piece 1, NC_000913, yobF_yebO-, config: linear, direction: -, begin: 1906314, end: 1905596

```
          *1906310  *        *1906300  *        *1906290  *        *1906280  *        *1906270  *        *1906260  *        *1906250  *        *1906240  *
5' g a t a t t a t t c g t c t g g t c g c c g a a c g a t a a t c c t t c c t c a a t c t t g a g t a a c c c g t c g t t g a a g g g t t a c t c a a t t c a t c 3'
   - asp - ile - ile - phe - val - trp - ser - pro - asn - asp - asn - pro - ser - ser - ile - leu - ser - asn - pro - val - val - glu - gly - leu - leu - asn - ser - ser -
       - tyr - tyr - ser - ser - gly - arg - arg - thr - ile - ile - leu - pro - gln - ser -  -    -    -    -    -    -    - fMet - lys - gly - tyr - ser - ile - his - pro -
```
p35 5.5 bits
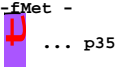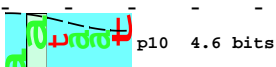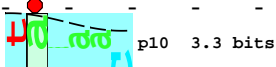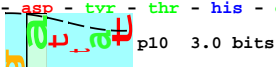
... p35-(24)-p10 1906230 Gap
... p35-p10 1906230 total 6.1

```
          *1906230  *        *1906220  *        *1906210  *        *1906200  *        *1906190  *        *1906180  *        *1906170  *        *1906160  *
5' c t g a t t a t a c g c a c t g t c a t g g t g c a a c t g c t t c a a a t t a a a a c t c t g g t c t g a c t t c a a a t a a t t a t c a t a t t a t t t a t t 3'
   -    -    -    -    -    -    - fMet - val - gln - leu - leu - gln - ile - lys - thr - leu - val -    -    -    -    -    -    -    -    -    - fMet -
   - asp - tyr - thr - his - cys - his - gly - ala - thr - ala - ser - asn -    -    -    -    -    -    -    -    -    -    -    -    -    -
```
p10 3.0 bits   p10 3.3 bits   p10 4.6 bits   ... p35

... -----} p35-(24)-p10 1906230 Gap 2.4 bits   p35 2.5 bits   p10 3.6 bits

... -----| p35-p10 1906230 total 6.1 bits   {----------------------------------} p35-(23)-p10 1906173 Gap 1.4 bits

p35 3.2 bits |--| p35-p10 1906173 total 5.6 bits

{--} p35-(24)-p10 1906194 Gap 2.4 bits   p10 7.1 bits
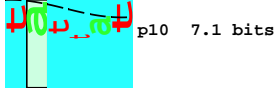
|--------------------------------------| p35-p10 1906194 total 4.1 bits

p35 3.5 bits

{--} p35-(22)-p10 1906164 Gap 2.3 bits
|--| p35-p10 1906164 total 4.8 bits
{--} p35-(24)-p10 1906162 Gap 2.4 bits
|--| p35-p10 1906162 total 8.2 bits

```
          *1906150  *        *1906140  *        *1906130  *        *1906120  *        *1906110  *        *1906100  *        *1906090  *        *1906080  *
5' t g c g t a a c g g a t a t c a g a a a a a g a t a t t t a c c c c a t t a a t t t a t t a g g a t g t t t a c a t c g g a t t t g t g a t t a a g c g t g g t 3'
   -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    -    - fMet - ile - lys - arg - gly -
   - arg - asn - gly - ile - ser - glu - lys - asp - ile - tyr - pro - ile - asn - leu - leu - gly - cys - leu - his - arg - ile - cys - asp - fMet - val -
```
p35 4.4 bits   p10 2.4 bits   p35 3.7 bits
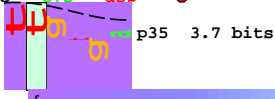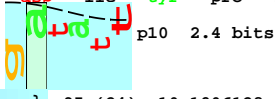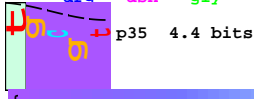
... {----------------------} p35-(24)-p10 1906128 Gap 2.4 bits   {----------------------} p35-(23)-p10 1906064 Gap
... |----------------------| p35-p10 1906128 total 4.4 bits   ... p35-p10 1906064 total 4.3

```
          *1906070  *        *1906060  *        *1906050  *        *1906040  *        *1906030  *        *1906020  *        *1906010  *        *1906000  *
5' a t t a t t a t t a g c g a a c g t t t c t c t c t t g a t t t t t g c t c a t t c a t c a a t t t c t t a t t t a a a t t t a c a a t c c c t t t 3'
   - ile - ile - tyr -    -    -    -    -    -    - fMet - ile - phe - leu - leu - ile - his - gln - phe - phe - leu - phe -    -
   - leu - phe - ile - ser - glu - thr - phe - leu - ser -    -    -    -    -    -    -    -    -    -    -    -    -    - fMet -
```
p10 2.0 bits   p10 0.8 bits   p10 1.4 bits   p10 5.7 bits

... ------------} p35-(23)-p10 1906064 Gap 1.4 bits   p35 5.7 bits   p35 2.2 bits   p10 5.2 bits

... ------------| p35-p10 1906064 total 4.3 bits   {----------------------------} p35-(22)-p10 1906021 Gap 2.3 bits

p35   4.8 bits   p35-p10 1906021 total 4.8 bits

p35-(23)-p10 1906043 Gap 1.4 bits
p35-p10 1906043 total 4.2 bits

p35   3.8 bits

p35-(22)-p10 1906012 Gap 2.3 bits
p35-p10 1906012 total 6.7 bits

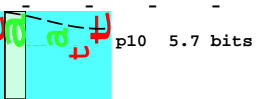p35-(21)-p10 1906007 Gap 3.3 bits
p35-p10 1906007 total 4.6 bits

```
*1905990  *   *1905980  *   *1905970  *   *1905960  *   *1905950  *   *1905940  *   *1905930  *   *1905920  *   *1905910
5' ggggattgacttctctttagggtaattaatagccgttaactgactgtttttatgagaaaagtgatataactttttattcat 3'
```

- gly - ile - asp - phe - ser - leu - gly -   -   -   -   -   -   -   -   -   -   - fMet - ile -   -
- fMet - thr - ser - leu -   -   -   -   -   -   -   - fMet - arg - lys - ser - asp - ile - thr - phe - tyr - ser - leu -

p35   6.5 bits   p10   1.2 bits   ir yobF_yebO-

sd   [###> orf 3 codons

p35-(21)-p10 1905963 Gap 3.3 bits   sd-(8)-ir 1905930 Gap 2.4 bits
p35-p10 1905963 total 4.5 bits   sd-ir 1905930 yobF_yebO- total 5.4 bits

p35   3.8 bits   p10   3.2 bits

p35-(24)-p10 1905918 Gap 2.4 bits
p35-p10 1905918 total 4.6 bits

```
 *        *1905900  *   *1905890  *   *1905880  *   *1905870  *   *1905860  *   *1905850  *   *1905840  *   *1905830
5' tgcatagcaaaaatgtgatattgcacgcactatgtaataacttctcccactggcctggaacaactgaacttattgaacta 3'
```
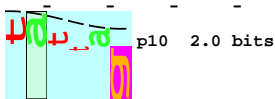
-   -   -   -   - fMet - ile - leu - his - ala - leu - cys - asn - asn - phe - ser - his - trp - pro - gly - thr - thr - glu - leu - ile - glu - leu -
- his - ser - lys - lys - cys - asp - ile - ala - arg - thr - met -   -   -   -   -   -   -   -   -   -   - fMet - asn - tyr -   -   - fMet -

sd   ir yobF_yebO-   p35   2.9 bits   ... p10

[###> orf 2 codons

sd-(17)-ir 1905877 Gap 6.5 bits   p35-(23)-p10 1905829 Gap 1.4 b
sd-ir 1905877 yobF_yebO- total 6.0 bits   p35-p10 1905829 total 6.0 bits

p35   5.0 bits

... p35-(23)-p10 1905812 Gap
... p35-p10 1905812 total 4.1

```
 *        *1905820  *   *1905810  *   *1905800  *   *1905790  *   *1905780  *   *1905770  *   *1905760  *   *1905750
5' tgttagaaaatacgccagtttaagtatctgcctgaactggcaaggttaagcacaatgatatatcggcgcgtattccgttgc 3'
```

- cys -   -   -   -   -   -   -   -   -   -   -   -   - fMet - ile - tyr - arg - arg - val - phe - arg - cys -
- val - arg - lys - tyr - ala - ser - leu - ser - ile - cys - leu - asn - trp - gln - gly -   -   -   -   -   -   -
- leu - glu - asn - thr - pro - val -   -   -   -   -   -   -   -   -   -   -   -   -   -   - fMet - his -

... p10   4.6 bits   p10   0.5 bits   sd   ir yobF_yebO-

sd-(10)-ir 1905774 Gap 2.7 bits
sd-ir 1905774 yobF_yebO- total 6.8 bits

... p35-(23)-p10 1905812 Gap 1.4 bits
... p35-p10 1905812 total 4.1 bits

```
 *        *1905740  *   *1905730  *   *1905720  *   *1905710  *   *1905700  *   *1905690  *   *1905680  *   *1905670
5' ataagtgtgcaaaaaagtggaagacgtatcgagatttgtgcgtctgatcgagacatgtttaaaaatggcttgccataatt 3'
```

- ile - ser - val - gln - lys - lys - trp - lys - thr - tyr - arg - asp - leu - cys - val -   -   -   -   -   -   -   -   -
-   - fMet - cys - lys - lys - ser - gly - arg - arg - ile - glu - ile - cys - ala - ser - asp - arg - asp - met - phe - lys - asn - gly - leu - pro -   -   -   -
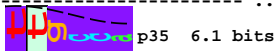
- lys - cys - ala - lys - lys - val - glu - asp - val - ser - arg - phe - val - arg - leu - ile - glu - thr - cys - leu - lys - met - ala - cys - his - asn - ● -

[###> orf 25 codons

p35 5.6 bits

... p10

... p35-(22)-p10 1905666 Gap
... p35-p10 1905666 total 6.3

p35 6.1 bits

... p35-(23)-p10 1905653 Gap
... p35-p10 1905653 total 4.7

```
      *      *1905660  *     *1905650  *     *1905640  *     *1905630  *     *1905620  *     *1905610  *     *1905600
5' a a c g t t g t a t g t g a t a a c a g a t t t c g g g t t a a a c g a g g t a c a g t t c t g t t t a t g t g t g g c a t t t t c a g t a a 3'
```

- -fMet - cys - gly - ile - phe - ser -
- -fMet - tyr - val - ile - thr - asp - phe - gly - leu - asn - glu - val - gln - phe - cys - leu - cys - val - ala - phe - ser - val -
- -fMet - ● - - - - - ● - - - - - -fMet - trp - his - phe - gln - ●

... p10 3.1 bits

p10 0.0 bits

[-------------------------------------- ... NC_000913.yobF

... } p35-(22)-p10 1905666 Gap 2.3 bits
... | p35-p10 1905666 total 6.3 bits

... ----------------------} p35-(23)-p10 1905653 Gap 1.4 bits
... ----------------------| p35-p10 1905653 total 4.7 bits