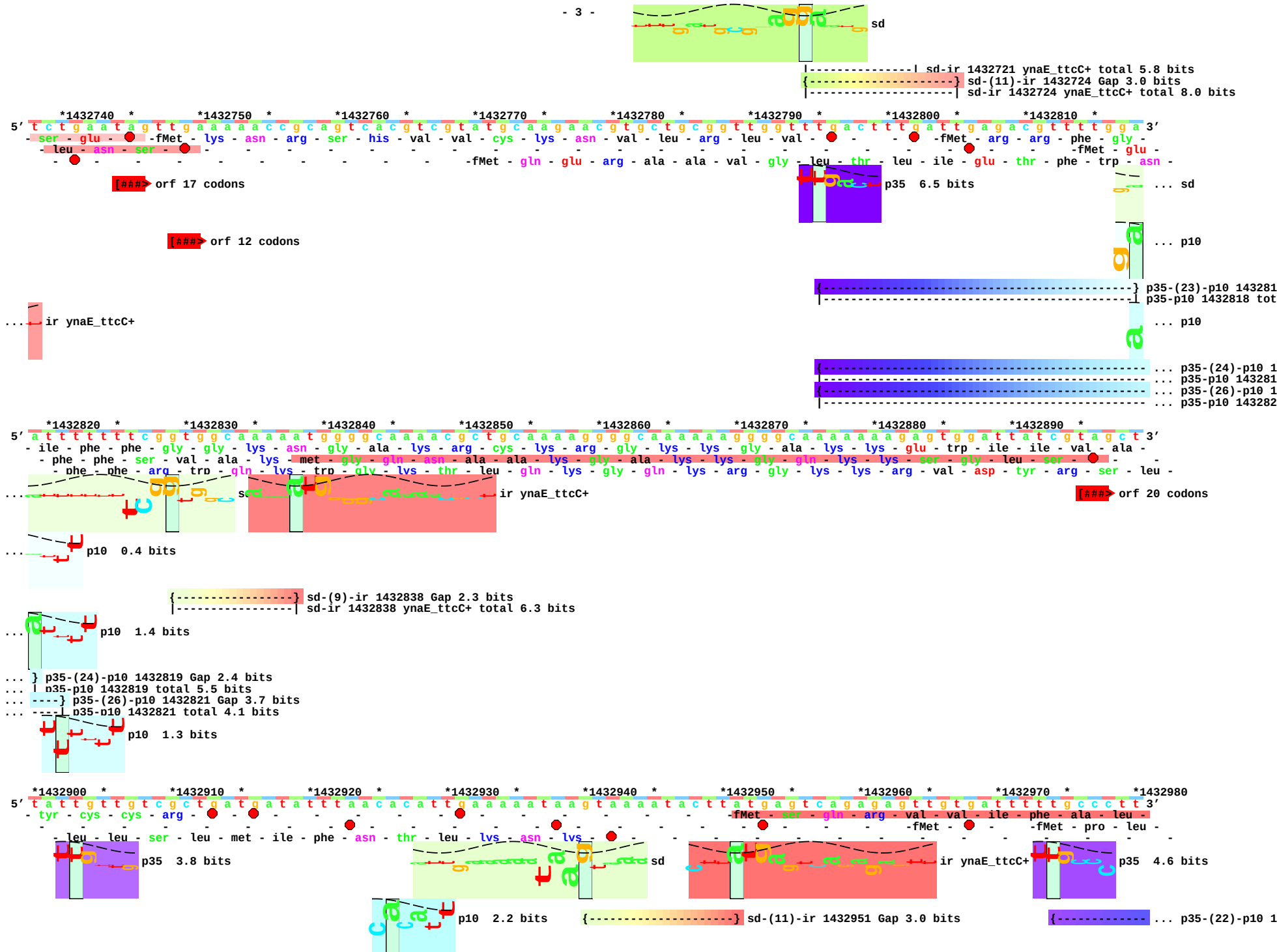
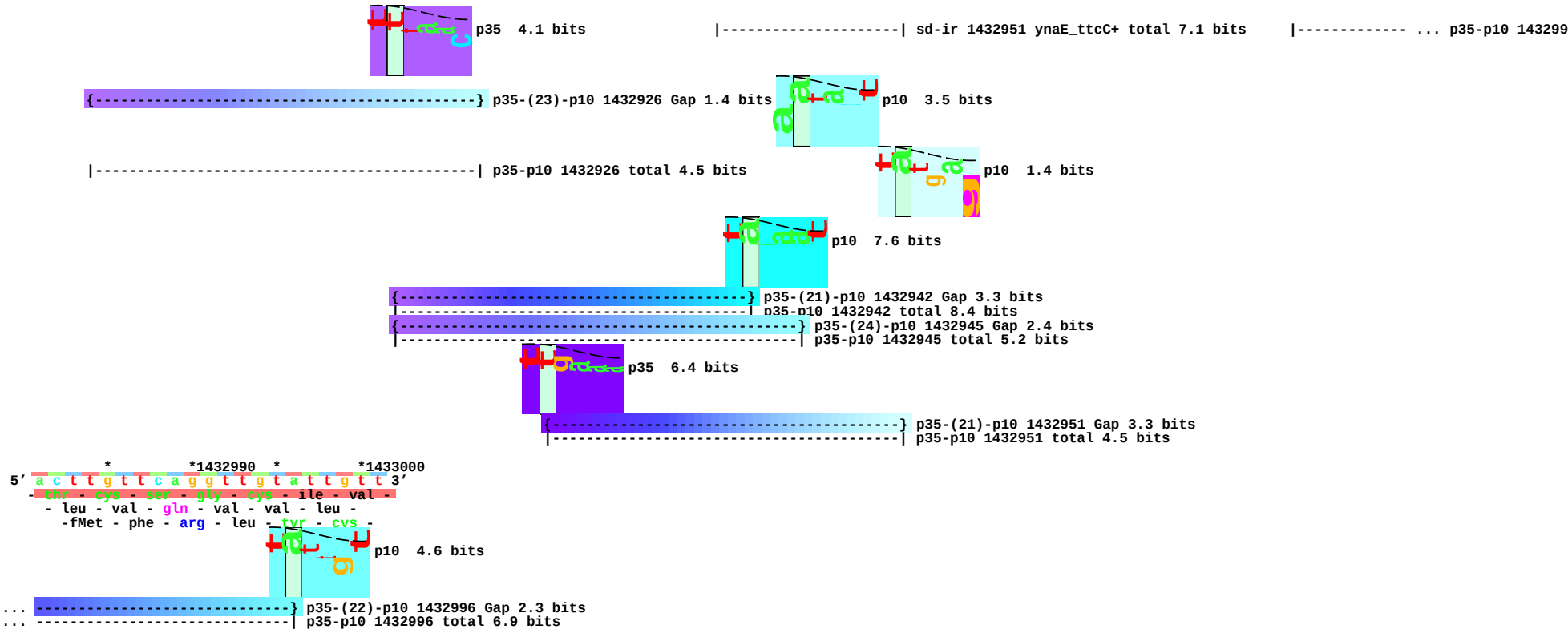
- 1 -
piece 1, NC_000913, ynaE_ttcC+, config: linear, direction: +, begin: 1432252, end: 1433001
*1432260 *1432270 *1432280 *1432290 *1432300 *1432310 *1432320 *1432330
5' g a t a t t c c t t a a a a t a t t a t t g a t t t t c a t t g c g a t a t t g t a t g t c t g a t t c a g g a t a g t t g a c t t a t a c a t c g g t t t t g 3'
- asp - ile - pro - - fMet - leu - thr - tyr - thr - ser - val - leu -
- ile - phe - leu - lys - ile - leu - leu - ile - phe - ile - ala - ile - leu - tyr - val - - fMet - leu - asp - met - ile - arg - ser - glu - val - ile -
- tyr - ser - leu - lys - tyr - tyr - - fMet - arg - tyr - cys - met - ser - asp - ser - gly - tyr - val - asp - leu - tyr - ile - gly - phe - val -
...] NC_000913.ynaE p35 5.7 bits p10 1.6 bits ... sd
{} p35-(23)-p10 1432313 Gap 1.4 bits
| p35-p10 1432313 total 5.8 bits
*1432340 *1432350 *1432360 *1432370 *1432380 *1432390 *1432400 *1432410
5' t c t g g g t t a t t g g a t a t g c c a a t c c c t a a t t t t a t t a g a g c a t g a c t a a a a a t g c t g a a t a t g a a a g g a g c g a a g t g a t t 3'
- ser - gly - leu - leu - asp - met - pro - ile - pro - asn - phe - ile - arg - ala - - fMet - leu - asn - met - ile - arg - ser - glu - val - ile -
- trp - val - ile - gly - tyr - ala - asn - pro - - fMet - thr - lys - asn - ala - glu - tyr - asp - lys - glu - arg - ser - asp - tyr -
... sd ir ynaE_ttcC+ [###> orf 10 codons ... ir
{} sd-(10)-ir 1432348 Gap 2.7 bits ir ynaE_ttcC+
| sd-ir 1432348 ynaE_ttcC+ total 5.3 bits {} sd-(8)-ir 1432384 Gap 2.4 bits {} sd-(7)-ir 1432408 Gap 3.7 bits
sd sd
| sd-ir 1432384 ynaE_ttcC+ total 8.1 bits
| sd-ir 1432408 ynaE_ttcC+ total 8.
p35 2.5 bits
{} ... p35-(26)-p10 14324
| ... p35-p10 1432420 to
*1432420 *1432430 *1432440 *1432450 *1432460 *1432470 *1432480 *1432490
5' a t c a g t a t g c t g t t c a t a t a g c c t c g a a t t a g t a a t g t g t t a t a t a t g a t a t a g t t g a c a a t t t t t a t c c t g g g t g t t c t t 3'
- ile - ser - met - leu - phe - ile - fMet - leu - tyr - met - ile - fMet - thr - ile - phe - ile - leu - gly - val - leu -
- gln - tyr - ala - val - his - ile - ala - ser - asn - fMet - cys - tyr - ile - fMet - phe - leu -
... ir ynaE_ttcC+ [###> orf 17 codons ir ynaE_ttcC+ ... p10
p10 5.3 bits sd [###> orf 3 codons
p35 2.1 bits {} sd-(9)-ir 1432459 Gap 2.3 bits
| sd-ir 1432459 ynaE_ttcC+ total 6.8 bits
p35 0.7 bits p10 6.4 bits
{} p35-(26)-p10 1432459 Gap 3.7 bits
| p35-p10 1432459 total 4.8 bits
... } p35-(26)-p10 1432420 Gap 3.7 bits p10 5.9 bits
... | p35-p10 1432420 total 4.1 bits {} p35-(22)-p10 1432464 Gap 2.3 bits
| p35-p10 1432464 total 4.3 bits

p35 6.4 bits
... p35-(26)-p10 1
... p35-p10 143249
*1432500 *1432510 *1432520 *1432530 *1432540 *1432550 *1432560 *1432570
5′ a a a g t t c g t a g a t a a a c a t t g t c g t t t c a g g t a t a c a g g a a t g c t a a c a g g t g g c g g c a a a a a t c a g g c g g t t t a t g g c g c 3′
- lys - val - arg - arg - -fMet - ser - phe - gln - val - tyr - arg - asn - ala - asn - arg - trp - arg - gln - lys - ser - gly - gly - leu - trp - arg -
- lys - phe - val - asp - lys - his - cys - arg - phe - arg - tyr - thr - gly - met - leu - thr - gly - gly - gly - lys - asn - gln - ala - val - tyr - gly - ala -
-fMet - ala - ala - lys - ile - arg - arg - phe - met - ala - gln -
... p10 5.1 bits
sd
ir ynaE_ttcC+
... ir
sd-(10)-ir 1432535 Gap 2.7 bits
sd-ir 1432535 ynaE_ttcC+ total 5.6 bits
sd-(7)-ir 1432569 Gap 3.7 bits
sd-ir 1432569 ynaE_ttcC+ total
sd
ir ynaE_ttcC+
sd-(12)-ir 1432545 Gap 4.0 bits
sd-ir 1432545 ynaE_ttcC+ total 5.2 bits
sd
... p35-(26)-p10 1432495 Gap 3.7 bits
... p35-p10 1432495 total 7.8 bits
*1432580 *1432590 *1432600 *1432610 *1432620 *1432630 *1432640 *1432650
5′ a a g c t g a a g t g g c a a c t g c a a a c t a t c t t a t g c a g a g a c t c t a c a c g g a t t g g g t t t a a a a g t a t a c a t a g a t a a c a g t t t 3′
- lys - leu - lys - trp - gln - leu - gln - thr - ile - leu - cys - arg - asp - ser - thr - arg - ile - gly - phe - lys - ser - ile - his - arg -
- ser -
-fMet - gly - leu - lys - val - tyr - ile - asp - asn - ser - phe -
- ala - glu - val - ala - thr - ala - asn - tyr - leu - met - gln - arg - leu - tyr - thr - asp - trp - val -
... ir ynaE_ttcC+
[###> orf 30 codons
... p10
[###> orf 16 codons
p35 5.6 bits
... p35-(25)-p10 143265
... p35-p10 1432656 tot
*1432660 *1432670 *1432680 *1432690 *1432700 *1432710 *1432720 *1432730
5′ t t a t c t g a a g a a g a a a a a t a t c a a g g t g a t a t a g c c t a t a t g c c t t t g a t g c g g a g g a a t g a a t g t g a t g g g a g t g a t g t a 3′
-fMet - pro - leu - met - arg - arg - asn - glu - cys - asp - gly - ser - asp - val -
- tyr - leu - lys - lys - lys - asn - ile - lys - val - ile -
-fMet - asn - val - met - gly - val - met - tyr -
-fMet -
... p10 3.2 bits
ir ynaE_ttcC+
ir ynaE_ttcC+
sd
[###> orf 3 codons
sd
ir ynaE_ttcC+
sd-(13)-ir 1432682 Gap 4.6 bits
sd-ir 1432682 ynaE_ttcC+ total 5.3 bits
sd-(5)-ir 1432715 Gap 5.4 bits
sd-ir 1432715 ynaE_ttcC+ total 5.8 bits
sd
ir ynaE_ttcC+
... ir
sd-(14)-ir 1432696 Gap 4.9 bits
sd-ir 1432696 ynaE_ttcC+ total 7.2 bits
sd-(8)-ir 1432721 Gap 2.4 bits


- 3 -
sd
|----------| sd-ir 1432721 ynaE_ttcC+ total 5.8 bits
{----------} sd-(11)-ir 1432724 Gap 3.0 bits
|----------| sd-ir 1432724 ynaE_ttcC+ total 8.0 bits
*1432740 *1432750 *1432760 *1432770 *1432780 *1432790 *1432800 *1432810 *
5′ t c t g a a t a g t t g a a a a a c c g c a g t c a c g t c g t a t g c a a g a a c g t g c t g c g g t t g g t t t g a c t t t g a t t g a g a c g t t t t g g a 3′
- ser - glu - -fMet - lys - asn - arg - ser - his - val - val - cys - lys - asn - val - leu - arg - leu - val - -fMet - arg - arg - phe - gly -
- leu - asn - ser - -fMet - gln - glu - arg - ala - ala - val - gly - leu - thr - leu - ile - glu - thr - phe - trp - asn -
[###> orf 17 codons
p35 6.5 bits
... sd
[###> orf 12 codons
... p10
{----------} p35-(23)-p10 143281
|----------| p35-p10 1432818 tot
...ir ynaE_ttcC+
... p10
{---------- ... p35-(24)-p10 1
|---------- ... p35-p10 143281
{---------- ... p35-(26)-p10 1
|---------- ... p35-p10 143282
*1432820 *1432830 *1432840 *1432850 *1432860 *1432870 *1432880 *1432890 *
5′ a t t t t t t t c g g t g g c a a a a a t g g g g c a a a a c g c t g c a a a a a g g g g c a a a a a a a g g g g c a a a a a a a g a g t g g a t t a t c g t a g c t 3′
- ile - phe - phe - gly - gly - lys - asn - gly - ala - lys - arg - cys - lys - arg - gly - lys - lys - gly - ala - lys - lys - glu - trp - ile - ile - val - ala -
- phe - phe - ser - val - ala - lys - met - gly - gln - asn - ala - ala - lys - gly - ala - lys - lys - gly - gln - lys - lys - ser - gly - leu - ser -
- phe - phe - arg - trp - gln - lys - trp - gly - lys - thr - leu - gln - lys - gly - gln - lys - arg - gly - lys - lys - arg - val - asp - tyr - arg - ser - leu -
...
sd
ir ynaE_ttcC+
[###> orf 20 codons
...
p10 0.4 bits
{----------} sd-(9)-ir 1432838 Gap 2.3 bits
|----------| sd-ir 1432838 ynaE_ttcC+ total 6.3 bits
...
p10 1.4 bits
... } p35-(24)-p10 1432819 Gap 2.4 bits
... | p35-p10 1432819 total 5.5 bits
... ----} p35-(26)-p10 1432821 Gap 3.7 bits
... ----| p35-p10 1432821 total 4.1 bits
p10 1.3 bits
*1432900 *1432910 *1432920 *1432930 *1432940 *1432950 *1432960 *1432970 *1432980
5′ t a t t g t t g t c g c t g a t g a t a t t t a a c a c a t t g a a a a a t a a g t a a a a t a c t t a t g a g t c a g a g a g t t g t g a t t t t t g c c c t t 3′
- tyr - cys - cys - arg - -fMet - ser - gln - arg - val - val - ile - phe - ala - leu -
- leu - leu - ser - leu - met - ile - phe - asn - thr - leu - lys - asn - lys - -fMet - -fMet - pro - leu -
p35 3.8 bits
sd
ir ynaE_ttcC+
p35 4.6 bits
p10 2.2 bits
{----------} sd-(11)-ir 1432951 Gap 3.0 bits
{---------- ... p35-(22)-p10 1


p35 4.1 bits
|----------| sd-ir 1432951 ynaE_ttcC+ total 7.1 bits
|---------- ... p35-p10 143299
{----------} p35-(23)-p10 1432926 Gap 1.4 bits
p10 3.5 bits
|----------| p35-p10 1432926 total 4.5 bits
p10 1.4 bits
p10 7.6 bits
{----------} p35-(21)-p10 1432942 Gap 3.3 bits
|----------| p35-p10 1432942 total 8.4 bits
{----------} p35-(24)-p10 1432945 Gap 2.4 bits
|----------| p35-p10 1432945 total 5.2 bits
p35 6.4 bits
{----------} p35-(21)-p10 1432951 Gap 3.3 bits
|----------| p35-p10 1432951 total 4.5 bits
*1432990
*1433000
5′ a c t t g t t c a g g t t g t a t t g t t 3′
- thr - cys - ser - gly - cys - ile - val -
- leu - val - gln - val - val - leu -
-fMet - phe - arg - leu - tyr - cys -
p10 4.6 bits
... {----------} p35-(22)-p10 1432996 Gap 2.3 bits
... |----------| p35-p10 1432996 total 6.9 bits