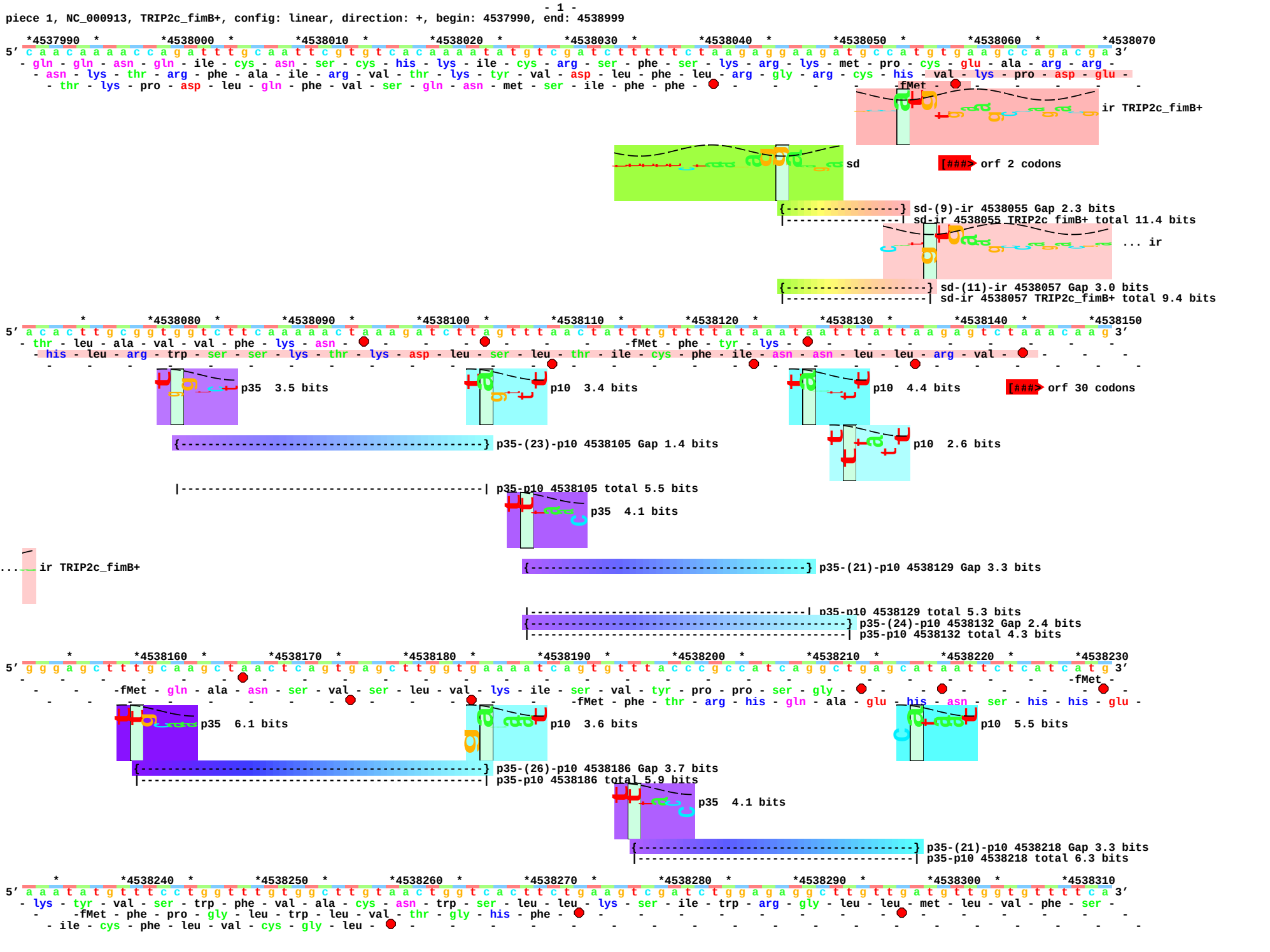
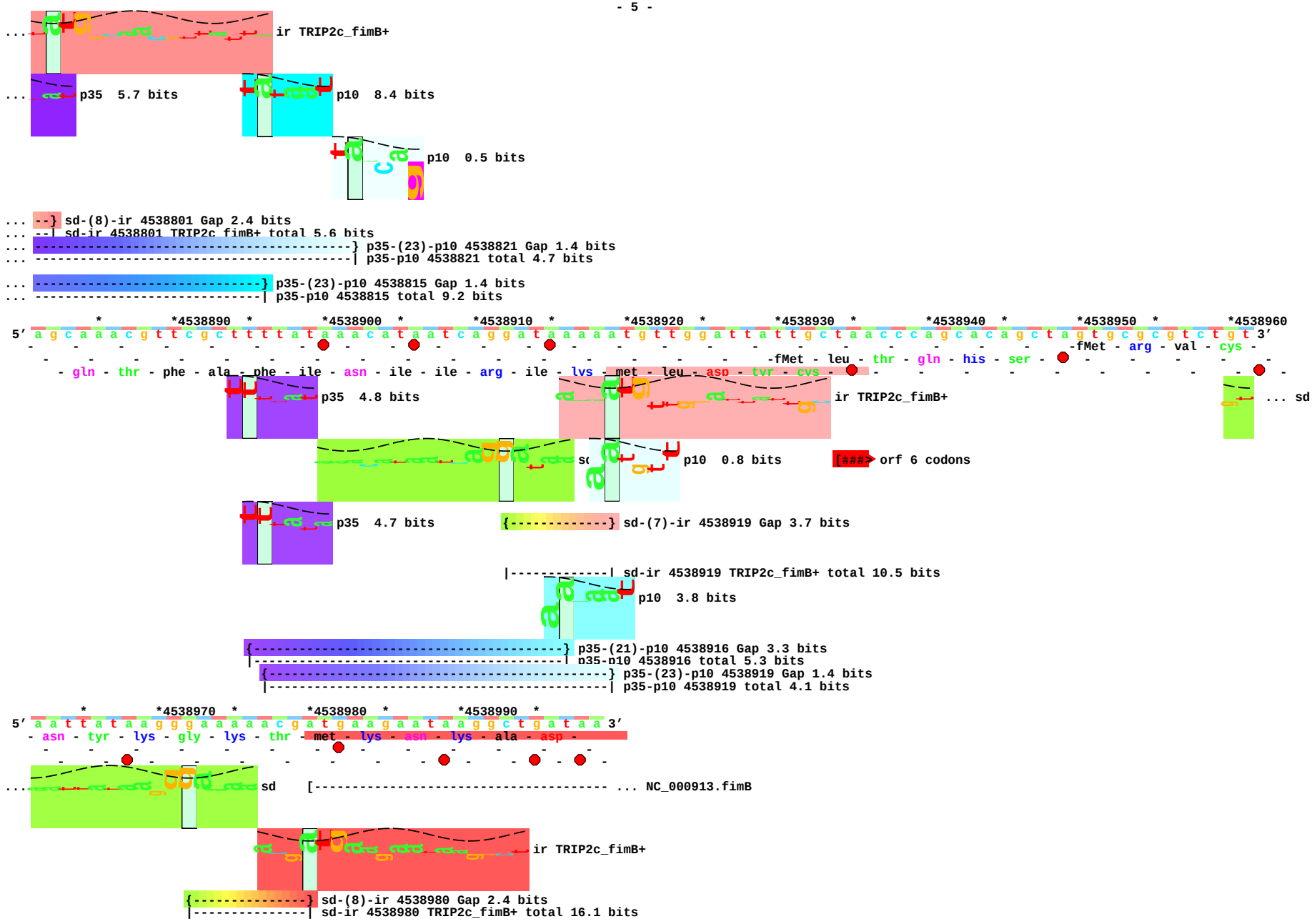

piece 1, NC_000913, TRIP2c_fimB+, config: linear, direction: +, begin: 4537990, end: 4538999
*4537990 *4538000 *4538010 *4538020 *4538030 *4538040 *4538050 *4538060 *4538070
5′ caacaaaaccagatttgcaattcgtgtcacaaaatatgtcgatctttttctaagaggaagatgccatgtgaagccagacga 3′
- gln - gln - asn - gln - ile - cys - asn - ser - cys - his - lys - ile - cys - arg - ser - phe - ser - lys - arg - lys - met - pro - cys - glu - ala - arg - arg -
- asn - lys - thr - arg - phe - ala - ile - arg - val - thr - lys - tyr - val - asp - leu - phe - leu - arg - gly - arg - cys - his - val - lys - pro - asp - glu -
- thr - lys - pro - asp - leu - gln - phe - val - ser - gln - asn - met - ser - ile - phe - phe -
-fMet -
ir TRIP2c_fimB+
sd
[###> orf 2 codons
{----------} sd-(9)-ir 4538055 Gap 2.3 bits
|----------| sd-ir 4538055 TRIP2c_fimB+ total 11.4 bits
... ir
{----------} sd-(11)-ir 4538057 Gap 3.0 bits
|----------| sd-ir 4538057 TRIP2c_fimB+ total 9.4 bits
*4538080 *4538090 *4538100 *4538110 *4538120 *4538130 *4538140 *4538150
5′ acacttgcggtggtcttcaaaaactaaagatcttagtttaactatttgttttataaataatttattaagagtctaaacaag 3′
- thr - leu - ala - val - val - phe - lys - asn -
-fMet - phe - tyr - lys -
- his - leu - arg - trp - ser - ser - lys - thr - lys - asp - leu - ser - leu - thr - ile - cys - phe - ile - asn - asn - leu - leu - arg - val -
p35 3.5 bits
p10 3.4 bits
p10 4.4 bits
[###> orf 30 codons
{----------} p35-(23)-p10 4538105 Gap 1.4 bits
p10 2.6 bits
|----------| p35-p10 4538105 total 5.5 bits
p35 4.1 bits
...ir TRIP2c_fimB+
{----------} p35-(21)-p10 4538129 Gap 3.3 bits
|----------| p35-p10 4538129 total 5.3 bits
{----------} p35-(24)-p10 4538132 Gap 2.4 bits
|----------| p35-p10 4538132 total 4.3 bits
*4538160 *4538170 *4538180 *4538190 *4538200 *4538210 *4538220 *4538230
5′ ggagctttgcaagctaactcagtgagcttggtgaaaatcagtgtttacccgccatcaggctgagcataattctcatcatg 3′
-fMet -
-fMet - gln - ala - asn - ser - val - ser - leu - val - lys - ile - ser - val - tyr - pro - pro - ser - gly -
-fMet - phe - thr - arg - his - gln - ala - glu - his - asn - ser - his - his - glu -
p35 6.1 bits
p10 3.6 bits
p10 5.5 bits
{----------} p35-(26)-p10 4538186 Gap 3.7 bits
|----------| p35-p10 4538186 total 5.9 bits
p35 4.1 bits
{----------} p35-(21)-p10 4538218 Gap 3.3 bits
|----------| p35-p10 4538218 total 6.3 bits
*4538240 *4538250 *4538260 *4538270 *4538280 *4538290 *4538300 *4538310
5′ aaatatgttttcctggttttgtggcttgtaactggtcactttctgaagtcgatctggagaggctttgttgatgttggtgttttca 3′
- lys - tyr - val - ser - trp - phe - val - ala - cys - asn - trp - ser - leu - leu - lys - ser - ile - trp - arg - gly - leu - leu - met - leu - val - phe - ser -
-fMet - phe - pro - gly - leu - trp - leu - val - thr - gly - his - phe -
- ile - cys - phe - leu - val - cys - gly - leu -

p35 4.6 bits
... p35-(21)-p10 4
... p35-p10 453833
*4538320 *4538330 *4538340 *4538350 *4538360 *4538370 *4538380 *4538390
5′ g g a t g a t g t t t c a c t t a g t t t g t t t g c c g t a t c g c c c g g c g a a t g g c t g t g a t t g a g g a a g g t t t a a g t c g t a g t g a c c a a 3′
- gly - - - - - - - - - - - - - - - -fMet - ala - val - ile - glu - glu - gly - leu - ser - arg - ser - asp - gln -
-fMet - met - phe - his - leu - val - cys - leu - pro - tyr - arg - pro - ala - asn - gly - cys - asp - - - - - - - - - - - - - - -

[###> orf 3 codons
p10 4.6 bits
{----------} sd-(15)-ir 4538535 Gap 6.0 bits
|----------| sd-ir 4538535 TRIP2c_fimB+ total 5.4 bits
... ----------} sd-(15)-ir 4538481 Gap 6.0 bits
... ----------| sd-ir 4538481 TRIP2c_fimB+ total 7.5 bits
... ----------} p35-(23)-p10 4538488 Gap 1.4 bits
... ----------| p35-p10 4538488 total 4.5 bits
*4538560 * *4538570 * *4538580 * *4538590 * *4538600 * *4538610 * *4538620 * *4538630 *
5′ t a c t g c g c t c c a t g a a a t a g c c a t t t t g t g g c a a a t g g a g t t g a c t a a t a a t g t c a t a t g t g a g a c g g c t a g t t g a a c g a a 3′
-fMet - ala - asn - gly - val - asp - -fMet - -fMet - -fMet - asn - glu -
-fMet - trp - gln - met - glu - leu - thr - asn - asn - val - ile - cys - glu - thr - ala - ser -
- leu - arg - ser - met - lys - -fMet - ser - tyr - val - arg - arg - leu - val - glu - arg - ile -
[###> orf 14 codons
ir TRIP2c_fimB+
sd
p10 4.6 bits
p35 2.9 bits
{----------} sd-(13)-ir 4538607 Gap 4.6 bits
|----------| sd-ir 4538607 TRIP2c_fimB+ total 7.6 bits
{----------} p35-(23)-p10 4538604 Gap 1.4 bits
|----------| p35-p10 4538604 total 6.1 bits
p35 2.8 bits
p10 3.8 bits
{----------} p35-(23)-p10 4538606 Gap 1.4 bits
|----------| p35-p10 4538606 total 5.2 bits
*4538640 * *4538650 * *4538660 * *4538670 * *4538680 * *4538690 * *4538700 * *4538710 *
5′ t a t t a a a t t t t g c t g a a t t t t t t a t g t t g a t t t t a c t t g t t a c a g a a c a t a t c a c a t g a t a t a t a g a t a a g a t t a g t t g c a 3′
- tyr - -fMet - leu - asn - phe - leu - cys - -fMet - leu - gln - asn - ile - ser - his - asp - ile - -fMet - his -
-fMet - ile - tyr - arg -
- leu - asn - phe - ala - glu - phe - phe - met - leu - ile - leu - leu - val - thr - glu - his - ile - thr -
ir TRIP2c_fimB+
[###> orf 30 codons
[###> orf 5 codons
... p35
sd
sd
ir TRIP2c_fimB+
{----------} sd-(9)-ir 4538661 Gap 2.3 bits
|----------| sd-ir 4538661 TRIP2c_fimB+ total 6.7 bits
{----------} sd-(11)-ir 4538693 Gap 3.0 bits
{---------- ... p35-(24)-p10 4
sd
{------- ... p35-(22)-p10 4
p35 4.3 bits
p10 3.4 bits
|----------| sd-ir 4538693 TRIP2c_fimB+ total 5.2 bits
|------- ... p35-p10 453873
{----------} p35-(22)-p10 4538670 Gap 2.3 bits
p10 3.6 bits
{---------- ... sd-(14)-ir 453
|----------| p35-p10 4538670 total 5.4 bits
p10 2.0 bits
|---------- ... sd-ir 4538722

- 4 -
p35 5.7 bits
{---------- ... sd-(17)-ir 453
{---------- p35-(23)-p10 4538688 Gap 1.4 bits
|---------- ... sd-ir 4538725
|---------- p35-p10 4538688 total 6.3 bits
p35 0.7 bits
p35 5.7 bits
|---------- ... p35-p10 453873
{---------- p35-(23)-p10 4538693 Gap 1.4 bits
|---------- p35-p10 4538693 total 7.8 bits
{------- ... p35-(24)-p10 4
|------- ... p35-p10 453873
{------- ... p35-(25)-p10 4
|------- ... p35-p10 453874
*4538720 *4538730 *4538740 *4538750 *4538760 *4538770 *4538780 *4538790 *
5' t t a a t g a t g a g g g t t a t t a t t a g a t t c g t a t c c g a t t g a t a a a t a t a a a g g t a c a t a g c a t g c a a g a g c a t g g c g t t t g 3'
-fMet - met - arg - val - ile - ile - arg - phe - val - ser - asp -
-fMet -
-fMet - gln - glu - his - gly - val - cys -
-fMet - ile - asn - ile -
-fMet - ala - phe - val -
... p35 6.2 bits
p10 7.1 bits
[###> orf 12 codons
ir TRIP2c_fimB+
ir TRIP2c_fimB+
sd
... ir
... p35-(24)-p10 4538734 Gap 2.4 bits
p35 5.6 bits
{---------- sd-(9)-ir 4538780 Gap 2.3 bits
... p35
... p35-(22)-p10 4538737 Gap 2.3 bits
|---------- sd-ir 4538780 TRIP2c_fimB+ total 11.4 bits
... p35-p10 4538737 total 5.9 bits
sd
... ------} sd-(14)-ir 4538722 Gap 4.9 bits
p10 4.7 bits
p10 4.5 bits
{---------- ... sd-(8)-ir 4538
... ------| sd-ir 4538722 TRIP2c_fimB+ total 5.1 bits
... ----------} sd-(17)-ir 4538725 Gap 6.5 bits
... ----------| sd-ir 4538725 TRIP2c_fimB+ total 5.2 bits
|---------- ... sd-ir 4538801
{---------- p35-(22)-p10 4538777 Gap 2.3 bits
{--- ... p35-(23)-p10 4
|---------- p35-p10 4538777 total 7.8 bits
|--- ... p35-p10 453882
ir TRIP2c_fimB+
p35 2.3 bits
... ----------| p35-p10 4538734 total 5.4 bits
... ----------} p35-(24)-p10 4538739 Gap 2.4 bits
... ----------| p35-p10 4538739 total 5.5 bits
... ----------} p35-(25)-p10 4538740 Gap 4.0 bits
... ----------| p35-p10 4538740 total 6.9 bits
{---------- ... p35-(23)-p10 4
|---------- ... p35-p10 453881
p10 2.0 bits
p10 1.8 bits
*4538800 *4538810 *4538820 *4538830 *4538840 *4538850 *4538860 *4538870 *4538880
5' t a t g g c a a c g t t a t t a t a a t t a a c a g t t g c t a c t c c a t t t a a g t t c a c t c a g a a g a a c t g g t c c a c t t a c g t t a g t t a t t a 3'
- tyr - gly - asn - val - ile - ile - ile - asn - ser - cys - tyr - ser - ile -
- met - ala - thr - leu - leu -
- trp - gln - arg - tyr - tyr - asn -
-fMet - leu - leu - his - leu - ser - ser - leu - arg - arg - thr - gly - pro - leu - thr - leu - val - ile - lys -
[###> orf 13 codons


ir TRIP2c_fimB+
p35 5.7 bits
p10 8.4 bits
p10 0.5 bits
sd-(8)-ir 4538801 Gap 2.4 bits
sd-ir 4538801 TRIP2c_fimB+ total 5.6 bits
p35-(23)-p10 4538821 Gap 1.4 bits
p35-p10 4538821 total 4.7 bits
p35-(23)-p10 4538815 Gap 1.4 bits
p35-p10 4538815 total 9.2 bits
*4538890
*4538900
*4538910
*4538920
*4538930
*4538940
*4538950
*4538960
5′ a g c a a a c g t t c g c t t t t a t a a a c a t a a t c a g g a t a a a a a t g t t g g a t t a t t g c t a a c c c a g c a c a g c t a g t g c g c g t c t g t 3′
- gln - thr - phe - ala - phe - ile - asn - ile - ile - arg - ile - lys - met - leu - asp - tyr - cys -
-fMet - leu - thr - gln - his - ser -
-fMet - arg - val - cys -
p35 4.8 bits
ir TRIP2c_fimB+
... sd
p10 0.8 bits
[###> orf 6 codons
p35 4.7 bits
{----------} sd-(7)-ir 4538919 Gap 3.7 bits
|----------| sd-ir 4538919 TRIP2c_fimB+ total 10.5 bits
p10 3.8 bits
{----------} p35-(21)-p10 4538916 Gap 3.3 bits
|----------| p35-p10 4538916 total 5.3 bits
{----------} p35-(23)-p10 4538919 Gap 1.4 bits
|----------| p35-p10 4538919 total 4.1 bits
*4538970
*4538980
*4538990
5′ a a t t a t a a g g g a a a a a c g a t g a a g a a t a a g g c t g a t a a 3′
- asn - tyr - lys - gly - lys - thr - met - lys - asn - lys - ala - asp -
sd [---------- ... NC_000913.fimB
ir TRIP2c_fimB+
{----------} sd-(8)-ir 4538980 Gap 2.4 bits
|----------| sd-ir 4538980 TRIP2c_fimB+ total 16.1 bits