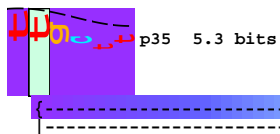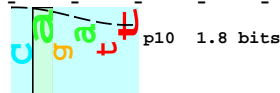piece 1, NC_000913, nuoA_TERM39+, config: linear, direction: +, begin: 2403065, end: 2403680

```
      *      *2403070   *      *2403080   *      *2403090   *      *2403100   *      *2403110   *      *2403120   *      *2403130   *      *2403140   *
5' g a t g a c t t c a g t g g a t g t t g a c a t a c t c a t t g c t t a c t c a t c a a a a g t a g c g c c a g a t t c a c t g c t c t t c a c g g c a g a t g g 3'
   -   asp - asp - phe - ser - gly - cys -         -   asp - val - asp - ile - leu - ile - ala - tyr - ser - ser - lys - val - ala - pro - asp - ser - leu - leu - phe - thr - ala - asp - gly -
         -         -     met - thr - ser - val -         - asp - val -      -fMet - leu - thr - tyr - ser - leu - leu - thr - his - gln - lys -         -      -         -   -   -   -   -   -   -   -fMet - asp -
```

... ---] NC_000913.nuoA

p10   1.8 bits

p35   5.3 bits

{---} p35-(24)-p10 2403119 Gap 2.4 bits
|---| p35-p10 2403119 total 4.7 bits

```
      *2403150   *      *2403160   *      *2403170   *      *2403180   *      *2403190   *      *2403200   *      *2403210   *      *2403220   *
5' a c g c c a c a t c g a t t c a t g g g g a g g a a t a a a a a a a a c c t t a c a a t c a c t g t a g a a a t t c t t t t a t a c a g c t a a t t g a t g t g g 3'
   -   -   -   -   -fMet - gly - arg - asn - lys - lys - asn - leu - thr - ile - thr - val - glu - ile - leu - leu - tyr - ser -         -fMet - met - trp -
   -   arg - his - ile - asp - ser - trp - gly - gly - ile - lys - lys - thr - leu - gln - ser - leu -         -      -         -   -   -   -   -   -   -fMet - val -
   -   ala - thr - ser - ile - his - gly - glu - glu -      -         -   -   -   -   -   -   -   -
```
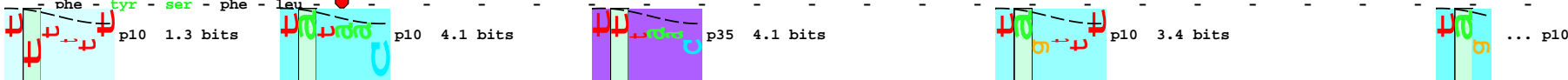
p35   4.8 bits

p35   4.7 bits

{---... p35-(23)-p10 2403228 Gap
|---... p35-p10 2403228 total 4.6
{---... p35-(26)-p10 2403231 Gap
|---... p35-p10 2403231 total 4.4
{---... p35-(24)-p10 2403243 Gap
|---... p35-p10 2403243 total 6.4
{---... p35-(26)-p10 2403245 Gap
|---... p35-p10 2403245 total 5.4

```
      *2403230   *      *2403240   *      *2403250   *      *2403260   *      *2403270   *      *2403280   *      *2403290   *      *2403300   *
5' t t t t t t a c t c c t t t c t a t a a c c t t t t g t c a a c t t t a a c a a a a g t t t c t t c a c a t t a g t t t a c a t a a t a t c a a c a c c a t t a g 3'
   - phe - phe - thr - pro - phe - tyr - asn - leu - leu - ser - thr - leu - thr - lys - val - ser - ser - his -         -   -   -   -   -   -
   -   -   -   - phe - tyr - ser - phe - leu -         -      -         -   -   -   -   -   -   -   -   -   -   -   -
```

p10   1.3 bits

p10   4.1 bits

p35   4.1 bits

p10   3.4 bits

... p10

... --} p35-(23)-p10 2403228 Gap 1.4 bits

p10   4.5 bits

{---} p35-(22)-p10 2403282 Gap 2.3 bits

... --| p35-p10 2403228 total 4.6 bits

|---| p35-p10 2403282 total 5.2 bits

... -------} p35-(26)-p10 2403231 Gap 3.7 bits

p35   5.5 bits

... -------| p35-p10 2403231 total 4.4 bits

{---} p35-(21)-p10 2403306 Gap 3.3 bit

... -------------------------} p35-(24)-p10 2403243 Gap 2.4 bits

|---| p35-p10 2403306 total 6.8 bits

... -------------------------| p35-p10 2403243 total 6.4 bits

{---... p35-(26)-p10 2403311 Gap

... -------------------------} p35-(26)-p10 2403245 Gap 3.7 bits

|---... p35-p10 2403311 total 6.3

... -------------------------| p35-p10 2403245 total 5.4 bits

p10   3.4 bits
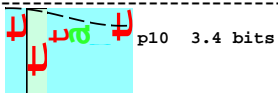
```
      *2403310   *      *2403320   *      *2403330   *      *2403340   *      *2403350   *      *2403360   *      *2403370   *      *2403380   *
5' c a t t t a a t g c c c t t t c a c c c c a g a t c c t t g a c g a c t c c a g g a t a a t t a g a t g t t g t t g a a t c g t g t c c g t t g t g a a g c a a t 3'
   -   -   -fMet - pro - phe - his - pro - arg - ser - leu - thr - thr - pro - gly -         -   -   -   -   -fMet -
   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet - leu - leu - asn - arg - val - arg - cys - glu - ala - met -
   -   -   -   -   -   -   -   -   -   -   -   -   -   -fMet - ser - val - val - lys - gln - trp -
```

p10   4.5 bits

ir nuoA_TERM39+

p10   4.5 bits

sd

{- - - - - - - - - -} sd-(9)-ir 2403357 Gap 2.3 bits
|- - - - - - - - - - - - - - - - -| sd-ir 2403357 nuoA_TERM39+ total 5.9 bits
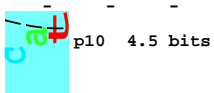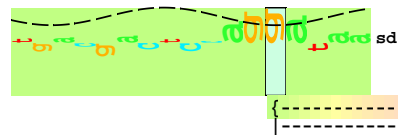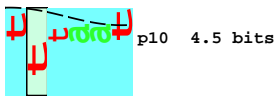
... {- - - - - -} p35-(26)-p10 2403311 Gap 3.7 bits
... - - - - - - | p35-p10 2403311 total 6.3 bits

*2403390 *   *2403400 *   *2403410 *   *2403420 *   *2403430 *   *2403440 *   *2403450 *   *2403460 *
5' ggaaaaatacgggtctattttgacaggaatttgtgtcgattcctccccccaaaagagagtatttcttgatctgtgacac 3'
     -     -   -   -   -   -   -   -   -   -fMet - ser - ile - pro - pro - pro - lys - arg - glu - tyr - phe - leu - asp - leu -   -   -
   - glu - lys - ile - arg - val - tyr - phe - asp - arg - asn - leu - cys - arg - phe - leu - pro - pro - lys - glu - ser - ile - phe - leu - ile - cys - asp - thr -
     - lys - lys - tyr - gly - ser - ile - leu - thr - gly - ile - cys - val - arg - phe - leu - ser - ser - pro - gln - lys - arg - val - phe - ser -   -   -fMet - thr - arg -
ir nuoA_TERM39+   p10   5.2 bits   [###> orf 15 codons

sd   p35   2.2 bits

{- - - - - - - - -} sd-(6)-ir 2403422 Gap 4.3 bits
|- - - - - - - - - - -| sd-ir 2403422 nuoA_TERM39+ total 6.0 bits

{- -} p35-(21)-p10 2403450 Gap 3.3 bits
|- -| p35-p10 2403450 total 4.1 bits

*2403470 *   *2403480 *   *2403490 *   *2403500 *   *2403510 *   *2403520 *   *2403530 *   *2403540 *   *2403550
5' gcttttgtcattccataacaaaaacgcagcaacaaatttacgtattttttaacatcattgtagcaggtgattttttcagg 3'
     - leu - leu - ser - phe - his - asn - lys - asn - ala - ala - thr - asn - leu - arg - ile - phe -   -   -   -   -fMet -   -   -fMet - ile - phe - phe - arg -
     - phe - cys - his - ser - ile - thr - lys - thr - gln - gln - gln - ile - tyr - val - phe - phe - asn - ile - ile - val - ala - gly - asp - phe - phe - gln - ala -
                                                                                      [###> orf 55 codons

*   *2403560 *   *2403570 *   *2403580 *   *2403590 *   *2403600 *   *2403610 *   *2403620 *   *2403630
5' cgattattgtcgttcgggacgtgaatctctggtggttgaaaatgaacagtttgtacgttctgcactatgcgatgaag 3'
   - arg - leu - phe - val - arg - ser - gly - arg - glu - ser - leu - val - val - glu - lys -   -   -   -fMet - tyr - val - leu - his - tyr - ala - met - lys -
     -     -   -fMet - cys - val - arg - asp - val - asn - leu - trp - trp - leu - lys - asn - glu - gln - phe - cys - thr - phe - cys - thr - met - arg -   -   -
     - ile - ile - cys - ala - phe - gly - thr -   -   -   -fMet - asn - ser - phe - val - arg - ser - ala - leu - cys - asp - glu - gly -
sd   ir nuoA_TERM39+

{- - - - - - - - - - - - - - - - -} sd-(11)-ir 2403595 Gap 3.0 bits
|- - - - - - - - - - - - - - - - - - -| sd-ir 2403595 nuoA_TERM39+ total 8.9 bits

*   *2403640 *   *2403650 *   *2403660 *   *2403670 *   *2403680
5' gattttactaaaaaagccgctgggggtttaaacacccccagcggct 3'
   - asp - phe - tyr -   -   -   -   -   -   -   -   -   -   -   -   -
     - phe - leu - leu - lys - lys - ser - arg - trp - gly - leu - lys - his - pro - gln - arg -
p35   5.7 bits   p10   3.3 bits

{- -} p35-(26)-p10 2403663 Gap 3.7 bits
|- -| p35-p10 2403663 total 5.3 bits