piece 1, NC_000913, hycA_hypA+, config: linear, direction: +, begin: 2848428, end: 2848688

```
      *2848430  *       *2848440  *       *2848450  *       *2848460  *       *2848470  *       *2848480  *       *2848490  *       *2848500  *
5' ggctttctcgcttatttcccaaatagtcattgtcaggttaccgtttaacagagatgccagctttaagcattttttgtgcc 3'
   - gly - phe - leu - ala - tyr - phe - pro - asn - ser - his - cys - gln - val - thr - arg - leu - thr - glu - met - pro - ala - leu - ser - ile - phe - cys - ala -
   - ala - phe - ser - leu - ile - ser - gln - ile - val - ile - val - arg - leu - pro - val -     - thr -     -     -     - ala - leu - ser - ile - phe - cys - ala -
   - leu - ser - arg - leu - phe - pro - lys -     -    -fMet - ser - gly - tyr - pro - phe - asn - arg - asp - ala - ser - phe - lys - his - phe - leu - cys - gln -
... -----------------------------------------------] NC_000913.hycA
```
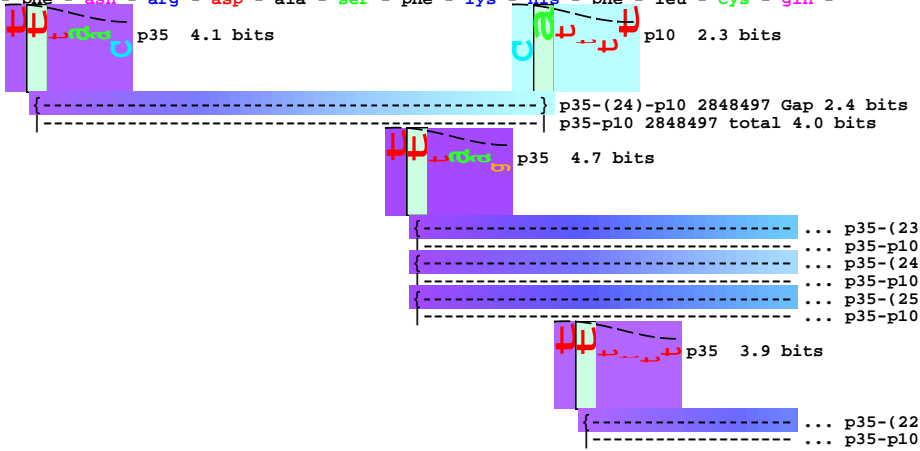
p35 4.1 bits
p10 2.3 bits

} p35-(24)-p10 2848497 Gap 2.4 bits
| p35-p10 2848497 total 4.0 bits

p35 4.7 bits

{ ... p35-(23)-p10 2848514 Gap
  ... p35-p10 2848514 total 7.7
{ ... p35-(24)-p10 2848515 Gap
  ... p35-p10 2848515 total 4.1
{ ... p35-(25)-p10 2848516 Gap
  ... p35-p10 2848516 total 5.1

p35 3.9 bits

{ ... p35-(22)-p10 2848521 Gap
  ... p35-p10 2848521 total 6.2

```
      *2848510  *       *2848520  *       *2848530  *       *2848540  *       *2848550  *       *2848560  *       *2848570  *       *2848580  *
5' aactttttaatttattgttattaaagagatttttaagctaaagatgaatttcgtcgccgtgtcgacgtgtcatttcgacatc 3'
   - asn - phe -     -     -     -     -     -     -     -     -    -fMet - asn - phe - val - ala - val - ser - thr - cys - his - phe - asp - ile -
   - thr - phe - asn - leu - leu - leu - leu - lys - arg - phe - leu - ser -     -     -     -     -     -     -     -     -     -     -
   - leu - leu - ile - tyr - cys - tyr -     - lys - arg - phe - leu - ser -     -     -    -fMet - ser - phe - arg - his - his -
```

sd

ir hycA_hypA+

p10 4.5 bits

{------------------------------------} sd-(18)-ir 2848551 Gap 6.9 bits

p10 1.8 bits

|------------------------------------| sd-ir 2848551 hycA_hypA+ total 6.1 bits

p10 4.4 bits

p10 1.1 bits

... -----------} p35-(23)-p10 2848514 Gap 1.4 bits

p10 4.6 bits

... -----------| p35-p10 2848514 total 7.7 bits
... -----------} p35-(24)-p10 2848515 Gap 2.4 bits
... -----------| p35-p10 2848515 total 4.1 bits
... -----------} p35-(25)-p10 2848516 Gap 4.0 bits
... -----------| p35-p10 2848516 total 5.1 bits

p10 4.6 bits

... -------------} p35-(22)-p10 2848521 Gap 2.3 bits
... -------------| p35-p10 2848521 total 6.2 bits

p35 5.7 bits

{------------------------} p35-(22)-p10 2848536 Gap 2.3 bits
|------------------------| p35-p10 2848536 total 4.5 bits

p35 4.8 bits

p35-(23)-p10 2848542 Gap 1.4 bits
p35-p10 2848542 total 7.9 bits

```
       *2848590  *        *2848600  *        *2848610  *        *2848620  *        *2848630  *        *2848640  *        *2848650  *        *2848660  *        *2848670
5' atcgacattattcaccgcagggataatcaacactggcacaattattgcttgtagctgcaatagttaatgggaggcgatat 3'
 - ile - asp - ile - ile - his - arg - arg - asp - asn - gln - his - trp - his - asn - tyr - cys - leu -                                      -fMet - gly - gly - asp - met -
   - arg - his - tyr - ser - pro - gln - gly -                                           -fMet - leu - val - ala - gly - asn - ser -
                                                                                   [###> orf 31 codons
```

[--- ... NC_000913.hypA

... ir

sd

sd-(8)-ir 2848669 Gap 2.4 bits
sd-ir 2848669 hycA_hypA+ total 1

```
         *        *2848680  *
5' gcacgaaataaccctctg 3'
 - his - glu - ile - thr - leu -
... -------------------------------- ... NC_000913.hypA
```

... ir hycA_hypA+