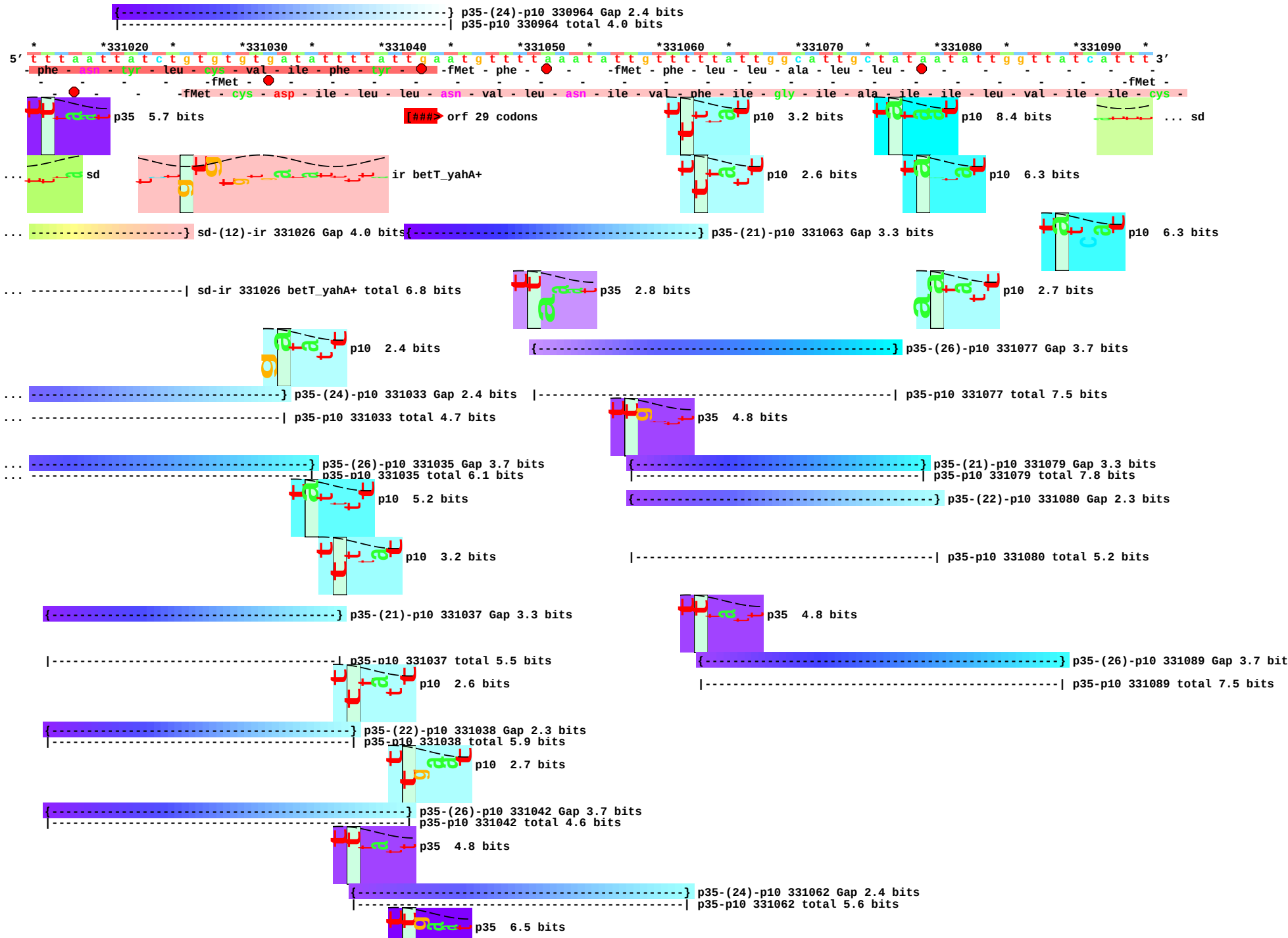
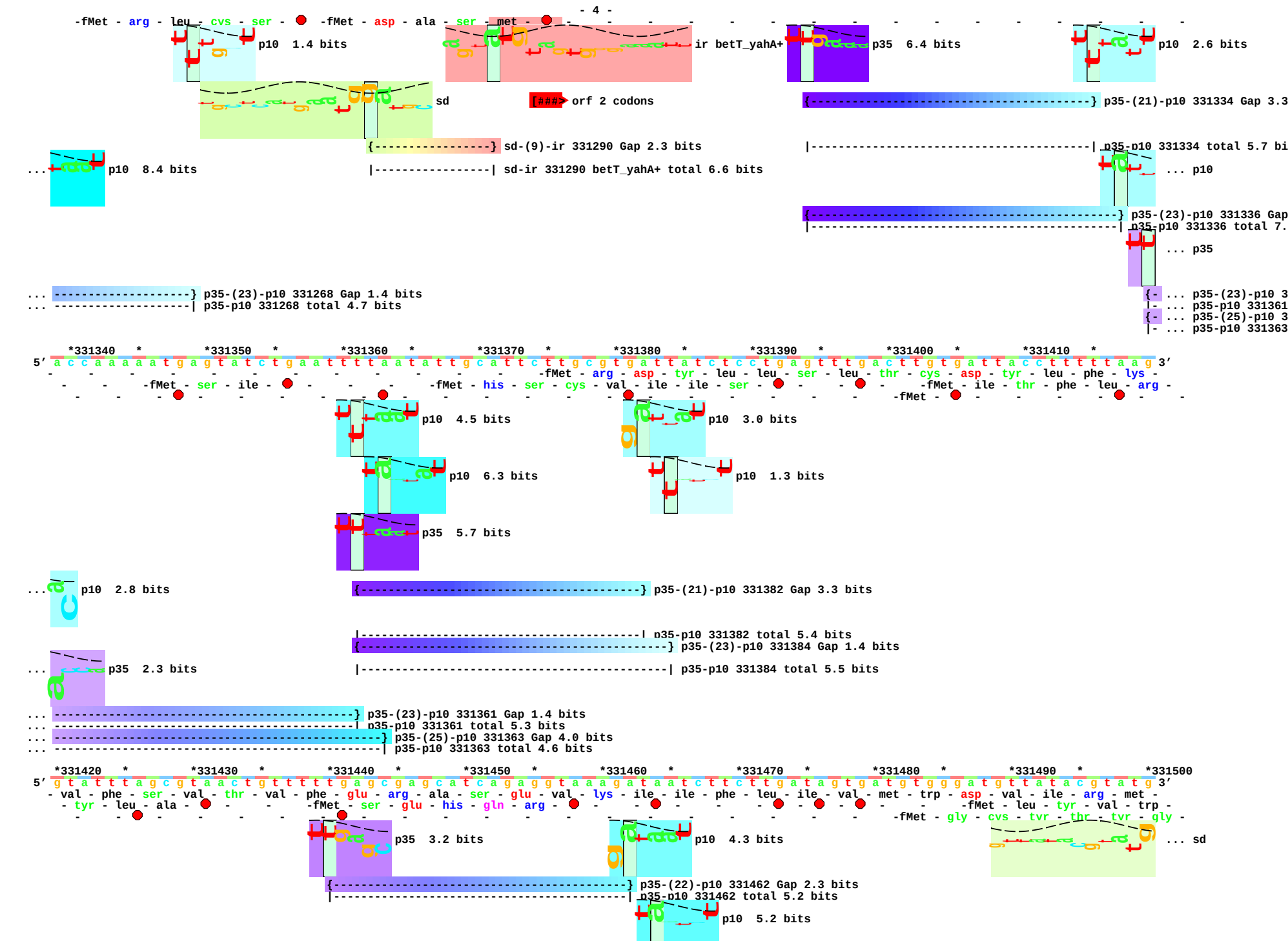
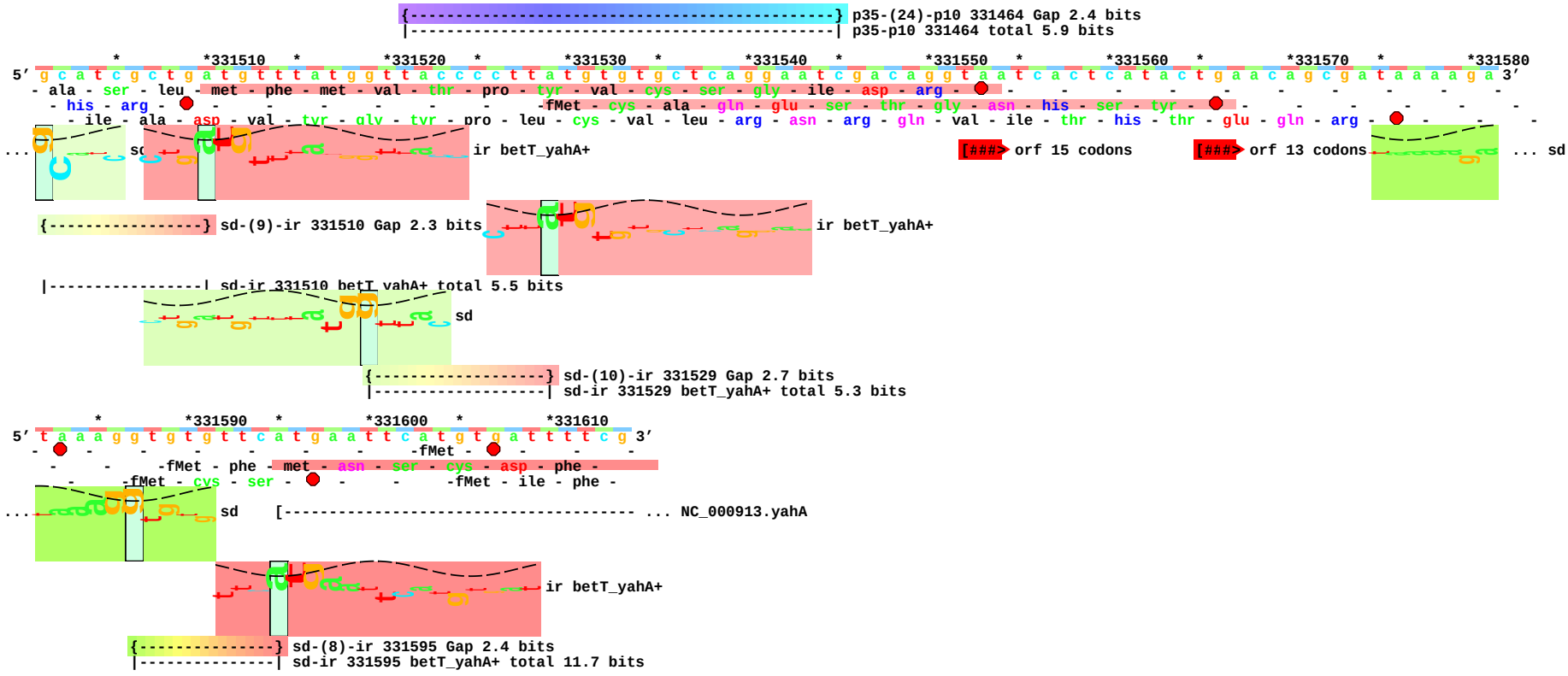
piece 1, NC_000913, betT_yahA+, config: linear, direction: +, begin: 330691, end: 331614


{----------} p35-(24)-p10 330964 Gap 2.4 bits
|----------| p35-p10 330964 total 4.0 bits
*331020 *331030 *331040 *331050 *331060 *331070 *331080 *331090
5' t t t a a t t a t c t g t g t g t g a t a t t t t a t t g a a t g t t t t a a a t a t t g t t t t t a t t g g c a t t g c t a t a a t a t t g g t t a t c a t t t 3'
- phe - asn - tyr - leu - cys - val - ile - phe - tyr - -fMet - phe - -fMet - phe - leu - leu - ala - leu - leu -
-fMet - -fMet -
-fMet - cys - asp - ile - leu - leu - asn - val - leu - asn - ile - val - phe - ile - gly - ile - ala - ile - ile - leu - val - ile - ile - cys -
p35 5.7 bits
[###> orf 29 codons
p10 3.2 bits
p10 8.4 bits
... sd
... sd
ir betT_yahA+
p10 2.6 bits
p10 6.3 bits
... {----------} sd-(12)-ir 331026 Gap 4.0 bits
{----------} p35-(21)-p10 331063 Gap 3.3 bits
p10 6.3 bits
... |----------| sd-ir 331026 betT_yahA+ total 6.8 bits
p35 2.8 bits
p10 2.7 bits
p10 2.4 bits
{----------} p35-(26)-p10 331077 Gap 3.7 bits
... {----------} p35-(24)-p10 331033 Gap 2.4 bits
|----------| p35-p10 331077 total 7.5 bits
... |----------| p35-p10 331033 total 4.7 bits
p35 4.8 bits
... {----------} p35-(26)-p10 331035 Gap 3.7 bits
{----------} p35-(21)-p10 331079 Gap 3.3 bits
... |----------| p35-p10 331035 total 6.1 bits
|----------| p35-p10 331079 total 7.8 bits
p10 5.2 bits
{----------} p35-(22)-p10 331080 Gap 2.3 bits
p10 3.2 bits
|----------| p35-p10 331080 total 5.2 bits
{----------} p35-(21)-p10 331037 Gap 3.3 bits
p35 4.8 bits
|----------| p35-p10 331037 total 5.5 bits
{----------} p35-(26)-p10 331089 Gap 3.7 bit
p10 2.6 bits
|----------| p35-p10 331089 total 7.5 bits
{----------} p35-(22)-p10 331038 Gap 2.3 bits
|----------| p35-p10 331038 total 5.9 bits
p10 2.7 bits
{----------} p35-(26)-p10 331042 Gap 3.7 bits
|----------| p35-p10 331042 total 4.6 bits
p35 4.8 bits
{----------} p35-(24)-p10 331062 Gap 2.4 bits
|----------| p35-p10 331062 total 5.6 bits
p35 6.5 bits

|----------| p35-p10 331063 total 5.8 bits
*331100 * *331110 * *331120 * *331130 * *331140 * *331150 * *331160 * *331170 *
5' g c t g a a t g g a t t c a g t c t t a a t g a g t g g g t t t t t a a g g g a c a g g c a t a g a g t a a t g a t a c g t a t g c a t a a c c a a c a t c t t t 3'
-fMet - gly - phe -
- leu - asn - gly - phe - ser - leu - asn - glu - trp - val - phe - lys - gly - gln - ala -
-fMet - asp - ser - val - leu - met - ser - gly - phe - leu - arg - asp - arg - his - arg - val - met - ile - arg - met - his - asn - gln - his - leu - tyr -
sd
ir betT_yahA+
sd
ir betT_yahA+
[###> orf 25 codons
sd
ir betT_yahA+
{----------} sd-(12)-ir 331116 Gap 4.0 bits
|----------| sd-ir 331116 betT_yahA+ total 6.8 bits
{----------} sd-(10)-ir 331149 Gap 2.7 bits
|----------| sd-ir 331149 betT_yahA+ total 9.0 bits
p35 3.8 bits
sd
p35 3.1 bits
{----------} sd-(7)-ir 331158 Gap 3.7 bits
|----------| sd-ir 331158 betT_yahA+ total 5.8 bits
p10 2.7 bits
{----------} p35-(23)-p10 331149 Gap 1.4 bits
|----------| p35-p10 331149 total 5.0 bits
{---------- ... p35-(22)-p10 3
|---------- ... p35-p10 331181
*331180 * *331190 * *331200 * *331210 * *331220 * *331230 * *331240 * *331250 *
5' a c t c a t t a t g t c a t t g a a t g t t g a c g c t a t g t g t t t a t g a g g g a g a g g t a t t t t c a g t t g a t c t g g a t t g t t a a a t t c a t a 3'
-fMet - phe - met - arg - glu - arg - tyr - phe - gln - leu - ile - trp - ile - val - lys - phe - ile -
-fMet - ser - leu - asn - val - asp - ala - met - cys - leu -
-fMet - leu - asn - ser - tyr -
- ser - leu - cys - his -
-fMet - leu - thr - leu - cys - val - tyr - glu - gly - glu - val - phe - ser - val - asp - leu - asp - cys -
[###> orf 26 codons
p10 1.4 bits
p35 4.6 bits
p10 5.7 bits
p10 4.2 bits
{----------} p35-(21)-p10 331249 Gap 3.3 bits
p35 6.5 bits
|----------| p35-p10 331249 total 7.1 bits
{----------} p35-(22)-p10 331213 Gap 2.3 bits
p35 4.2 bits
... p10
|----------| p35-p10 331213 total 5.6 bits
{----------} p35-(22)-p10 331257
|----------| p35-p10 331257 tota
p35 4.7 bits
{---------- ... p35-(23)-p10 3
|---------- ... p35-p10 331268
... --------} p35-(22)-p10 331181 Gap 2.3 bits
... --------| p35-p10 331181 total 5.0 bits
*331260 * *331270 * *331280 * *331290 * *331300 * *331310 * *331320 * *331330 *
5' t a a t g c g c c t t t g c t c a t g a a t g g a t g c c a g t a t g t a g t g g g a a a t t a t a a a t a t t g a a a t a g t c c a a c t a c t t c t t t a t t 3'
-fMet - pro - val - cys - ser - gly - lys - leu -
-fMet - lys -
- asn - ala - pro - leu - leu - met - asn - gly - cys - gln - tyr - val - val - gly - asn - tyr - lys - tyr -


-fMet - arg - leu - cys - ser - -fMet - asp - ala - ser - met -
p10 1.4 bits
ir betT_yahA+
p35 6.4 bits
p10 2.6 bits
sd
[###> orf 2 codons
{----------} p35-(21)-p10 331334 Gap 3.3
{----------} sd-(9)-ir 331290 Gap 2.3 bits
|----------| sd-ir 331290 betT_yahA+ total 6.6 bits
|----------| p35-p10 331334 total 5.7 bi
... p10 8.4 bits
... p10
{----------} p35-(23)-p10 331336 Gap
|----------| p35-p10 331336 total 7.
... p35
{- ... p35-(23)-p10 3
|- ... p35-p10 331361
{- ... p35-(25)-p10 3
|- ... p35-p10 331363
... {----------} p35-(23)-p10 331268 Gap 1.4 bits
... |----------| p35-p10 331268 total 4.7 bits
*331340 * *331350 * *331360 * *331370 * *331380 * *331390 * *331400 * *331410 *
5′ a c c a a a a t g a g t a t c t g a a t t t t a a t a t t g c a t t c t t g c g t g a t t a t c t c c t g a g t t t g a c t t g t g a t t a c c t t t t t a a g 3′
-fMet - arg - asp - tyr - leu - leu - ser - leu - thr - cys - asp - tyr - leu - phe - lys -
-fMet - ser - ile -
-fMet - his - ser - cys - val - ile - ile - ser -
-fMet - ile - thr - phe - leu - arg -
-fMet -
p10 4.5 bits
p10 3.0 bits
p10 6.3 bits
p10 1.3 bits
p35 5.7 bits
... p10 2.8 bits
{----------} p35-(21)-p10 331382 Gap 3.3 bits
|----------| p35-p10 331382 total 5.4 bits
{----------} p35-(23)-p10 331384 Gap 1.4 bits
... p35 2.3 bits
|----------| p35-p10 331384 total 5.5 bits
... {----------} p35-(23)-p10 331361 Gap 1.4 bits
... |----------| p35-p10 331361 total 5.3 bits
... {----------} p35-(25)-p10 331363 Gap 4.0 bits
... |----------| p35-p10 331363 total 4.6 bits
*331420 * *331430 * *331440 * *331450 * *331460 * *331470 * *331480 * *331490 * *331500
5′ g t a t t t a g c g t a a c t g t t t t t g a g c g a g c a t c a g a g g t a a a g a t a a t c t t c t t g a t a g t g a t g t g g g a t g t t a t a c g t a t g 3′
- val - phe - ser - val - thr - val - phe - glu - arg - ala - ser - glu - val - lys - ile - ile - phe - leu - ile - val - met - trp - asp - val - ile - arg - met -
- tyr - leu - ala -
-fMet - ser - glu - his - gln - arg -
-fMet - leu - tyr - val - trp -
-fMet - gly - cys - tyr - thr - tyr - gly -
p35 3.2 bits
p10 4.3 bits
... sd
{----------} p35-(22)-p10 331462 Gap 2.3 bits
|----------| p35-p10 331462 total 5.2 bits
p10 5.2 bits


{----------} p35-(24)-p10 331464 Gap 2.4 bits
|----------| p35-p10 331464 total 5.9 bits
*331510 *331520 *331530 *331540 *331550 *331560 *331570 *331580
5′ g c a t c g c t g a t g t t t a t g g t t a c c c c t t a t g t g c t c a g g a a t c g a c a g g t a a t c a c t c a t a c t g a a c a g c g a t a a a a g a 3′
- ala - ser - leu - met - phe - met - val - thr - pro - tyr - val - cys - ser - gly - ile - asp - arg -
- his - arg - fMet - cys - ala - gln - glu - ser - thr - gly - asn - his - ser - tyr -
- ile - ala - asp - val - tyr - gly - tyr - pro - leu - cys - val - leu - arg - asn - arg - gln - val - ile - thr - his - thr - glu - gln - arg -
... sd ir betT_yahA+ [###> orf 15 codons [###> orf 13 codons ... sd
{----------} sd-(9)-ir 331510 Gap 2.3 bits
ir betT_yahA+
|----------| sd-ir 331510 betT_yahA+ total 5.5 bits
sd
{----------} sd-(10)-ir 331529 Gap 2.7 bits
|----------| sd-ir 331529 betT_yahA+ total 5.3 bits
*331590 *331600 *331610
5′ t a a a g g t g t g t t c a t g a a t t c a t g t g a t t t t c g 3′
-fMet - fMet - phe - met - asn - ser - cys - asp - phe -
-fMet - cys - ser - fMet - ile - phe -
... sd [------------------------------------ ... NC_000913.yahA
ir betT_yahA+
{----------} sd-(8)-ir 331595 Gap 2.4 bits
|----------| sd-ir 331595 betT_yahA+ total 11.7 bits