

piece 1, NF1\_NF1.txt , piece 1, config: linear, direction: +, begin: 29383116, end: 29383224

\*29383120 \*                    \*29383130 \*                    \*29383140 \*                    \*29383150

5' t t t g t a c t t t t t c t t c c t a t t g g t c t t t g t t t t t c t c t a 3'

- F - V - L - F - L - P - I - G - L - C - F - S - L -

- L - Y - F - F - F - L - L - V - F - V - F - L - ● -

- C - T - F - S - S - Y - W - S - L - F - F - S - S -



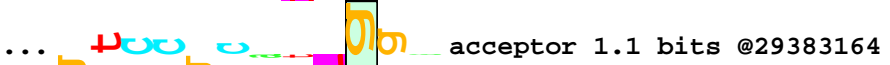
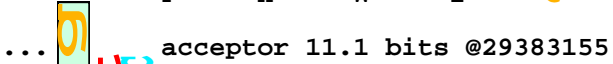
\*                    \*29383160 \*                    \*29383170 \*                    \*29383180 \*                    \*29383190

5' g t c c g c a t t g g a t t g g t g g c c t a a g a t t g a t g c t g t g t a 3'

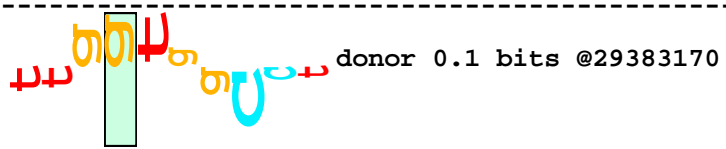
- V - R - I - G - L - V - A - ● - D - ● - C - C - V -

- S - A - L - D - W - W - P - K - I - D - A - V - Y -

- P - H - W - I - G - G - L - R - L - M - L - C - I -



[----- exon 12.2938



\*                    \*29383200 \*                    \*29383210 \*                    \*29383220

5' t t g t c a c t c g g t t g a a c t t c g a a t a t g t t t 3'

- L - S - L - G - ● - T - S - K - Y - V -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

- 2 -  
- C - H - S - V - E - L - R - N - M - F -  
- V - T - R - L - N - F - E - I - C -

... ----- ... exon 12.29383156-29383287

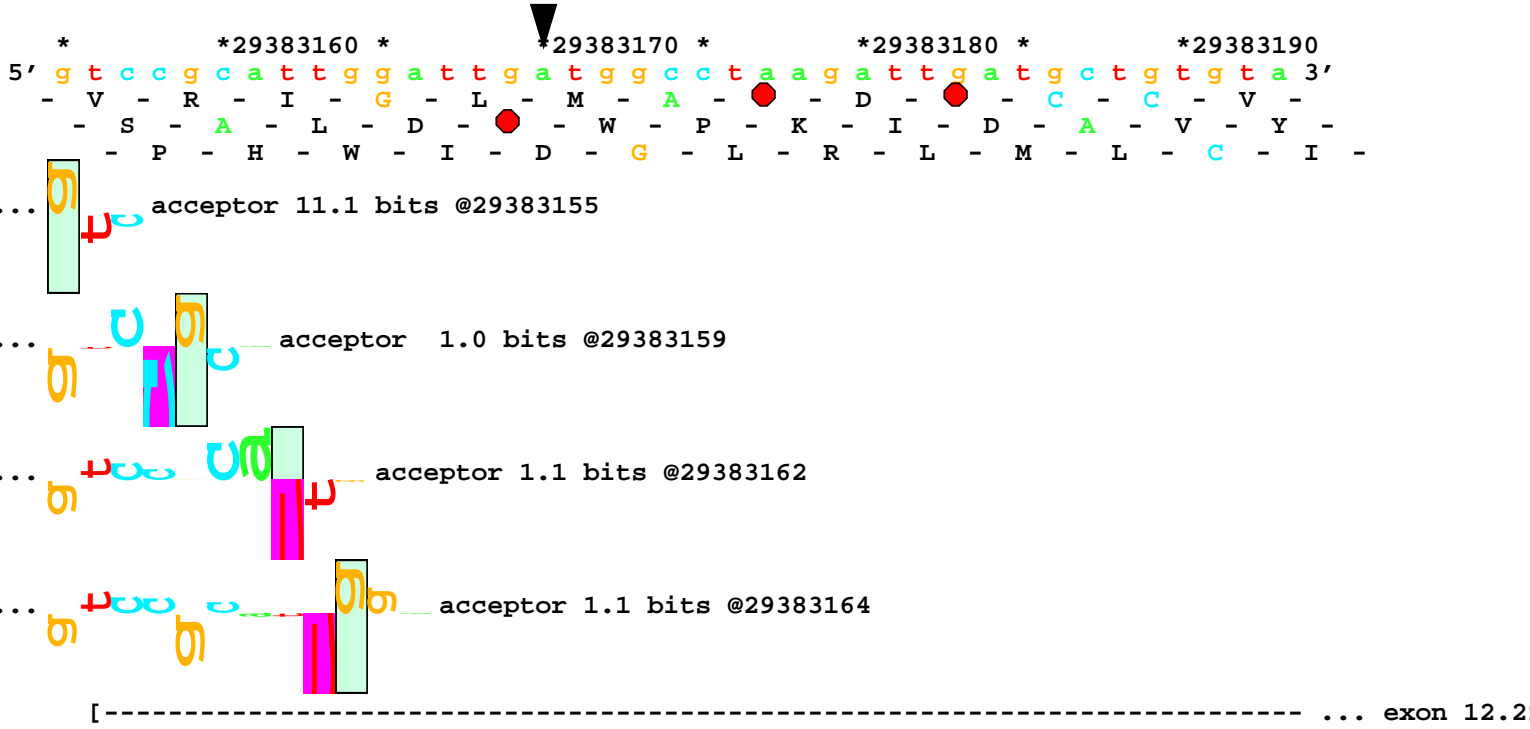
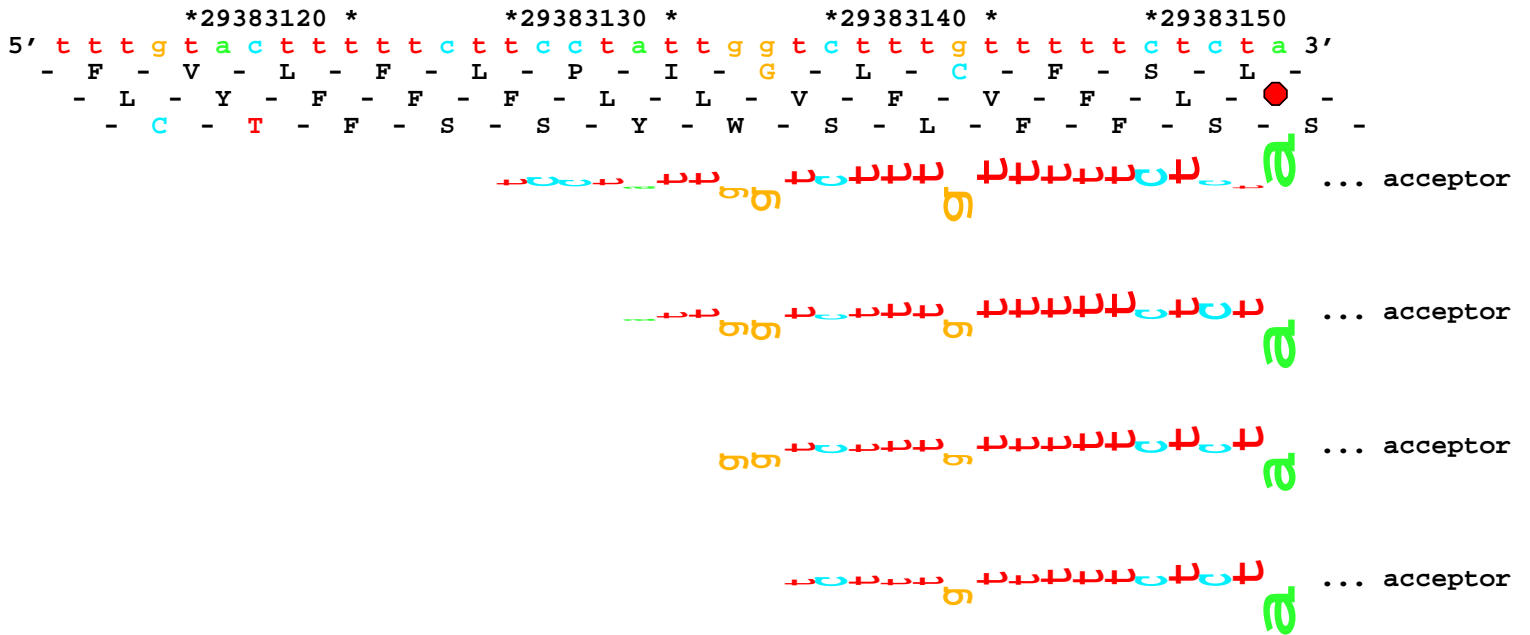
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 2, NF1, 1275G>A g29383170a, config: linear, direction: +, begin: 29383116, end: 29383224



\*                    \*29383200 \*                    \*29383210 \*                    \*29383220

5' t t g t c a c t c g g t t g a a c t t c g a a a t a t g t t t 3'

- L - S - L - G - ● - T - S - K - Y - V -

- C - H - S - V - E - L - R - N - M - F -

- V - T - R - L - N - F - E - I - C -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

... ----- ... exon 12.29383156-29383287

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 3, NF1\_NF1.txt , piece 1, config: linear, direction: +, begin: 29383159, end: 29383267

\*29383160 \*                    \*29383170 \*                    \*29383180 \*                    \*29383190 \*

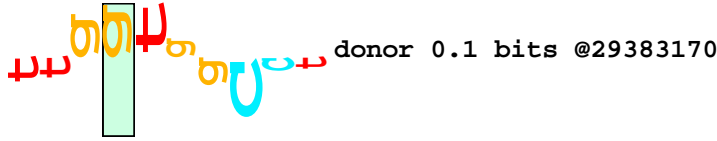
5' g c a t t g g a t t g g t g g c c t a a g a t t g a t g c t g t g t a t t g t 3'

- A - L - D - W - W - P - K - I - D - A - V - Y - C -

- H - W - I - G - G - L - R - L - M - L - C - I - V -

- I - G - L - V - A - ● - D - ● - C - C - V - L - S -

... exon 12.2938



\*29383200 \*                    \*29383210 \*                    \*29383220 \*                    \*29383230 \*

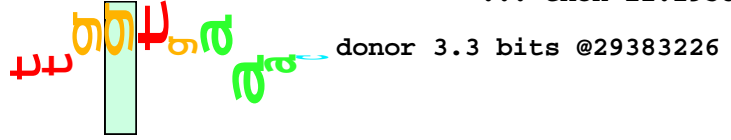
5' c a c t c g g t t g a a c t t c g a a a t a t g t t t g g t g a a a c a c t t 3'

- H - S - V - E - L - R - N - M - F - G - E - T - L -

- T - R - L - N - F - E - I - C - L - V - K - H - F -

- L - G - ● - T - S - K - Y - V - W - ● - N - T - S -

... exon 12.2938



\*29383240 \*                    \*29383250 \*                    \*29383260 \*

5' c a t a a a g c a g t g c a a g g t t g t g g a g c a c a c c 3'

- H - K - A - V - Q - G - C - G - A - H -

- I - K - Q - C - K - V - V - E - H - T -

- ● - S - S - A - R - L - W - S - T -

... exon 12.29383156-29383287



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

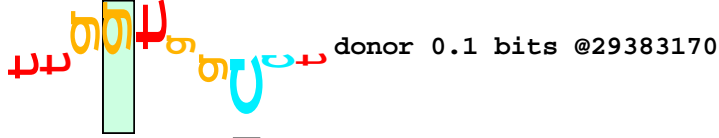
piece 4, NF1, 1318C>T c29383213t, config: linear, direction: +, begin: 29383159, end: 29383267

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*29383160 *           *29383170 *           *29383180 *           *29383190 *
5' g c a t t g g a t t g g t g g c c t a a g a t t g a t g c t g t g t a t t g t 3'
  - A - L - D - W - W - P - K - I - D - A - V - Y - C -
  - H - W - I - G - G - L - R - L - M - L - C - I - V -
  - I - G - L - V - A - ● - D - ● - C - C - V - L - S -

```

... exon 12.2938

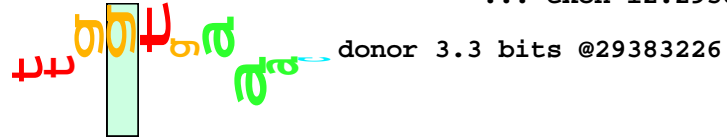


```

*29383200 *           *29383210 *           *29383220 *           *29383230 *
5' c a c t c g g t t g a a c t t t g a a a t a t g t t t g g t g a a a c a c t t 3'
  - H - S - V - E - L - ● - N - M - F - G - E - T - L -
  - T - R - L - N - F - E - I - C - L - V - K - H - F -
  - L - G - ● - T - L - K - Y - V - W - ● - N - T - S -

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... exon 12.2938



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*29383240 *           *29383250 *           *29383260 *
5' c a t a a a g c a g t g c a a g g t t g t g g a g c a c a c c 3'
  - H - K - A - V - Q - G - C - G - A - H -
  - I - K - Q - C - K - V - V - E - H - T -
  - ● - S - S - A - R - L - W - S - T -

```

... exon 12.29383156-29383287



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 5, NF1\_NF1.txt , piece 1, config: linear, direction: +, begin: 29383222, end: 29383330

\* 29383230 \* \* 29383240 \* \* 29383250 \* \* 29383260 \*

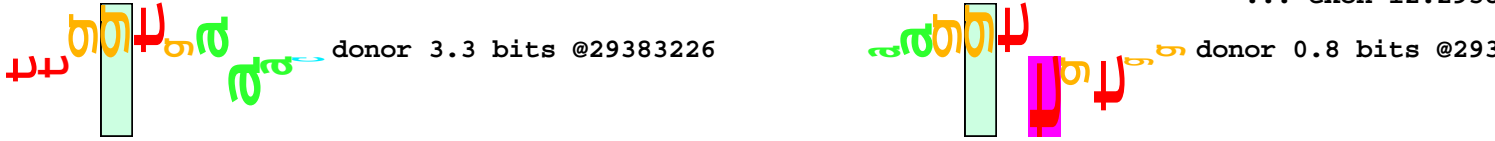
5' t t t g g t g a a a c a c t t c a t a a a g c a g t g c a a g g t t g t g g a 3'

- F - G - E - T - L - H - K - A - V - Q - G - C - G -

- L - V - K - H - F - I - K - Q - C - K - V - V - E -

- W - N - T - S - S - S - A - R - L - W - S -

... ----- ... exon 12.2938



\* 29383270 \* \* 29383280 \* \* 29383290 \*

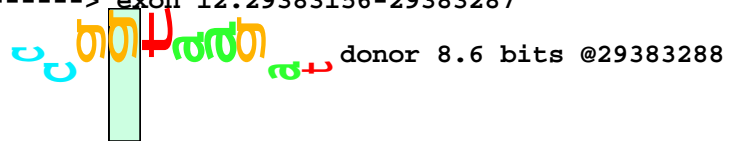
5' g c a c a c c c a g c a a t a c g a a t g g c a c c g g t a a g a t a a a t c 3'

- A - H - P - A - I - R - M - A - P - V - R - I -

- H - T - Q - Q - Y - E - W - H - R - D - K - S -

- T - P - S - N - T - N - G - T - G - K - I - N - H -

... ----- > exon 12.29383156-29383287



\* 29383300 \* \* 29383310 \* \* 29383320 \* \* 29383330 \*

5' a c g a a t t t t g a a t c t c a c c t c c t t t c t a t t g 3'

- T - N - F - E - S - H - L - L - S - I -

- R - I - L - N - L - T - S - F - L - L -

- E - F - I - S - P - P - F - Y -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 6, NF1, 1381C>T c29383276t, config: linear, direction: +, begin: 29383222, end: 29383330

\* 29383230 \*                    \*29383240 \*                    \*29383250 \*                    \*29383260

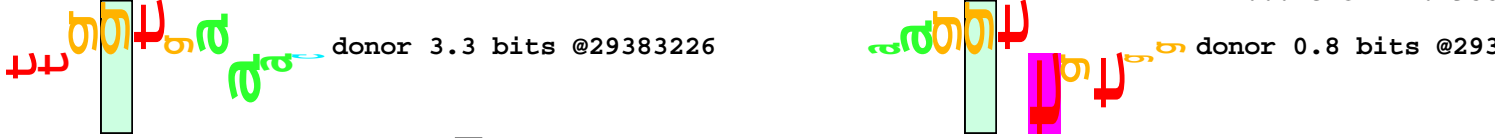
5' t t t g g t g a a a c a c t t c a t a a a g c a g t g c a a g g t t g t g g a 3'

- F - G - E - T - L - H - K - A - V - Q - G - C - G -

- L - V - K - H - F - I - K - Q - C - K - V - V - E -

- W - N - T - S - S - S - A - R - L - W - S -

... ----- ... exon 12.2938



\* 29383270 \*                    \*29383280 \*                    \*29383290 \*

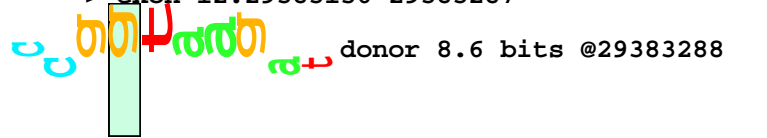
5' g c a c a c c c a g c a a t a t g a a t g g c a c c g g t a a g a t a a a t c 3'

- A - H - P - A - I - M - A - P - V - R - I -

- H - T - Q - Q - Y - E - W - H - R - D - K - S -

- T - P - S - N - M - N - G - T - G - K - I - N - H -

... ----- > exon 12.29383156-29383287



\*29383300 \*                    \*29383310 \*                    \*29383320 \*                    \*29383330

5' a c g a a t t t t g a a t c t c a c c t c c t t t c t a t t g 3'

- T - N - F - E - S - H - L - L - S - I -

- R - I - L - N - L - T - S - F - L - L -

- E - F - I - S - P - P - F - Y -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 7, NF1\_NF1.txt , piece 1, config: linear, direction: +, begin: 29389847, end: 29389955

\*29389850 \*                    \*29389860 \*                    \*29389870 \*                    \*29389880 \*

5' t g t c t a t c a t t g a c t g a a a t g t t g t t t t g t g g c a t a t g a 3'

- C - L - S - L - T - E - M - L - F - C - G - I - ● -

- V - Y - H - ● - L - K - C - C - F - V - A - Y - D -

- S - I - I - D - ● - N - V - V - L - W - H - M - T -

\*29389890 \*                    \*29389900 \*                    \*29389910 \*                    \*29389920

5' c t c t a t t t a c g t t t t t t t g g a a a t g a t t c t t a a g g a a a a a 3'

- L - Y - L - R - F - L - E - M - I - L - K - E - K -

- S - I - Y - V - F - W - K - ● - F - L - R - K - N -

- L - F - T - F - F - G - N - D - S - ● - G - K - I -



\*                    \*29389930 \*                    \*29389940 \*                    \*29389950 \*

5' t t c t g a t a c c t g c t c a t t g t t c t c t g a t c t t 3'

- F - ● - Y - L - L - I - V - L - ● - S -

- S - D - T - C - S - L - F - S - D - L -

- L - I - P - A - H - C - S - L - I -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 8, NF1, 1465-1466insC i29389901,29389902c, config: linear, direction: +, begin: 29389847, end:

\*29389850 \*                    \*29389860 \*                    \*29389870 \*                    \*29389880 \*

5' t g t c t a t c a t t g a c t g a a a t g t t g t t t t g t g g c a t a t g a 3'

- C - L - S - L - T - E - M - L - F - C - G - I - D -

- V - Y - H - L - K - C - C - F - V - A - Y - D -

- S - I - I - D - N - V - V - L - W - H - M - T -

... acceptor

\*29389890 \*                    \*29389900 \*                    \*29389910 \*                    \*29389920 \*

5' c t c t a t t t a c g t t t t t c t g g a a a t g a t t c t t a a g g a a a a 3'

- L - Y - L - R - F - S - G - N - D - S - G - K -

- S - I - Y - V - F - L - E - M - I - L - K - E - K -

- L - F - T - F - F - W - K - F - L - R - K - N -

... acceptor 2.9 bits @29389904

... acceptor 0.2 bits @29389904

\*29389930 \*                    \*29389940 \*                    \*29389950 \*

5' a t t c t g a t a c c t g c t c a t t g t t c t c t g a t c t t 3'

- I - L - I - P - A - H - C - S - L - I -

- F - Y - L - L - I - V - L - S -

- S - D - T - C - S - L - F - S - D - L -

... acceptor 1.2 bits @29389951

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 9, NF1\_NF1.txt , piece 1, config: linear, direction: +, begin: 29391386, end: 29391494

\*29391390 \*                    \*29391400 \*                    \*29391410 \*                    \*29391420

5' a a g t a a c a a g c c t t a a a t t t a a a g a a a a a c c t a c a g a c c 3'

- K - Q - A - L - N - L - K - K - N - L - Q - T -

- S - N - K - P - I - R - K - T - Y - R - P -

- V - T - S - L - K - F - K - E - K - P - T - D - L -

... exon 13.2939

\*                    \*29391430 \*                    \*29391440 \*                    \*29391450 \*                    \*29391460

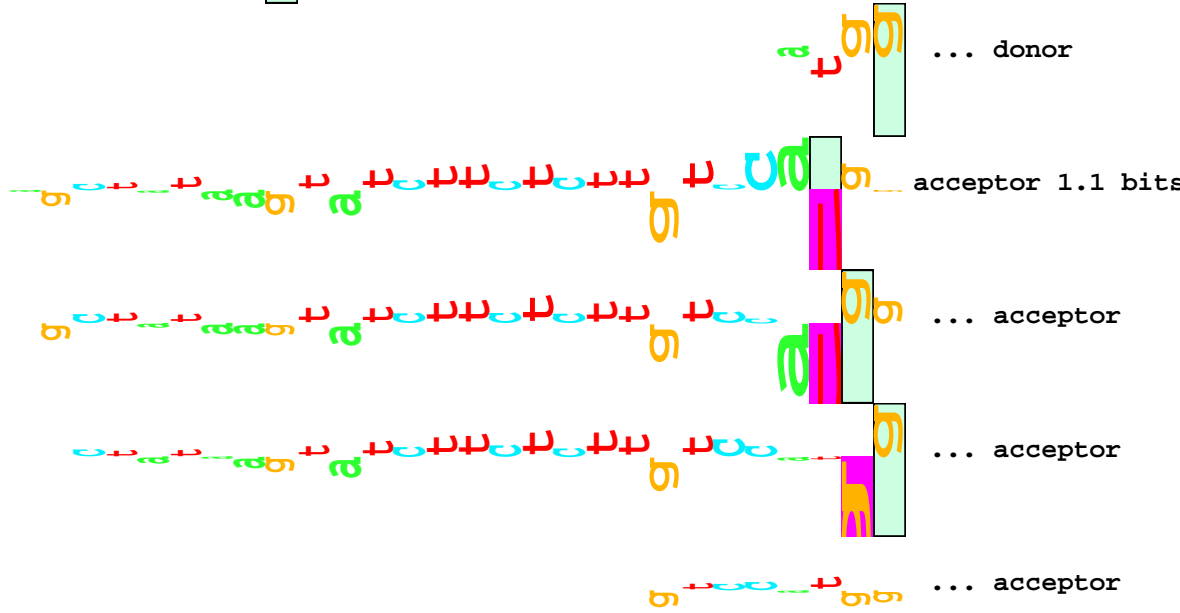
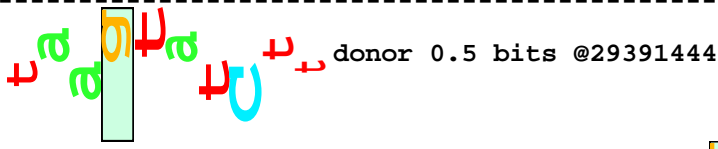
5' t g g a g a c a a g a a g c t a t a a g t a t c t t c t c t t g t c c a t g g 3'

- W - R - Q - E - A - I - S - I - F - S - C - P - W -

- G - D - K - K - L - V - S - S - L - V - H - G -

- E - T - R - S - Y - K - Y - L - L - L - S - M - V -

... exon 13.2939



\*                    \*29391470 \*                    \*29391480 \*                    \*29391490

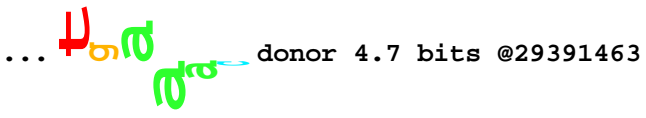
5' t g a a a c t a a t t c a t g c a g a t c c a a a g c t c t t 3'

- N - F - M - Q - I - Q - S - S -

- E - T - N - S - C - R - S - K - A - L -


- K - L - I - H - A - D - P - K - L -


... exon 13.29391367-29391501



... acceptor 0.2 bits @29391462

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

...  acceptor 0.1 bits @29391463

...  acceptor 1.1 bits @29391481

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 10, 1\_10, 1466A>G a29391440g, config: linear, direction: +, begin: 29391386, end: 29391494

\*29391390 \*                    \*29391400 \*                    \*29391410 \*                    \*29391420

5' a a g t a a c a a g c c t t a a a t t t a a a g a a a a a c c t a c a g a c c 3'

- K - Q - A - L - N - L - K - K - N - L - Q - T -

- S - N - K - P - I - R - K - T - Y - R - P -

- V - T - S - L - K - F - K - E - K - P - T - D - L -

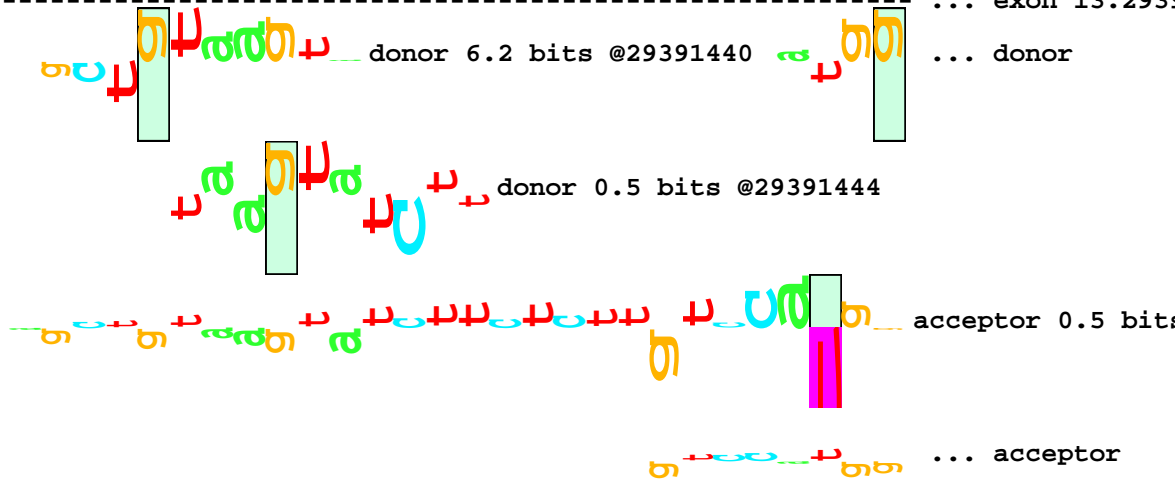
\*                    \*29391430 \*                    \*29391440 \*                    \*29391450 \*                    \*29391460

5' t g g a g a c a a g a a g c t g t a a g t a t c t t c t c t t g t c c a t g g 3'

- W - R - Q - E - A - V - S - I - F - S - C - P - W -

- G - D - K - K - L - V - S - S - L - V - H - G -

- E - T - R - S - C - K - Y - L - L - L - S - M - V -



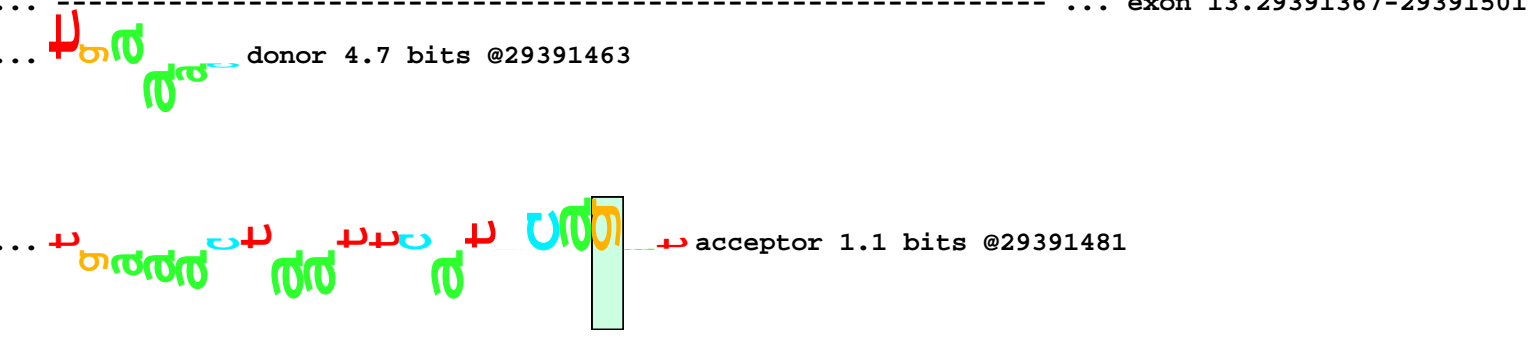
\*                    \*29391470 \*                    \*29391480 \*                    \*29391490

5' t g a a a c t a a t t c a t g c a g a t c c a a a g c t c t t 3'

- N - F - M - Q - I - Q - S - S -

- E - T - N - S - C - R - S - K - A - L -

- K - L - I - H - A - D - P - K - L -



piece 11, 1\_11, piece 1, config: linear, direction: +, begin: 29395909, end: 29396017

\*29395910 \*                    \*29395920 \*                    \*29395930 \*                    \*29395940 \*

5' t t t t c c t t g c a g a a t c c a a g a a a a c a g g g g c c c g a a a c c 3'

- F - S - L - Q - N - P - R - K - Q - G - P - E - T -

- F - P - C - R - I - Q - E - N - R - G - P - K - P -

- F - L - A - E - S - K - K - T - G - A - R - N - P -

[-----] ... exon 14.2939

\*29395950 \*                    \*29395960 \*                    \*29395970 \*                    \*29395980 \*

5' c a a g g c a g t a c a g c a g a a t t a a t t a c a g g g g c t c g t c c a a 3'

- Q - G - S - T - A - E - L - I - T - G - L - V - Q -

- K - A - V - Q - Q - N - L - Q - G - S - S - N -

- R - Q - Y - S - R - I - N - Y - R - A - R - P - T -

[-----] ... exon 14.2939



... acceptor

\*29395990 \*                    \*29396000 \*                    \*29396010 \*

5' c t g g t c c c t c a g t c a c a c a t g c c a g a g a t t g 3'

- L - V - P - Q - S - H - M - P - E - I -

- W - S - L - S - H - T - C - Q - R - L -

- G - P - S - V - T - H - A - R - D -

[-----] ... exon 14.29395921-29396034



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 12, 1\_12, 1570G>T g29395963t, config: linear, direction: +, begin: 29395909, end: 29396017

\*29395910 \*                    \*29395920 \*                    \*29395930 \*                    \*29395940 \*

5' t t t t c c t t g c a g a a t c c a a g a a a a c a g g g g c c c g a a a c c 3'

- F - S - L - Q - N - P - R - K - Q - G - P - E - T -

- F - P - C - R - I - Q - E - N - R - G - P - K - P -

- F - L - A - E - S - K - K - T - G - A - R - N - P -

[-----] ... exon 14.2939

\*29395950 \*                    \*29395960 \*                    \*29395970 \*                    \*29395980 \*

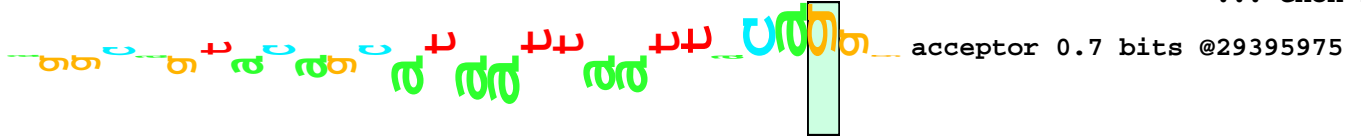
5' c a a g g c a g t a c a g c a t a a t t a a t t a c a g g g g c t c g t c c a a 3'

- Q - G - S - T - A - L - I - T - G - L - V - Q -

- K - A - V - Q - H - N - L - Q - G - S - S - N -

- R - Q - Y - S - I - I - N - Y - R - A - R - P - T -

... exon 14.2939



... acceptor

\*29395990 \*                    \*29396000 \*                    \*29396010 \*

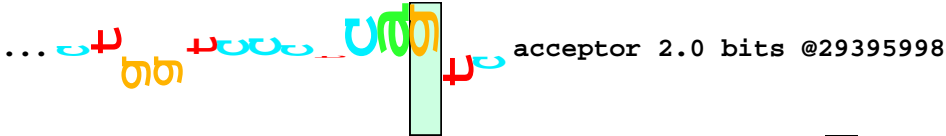
5' c t g g t c c c t c a g t c a c a c a t g c c a g a g a t t g 3'

- L - V - P - Q - S - H - M - P - E - I -

- W - S - L - S - H - T - C - Q - R - L -

- G - P - S - V - T - H - A - R - D -

... exon 14.29395921-29396034



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 13, 1\_13, piece 1, config: linear, direction: +, begin: 29395946, end: 29396054

\*29395950 \*                    \*29395960 \*                    \*29395970 \*                    \*29395980

5' c c c a a g g c a g t a c a g c a g a a t t a a t t a c a g g g c t c g t c c 3'

- P - K - A - V - Q - Q - N - L - Q - G - S - S -

- P - R - Q - Y - S - R - I - N - Y - R - A - R - P -

- Q - G - S - T - A - E - L - I - T - G - L - V - Q -

... exon 14.2939



\*                    \*29395990 \*                    \*29396000 \*                    \*29396010 \*                    \*29396020

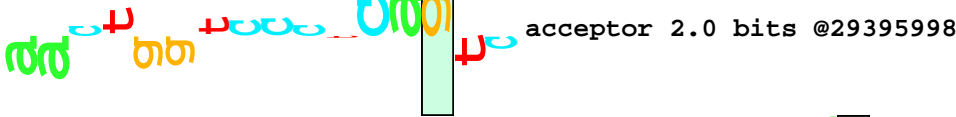
5' a a c t g g t c c c t c a g t c a c a c a t g c c a g a g a t t g c t c a g g 3'

- N - W - S - L - S - H - T - C - Q - R - L - L - R -

- T - G - P - S - V - T - H - A - R - D - C - S - G -

- L - V - P - Q - S - H - M - P - E - I - A - Q - E -

... exon 14.2939



\*                    \*29396030 \*                    \*29396040 \*                    \*29396050

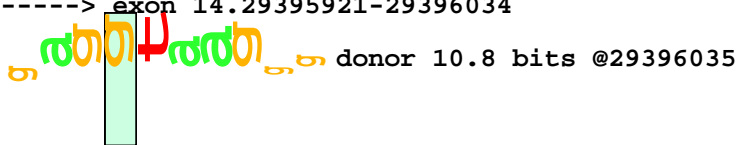
5' a a g c a a t g g a g g t a a g g g g a a a a t g a a t t c c 3'

- K - Q - W - R - G - E - N - E - F -

- S - N - G - G - K - G - K - M - N - S -

- A - M - E - V - R - G - K - I -

... exon 14.29395921-29396034



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 14, 1\_14, 1607C>A c29396000a, config: linear, direction: +, begin: 29395946, end: 29396054

\*29395950 \*                    \*29395960 \*                    \*29395970 \*                    \*29395980

5' c c c a a g g c a g t a c a g c a g a a t t a a t t a c a g g g c t c g t c c 3'

- P - K - A - V - Q - Q - N - L - Q - G - S - S -

- P - R - Q - Y - S - R - I - N - Y - R - A - R - P -

- Q - G - S - T - A - E - L - I - T - G - L - V - Q -

... ----- ... exon 14.2939



\*                    \*29395990 \*                    \*29396000 \*                    \*29396010 \*                    \*29396020

5' a a c t g g t c c c t c a g t a a c a c a t g c c a g a g a t t g c t c a g g 3'

- N - W - S - L - S - N - T - C - Q - R - L - L - R -

- T - G - P - S - V - T - H - A - R - D - C - S - G -

- L - V - P - Q - H - M - P - E - I - A - Q - E -

... ----- ... exon 14.2939



\*                    \*29396030 \*                    \*29396040 \*                    \*29396050

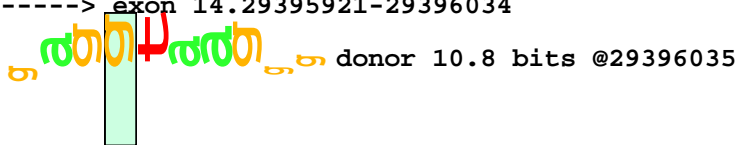
5' a a g c a a t g g a g g t a a g g g g a a a a t g a a t t c c 3'

- K - Q - W - R - G - E - N - E - F -

- S - N - G - G - K - G - K - M - N - S -

- A - M - E - V - R - G - K - I -

... ----- > exon 14.29395921-29396034



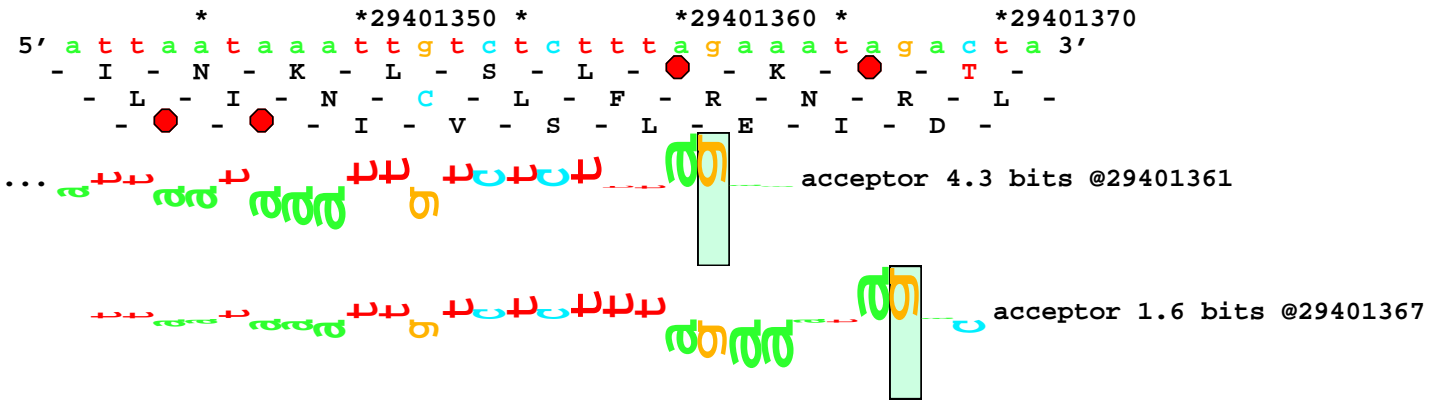
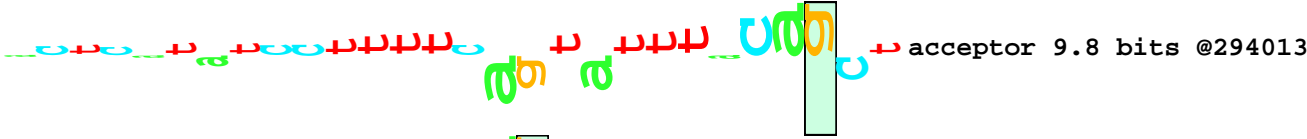
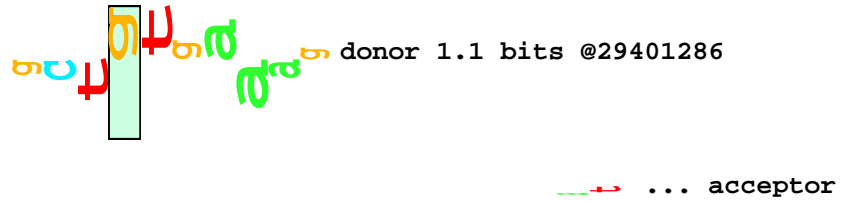
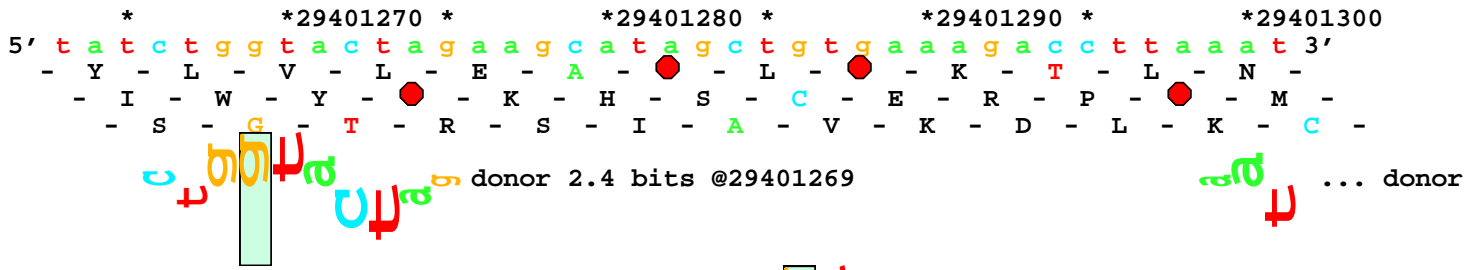
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

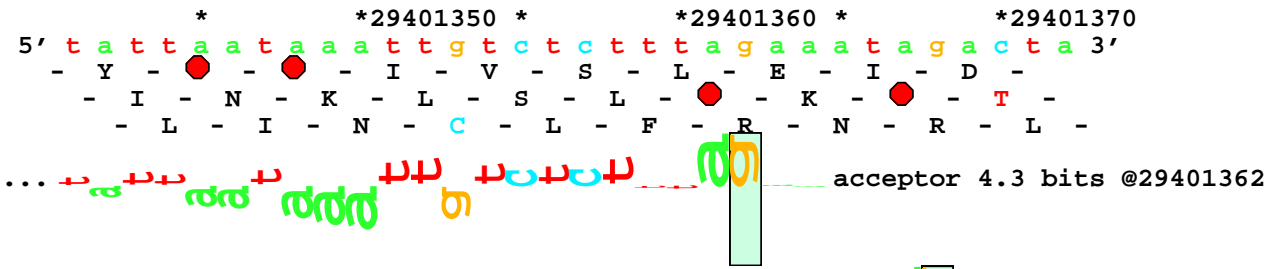
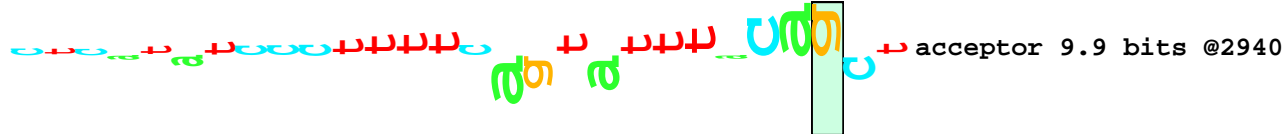
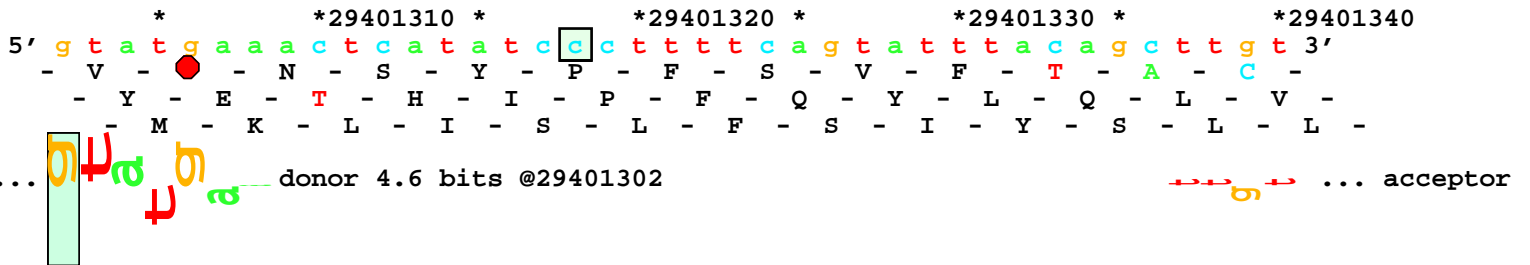
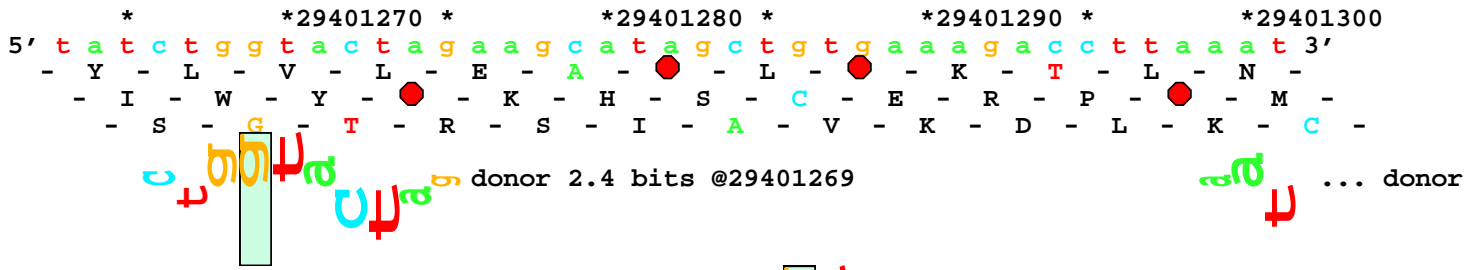
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 15, 1\_15, piece 1, config: linear, direction: +, begin: 29401263, end: 29401371



piece 16, 1\_16, 2033-2034insC i29401317,29401318c, config: linear, direction: +, begin: 29401263,



piece 17, 1\_17, piece 1, config: linear, direction: +, begin: 29335914, end: 29336022

\* 29335920 \* \* 29335930 \* \* 29335940 \* \* 29335950 \*

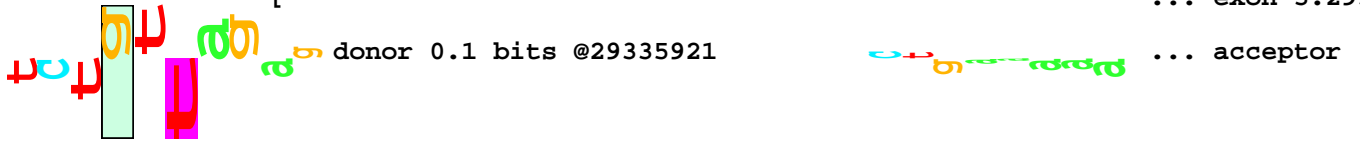
5' c t t t t c t g t t a g a g a a t a t t t g g a g a a g c t g c t g a a a a a 3'

- L - F - C - R - I - F - G - E - A - A - E - K -

- F - S - V - R - E - Y - L - E - K - L - L - K - K -

- F - L - L - E - N - I - W - R - S - C - K - K -

[----- exon 3.29335



\* 29335960 \* \* 29335970 \* \* 29335980 \* \* 29335990 \*

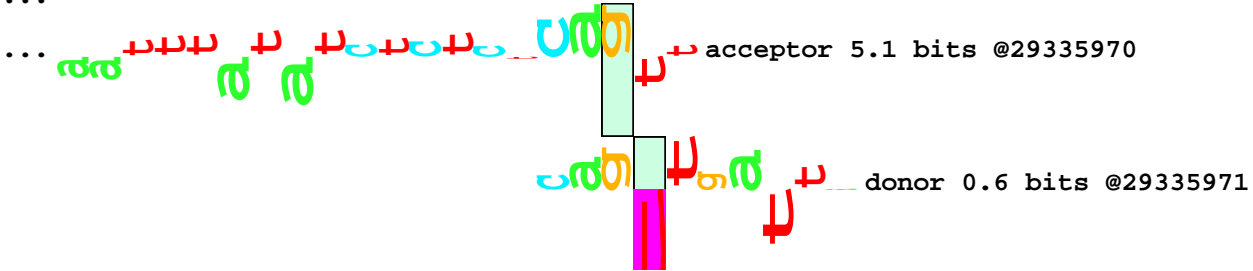
5' a a t t t a t a t c t c t c t c a g t t g a t t a t a t t g g a t a c a c t g 3'

- N - L - Y - L - S - Q - L - I - I - L - D - T - L -

- I - Y - I - S - L - S - L - Y - W - I - H - W -

- F - I - S - L - S - V - D - Y - I - G - Y - T - G -

... exon 3.29335



\* 29336000 \* \* 29336010 \* \* 29336020 \*

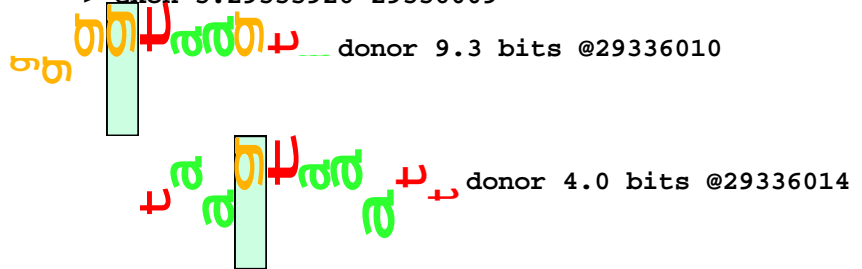
5' g a a a a a t g t c t t g c t g g g g t a a g t a a a t t g a 3'

- E - K - C - L - A - G - V - S - K - L -

- K - N - V - L - L - G - V - N -

- K - M - S - C - W - G - K - I -

... > exon 3.29335926-29336009



piece 18, 1\_18, 247C>T c29335968t, config: linear, direction: +, begin: 29335914, end: 29336022

\* 29335920 \*                    \*29335930 \*                    \*29335940 \*                    \*29335950

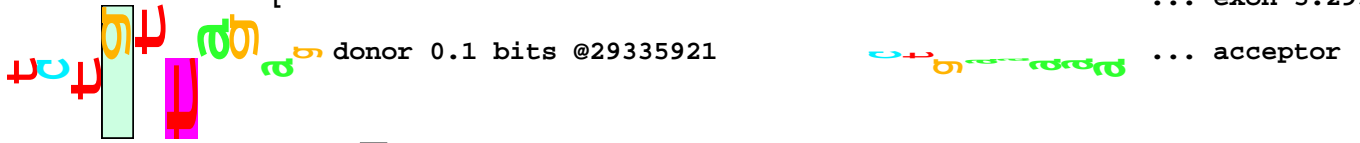
5' c t t t t c t g t t a g a g a a t a t t t g g a g a a g c t g c t g a a a a a 3'

- L - F - C - R - I - F - G - E - A - A - E - K -

- F - S - V - R - E - Y - L - E - K - L - L - K - K -

- F - L - L - E - N - I - W - R - S - C - K - K -

[----- exon 3.29335



\* 29335960 \*                    \*29335970 \*                    \*29335980 \*                    \*29335990

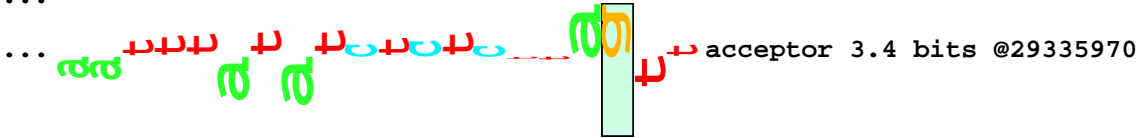
5' a a t t t a t a t c t c t c t t a g t t g a t t a t a t t g g a t a c a c t g 3'

- N - L - Y - L - S - L - I - I - L - D - T - L -

- I - Y - I - S - L - S - L - Y - W - I - H - W -

- F - I - S - L - L - V - D - Y - I - G - Y - T - G -

... exon 3.29335



\* 29336000 \*                    \*29336010 \*                    \*29336020

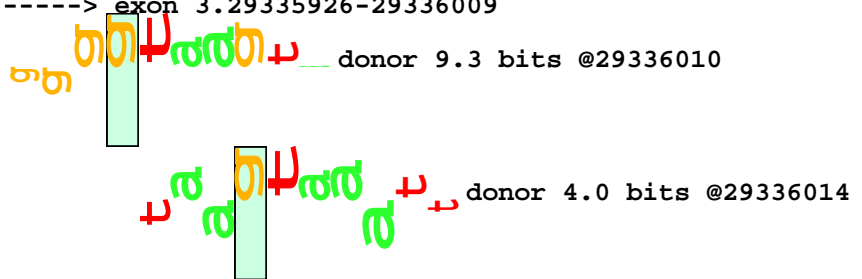
5' g a a a a a t g t c t t g c t g g g g t a a g t a a a t t g a 3'

- E - K - C - L - A - G - V - S - K - L -

- K - N - V - L - L - G - V - N -

- K - M - S - C - W - G - K - I -

... exon 3.29335926-29336009



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 19, 1\_19, piece 1, config: linear, direction: +, begin: 29406017, end: 29406125

\*29406020 \*                    \*29406030 \*                    \*29406040 \*                    \*29406050 \*

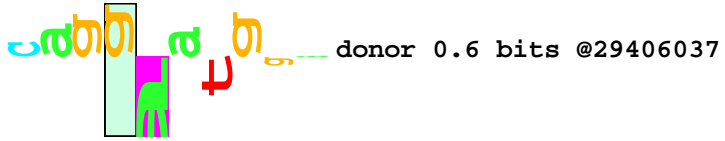
5' c t g a c a c a g a c t c c c t a c a g g a a t g g a t c a a c a t g a c t g 3'

- L - T - Q - T - P - Y - R - N - G - S - T - L -

- H - R - L - P - T - G - M - D - Q - H - D - W -

- D - T - D - S - L - Q - E - W - I - N - M - T - G -

... exon 21.2940



\*29406060 \*                    \*29406070 \*                    \*29406080 \*                    \*29406090 \*

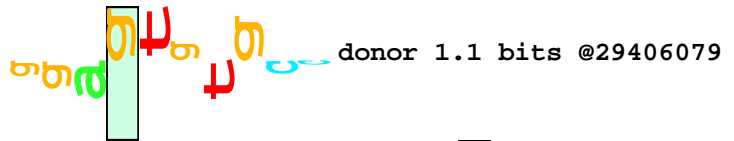
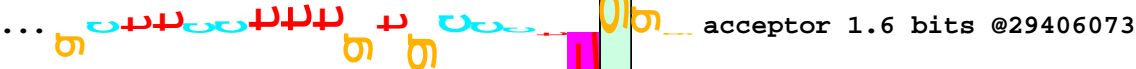
5' g c t t c c t t t g t g c c t t g g g g g a g t g t g c c t c c a g c a g a 3'

- A - S - F - V - P - L - G - E - C - A - S - S - R -

- L - P - L - C - P - W - G - S - V - P - P - A - E -

- F - L - C - A - L - G - G - V - C - L - Q - Q - R -

... exon 21.2940



\* 29406100 \*                    \*29406110 \*                    \*29406120 \*

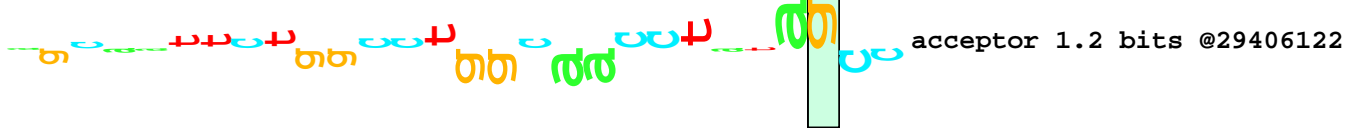
5' g a a g c a a t t c t g g c c t g g c a a c c t a t a g c c c 3'

- E - A - I - L - A - W - Q - P - I - A -

- K - Q - F - W - P - G - N - L - P -

- S - N - S - G - L - A - T - Y - S -

... ----- ... exon 21.29405941-29406381



... \_\_\_ acceptor 2.1 bits @29406093

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 20, 1\_20, 2540T>C t29406071c, config: linear, direction: +, begin: 29406017, end: 29406125

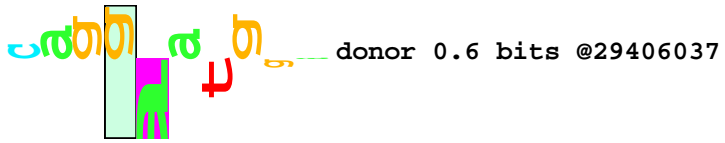
\*29406020 \*                    \*29406030 \*                    \*29406040 \*                    \*29406050 \*

5' c t g a c a c a g a c t c c c t a c a g g a a t g g a t c a a c a t g a c t g 3'

- L - T - Q - T - P - Y - R - N - G - S - T - ● - L -

- ● - H - R - L - P - T - G - M - D - Q - H - D - W -

- D - T - D - S - L - Q - E - W - I - N - M - T - G -



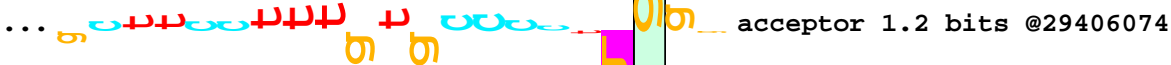
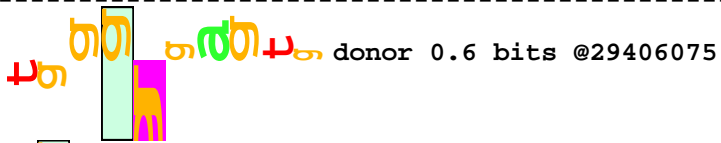
\*29406060 \*                    \*29406070 \*                    \*29406080 \*                    \*29406090 \*

5' g c t t c c t t t g t g c c c t g g g g g a g t g t g c c t c c a g c a g a 3'

- A - S - F - V - P - L - G - E - C - A - S - S - R -

- L - P - L - C - P - W - G - S - V - P - P - A - E -

- F - L - C - A - P - G - G - V - C - L - Q - Q - R -



\*29406100 \*                    \*29406110 \*                    \*29406120 \*

5' g a a g c a a t t c t g g c c t g g c a a c c t a t a g c c c 3'

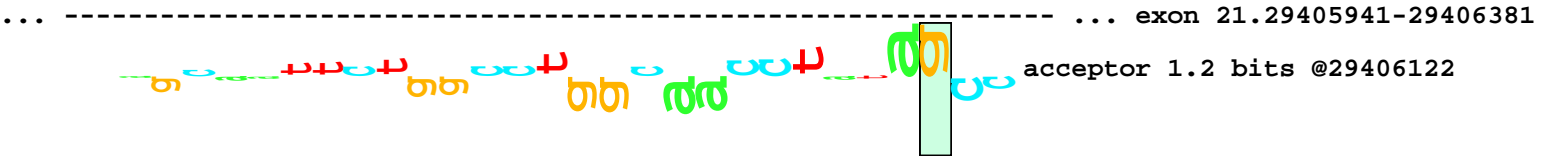
- E - A - I - L - A - W - Q - P - I - A -

- K - Q - F - W - P - G - N - L - ● - P -

- S - N - S - G - L - A - T - Y - S -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>





... acceptor 2.1 bits @29406093

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

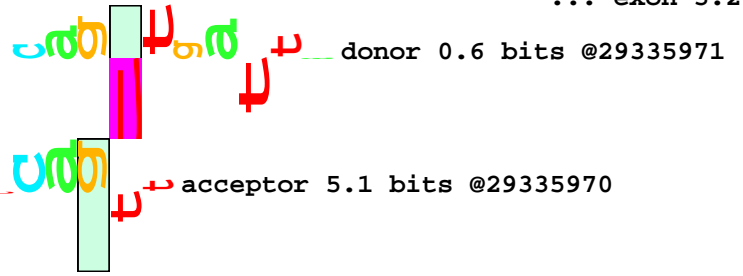
piece 21, 1\_21, piece 1, config: linear, direction: +, begin: 29335945, end: 29336053

```

*          *29335950 *          *29335960 *          *29335970 *          *29335980
5' c t g a a a a a a a t t t a t a t c t c t c t c a g t t g a t t a t a t t g g 3'
- L - K - K - I - Y - I - S - L - S - L - Y - W -
- K - K - F - I - S - L - S - V - D - Y - I - G -
- E - K - N - L - Y - L - S - Q - L - I - I - L - D -

```

... ----- ... exon 3.29335

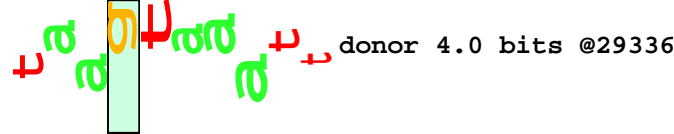
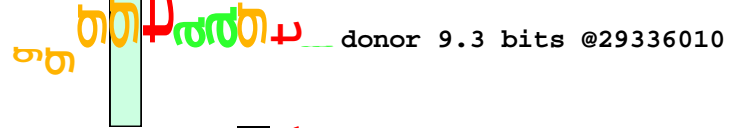


```

*          *29335990 *          *29336000 *          *29336010 *          *29336020
5' a t a c a c t g g a a a a a t g t c t t g c t g g g g t a a g t a a a t t g a 3'
- I - H - W - K - N - V - L - L - G - V - N -
- Y - T - G - K - M - S - C - W - G - K - I - D -
- T - L - E - K - C - L - A - G - V - S - K - L - I -

```

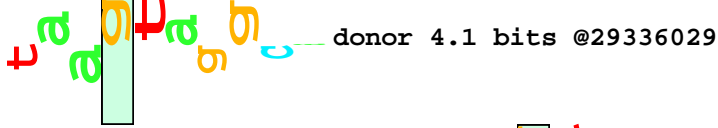
... ----- > exon 3.29335926-29336009



```

*          *29336030 *          *29336040 *          *29336050
5' t c t t a a g t a g g c a g g c t t t g t g a a t t t g a t c 3'
- S - V - G - R - L - C - E - F - D -
- L - K - A - G - F - V - N - L - I -
- L - S - R - Q - A - L - I -

```



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

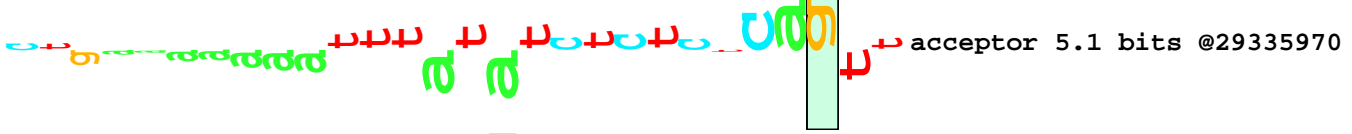
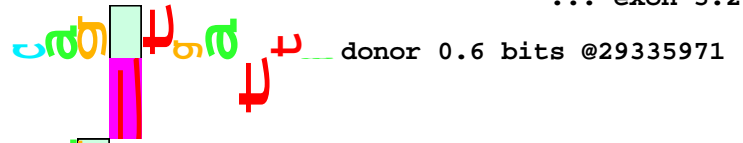
piece 22, 1\_22, 278G>A g29335999a, config: linear, direction: +, begin: 29335945, end: 29336053

```

*          *29335950 *          *29335960 *          *29335970 *          *29335980
5' c t g a a a a a a a t t t a t a t c t c t c t c a g t t g a t t a t a t t g g 3'
- L - K - K - I - Y - I - S - L - S - L - Y - W -
- K - K - F - I - S - L - S - V - D - Y - I - G -
- E - K - N - L - Y - L - S - Q - L - I - I - L - D -

```

... ----- ... exon 3.29335

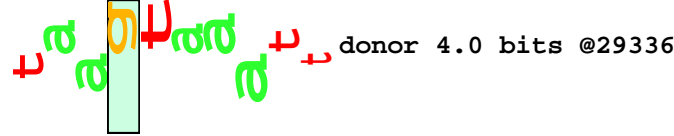
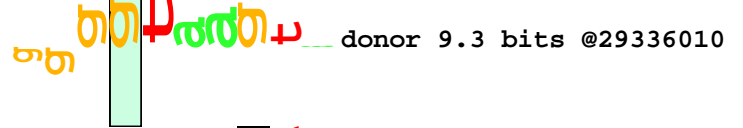


```

*          *29335990 *          *29336000 *          *29336010 *          *29336020
5' a t a c a c t g g a a a a a t a t c t t g c t g g g g t a a g t a a a t t g a 3'
- I - H - W - K - N - I - L - L - G - V - N -
- Y - T - G - K - I - S - C - W - G - K - I - D -
- T - L - E - K - Y - L - A - G - V - S - K - L - I -

```

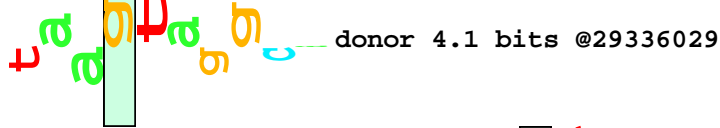
... ----- > exon 3.29335926-29336009



```

*          *29336030 *          *29336040 *          *29336050
5' t c t t a a g t a g g c a g g c t t t g t g a a t t t g a t c 3'
- S - V - G - R - L - C - E - F - D -
- L - K - A - G - F - V - N - L - I -
- L - S - R - Q - A - L - I -

```



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 23, 1\_23, piece 1, config: linear, direction: +, begin: 29406721, end: 29406829

\*29406730 \*                      \*29406740 \*                      \*29406750 \*

5' a a a t c a t t a a t g t a t t t g t t c t t t c t t t a g g t t t t a t t g 3'

- K - S - L - M - Y - L - F - F - L - V - L - L -

- N - H - C - I - C - S - F - F - R - F - Y -

- I - I - N - V - F - V - L - S - L - G - F - I - D -

[----- ... exon 22.2940



\*29406760 \*                      \*29406770 \*                      \*29406780 \*                      \*29406790 \*

5' a c t g a t a c c a a t a c t c a a t t t g t a g a a c a a a c c a t a g c t 3'

- T - D - T - N - T - Q - F - V - E - Q - T - I - A -

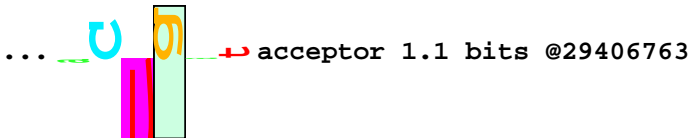
- L - I - P - I - L - N - L - N - K - P - L -

- Y - Q - Y - S - I - C - R - T - N - H - S - Y -

... ----- ... exon 22.2940



... acceptor 1.4 bits @29406759



\*29406800 \*                      \*29406810 \*                      \*29406820 \*

5' a t a a t g a a g a a c t t g c t a g a t a a t c a t a c t g 3'

- I - M - K - N - L - L - D - N - H - T -

- 29 -  
- N - E - E - L - A - R - S - Y -  
... ----- ... exon 22.29406751-29406890

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

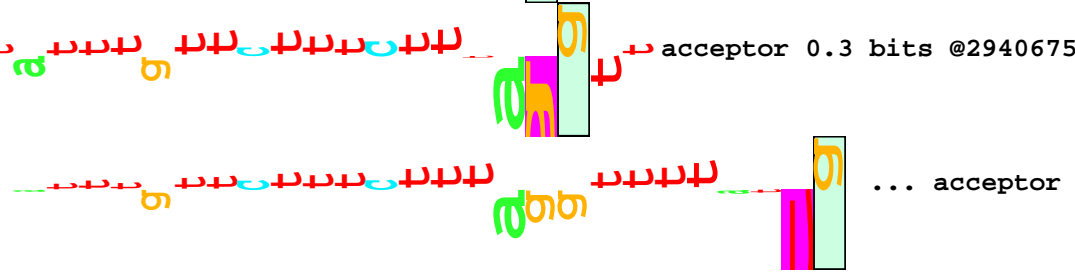
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

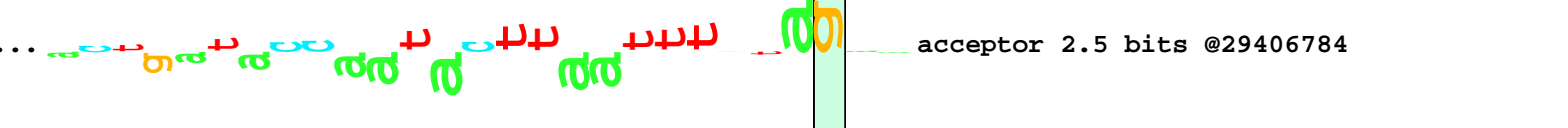
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 24, 1\_24, 2875C>T c29406775t, config: linear, direction: +, begin: 29406721, end: 29406829

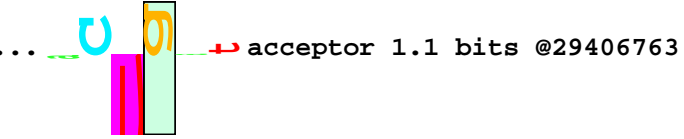
\*29406730 \*                      \*29406740 \*                      \*29406750 \*  
 5' a a a t c a t t a a t g t a t t t g t t c t t t c t t t a g g t t t t a t t g 3'  
 - K - S - L - M - Y - L - F - F - L - V - L - L -  
 - N - H - C - I - C - S - F - F - R - F - Y -  
 - I - I - N - V - F - V - L - S - L - G - F - I - D -



\*29406760 \*                      \*29406770 \*                      \*29406780 \*                      \*29406790 \*  
 5' a c t g a t a c c a a t a c t t a a t t t g t a g a a c a a a c c a t a g c t 3'  
 - T - D - T - N - T - F - V - E - Q - T - I - A -  
 - L - I - P - I - L - N - L - N - K - P - L -  
 - Y - Q - Y - L - I - C - R - T - N - H - S - Y -



... acceptor 1.4 bits @29406759



\*29406800 \*                      \*29406810 \*                      \*29406820 \*  
 5' a t a a t g a a g a a c t t g c t a g a t a a t c a t a c t g 3'  
 - I - M - K - N - L - L - D - N - H - T -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

- 31 -  
- N - E - E - L - A - R - S - Y -  
... ----- ... exon 22.29406751-29406890

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 25, 1\_25, piece 1, config: linear, direction: +, begin: 29406733, end: 29406841

\* 29406740 \*                    \*29406750 \*                    \*29406760 \*                    \*29406770

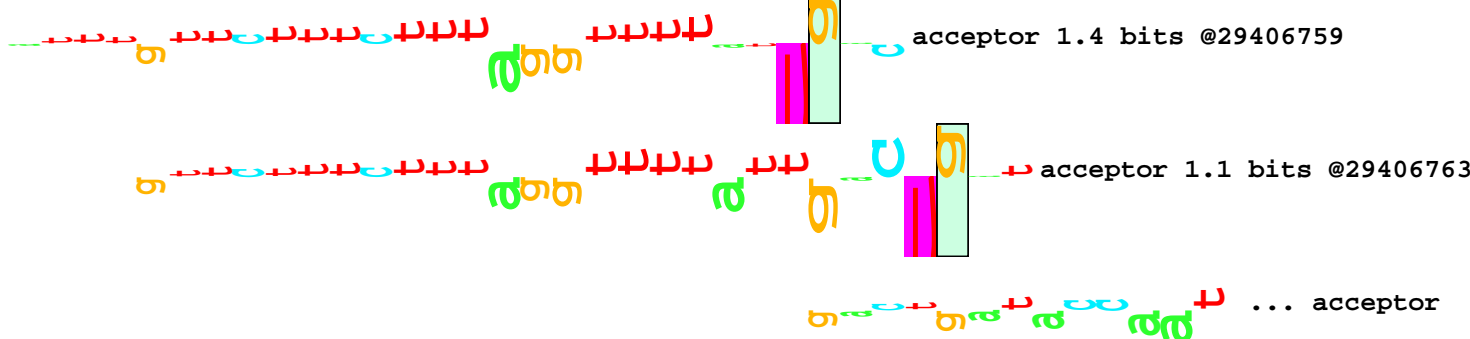
5' t a t t t g t t c t t t c t t t a g g t t t t a t t g a c t g a t a c c a a t 3'

- Y - L - F - F - L - ● - V - L - L - T - D - T - N -

- I - C - S - F - F - R - F - Y - ● - L - I - P - I -

- F - V - L - S - L - G - F - I - D - ● - Y - Q - Y -

[----- ... exon 22.2940



\* 29406780 \*                    \*29406790 \*                    \*29406800 \*                    \*29406810

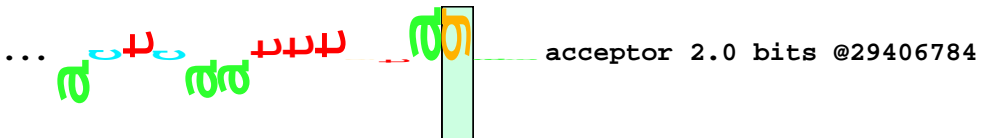
5' a c t c a a t t t g t a g a a c a a a c c a t a g c t a t a a t g a a g a a c 3'

- T - Q - F - V - E - Q - T - I - A - I - M - K - N -

- L - N - L - ● - N - K - P - ● - L - ● - ● - R - T -

- S - I - C - R - T - N - H - S - Y - N - E - E - L -

... ----- ... exon 22.2940



\* 29406820 \*                    \*29406830 \*                    \*29406840

5' t t g c t a g a t a a t c a t a c t g a a g g c a g c t c t g 3'

- L - L - D - N - H - T - E - G - S - S -

- C - ● - I - I - I - L - K - A - A - L -

- A - R - ● - S - Y - ● - R - Q - L -

... ----- ... exon 22.29406751-29406890

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 26, 1\_26, 2887C>T c29406787t, config: linear, direction: +, begin: 29406733, end: 29406841

\* 29406740 \*                    \*29406750 \*                    \*29406760 \*                    \*29406770

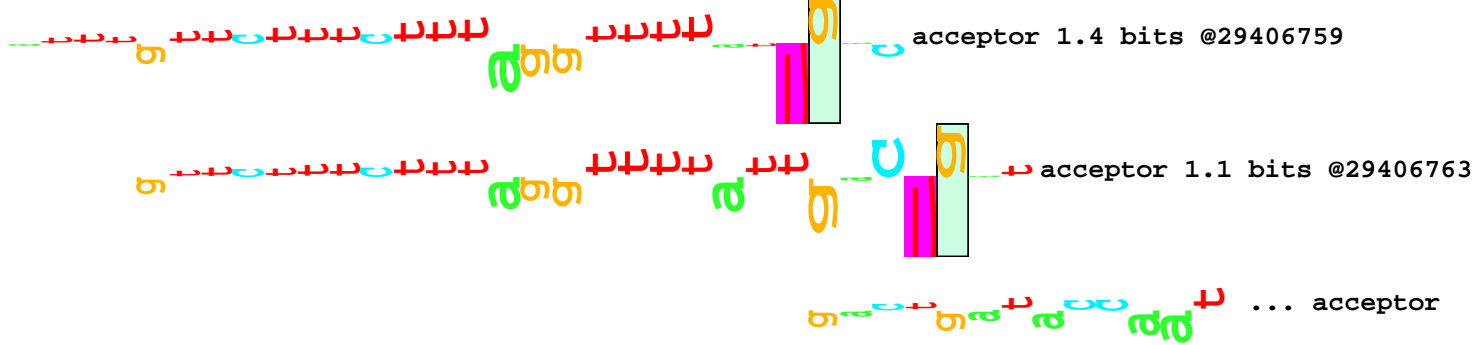
5' t a t t t g t t c t t t c t t t a g g t t t t a t t g a c t g a t a c c a a t 3'

- Y - L - F - F - L - ● - V - L - L - T - D - T - N -

- I - C - S - F - F - R - F - Y - ● - L - I - P - I -

- F - V - L - S - L - G - F - I - D - ● - Y - Q - Y -

[----- ... exon 22.2940



\* 29406780 \*                    \*29406790 \*                    \*29406800 \*                    \*29406810

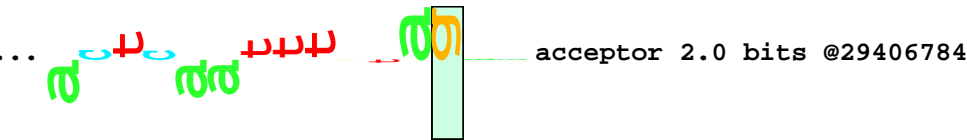
5' a c t c a a t t t t g t a g a a t a a a c c a t a g c t a t a a t g a a g a a c 3'

- T - Q - F - V - E - ● - T - I - A - I - M - K - N -

- L - N - L - ● - N - K - P - ● - L - ● - M - R - T -

- S - I - C - R - I - N - H - S - Y - N - E - E - L -

... ----- ... exon 22.2940



\* 29406820 \*                    \*29406830 \*                    \*29406840

5' t t g c t a g a t a a t c a t a c t g a a g g c a g c t c t g 3'

- L - L - D - N - H - T - E - G - S - S -

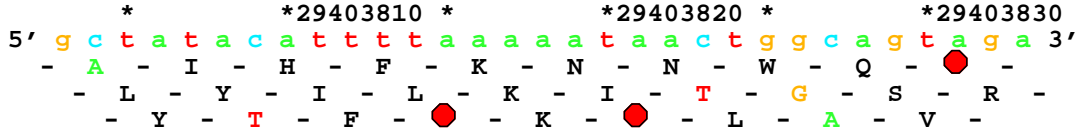
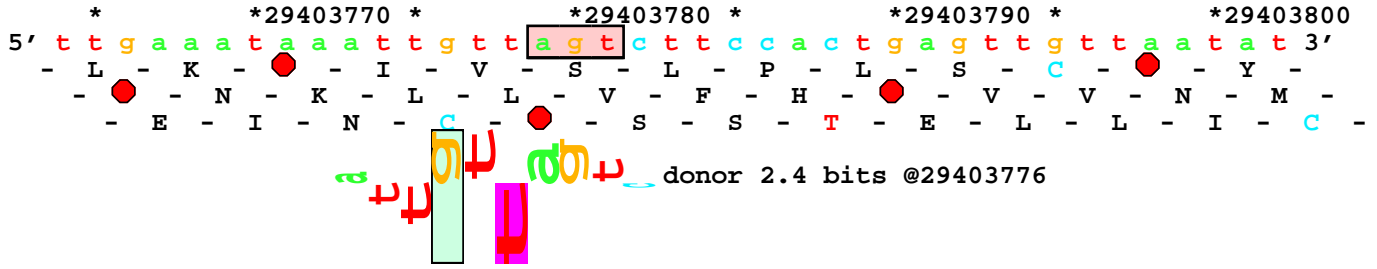
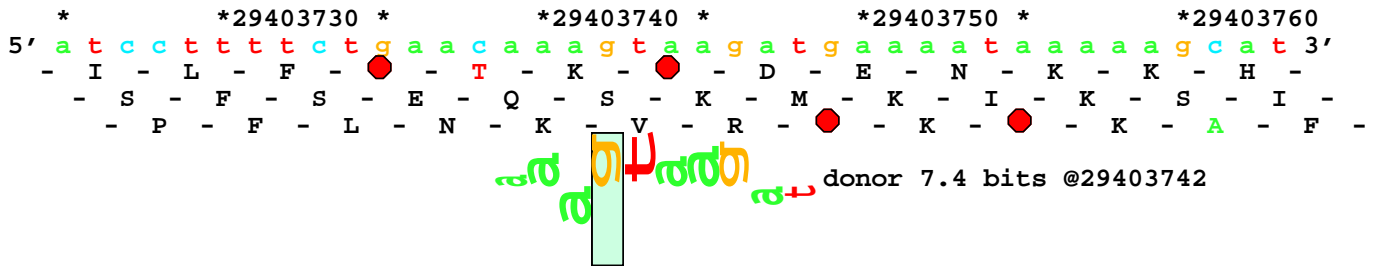
- C - ● - I - I - I - L - K - A - A - L -

- A - R - ● - S - Y - ● - R - Q - L -

... ----- ... exon 22.29406751-29406890

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 27, 1\_27, piece 1, config: linear, direction: +, begin: 29403725, end: 29403833



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 28, 1\_28, 2970-2972delAAT d29403779,29403781, config: linear, direction: +, begin: 29403725,

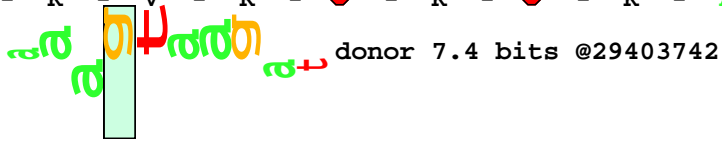
\* 29403730 \*                    \*29403740 \*                    \*29403750 \*                    \*29403760

5' a t c c t t t t c t g a a c a a a g t a a g a t g a a a a t a a a a a g c a t 3'

- I - L - F - ● - T - K - ● - D - E - N - K - K - H -

- S - F - S - E - Q - S - K - M - K - I - K - S - I -

- P - F - L - N - K - V - R - ● - K - ● - K - A - F -



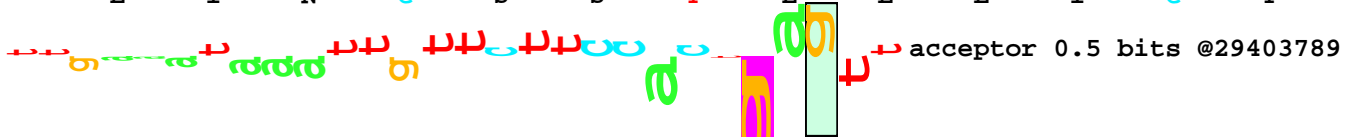
\* 29403770 \*                    \*29403780 \*                    \*29403790 \*                    \*29403800

5' t t g a a a t a a a t t g t t c t t c c a c t g a g t t g t t a a t a t g c t 3'

- L - K - ● - I - V - L - P - L - S - C - ● - Y - A -

- ● - N - K - L - F - F - H - ● - V - V - N - M - L -

- E - I - N - C - S - S - T - E - L - L - I - C - Y -



\* 29403810 \*                    \*29403820 \*                    \*29403830

5' a t a c a t t t t a a a a a t a a c t g g c a g t a g a 3'

- I - H - F - K - N - N - W - Q - ● -

- Y - I - L - K - I - T - G - S - R -

- T - F - ● - K - ● - L - A - V -

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 29, 1\_29, piece 1, config: linear, direction: +, begin: 29407783, end: 29407891

\* 29407790 \*                    \*29407800 \*                    \*29407810 \*                    \*29407820

5' g a c t g g g t t a t g g g a a c a t c a a a c c a a g c a g c a g a t g a t 3'

- D - W - V - M - G - T - S - N - Q - A - A - D - D -

- T - G - L - W - E - H - Q - T - K - Q - Q - M - M -

- L - G - Y - G - N - I - K - P - S - S - R - ● - ● -

... -----> exon 24.2940

\* 29407830 \*                    \*29407840 \*                    \*29407850 \*                    \*29407860

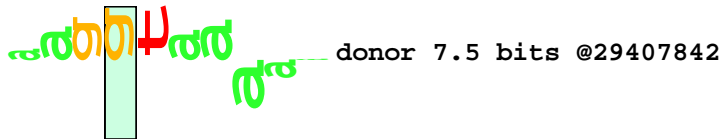
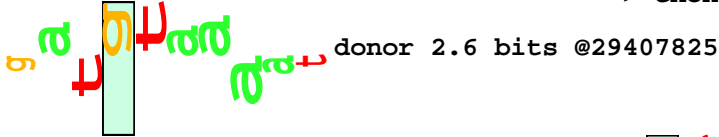
5' g a t g t a a a a t g t c t t a c a a g g t a a a a a a g a a t g a c c t t 3'

- D - V - K - C - L - T - R - K - K - N - D - L -

- M - ● - N - V - L - Q - G - K - K - R - M - T - F -

- C - K - M - S - Y - K - V - K - K - E - ● - P - S -

... -----> exon 24.29407758-29407841



\* 29407870 \*                    \*29407880 \*                    \*29407890

5' c a a g t a t t a g t g g g t t t t a c t g t g a g a g t t a 3'

- Q - V - L - V - G - F - T - V - R - V -

- K - Y - ● - W - V - L - L - ● - E - L -

- S - I - S - G - F - Y - C - E - S -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 30, 1\_30, 3193delC d29407837,29407837, config: linear, direction: +, begin: 29407783, end: 2

\* 29407790 \* \* 29407800 \* \* 29407810 \* \* 29407820

5' g a c t g g g t t a t g g g a a c a t c a a a c c a a g c a g c a g a t g a t 3'

- D - W - V - M - G - T - S - N - Q - A - A - D - D -

- T - G - L - W - E - H - Q - T - K - Q - Q - M - M -

- L - G - Y - G - N - I - K - P - S - S - R - ● - ● -

... ----- ... exon 24.2940

\* 29407830 \* \* 29407840 \* \* 29407850 \* \* 29407860

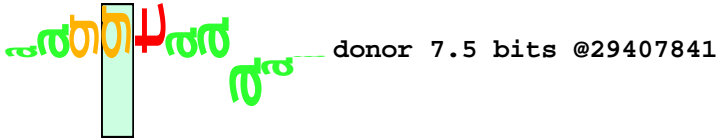
5' g a t g t a a a a t g t c t t t c a a g g t a a a a a a a g a a t g a c c t t c 3'

- D - V - K - C - L - Q - G - K - K - R - M - T - F -

- M - ● - N - V - F - K - V - K - K - E - ● - P - S -

- C - K - M - S - S - R - ● - K - K - N - D - L - Q -

... -----> exon 24.29407758-29407841      ... donor



\* 29407870 \* \* 29407880 \* \* 29407890

5' a a g t a t t a g t g g g t t t t a c t g t g a g a g t t a 3'

- K - Y - ● - W - V - L - L - ● - E - L -

- S - I - S - G - F - Y - C - E - S -

- V - L - V - G - F - T - V - R - V -

... donor 1.5 bits @29407863



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

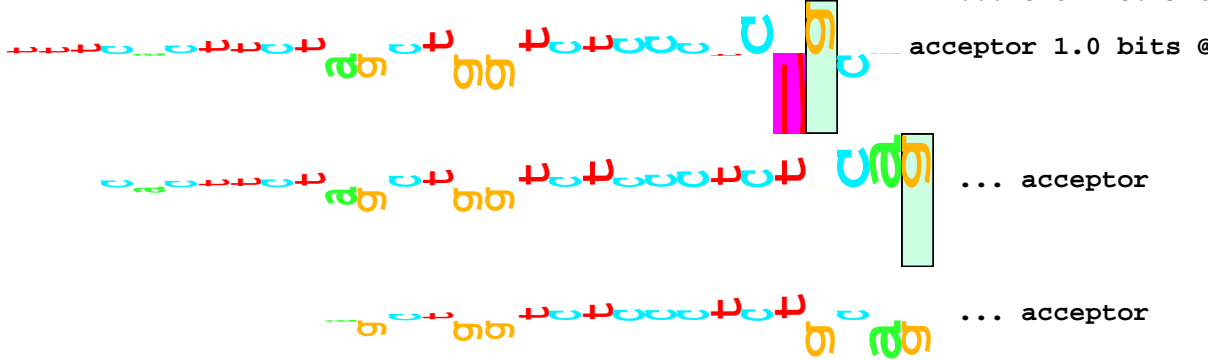
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 31, 1\_31, piece 1, config: linear, direction: +, begin: 29409011, end: 29409119

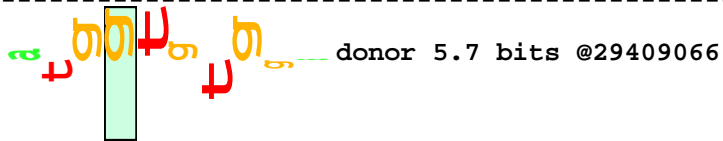
\*29409020 \*                      \*29409030 \*                      \*29409040 \*  
 5' g a a g c a g t a g t t t c a c t t c t a g c t g g t c t c c c t c t g c a g 3'  
 - E - A - V - V - S - L - L - A - G - L - P - L - Q -  
 - K - Q - ● - F - H - F - ● - L - V - S - L - C - S -  
 - S - S - S - F - T - S - S - W - S - P - S - A - A -

... exon 25.2940



\*29409050 \*                      \*29409060 \*                      \*29409070 \*                      \*29409080 \*  
 5' c c t g a a g a a g g a g a t g g t g t g g a a t t g a t g g a a g c c a a a 3'  
 - P - E - E - G - D - G - V - E - L - M - E - A - K -  
 - L - K - K - E - M - V - W - N - ● - W - K - P - N -  
 - ● - R - R - R - W - C - G - I - D - G - S - Q - I -

... exon 25.2940



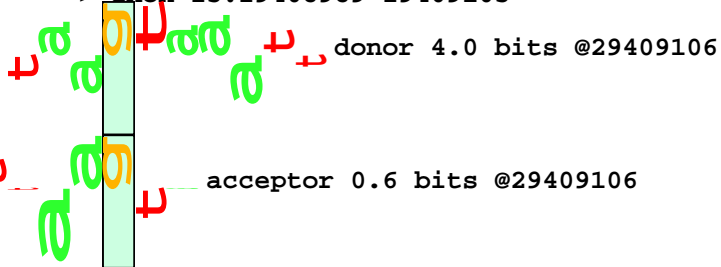
... acceptor 9.8 bits @29409049

... acceptor



\*29409090 \*                      \*29409100 \*                      \*29409110 \*  
 5' t c a c a g t t a t t t c t t a a g t a a a t t t c a g t c a 3'  
 - S - Q - L - F - L - K - ● - I - S - V -  
 - H - S - Y - F - L - S - K - F - Q - S -  
 - T - V - I - S - ● - V - N - F - S -

... > exon 25.29408989-29409105



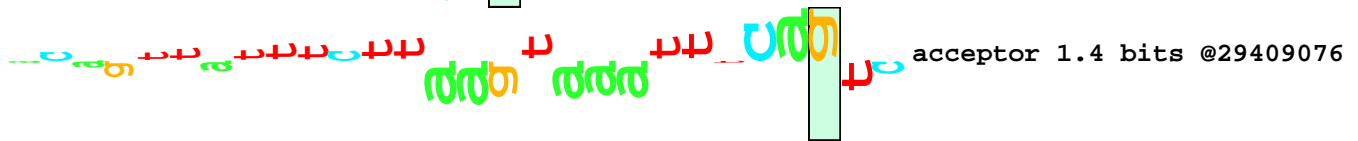
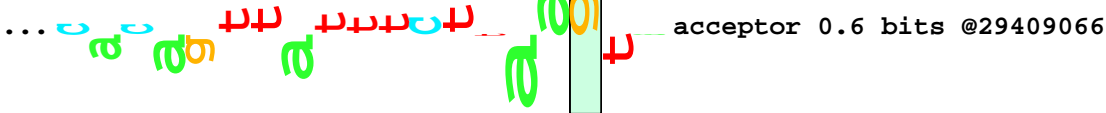


piece 32, 1\_32, 3274del140 d29409026,29409065, config: linear, direction: +, begin: 29409011, end:

\*29409020 \*                      \*29409030 \*                      \*29409040 \*  
 5' g a a g c a g t a g t t t c a g t g t g g a a t t g a t g g a a g c c a a a t 3'  
 - E - A - V - V - S - V - W - N - W - K - P - N -  
 - K - Q - F - Q - C - G - I - D - G - S - Q - I -  
 - S - S - S - F - S - V - E - L - M - E - A - K - S -  
 ... ----- ... exon 25.2940



\*29409050 \*                      \*29409060 \*                      \*29409070 \*  
 5' c a c a g t t a t t t c t t a a g t a a a t t t c a g t c a 3'  
 - H - S - Y - F - L - S - K - F - Q - S -  
 - T - V - I - S - V - N - F - S -  
 - Q - L - F - L - K - I - S - V -  
 ... ----- ... exon 25.29408989-29409105



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 33, 1\_33, piece 1, config: linear, direction: +, begin: 29409014, end: 29409122

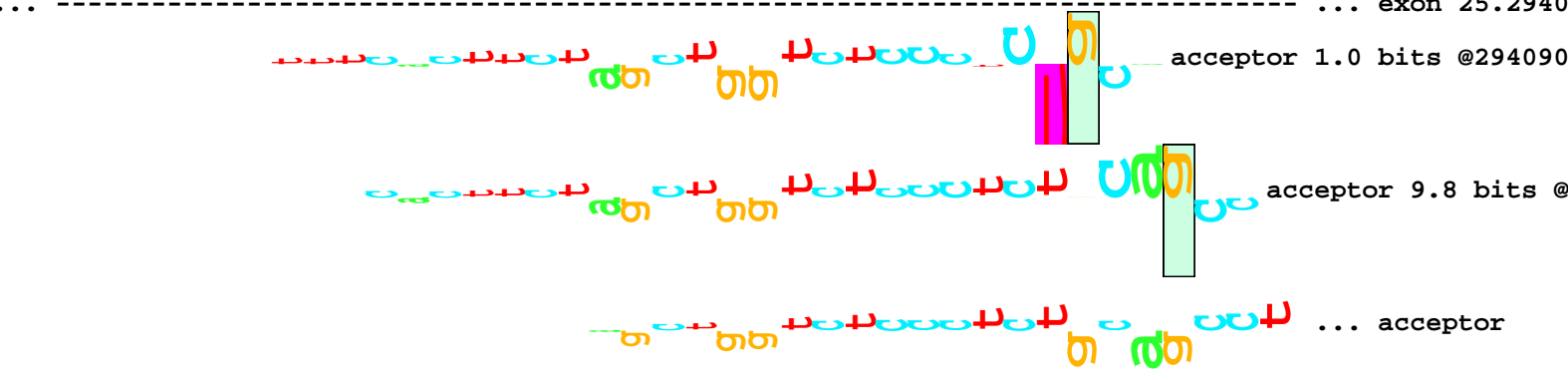
\* 29409020 \* \* 29409030 \* \* 29409040 \* \* 29409050

5' g c a g t a g t t t c a c t t c t a g c t g g t c t c c c t c t g c a g c c t 3'

- A - V - V - S - L - L - A - G - L - P - L - Q - P -

- Q - ● - F - H - F - ● - L - V - S - L - C - S - L -

- S - S - F - T - S - S - W - S - P - S - A - A - ● -



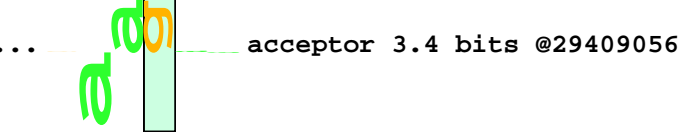
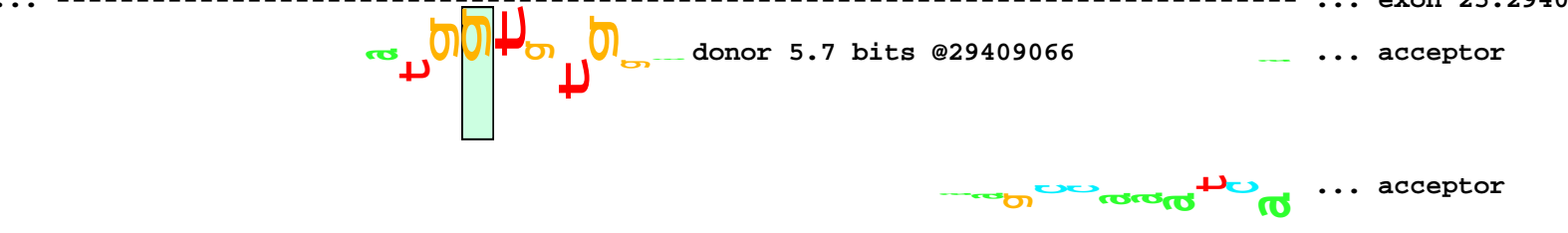
\* 29409060 \* \* 29409070 \* \* 29409080 \* \* 29409090

5' g a a g a a g g a g a t g g t g t g g a a t t g a t g g a a g c c a a a t c a 3'

- E - E - G - D - G - V - E - L - M - E - A - K - S -

- K - K - E - M - V - W - N - ● - W - K - P - N - H -

- R - R - R - W - C - G - I - D - G - S - Q - I - T -



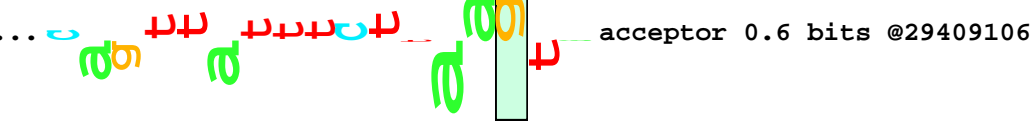
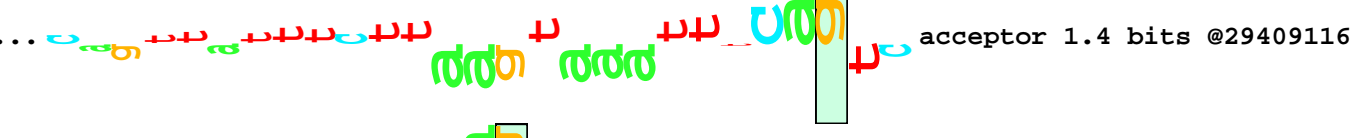
\* 29409100 \* \* 29409110 \* \* 29409120

5' c a g t t a t t t c t t a a g t a a a t t t c a g t c a c c a 3'

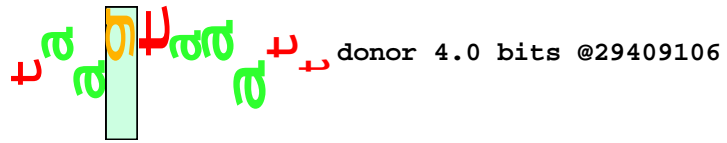
- Q - L - F - L - K - ● - I - S - V - T -

- S - Y - F - L - S - K - F - Q - S - P -

- V - I - S - ● - V - N - F - S - H -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 34, 1\_34, 3277G>A g29409068a, config: linear, direction: +, begin: 29409014, end: 29409122

\* 29409020 \* \* 29409030 \* \* 29409040 \* \* 29409050

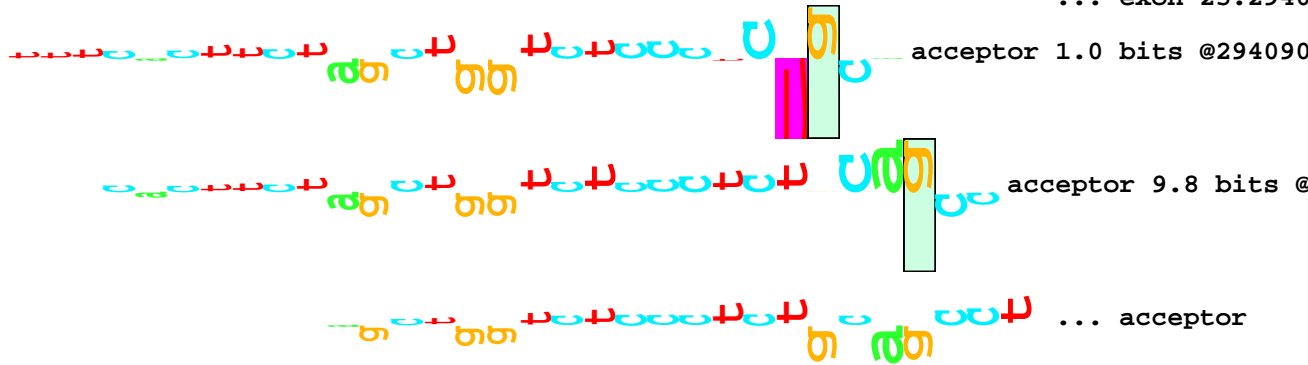
5' g c a g t a g t t t c a c t t c t a g c t g g t c t c c c t c t g c a g c c t 3'

- A - V - V - S - L - L - A - G - L - P - L - Q - P -

- Q - ● - F - H - F - ● - L - V - S - L - C - S - L -

- S - S - F - T - S - S - W - S - P - S - A - A - ● -

... exon 25.2940



\* 29409060 \* \* 29409070 \* \* 29409080 \* \* 29409090

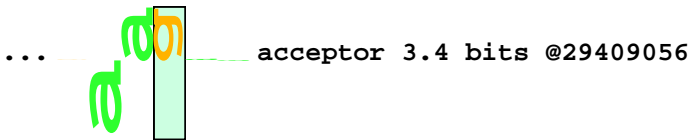
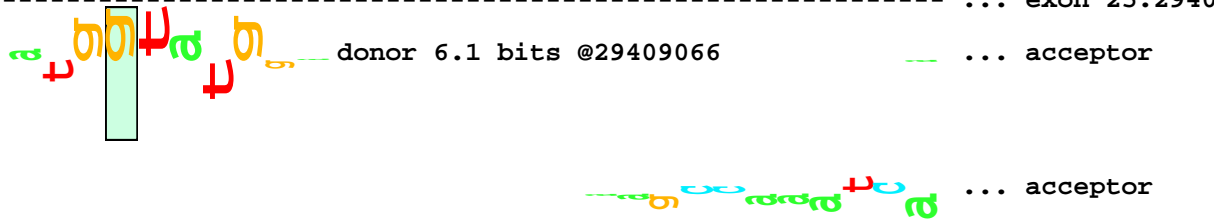
5' g a a g a a g g a g a t g g t a t g g a a t t g a t g g a a g c c a a a t c a 3'

- E - E - G - D - G - M - E - L - M - E - A - K - S -

- K - K - E - M - V - W - N - ● - W - K - P - N - H -

- R - R - R - W - Y - G - I - D - G - S - Q - I - T -

... exon 25.2940



\* 29409100 \* \* 29409110 \* \* 29409120

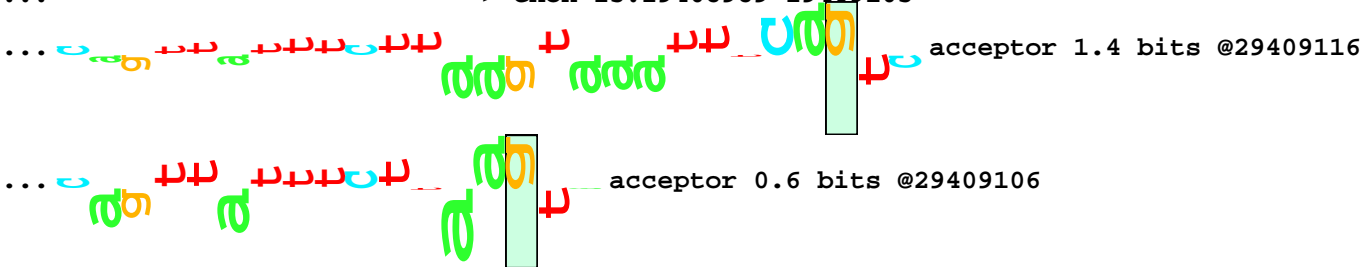
5' c a g t t a t t t c t t a a g t a a a t t t c a g t c a c c a 3'

- Q - L - F - L - K - ● - I - S - V - T -

- S - Y - F - L - S - K - F - Q - S - P -

- V - I - S - ● - V - N - F - S - H -

... > exon 25.29408989-29409105





Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 35, 1\_35, piece 1, config: linear, direction: +, begin: 29409614, end: 29409722

\* 29409620 \* \* 29409630 \* \* 29409640 \* \* 29409650

5' a g a t a c t t c a c a t t a t t t a t g a a c c t t t t g a a t g a c t g c 3'

- R - Y - F - T - L - F - M - N - L - L - N - D - C -

- D - T - S - H - Y - L - ● - T - F - ● - M - T - A -

- I - L - H - I - I - Y - E - P - F - E - ● - L - Q -

----- ... exon 26.2940

... donor



\* 29409660 \* \* 29409670 \* \* 29409680 \* \* 29409690

5' a g t g a a g t t g a a g a t g a a a g t g c g c a a a c a g g t g g c a g g 3'

- S - E - V - E - D - E - S - A - Q - T - G - G - R -

- V - K - L - K - M - K - V - R - K - Q - V - A - G -

- ● - S - ● - R - ● - K - C - A - N - R - W - Q - E -

----- ... exon 26.2940

... donor 0.8 bits @29409654

... donor 4.6 bits @29409672

... acceptor 2.5 bits @29409654



... donor 0.9 bits @29409668

... donor 4.6 bits @29409672

\* 29409700 \* \* 29409710 \* \* 29409720

5' a a a c g t g g c a t g t c t c g g a g g c t g g c a t c a c 3'

- K - R - G - M - S - R - R - L - A - S -

- N - V - A - C - L - G - G - W - H - H -

- T - W - H - V - S - E - A - G - I -

----- ... exon 26.29409616-29409797

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 36, 1\_36, 3367G>T g29409668t, config: linear, direction: +, begin: 29409614, end: 29409722

\* 29409620 \* \*29409630 \* \*29409640 \* \*29409650

5' a g a t a c t t c a c a t t a t t t a t g a a c c t t t t g a a t g a c t g c 3'

- R - Y - F - T - L - F - M - N - L - L - N - D - C -

- D - T - S - H - Y - L - ● - T - F - ● - M - T - A -

- I - L - H - I - I - Y - E - P - F - E - ● - L - Q -

[----- ... exon 26.2940

... donor

... acceptor

\* 29409660 \* \*29409670 \* \*29409680 \* \*29409690

5' a g t g a a g t t g a a g a t t a a a g t g c g c a a a c a g g t g g c a g g 3'

- S - E - V - E - D - ● - S - A - Q - T - G - G - R -

- V - K - L - K - I - K - V - R - K - Q - V - A - G -

- ● - S - ● - R - L - K - C - A - N - R - W - Q - E -

... exon 26.2940

... donor 0.8 bits @29409654

... donor 4.6 bits @294

... acceptor 2.5 bits @29409654

... donor 4.6 bits @29409672

\* 29409700 \* \*29409710 \* \*29409720

5' a a a c g t g g c a t g t c t c g g a g g c t g g c a t c a c 3'

- K - R - G - M - S - R - R - L - A - S -

- N - V - A - C - L - G - G - W - H - H -

- T - W - H - V - S - E - A - G - I -

... exon 26.29409616-29409797

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 37, 1\_37, piece 1, config: linear, direction: +, begin: 29409887, end: 29409995

\*29409890 \*                    \*29409900 \*                    \*29409910 \*                    \*29409920 \*

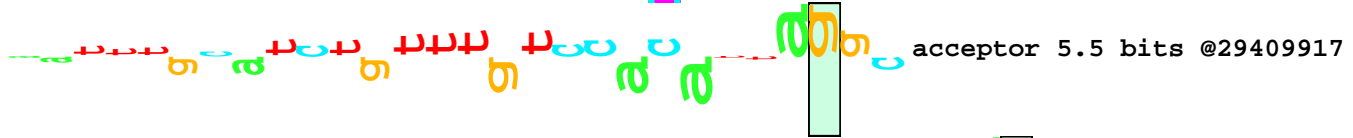
5' t a g t a a a t t t g c a t c t g t t t g t c c a c a t t a g g c t t a g g t 3'

- S - K - F - A - S - V - C - P - H - L - G - L - G -

- V - N - L - H - L - F - V - H - I - R - L - R - L -

... exon 27.2940

... donor



\*29409930 \*                    \*29409940 \*                    \*29409950 \*                    \*29409960 \*

5' t a c c a c a a g g a t c t c c a g a c a a g a g c t a c a t t t a t g g a a 3'

- Y - H - K - D - L - Q - T - R - A - T - F - M - E -

- T - T - R - I - S - R - Q - E - L - H - L - W - K -

- P - Q - G - S - P - D - K - S - Y - I - Y - G - S -

... exon 27.2940

... donor 1.3 bits @29409924

\*                    \*29409970 \*                    \*29409980 \*                    \*29409990 \*

5' g t t c t g a c a a a a a t c c t t c a a c a a g g c a c a g 3'

- V - L - T - K - I - L - Q - Q - G - T -

- F - Q - K - S - F - N - K - A - Q -

- S - D - K - N - P - S - T - R - H -

... exon 27.29409918-29410129

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 38, 1\_38, 3520C>T c29409941t, config: linear, direction: +, begin: 29409887, end: 29409995

\*29409890 \*                    \*29409900 \*                    \*29409910 \*                    \*29409920 \*  
 5' t a g t a a a t t t g c a t c t g t t t g t c c a c a t t a g g c t t a g g t 3'  
 - S - K - F - A - S - V - C - P - H - L - G - L - G -  
 - V - N - L - H - L - F - V - H - I - R - L - R - L -

... exon 27.2940

... donor

acceptor 0.0 bits @29409912

acceptor 5.5 bits @29409917

acceptor 2.3 bits

\*29409930 \*                    \*29409940 \*                    \*29409950 \*                    \*29409960  
 5' t a c c a c a a g g a t c t c t a g a c a a g a g c t a c a t t t a t g g a a 3'  
 - Y - H - K - D - L - T - R - A - T - F - M - E -  
 - T - T - R - I - S - R - Q - E - L - H - L - W - K -  
 - P - Q - G - S - L - D - K - S - Y - I - Y - G - S -  
 ... exon 27.2940

... donor 1.3 bits @29409924

\*29409970 \*                    \*29409980 \*                    \*29409990 \*  
 5' g t t c t g a c a a a a a t c c t t c a a c a a g g c a c a g 3'  
 - V - L - T - K - I - L - Q - Q - G - T -  
 - F - Q - K - S - F - N - K - A - Q -  
 - S - D - K - N - P - S - T - R - H -  
 ... exon 27.29409918-29410129

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 39, 1\_39, piece 1, config: linear, direction: +, begin: 29412590, end: 29412698

\*29412590 \*                    \*29412600 \*                    \*29412610 \*                    \*29412620 \*

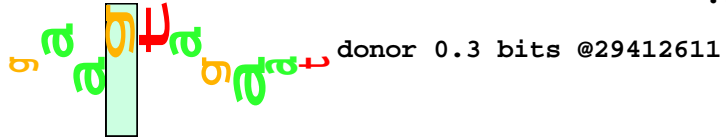
5' t g g a a c a t g t t t t c t a a a g a a g t a g a a t t g g c a g a c t c c 3'

- W - N - M - F - S - K - E - V - E - L - A - D - S -

- G - T - C - F - L - K - K - N - W - Q - T - P -

- E - H - V - F - R - S - R - I - G - R - L - H -

... exon 28.2941



\*29412630 \*                    \*29412640 \*                    \*29412650 \*                    \*29412660 \*

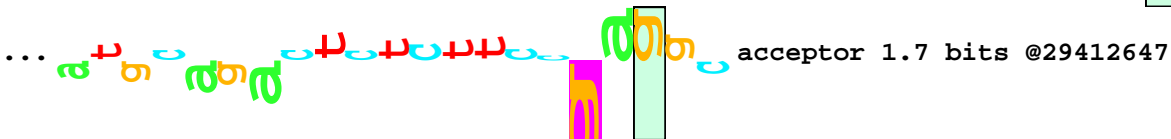
5' a t g c a g a c t c t c t t c c g a g g c a a c a g c t t g g c c a g t a a a 3'

- M - Q - T - L - F - R - G - N - S - L - A - S - K -

- C - R - L - S - S - E - A - T - A - W - P - V - K -

- A - D - S - L - P - R - Q - Q - L - G - Q - N -

... exon 28.2941



\*29412670 \*                    \*29412680 \*                    \*29412690 \*

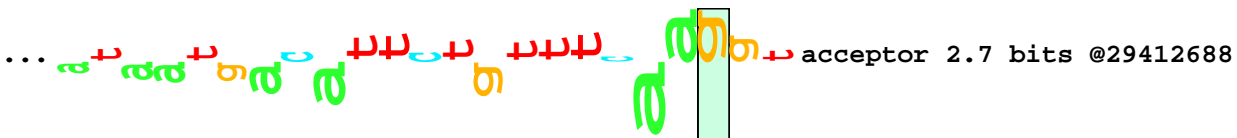
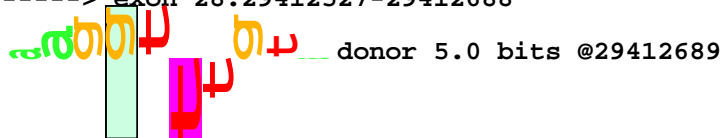
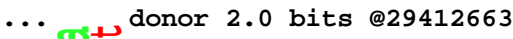
5' a t a a t g a c a t t c t g t t t c a a g g t t t g t a t c a 3'

- I - M - T - F - C - F - K - V - C - I -

- N - D - H - S - V - S - R - F - V - S -

- N - D - I - L - F - Q - G - L - Y -

... exon 28.29412527-29412688



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 40, 1\_40, 3826C>T c29412644t, config: linear, direction: +, begin: 29412590, end: 29412698

\*29412590 \*                    \*29412600 \*                    \*29412610 \*                    \*29412620 \*

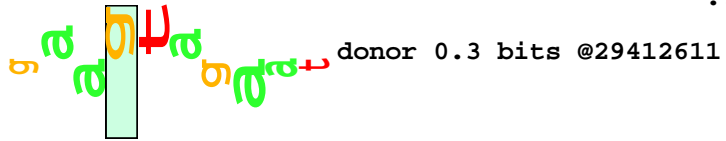
5' t g g a a c a t g t t t t c t a a a g a a g t a g a a t t g g c a g a c t c c 3'

- W - N - M - F - S - K - E - V - E - L - A - D - S -

- G - T - C - F - L - K - K - N - W - Q - T - P -

- E - H - V - F - R - S - R - I - G - R - L - H -

... exon 28.2941



\*29412630 \*                    \*29412640 \*                    \*29412650 \*                    \*29412660 \*

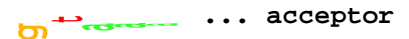
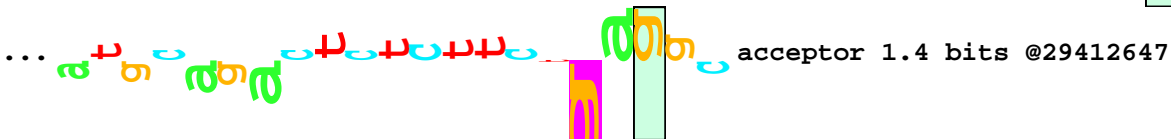
5' a t g c a g a c t c t c t t c t g a g g c a a c a g c t t g g c c a g t a a a 3'

- M - Q - T - L - F - G - N - S - L - A - S - K -

- C - R - L - S - S - E - A - T - A - W - P - V - K -

- A - D - S - L - L - R - Q - Q - L - G - Q - N -

... exon 28.2941



\*29412670 \*                    \*29412680 \*                    \*29412690 \*

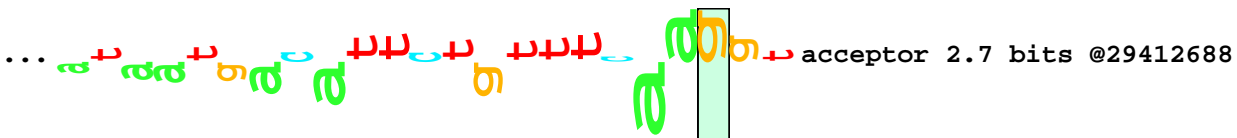
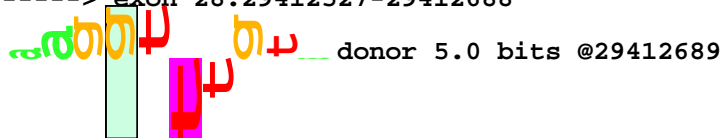
5' a t a a t g a c a t t c t g t t t c a a g g t t t g t a t c a 3'

- I - M - T - F - C - F - K - V - C - I -

- N - D - I - L - F - Q - G - L - Y -

... > exon 28.29412527-29412688

... donor 2.0 bits @29412663



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

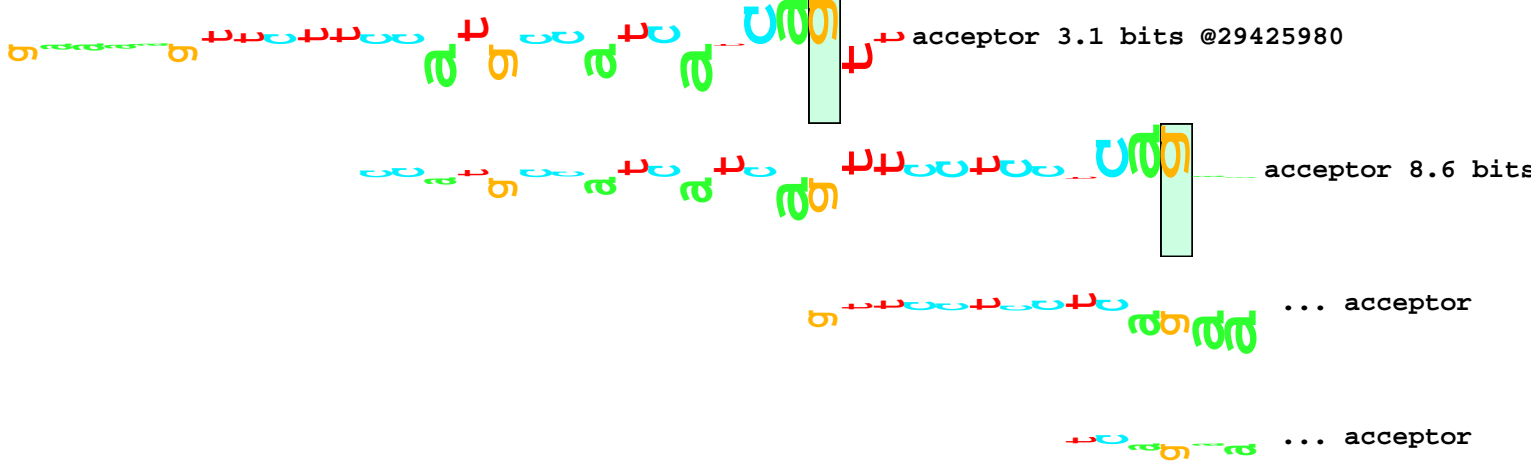
piece 41, 1\_41, piece 1, config: linear, direction: +, begin: 29425955, end: 29426063

```

*          *29425960 *          *29425970 *          *29425980 *          *29425990
5' g a a a a g t t c t t c c a t g c c a t c a t c a g t t c c t c c t c a g a a 3'
- E - K - F - F - H - A - I - I - S - S - S - S - E -
- K - S - S - S - M - P - S - S - V - P - P - Q - N -
- K - V - L - P - C - H - H - Q - F - L - L - R - I -

```

... exon 30.2942

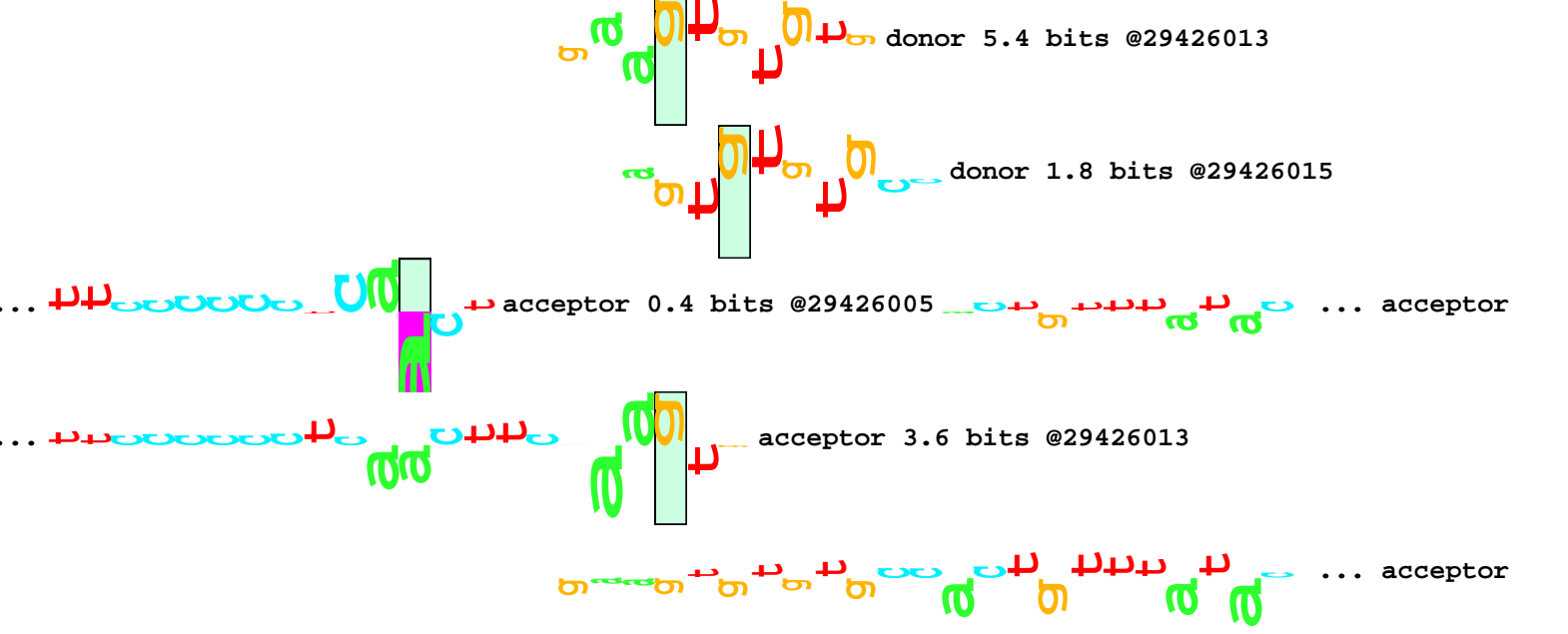


```

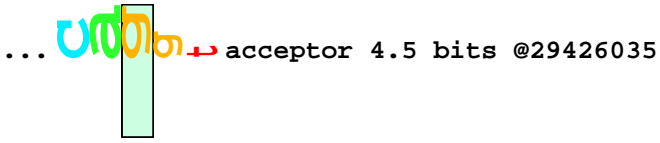
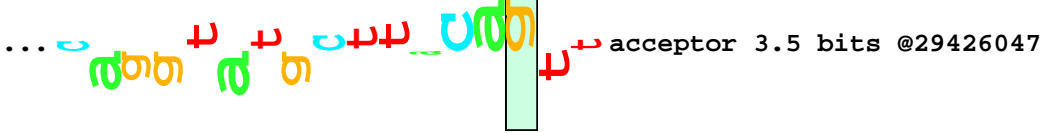
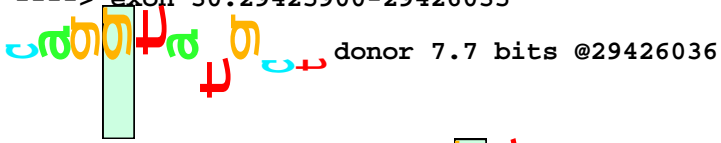
*          *29426000 *          *29426010 *          *29426020 *          *29426030
5' t t c c c c c t c a a c t t c g a a g t g t g t g c c a c t g t t t a t a c 3'
- F - P - P - P - Q - L - R - S - V - V - C - H - C - L - Y -
- S - P - L - N - F - E - V - C - A - T - V - Y - T -
- P - P - S - T - S - K - C - V - P - L - F - I - P -

```

... exon 30.2942



\* 29426040 \* \*29426050 \* \*29426060  
5' c a g g t a t g c t t a c a g t t a g a g a t t a c c a t t a 3'  
- Q - V - C - L - Q - L - E - I - T - I -  
- R - Y - A - Y - S - R - L - P - L -  
- G - M - L - T - V - R - D - Y - H -  
... ----> exon 30.29425900-29426035



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

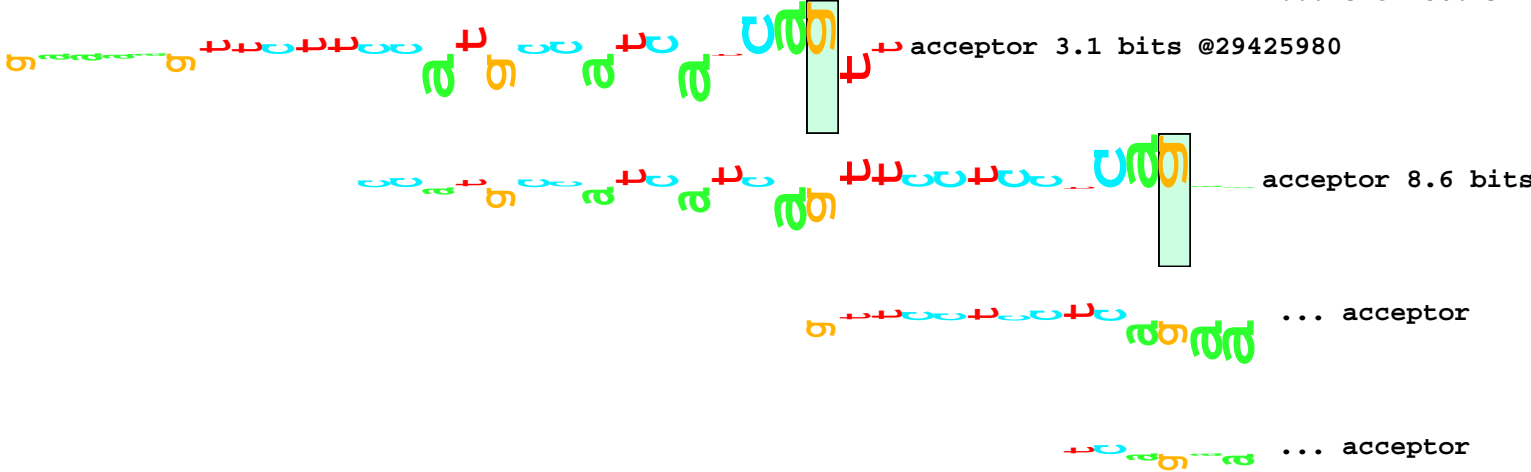
piece 42, 1\_42, 4084C>T c29426009t, config: linear, direction: +, begin: 29425955, end: 29426063

```

*          *29425960 *          *29425970 *          *29425980 *          *29425990
5' g a a a a g t t c t t c c a t g c c a t c a t c a g t t c c t c c t c a g a a 3'
- E - K - F - F - H - A - I - I - S - S - S - S - E -
- K - S - S - S - M - P - S - S - V - P - P - Q - N -
- K - V - L - P - C - H - H - Q - F - L - L - R - I -

```

... exon 30.2942

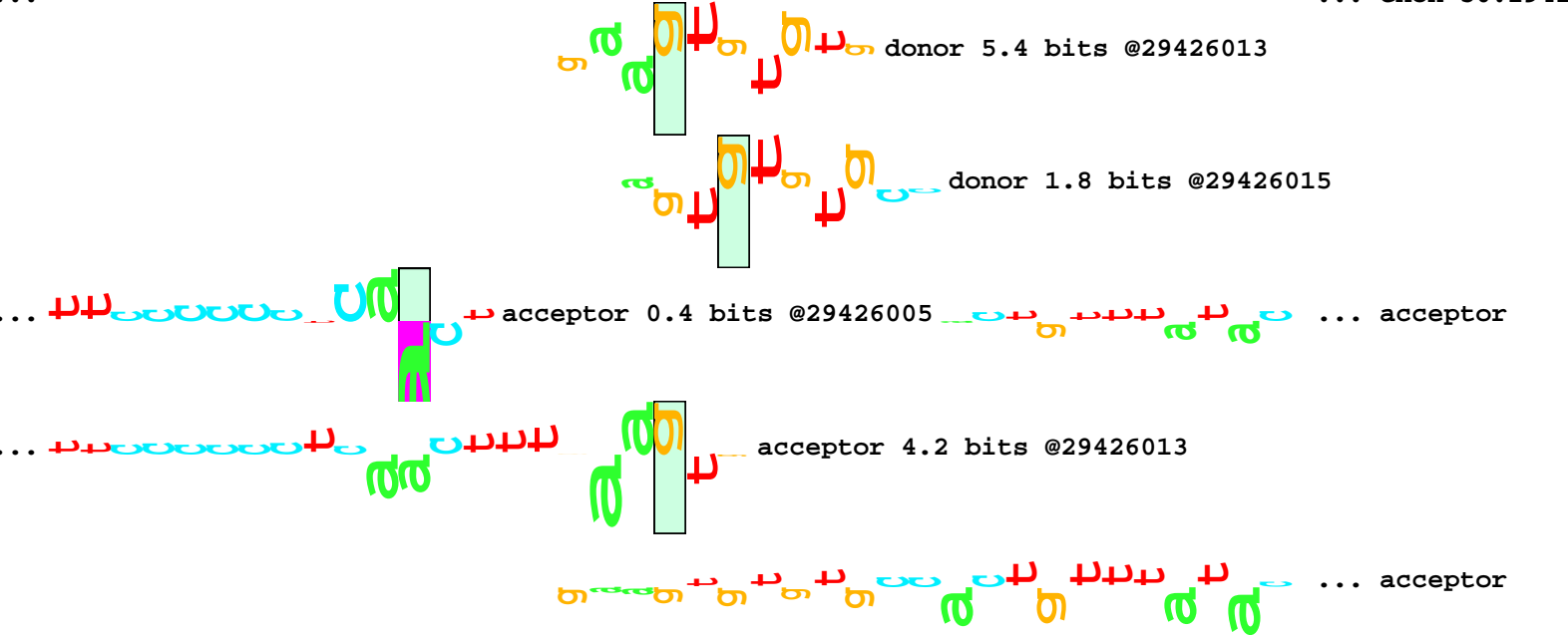


```

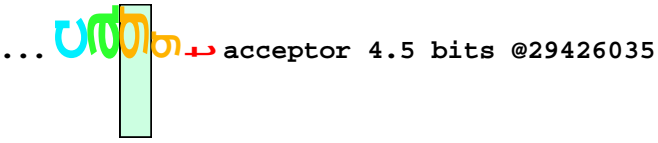
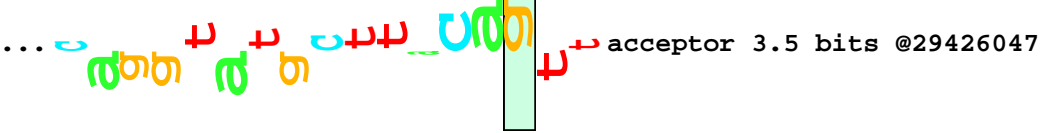
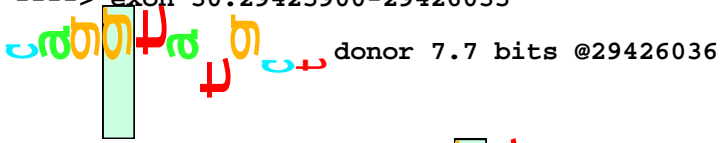
*          *29426000 *          *29426010 *          *29426020 *          *29426030
5' t t c c c c c t c a a c t t t g a a g t g t g t g c c a c t g t t t a t a c 3'
- F - P - P - Q - L - L - S - V - V - C - H - C - L - Y -
- S - P - L - N - F - E - V - C - A - T - V - Y - T -
- P - P - S - T - L - K - C - V - P - L - F - I - P -

```

... exon 30.2942



\* 29426040 \* 29426050 \* 29426060  
5' c a g g t a t g c t t a c a g t t a g a g a t t a c c a t t a 3'  
- Q - V - C - L - Q - L - E - I - T - I -  
- R - Y - A - Y - S - R - L - P - L -  
- G - M - L - T - V - R - D - Y - H -  
... ----> exon 30.29425900-29426035



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 43, 1\_43, piece 1, config: linear, direction: +, begin: 29438595, end: 29438703

\* 29438600 \*                    \*29438610 \*                    \*29438620 \*                    \*29438630

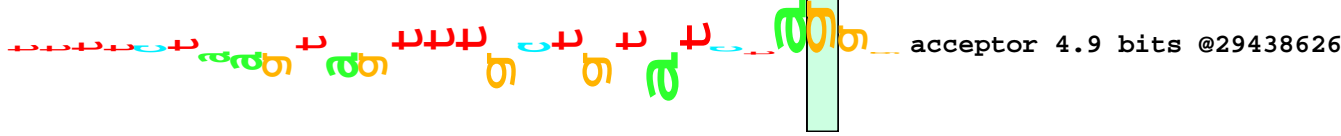
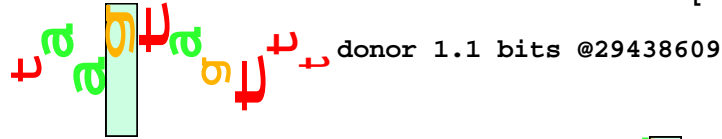
5' a a t t t t t t t t t c t a a g t a g t t t g c t g t a t c t a g g g a t c a t 3'

- N - F - F - S - K - ● - F - A - V - S - R - D - H -

- I - F - F - L - S - S - L - L - Y - L - ● - G - I - I - ● -

- F - F - F - ● - V - V - C - C - I - ● - G - S - ● -

[----- ... exon 34.2943



\* 29438640 \*                    \*29438650 \*                    \*29438660 \*                    \*29438670

5' a a a g c t g t t g g a a g a c g a c c t t t t g a t a a g a t g g c a a c a 3'

- K - A - V - G - R - R - P - F - D - K - M - A - T -

- K - L - L - E - D - D - L - L - I - R - W - Q - H -

- S - C - W - K - T - T - F - ● - ● - D - G - N - T -

... ----- ... exon 34.2943

... acceptor

\* 29438680 \*                    \*29438690 \*                    \*29438700

5' c t t c t t g c a t a c c t g g g t c c t c c a g a g c a c a 3'

- L - L - A - Y - L - G - P - P - E - H -

- F - L - H - T - W - V - L - Q - S - T -

- S - C - I - P - G - S - S - R - A -

... ----- ... exon 34.29438627-29438773



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 44, 1\_44, 4537C>T c29438649t, config: linear, direction: +, begin: 29438595, end: 29438703

\* 29438600 \* 29438610 \* 29438620 \* 29438630

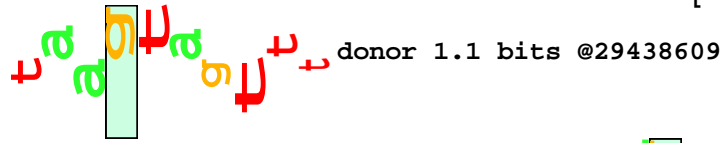
5' a a t t t t t t t t c t a a g t a g t t t g c t g t a t c t a g g g a t c a t 3'

- N - F - F - S - K - F - A - V - S - R - D - H -

- I - F - F - L - S - S - L - L - Y - L - G - I - I -

- F - F - F - V - V - C - C - I - G - S -

[----- ... exon 34.2943



\* 29438640 \* 29438650 \* 29438660 \* 29438670

5' a a a g c t g t t g g a a g a t g a c c t t t t g a t a a g a t g g c a a c a 3'

- K - A - V - G - R - P - F - D - K - M - A - T -

- K - L - L - E - D - D - L - L - I - R - W - Q - H -

- S - C - W - K - M - T - F - D - G - N - T -

... exon 34.2943

... acceptor

\* 29438680 \* 29438690 \* 29438700

5' c t t c t t g c a t a c c t g g g t c c t c c a g a g c a c a 3'

- L - L - A - Y - L - G - P - P - E - H -

- F - L - H - T - W - V - L - Q - S - T -

- S - C - I - P - G - S - S - R - A -

... exon 34.29438627-29438773



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 45, 1\_45, piece 1, config: linear, direction: +, begin: 29346833, end: 29346941

\* 29346840 \* \* 29346850 \* \* 29346860 \* \* 29346870 \*

5' a a g a c a a t g t t g a t g t t c a t g a t a t a g a a t t g t t a c a g t 3'

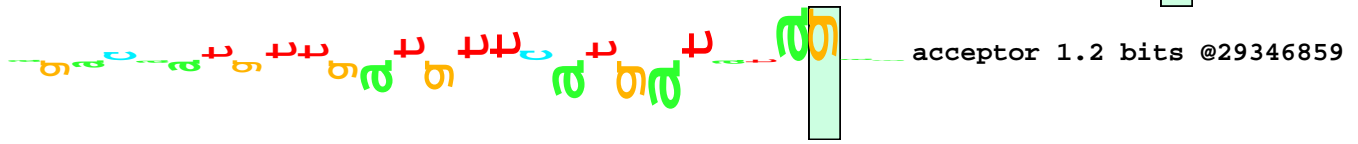
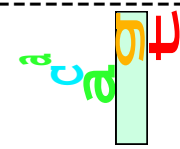
- K - T - M - L - M - F - M - I - N - C - Y - S -

- R - Q - C - S - Y - R - I - V - T - V -

- D - N - V - D - V - H - D - I - E - L - L - Q - Y -

... exon 5.29346

... donor



\* 29346880 \* \* 29346890 \* \* 29346900 \* \* 29346910 \*

5' a t a t c a a t g t g g a t t g t g c a a a a t t a a a a c g a c t c c t g a 3'

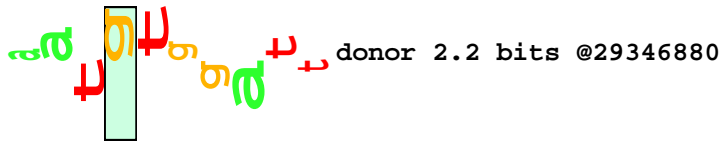
- I - S - M - W - I - V - Q - N - N - D - S -

- Y - Q - C - G - L - C - K - I - K - T - T - P - E -

- I - N - V - D - C - A - K - L - K - R - L - L - K -

... exon 5.29346

... donor 0.7 bits @29346870



\* 29346920 \* \* 29346930 \* \* 29346940 \*

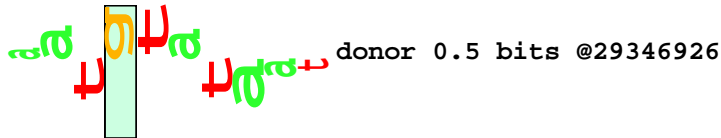
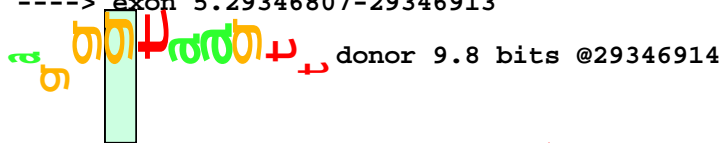
5' a g g g t a a g t t t a a a t g t a t a a a t a t a t c t g a a 3'

- R - V - S - L - N - V - Y - I -

- G - V - M - Y - N - I - S - E -

- G - K - F - K - C - I - I - Y - L -

... ----> exon 5.29346807-29346913



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 46, 1\_46, 560G>A g29346887a, config: linear, direction: +, begin: 29346833, end: 29346941

\* 29346840 \* \* 29346850 \* \* 29346860 \* \* 29346870 \*

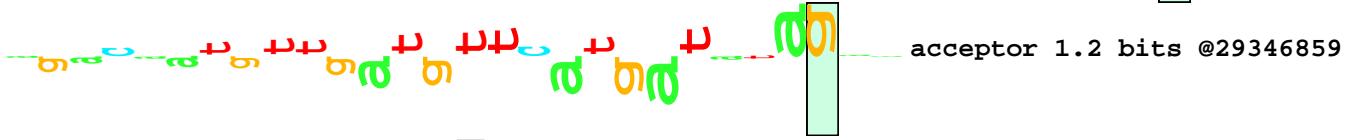
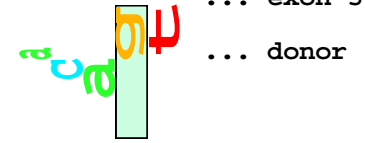
5' a a g a c a a t g t t g a t g t t c a t g a t a t a g a a t t g t t a c a g t 3'

- K - T - M - L - M - F - M - I - N - C - Y - S -

- R - Q - C - S - Y - R - I - V - T - V -

- D - N - V - D - V - H - D - I - E - L - L - Q - Y -

... exon 5.29346



\* 29346880 \* \* 29346890 \* \* 29346900 \* \* 29346910 \*

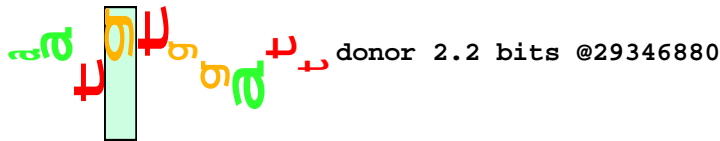
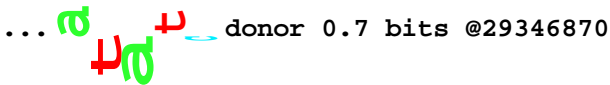
5' a t a t c a a t g t g g a t t a t g c a a a a t t a a a a c g a c t c c t g a 3'

- I - S - M - W - I - M - Q - N - N - D - S -

- Y - Q - C - G - L - C - K - I - K - T - T - P - E -

- I - N - V - D - Y - A - K - L - K - R - L - L - K -

... exon 5.29346



\* 29346920 \* \* 29346930 \* \* 29346940 \*

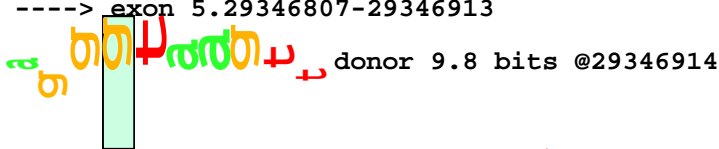
5' a g g g t a a g t t t a a a t g t a t a a a t a t a t c t g a a 3'

- R - V - S - L - N - V - Y - I - I -

- G - V - M - Y - N - I - S - E -

- G - K - F - K - C - I - I - Y - L -

... ----> exon 5.29346807-29346913



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 47, 1\_47, piece 1, config: linear, direction: +, begin: 29346847, end: 29346955

\*29346850 \*                    \*29346860 \*                    \*29346870 \*                    \*29346880 \*

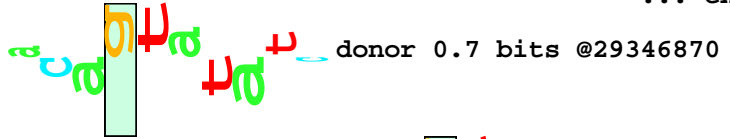
5' g t t c a t g a t a t a g a a t t g t t a c a g t a t a t c a a t g t g g a t 3'

- V - H - D - I - E - L - L - Q - Y - I - N - V - D -

- F - M - I - I - N - C - Y - S - I - S - M - W - I -

- S - Y - R - I - V - T - V - Y - Q - C - G - L -

... exon 5.29346



\*29346890 \*                    \*29346900 \*                    \*29346910 \*                    \*29346920 \*

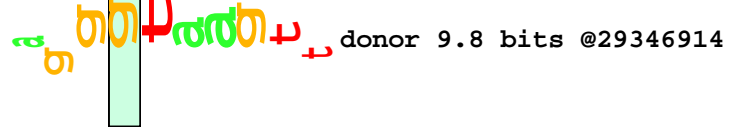
5' t g t g c a a a a t t a a a a c g a c t c c t g a a g g g t a a g t t t a a a 3'

- C - A - K - L - K - R - L - L - K - G - K - F - K -

- V - Q - N - N - N - D - S - R - V - S - L - N -

- C - K - I - K - T - T - P - E - G - V - M -

> exon 5.29346807-29346913



... donor 2.2 bits @29346880

... donor

\*                    \*29346930 \*                    \*29346940 \*                    \*29346950 \*

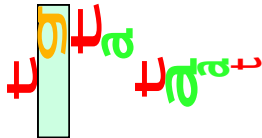
5' t g t a t a a t a t a t c t g a a a a a a a t c a c t g g g t 3'

- C - I - I - Y - L - K - K - I - T - G -

- V - Y - I - K - K - S - L - G -

- Y - N - I - S - E - K - N - H - W -

... donor 0.5 bits @29346926



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 48, 1\_48, 574C>T c29346901t, config: linear, direction: +, begin: 29346847, end: 29346955

\*29346850 \*                    \*29346860 \*                    \*29346870 \*                    \*29346880 \*

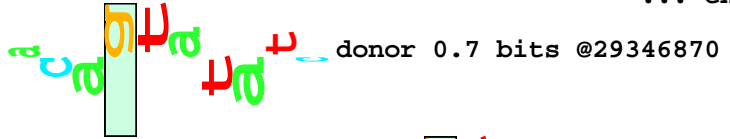
5' g t t c a t g a t a t a g a a t t g t t a c a g t a t a t c a a t g t g g a t 3'

- V - H - D - I - E - L - L - Q - Y - I - N - V - D -

- F - M - I - N - C - Y - S - I - S - M - W - I -

- S - Y - R - I - V - T - V - Y - Q - C - G - L -

... exon 5.29346



\*29346890 \*                    \*29346900 \*                    \*29346910 \*                    \*29346920 \*

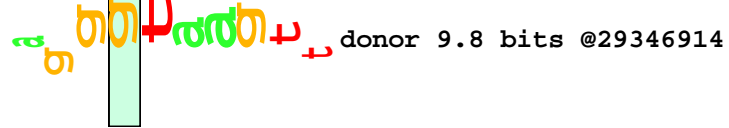
5' t g t g c a a a a t t a a a a t g a c t c c t g a a g g g t a a g t t t a a a 3'

- C - A - K - L - K - L - L - K - G - K - F - K -

- V - Q - N - N - D - S - R - V - S - L - N -

- C - K - I - K - M - T - P - E - G - V - M -

> exon 5.29346807-29346913



... donor 2.2 bits @29346880

... donor

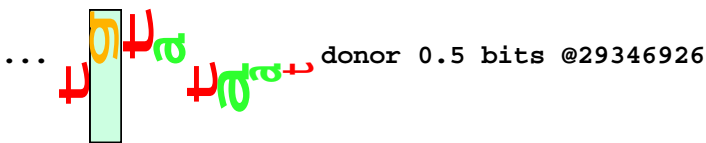
\*                    \*29346930 \*                    \*29346940 \*                    \*29346950 \*

5' t g t a t a a t a t a t c t g a a a a a a a t c a c t g g g t 3'

- C - I - I - Y - L - K - K - I - T - G -

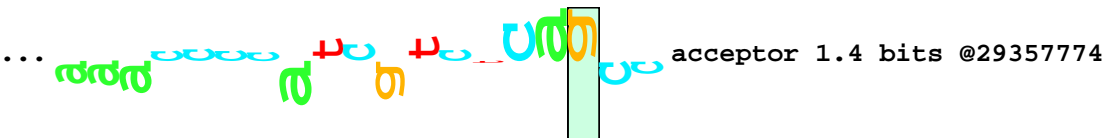
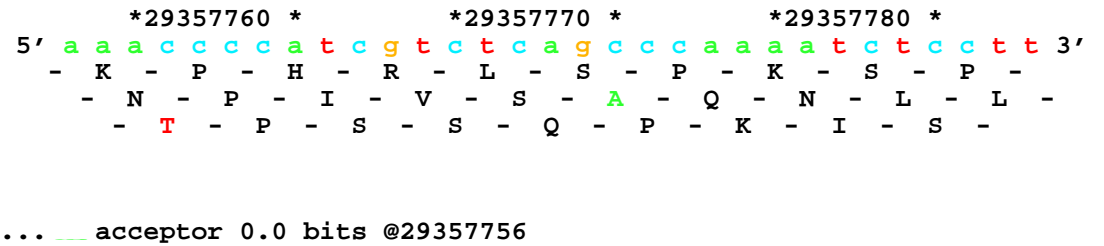
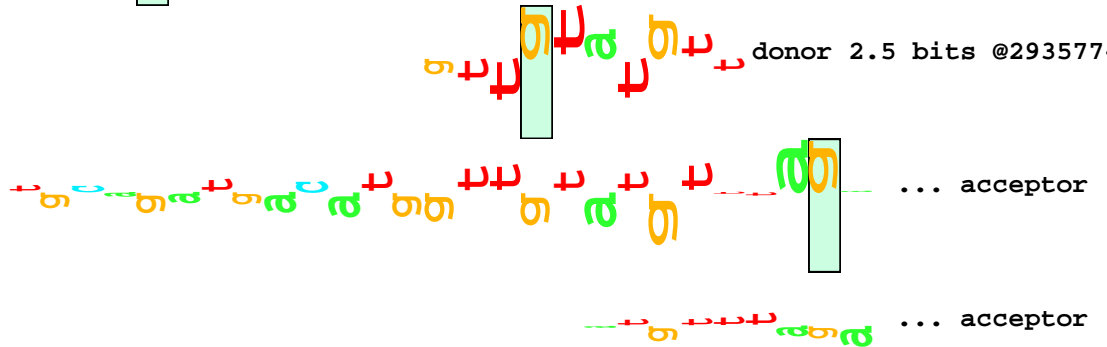
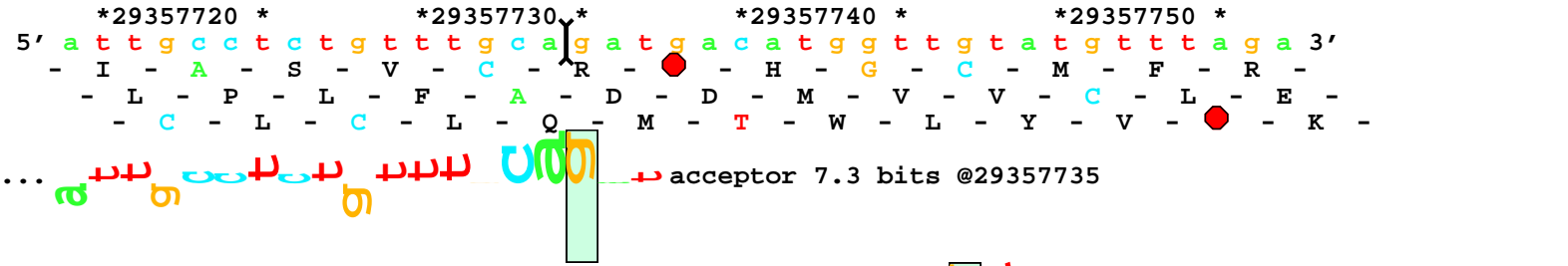
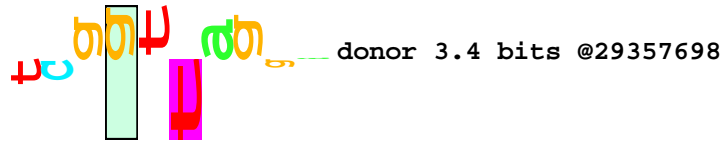
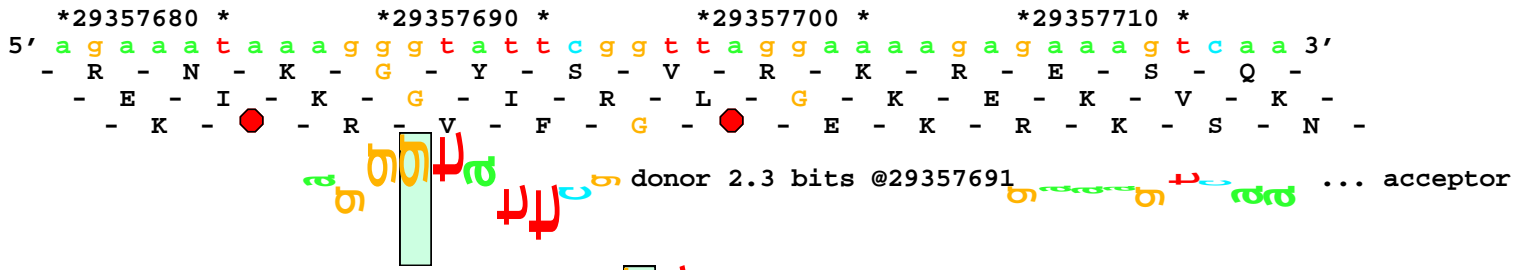
- V - Y - I - K - K - K - S - L - G -

- Y - N - I - S - E - K - N - H - W -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 49, 1\_49, piece 1, config: linear, direction: +, begin: 29357680, end: 29357788

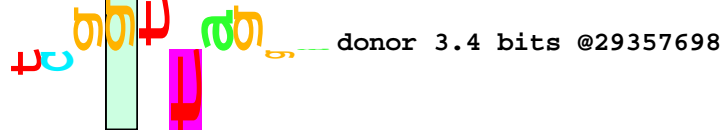


piece 50, 1\_50, 603-604instT i29357734,29357735t, config: linear, direction: +, begin: 29357680, en

```

*29357680 *           *29357690 *           *29357700 *           *29357710 *
5' a g a a a t a a a g g g t a t t c g g t t a g g a a a a g a g a a a g t c a a 3'
- R - N - K - G - Y - S - V - R - K - R - E - S - Q -
- E - I - K - G - I - R - L - G - K - E - K - V - K -
- K - R - V - F - G - E - K - R - K - S - N -

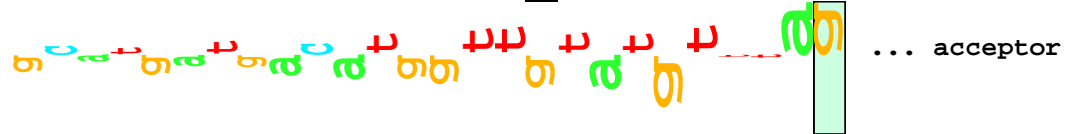
```



```

*29357720 *           *29357730 *           *29357740 *           *29357750 *
5' a t t g c c t c t g t t t g c a t g a t g a c a t g g t t g t a t g t t t a g 3'
- I - A - S - V - C - M - M - T - W - L - Y - V -
- L - P - L - F - A - H - G - C - M - F - R -
- C - L - C - L - H - D - D - M - V - V - C - L - E -

```

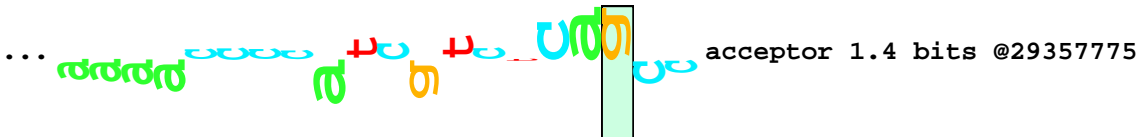


```

*29357760 *           *29357770 *           *29357780 *
5' a a a a c c c c a t c g t c t c a g c c c a a a a t c t c c t t 3'
- K - T - P - S - S - Q - P - K - I - S -
- K - P - H - R - L - S - P - K - S - P -
- N - P - I - V - S - A - Q - N - L - L -

```

... acceptor 0.0 bits @29357757





piece 51, 1\_51, piece 1, config: linear, direction: +, begin: 29359527, end: 29359635

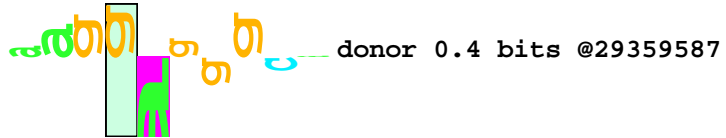
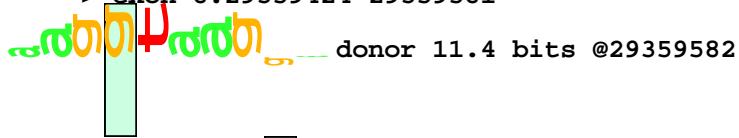
\*29359530 \*                    \*29359540 \*                    \*29359550 \*                    \*29359560 \*  
 5' a g a a a t a a t c c a g g a t a t a t c c a a a g a c g t g g t t g a t g a 3'  
 - R - N - N - P - G - Y - I - Q - R - R - G - - -  
 - E - I - I - Q - D - I - S - K - D - V - V - D - E -  
 - K - - S - R - I - Y - P - K - T - W - L - M - K -

... exon 8.29359



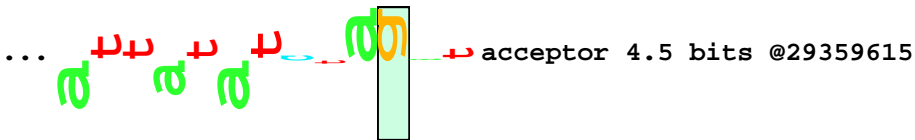
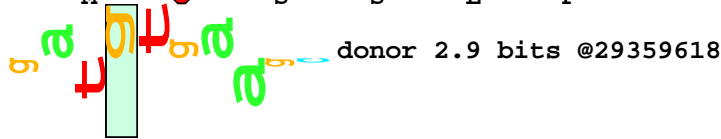
\*29359570 \*                    \*29359580 \*                    \*29359590 \*                    \*29359600  
 5' a a a c a a c a t g a a t a a g g t a a g g a g g g c a a a a t t a t t t c c 3'  
 - K - Q - H - E - - G - K - E - G - K - I - I - S -  
 - N - N - M - N - K - V - R - R - A - K - L - F - P -  
 - T - T - - I - R - - G - G - Q - N - Y - F - H -

> exon 8.29359424-29359581



... acceptor

\*                    \*29359610 \*                    \*29359620 \*                    \*29359630 \*  
 5' a t t a t a t c t a g a t g t g a a g c a g t t t a t t t t a 3'  
 - I - I - S - R - C - E - A - V - Y - F -  
 - L - Y - L - D - V - K - Q - F - I - L -  
 - Y - I - - M - - S - S - L - F -



piece 52, 1\_52, 888del174 d29359408,29359581, config: linear, direction: +, begin: 29359527, end:

\*29359530 \*                    \*29359540 \*                    \*29359550 \*                    \*29359560 \*

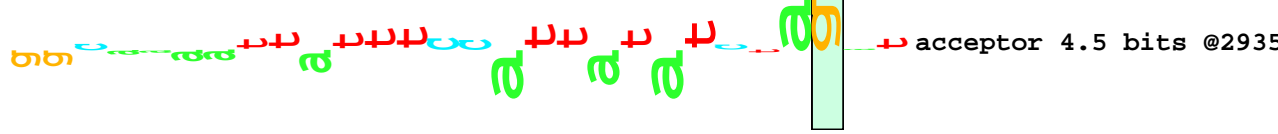
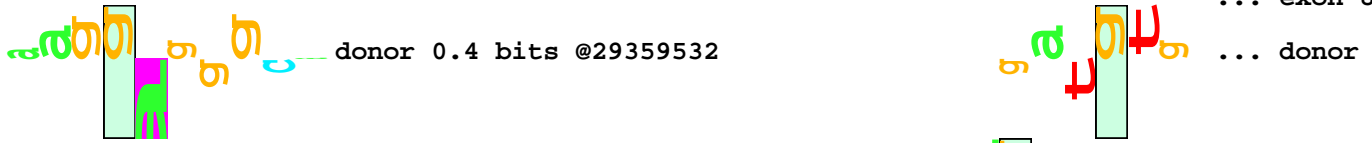
5' g t a a g g a g g g c a a a a t t a t t t c c a t t a t a t c t a g a t g t g 3'

- V - R - R - A - K - L - F - P - L - Y - L - D - V -

- G - G - Q - N - Y - F - H - Y - I - M -

- K - E - G - K - I - I - S - I - I - S - R - C - E -

... ----- ... exon 8.29359



\*29359570 \*                    \*29359580

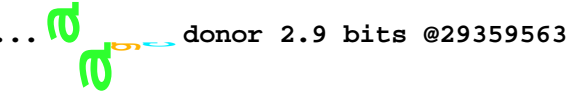
5' a a g c a g t t t a t t t t a 3'

- K - Q - F - I - L -

- S - S - L - F -

- A - V - Y - F -

... ----- ... exon 8.29359424-29359581



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 53, 1\_53, piece 1, config: linear, direction: +, begin: 29377305, end: 29377413

\* 29377310 \*                    \*29377320 \*                    \*29377330 \*                    \*29377340

5' a t a t t a t c t t a t c g c t a t a t t t g a a t t c t g t a g a a g t t a 3'

- I - L - S - Y - R - Y - I - I - I - L - K - L -

- Y - Y - L - I - A - I - F - E - F - C - R - S - Y -

- I - I - L - S - L - Y - L - N - S - V - E - V - I -

[----- ... exon 9.29377



\* 29377350 \*                    \*29377360 \*                    \*29377370 \*                    \*29377380

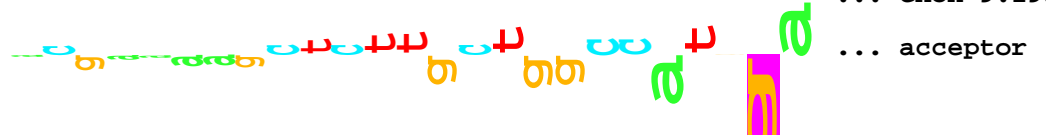
5' t t t c t g g a c a g t c t a c g a a a a g c t c t t g c t g g c c a t g g a 3'

- F - L - D - S - L - R - K - A - L - A - G - H - G -

- F - W - T - V - Y - E - K - L - L - L - A - M - E -

- S - G - Q - S - T - K - S - S - C - W - P - W - R -

... exon 9.29377



\* 29377390 \*                    \*29377400 \*                    \*29377410

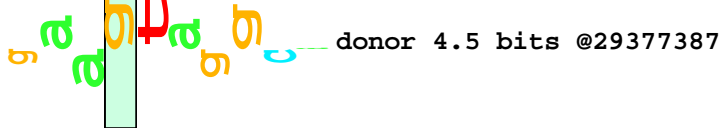
5' g g a a g t a g g c a g c t g a c a g a a a g t g c t g c a a 3'

- G - S - R - Q - L - T - E - S - A - A -

- E - V - G - S - Q - K - V - L - Q -

- K - A - A - D - R - K - C - C -

... exon 9.29377338-29377511



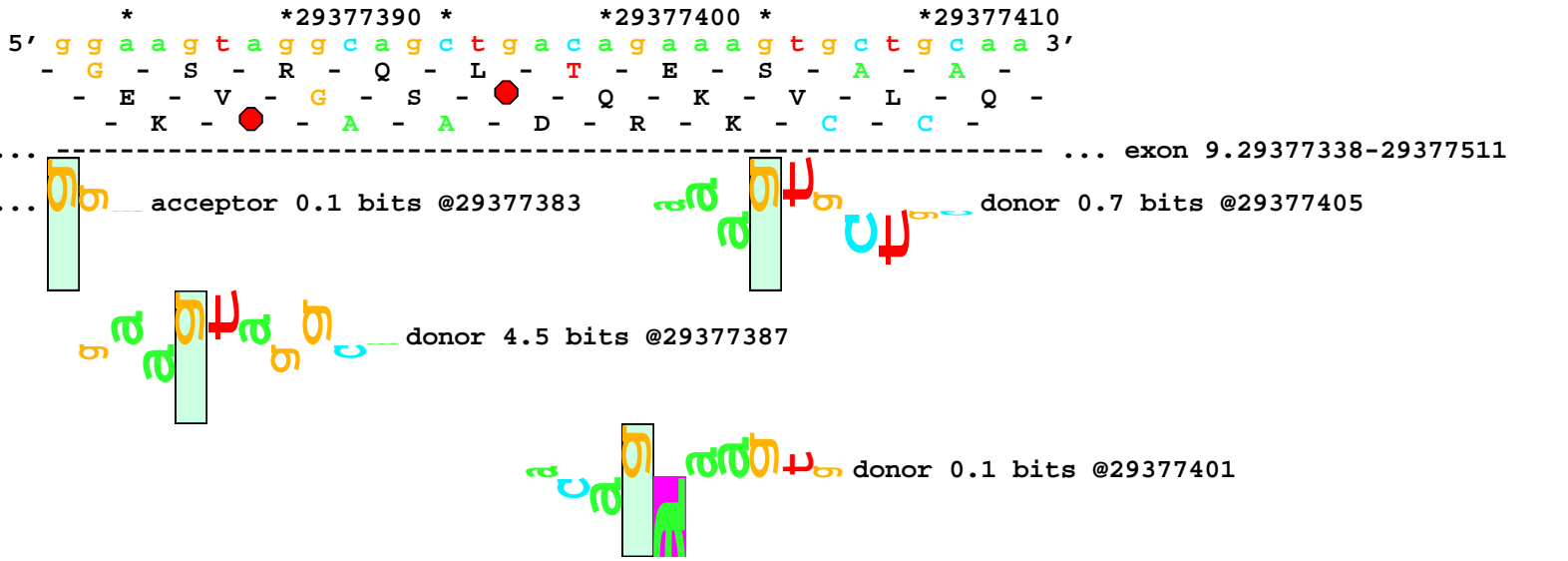
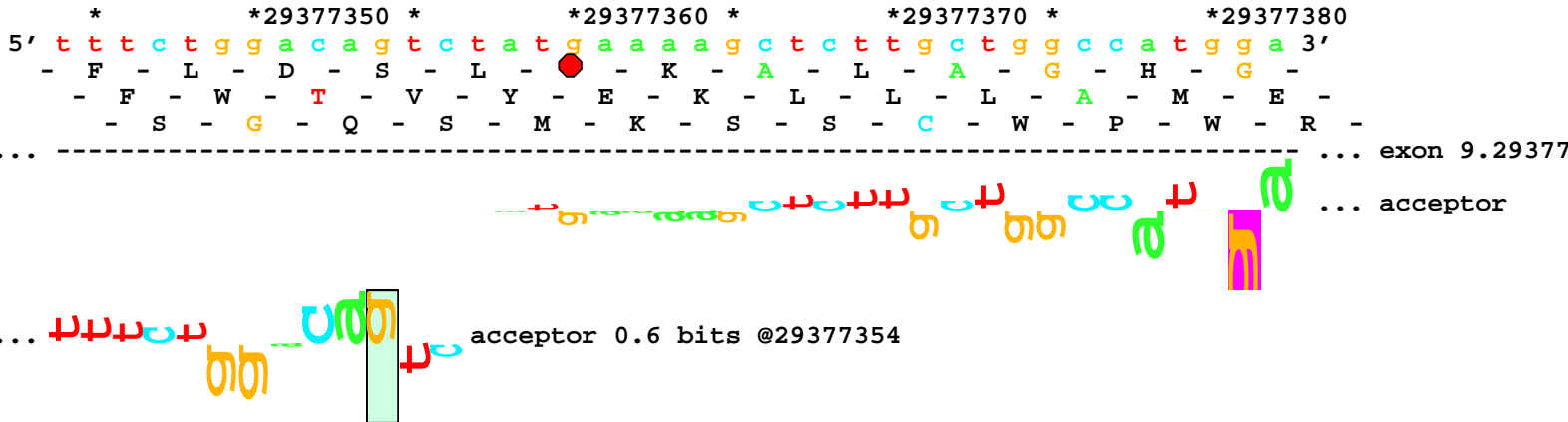
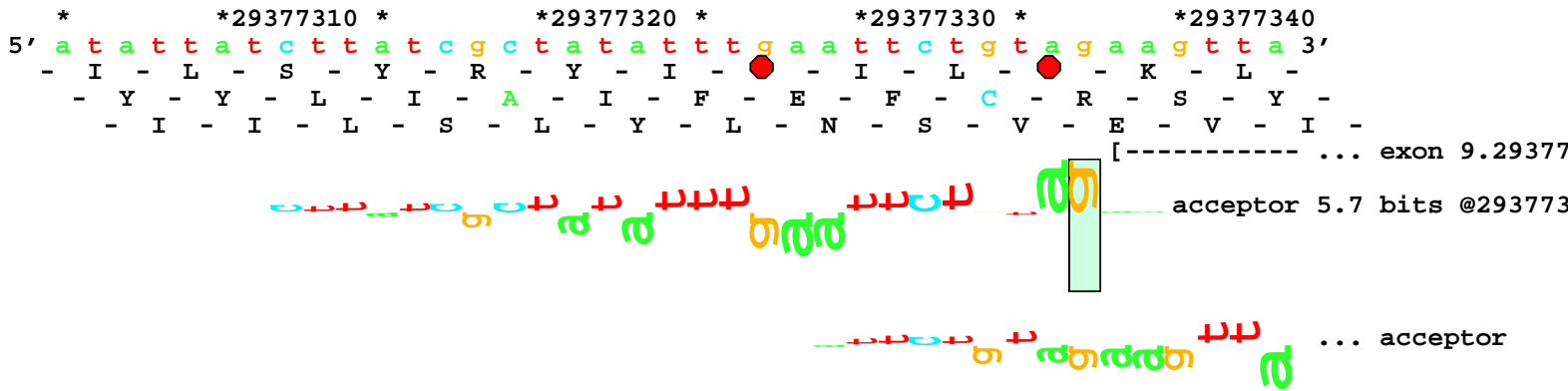
Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 54, 1\_54, 910C>T c29377359t, config: linear, direction: +, begin: 29377305, end: 29377413



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 55, 1\_55, piece 1, config: linear, direction: +, begin: 29376296, end: 29376404

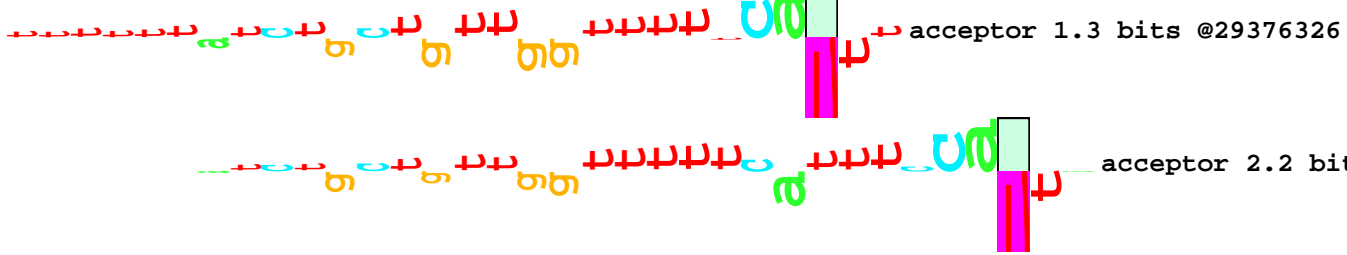
\*29376300 \*                    \*29376310 \*                    \*29376320 \*                    \*29376330

5' t t a g t t t t t t t a t c t g c t g t t g g t t t t t c a t t t c c a t t a 3'

- L - V - F - L - S - A - V - G - F - S - F - P - L -

- ● - F - F - Y - L - L - L - V - F - H - F - H - Y -

- S - F - F - I - C - C - W - F - F - I - S - I - M -



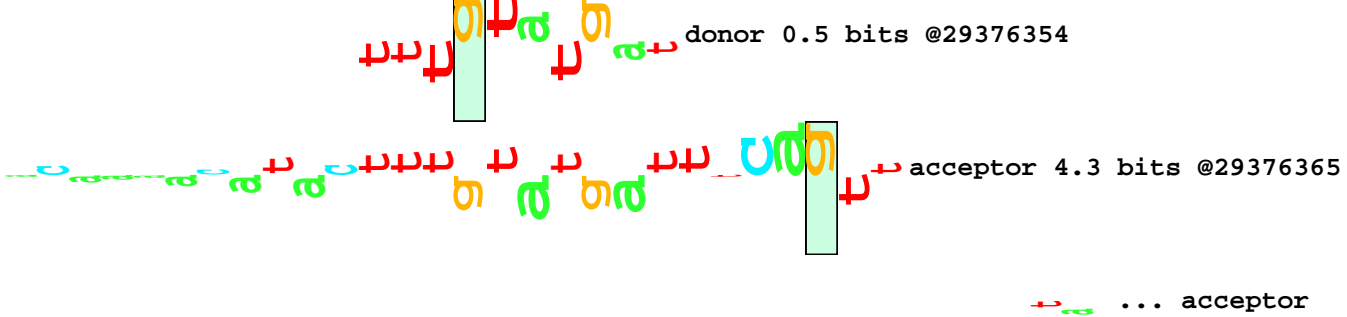
\*                    \*29376340 \*                    \*29376350 \*                    \*29376360 \*                    \*29376370

5' t g a t c a c a a a a c a t a c t t t t g t a t g a t t t c a g t t t t c t t t a 3'

- ● - S - Q - N - I - L - C - M - I - S - V - S - L -

- D - H - K - T - Y - F - V - ● - F - Q - F - L - ● -

- I - T - K - H - T - L - Y - D - F - S - F - F - K -



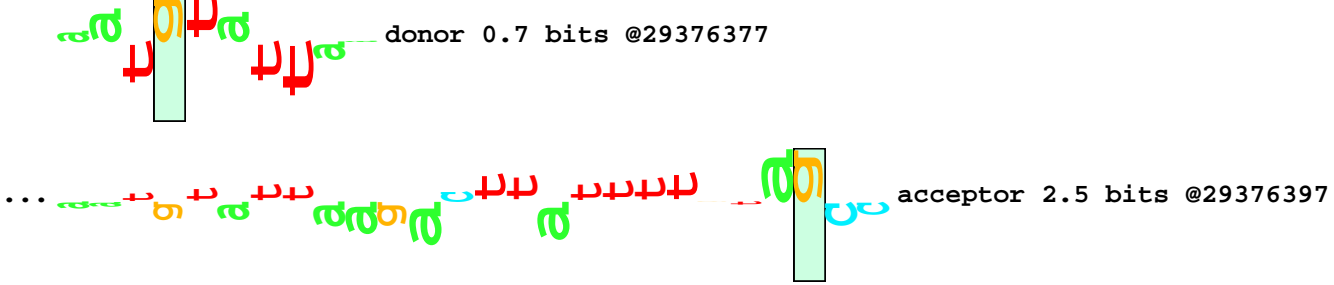
\*                    \*29376380 \*                    \*29376390 \*                    \*29376400

5' a a t g t a t t a a g a c t t a t t t t g t a g c c t a a c a 3'

- N - V - L - R - L - I - L - ● - P - N -

- M - Y - ● - D - L - F - C - S - L - T -

- C - I - K - T - Y - F - V - A - ● -



piece 56, 1\_56, 987-988insA i29376350,29376351a, config: linear, direction: +, begin: 29376296, end: 29376378

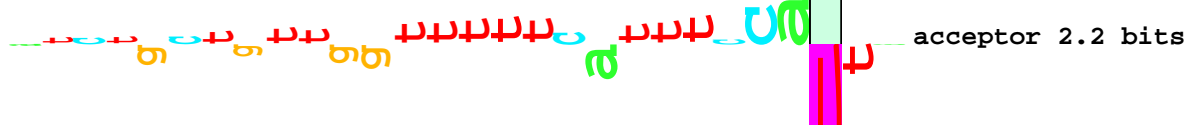
\*29376300 \*                    \*29376310 \*                    \*29376320 \*                    \*29376330 \*

5' t t a g t t t t t t t a t c t g c t g t t g g t t t t t c a t t t c c a t t a 3'

- L - V - F - L - S - A - V - G - F - S - F - P - L -

- ● - F - F - Y - L - L - L - V - F - H - F - H - Y -

- S - F - F - I - C - C - W - F - F - I - S - I - M -



\*                    \*29376340 \*                    \*29376350 \*                    \*29376360 \*                    \*29376370 \*

5' t g a t c a c a a a a c a t a c a t t t t g t a t g a t t t c a g t t t c t t t 3'

- ● - S - Q - N - I - H - L - Y - D - F - S - F - F -

- D - H - K - T - Y - I - C - M - I - S - V - S - L -

- I - T - K - H - T - F - V - ● - F - Q - F - L - ● -



→ ... acceptor

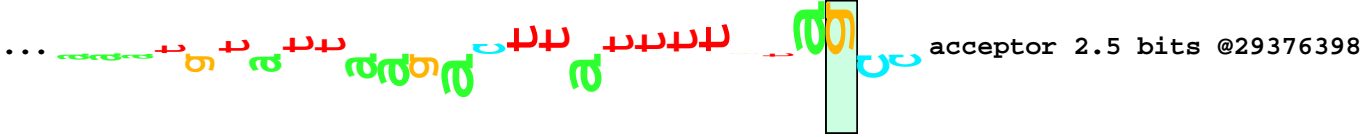
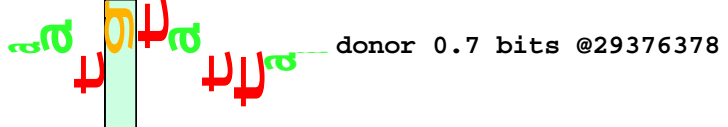
\*                    \*29376380 \*                    \*29376390 \*                    \*29376400 \*

5' a a a t g t a t t a a g a c t t a t t t t g t a g c c t a a c a 3'

- K - C - I - K - T - Y - F - V - A - ● -

- N - V - L - R - L - I - L - ● - P - N -

- M - Y - ● - D - L - F - C - S - L - T -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 57, 1\_57, piece 1, config: linear, direction: +, begin: 29400432, end: 29400540

\* 29400440 \*                    \*29400450 \*                    \*29400460 \*                    \*29400470 \*

5' g t g g t t g c g g g a a a t a t t g a t c t g c a g g a a t a a a t t t c t 3'

- V - V - A - G - N - I - D - L - Q - E - I - S -

- W - L - R - E - I - L - I - C - R - N - K - F - L -

- G - C - G - K - Y - S - A - G - I - N - F - F -

... ----- ... exon 16.2940



\* 29400480 \*                    \*29400490 \*                    \*29400500 \*

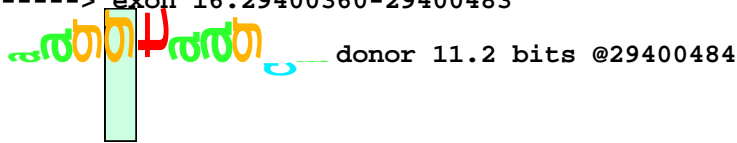
5' t c t t a a a a a t a a g g t a a g c a a a a t g a c a t a t t t a a a a a a 3'

- S - K - G - K - Q - N - D - I - F - K - K -

- L - K - N - K - V - S - K - M - T - Y - L - K - N -

- L - K - I - R - A - K - H - I - K - M -

... -----> exon 16.29400360-29400483



\*29400510 \*                    \*29400520 \*                    \*29400530 \*                    \*29400540 \*

5' t g g a a g a a t a t t t g g a a t g g t a a t g g t g a g a 3'

- W - K - N - I - W - N - G - N - G - E -

- G - R - I - F - G - M - V - M - V - R -

- E - E - Y - L - E - W - W -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 58, 1\_58, IVS16+3del16 d29400486,29400491, config: linear, direction: +, begin: 29400432, end:

\* 29400440 \*                    \*29400450 \*                    \*29400460 \*                    \*29400470 \*

5' g t g g t t g c g g g a a a t a t t g a t c t g c a g g a a t a a a t t t c t 3'

- V - V - A - G - N - I - D - L - Q - E - I - S -

- W - L - R - E - I - L - I - C - R - N - K - F - L -

- G - C - G - K - Y - S - A - G - I - N - F - F -



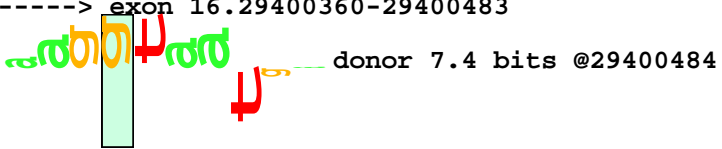
\* 29400480 \*                    \*29400490 \*                    \*29400500 \*

5' t c t t a a a a a t a a g g t a a t g a c a t a t t t a a a a a a t g g a a g 3'

- S - K - G - N - D - I - F - K - K - W - K -

- L - K - N - K - V - M - T - Y - L - K - N - G - R -

- L - K - I - R - H - I - K - M - E - E -



\*29400510 \*                    \*29400520 \*                    \*29400530 \*

5' a a t a t t t g g a a t g g t a a t g g t g a g a 3'

- N - I - W - N - G - N - G - E -

- I - F - G - M - V - M - V - R -

- Y - L - E - W - W -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>



piece 59, 1\_59, piece 1, config: linear, direction: +, begin: 29400300, end: 29400408

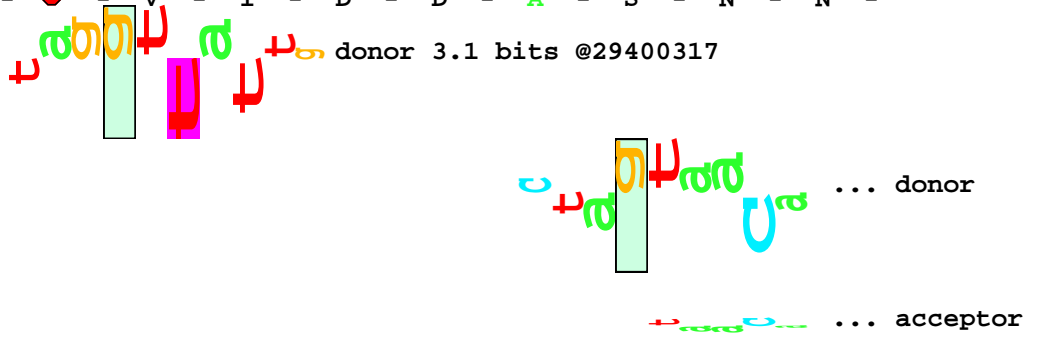
\*29400300 \*                    \*29400310 \*                    \*29400320 \*                    \*29400330 \*

5' g g t t a t a t c t g c a t t a g g t t a t t g a t g a t g c t a g t a a c a 3'

- G - Y - I - C - I - R - L - L - M - M - L - V - T -

- V - I - S - A - L - G - Y -     -     -     -     -     - Q -

- L - Y - L - H -     - V - I - D - D - A - S - N - N -



\*29400340 \*                    \*29400350 \*                    \*29400360 \*                    \*29400370 \*

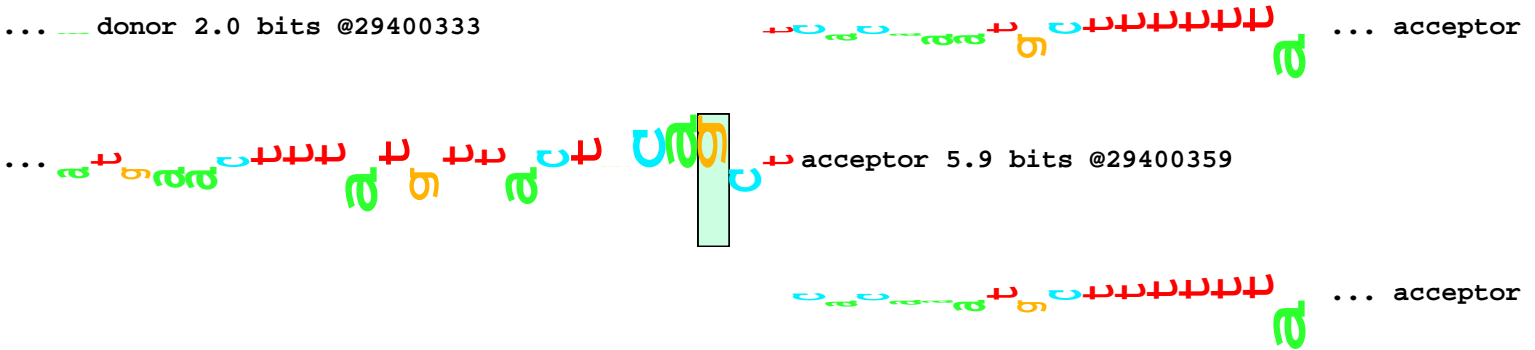
5' a t g a a c t t t a t g t t a c t g c a g c t c a c a a a t g c t t t t t t a 3'

- M - N - F - M - L - L - Q - L - T - N - A - F - L -

-     - T - L - C - Y - C - S - S - Q - M - L - F - Y -

- E - L - Y - V - T - A - A - H - K - C - F - F - T -

[----- ... exon 16.2940



\*29400380 \*                    \*29400390 \*                    \*29400400 \*

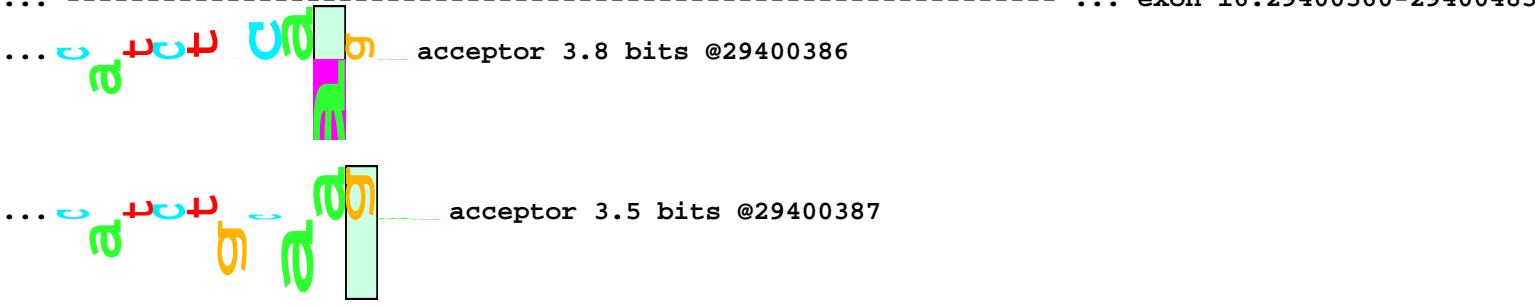
5' c a t c t g c a a g a a a t t a a c t a g t c a t c a a a t g 3'

- H - L - Q - E - I - N -     - S - S - N -

- I - C - K - K - L - T - S - H - Q - M -

- S - A - R - N -     - L - V - I - K -

----- ... exon 16.29400360-29400483



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
 References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
 URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
 Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 60, 1\_60, IVS16-6del14 d29400354,29400357, config: linear, direction: +, begin: 29400300, end:

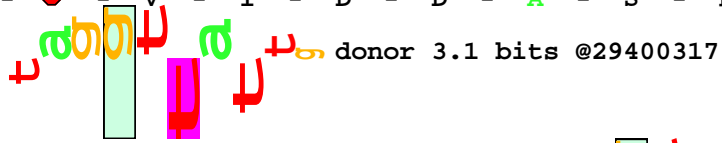
\*29400300 \*                    \*29400310 \*                    \*29400320 \*                    \*29400330 \*

5' g g t t a a t c t g c a t t a g g t t a t t g a t g a t g c t a g t a a c a 3'

- G - Y - I - C - I - R - L - L - M - M - L - V - T -

- V - I - S - A - L - G - Y - ● - ● - C - ● - ● - Q -

- L - Y - L - H - ● - V - I - D - D - A - S - N - N -



\*29400340 \*                    \*29400350 \*                    \*29400360 \*                    \*29400370 \*

5' a t g a a c t t t a t g t t a a g c t c a c a a a t g c t t t t t a c a t c 3'

- M - N - F - M - L - S - S - Q - M - L - F - Y - I -

- ● - T - L - C - ● - A - H - K - C - F - F - T - S -

- E - L - Y - V - K - L - T - N - A - F - L - H - L -

... donor 2.0 bits @29400333



\*29400380 \*                    \*29400390 \*                    \*29400400 \*

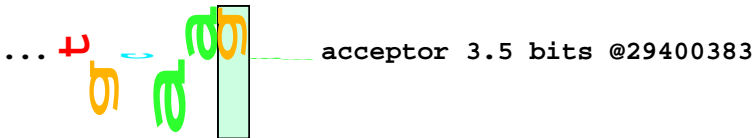
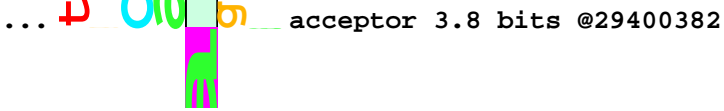
5' t g c a a g a a a t t a a c t a g t c a t c a a a t g 3'

- C - K - K - L - T - S - H - Q - M -

- A - R - N - ● - L - V - I - K -

- Q - E - I - N - ● - S - S - N -

... exon 16.29400360-29400483



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 61, 1\_61, piece 1, config: linear, direction: +, begin: 29409862, end: 29409970

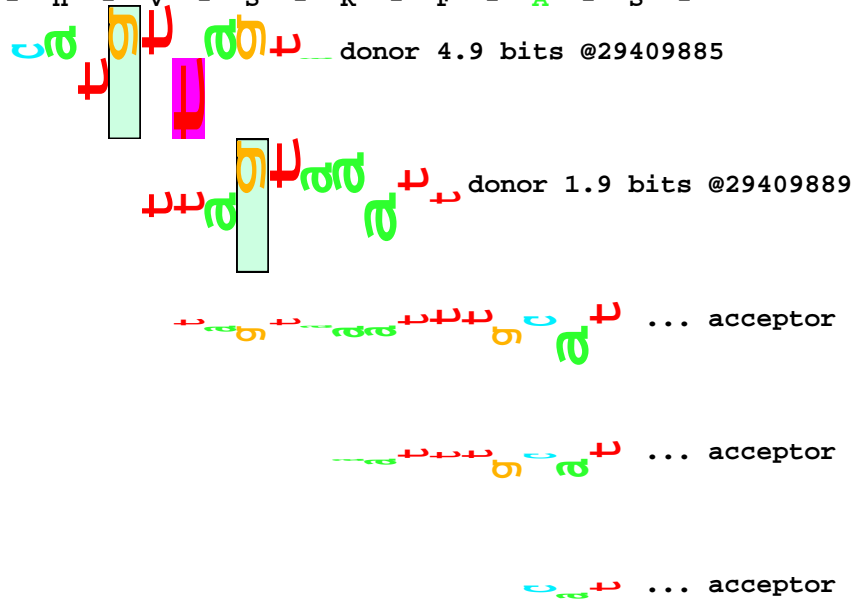
\* 29409870 \*                    \*29409880 \*                    \*29409890 \*                    \*29409900 \*

5' a a a a a t t a c t t c a g c a a g g c c a t g t t a g t a a a t t t g c a t 3'

- K - N - Y - F - S - K - A - M - L - V - N - L - H -

- K - I - T - S - A - R - P - C - ● - ● - I - C - I -

- K - L - L - Q - Q - G - H - V - S - K - F - A - S -



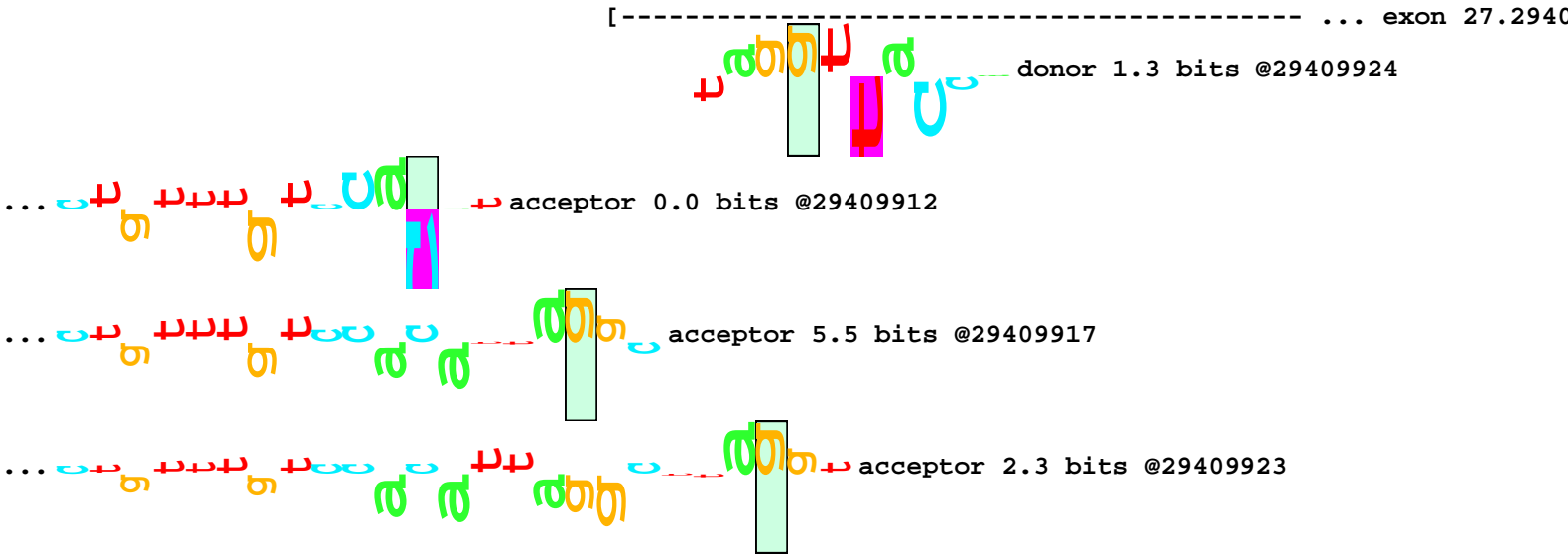
\* 29409910 \*                    \*29409920 \*                    \*29409930 \*

5' c t g t t t g t c c a c a t t a g g c t t a g g t t a c c a c a a g g a t c t 3'

- L - F - V - H - I - R - L - R - L - P - Q - G - S -

- C - L - S - T - L - G - L - G - Y - H - K - D - L -

- V - C - P - H - ● - A - ● - V - T - T - R - I - S -



Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

\*29409940 \*                    \*29409950 \*                    \*29409960 \*                    \*29409970  
5' c c a g a c a a g a g c t a c a t t t a t g g a a g t t c t g 3'  
- P - D - K - S - Y - I - Y - G - S - S -  
- Q - T - R - A - T - F - M - E - V - L -  
- R - Q - E - L - H - L - W - K - F -

... ----- ... exon 27.29409918-29410129

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC  
References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998  
URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>  
Molecular Information theory: <http://www.lecb.ncifcrf.gov/~toms/>

piece 62, 1\_62, IVS26-2A>T a29409916t, config: linear, direction: +, begin: 29409862, end: 2940997

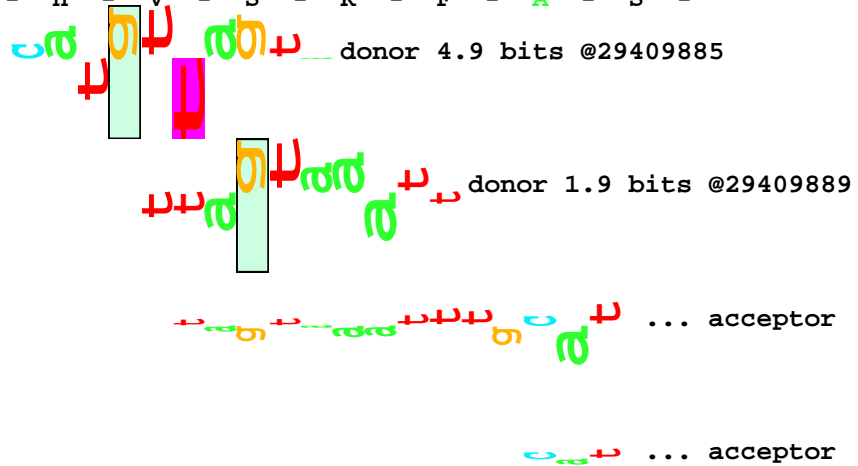
\* 29409870 \*                    \*29409880 \*                    \*29409890 \*                    \*29409900

5' a a a a a t t a c t t c a g c a a g g c c a t g t t a g t a a a t t t g c a t 3'

- K - N - Y - F - S - K - A - M - L - V - N - L - H -

- K - I - T - S - A - R - P - C -                    - I - C - I -

- K - L - L - Q - Q - G - H - V - S - K - F - A - S -



\* 29409910 \*                    \*29409920 \*                    \*29409930 \*

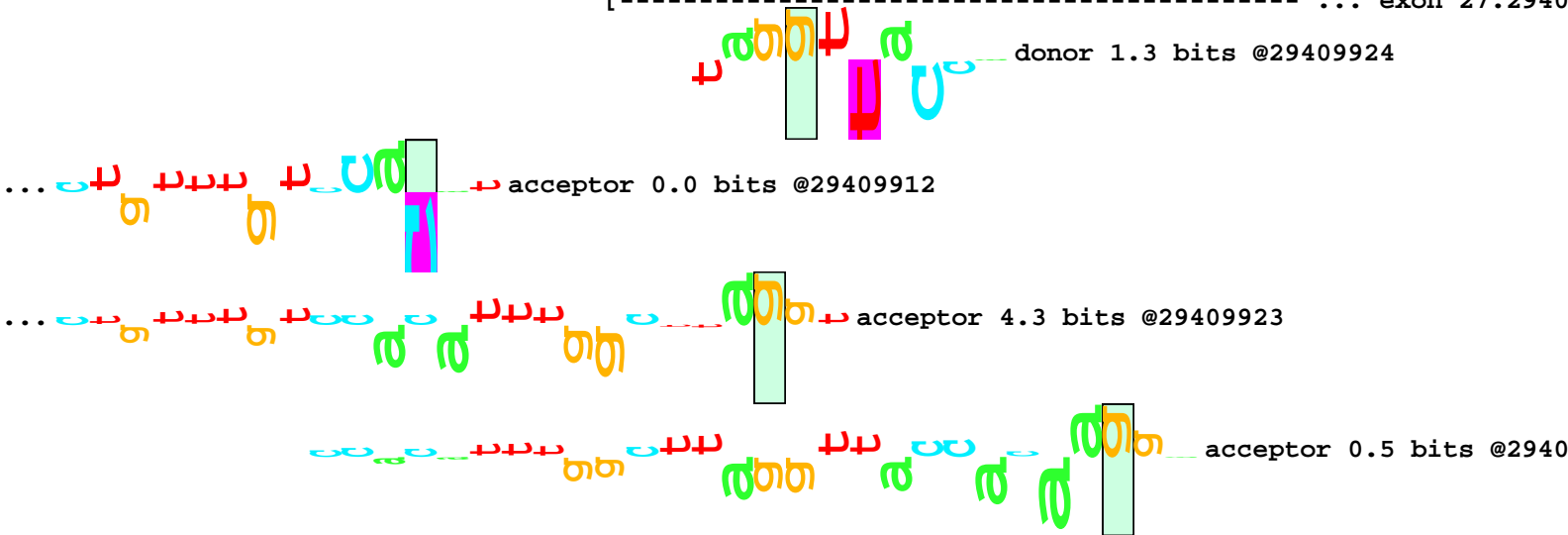
5' c t g t t t g t c c a c a t t t g g c t t a g g t t a c c a c a a g g a t c t 3'

- L - F - V - H - I - W - L - R - L - P - Q - G - S -

- C - L - S - T - F - G - L - G - Y - H - K - D - L -

- V - C - P - H - L - A -                    - V - T - T - R - I - S -

[----- ... exon 27.2940



\*29409940 \*                    \*29409950 \*                    \*29409960 \*                    \*29409970

5' c c a g a c a a g a g c t a c a t t t a t g g a a g t t c t g 3'

- P - D - K - S - Y - I - Y - G - S - S -

- Q - T - R - A - T - F - M - E - V - L -

- R - Q - E - L - H - L - W - K - F -

... ----- ... exon 27.29409918-29410129

Authors: Vijay Nalla, Peter Rogan, CMH, UMKC

References: Hum Mutation 6:74-76, 1995, Hum Mutat. 12(3): 153-171, 1998

URL: <http://www.sce.umkc.edu/~roganp/Information/viewarticles.html>

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