piece 1, NC_000913, ydfJ_ydfK+, config: linear, direction: +, begin: 1630280, end: 1631082

*1630280 * *1630290 * *1630300 * *1630310 * *1630320 * *1630330 * *1630340 * *1630350 * *1630360
5' tgcgccgagcgaatataactggaaatccataattcacaggtgttttttcccatcctgtggtttccttggcgtttctaggt 3'
- cys - ala - glu - arg - ile - - - - - -fMet - phe - phe - pro - ile - leu - trp - phe - pro - trp - arg - phe - leu - gly - -
- ala - pro - ser - glu - tyr - asn - trp - lys - ser - ile - ile - his - arg - cys - phe - phe - pro - ser - cys - gly - phe - leu - gly - val - phe - -
- arg - arg - ala - asn - ile - thr - gly - asn - pro - - - - - - - - - -fMet - val - ser - leu - ala - phe - ser - arg - phe -

... ---] NC_000913.ydfJ

p10   1.3 bits

p35   4.4 bits

p35   4.3 bits

{-------------- ... p35-(24)-p10 1630377 Gap

{-------------------------------------} p35-(23)-p10 1630323 Gap 1.4 bits
{---------------------------------------| p35-p10 1630323 total 4.2 bits

|-------------- ... p35-p10 1630377 total 4.2

* *1630370 * *1630380 * *1630390 * *1630400 * *1630410 * *1630420 * *1630430 * *1630440
5' tttttcagatagttgcattttttaaaaagcatcctaagttcgatctcagtgtctatctggggcctatttctgtcccatat 3'
- phe - phe - arg - - -fMet - his - phe - phe - lys - lys - his - pro - lys - phe - asp - leu - ser - val - tyr - leu - gly - pro - ile - ser - val - pro - tyr -
- phe - gln - ile - val - ala - phe - phe - - - - - - - - - -fMet - ser - ile - trp - gly - leu - phe - leu - ser - his - ile -

p10   2.3 bits

p10   3.8 bits

... {-------------------------------} p35-(24)-p10 1630377 Gap 2.4 bits
... {---------------------------------| p35-p10 1630377 total 4.2 bits

p35   6.2 bits

{-------------------------------} p35-(23)-p10 1630397 Gap 1.4 bits
{---------------------------------| p35-p10 1630397 total 8.5 bits

* *1630450 * *1630460 * *1630470 * *1630480 * *1630490 * *1630500 * *1630510 * *1630520
5' atgccccaagaaagaaactcccaacagataagtagtttttcatggatttgtaaatcgaagaacggctggaatcattc 3'
- met - pro - gln - lys - asn - ser - pro - thr - asp - lys - - - - fMet - arg - lys - ile - lys - asn - gly - trp - lys - ser - phe -
- cys - pro - lys - lys - thr - pro - gln - gln - ile - ser - ser - phe - phe - met - asp - leu - cys - val - lys - ser - arg - thr - ala - gly - asn - his - ser -

p35   0.7 bits

ir ydfJ_ydfK+

sd

p10   7.6 bits

{---------} sd-(5)-ir 1630490 Gap 5.4 bits
|--------- sd-ir 1630490 ydfJ_ydfK+ total 8.6 bits
{-------------------------------} p35-(23)-p10 1630496 Gap 1.4 bits
|---------------------------------| p35-p10 1630496 total 6.9 bits

* *1630530 * *1630540 * *1630550 * *1630560 * *1630570 * *1630580 * *1630590 * *1630600
5' aatactcacactatcgaaaaatttaccagccaatcgcagcacgttcttgcataaggtgtgtctgcggtttttcaactattc 3'
- asn - thr - his - thr - ile - glu - lys - phe - thr - ser - gln - ser - gln - his - val - leu - ala - - - -fMet - ser - ala - val - phe - gln - leu - phe -
- ile - leu - thr - leu - ser - lys - asn - leu - pro - ala - asn - arg - ser - thr - phe - leu - his - lys - lys - val - cys - leu - arg - phe - phe - asn - tyr - ser -

[###]> orf 29 codons

* *1630610 * *1630620 * *1630630 * *1630640 * *1630650 * *1630660 * *1630670 * *1630680
5' agatacatcaccccatcacattcatcctccgcatcaaaggcatcattaggctatatcaccttgatatttttctttttcaga 3'
- arg - tyr - ile - thr - pro - ile - thr - phe - ile - pro - pro - his - gln - arg - his - ile - gly - tyr - ile - thr - leu - ile - phe - phe - phe - arg -
- asp - thr - ser - leu - pro - ser - his - ser - phe - leu - arg - ile - lys - gly - ile - - - leu - gly - tyr - ile - thr - - - - - - - -

p35   5.6 bits

p35   4.6 bits

{-------------------------------------- ... p35-(23)-p10 1630688 Gap
|-- ... p35-p10 1630688 total 6.9

p35   4.8 bits

```
                                                                    {------------------------------ ... p35-(23)-p10 1630695 Gap
                                                                     ------------------------------ ... p35-p10 1630695 total 4.6
                                                                              {--------------------- ... p35-(26)-p10 1630704 Gap
                                                                               |-------------------- ... p35-p10 1630704 total 8.2
      *      *1630690   *       *1630700   *       *1630710   *       *1630720   *       *1630730   *       *1630740   *       *1630750   *       *1630760   *
   5' t a a a a c t g t t a t c t a t g t a t a c t t t t a a a c c c a a t c c g t g t a g a g t c t c t a c a t a a g a t a g t t t g c a g t t g c c g c t t c a g 3'
      -   ●   -     -     -     -   -fMet - tyr - thr - phe - lys - pro - asn - pro - cys - arg - val - ser - thr -   ●   -     -   -fMet - gln - leu - pro - leu - gln -
      -     -     -     -     -     -   ●   -     -     -     -     -   -fMet -   ●   -     -     -     -     -     -     -     -   ●   -     -     -     -     -
```

p10 2.7 bits
p10 7.3 bits
p10 4.1 bits
p35 5.2 bits

```
... {------} p35-(23)-p10 1630688 Gap 1.4 bits
... |------| p35-p10 1630688 total 6.9 bits {--------------------------} p35-(23)-p10 1630727 Gap 1.4 bits
                                                                                          {------------------------------ ... p35-(21)-p10 1630776 Gap
                                                                                           |------------------------------ ... p35-p10 1630776 total 4.1
```

p10 1.3 bits
p35 1.5 bits

```
... {--------------------} p35-(23)-p10 1630695 Gap 1.4 bits
... |--------------------| p35-p10 1630695 total 4.6 bits
... {--------------------------} p35-(26)-p10 1630704 Gap 3.7 bits
... |--------------------------| p35-p10 1630704 total 8.2 bits
```

```
                              |------------------------------------------| p35-p10 1630727 total 4.2 bits
```

```
      *1630770   *       *1630780   *       *1630790   *       *1630800   *       *1630810   *       *1630820   *       *1630830   *       *1630840   *
   5' c t t g c g c c a t a a a c c g c c t g a t t t t t g c t g c c a c c t g t t a g c a t t c c t g t a t a c c t g a a a c g a c a a t g t t t a t c t a c g a a c 3'
      - leu - ala - pro -   ●   -     -     -     -   -fMet - leu - pro - pro - val - ser - ile - pro - val - tyr - leu - lys - arg - gln - cys - leu - ser - thr - asn -
      -   -fMet - arg - his - lys - pro - pro - asp - phe - cys - cys - his - leu - leu - ala - phe - leu - tyr - thr -   ●   -     -     -     -     -     -     -
      -     -     -     -     -     -     -     -     -     -     -     -     -     ●   -     -     -     -     -   -fMet - phe - ile - tyr - glu - leu -
```

p10 2.2 bits

```
... {--------------------} p35-(21)-p10 1630776 Gap 3.3 bits
... |--------------------| p35-p10 1630776 total 4.1 bits
```

```
      *1630850   *       *1630860   *       *1630870   *       *1630880   *       *1630890   *       *1630900   *       *1630910   *       *1630920   *
   5' t t t a a g a a c c a a g a t a a a a a t t g t c a a c t a t a t c a t a t a t a a c a c a t t a c t a a t t c g a g g c t a t a t g a a c a g c a t a c t 3'
      - phe - lys - asn - thr - gln - asp - lys - asn - cys - gln - leu - tyr - his - ile -   ●   -     -     -     -     -     -     -     -   -fMet - asn - ser - ile - leu -
      -   -     -     -     -     -   ●   -     -   -fMet - ser - thr - ile - ser - tyr - ile - thr - his - tyr -   ●   -     -     -     -     -     -     -
```

p35 5.5 bits
p10 2.2 bits
... ir

sd

```
                                                                    {----------} sd-(5)-ir 1630914 Gap 5.4 bits
                                                                     |---------- sd-ir 1630914 ydfJ_ydfK+ total 7.0 bits
```

```
                  {------------------------------------------} p35-(22)-p10 1630893 Gap 2.3 bits
                   |------------------------------------------| p35-p10 1630893 total 5.4 bits
```

```
      *1630930   *       *1630940   *       *1630950   *       *1630960   *       *1630970   *       *1630980   *       *1630990   *       *1631000   *
   5' g a t a a t c a c a t c t c t c c t t a t c a t a t t c a g c a t t t t t a g t c a t g c g c c t a a t a a a t t a g g a t t g g c a t a t c c a a t a a c c 3'
      - ile - ile - thr - ser - leu - leu - ile - ile - phe - ser - ile - phe - ser -   ●   -     - his - ala - leu - ile - lys - leu - gly - ile - gly - ile - ser - asn - pro -
      -   ●   -     -     -     -     -     -     -     -     -     -     -   -fMet - pro -   ●   -     ●   -     -     -     ●   -     -   -fMet - ala - tyr - pro - ile - thr - gln -
```

... ir ydfJ_ydfK+

p35 1.2 bits
p10 7.6 bits

```
                  {------------------------------------------------} p35-(26)-p10 1630979 Gap 3.7 bits
                   |------------------------------------------------| p35-p10 1630979 total 5.1 bits
```

```
           *1631010    *        *1631020    *        *1631030    *        *1631040    *        *1631050    *        *1631060    *        *1631070    *        *1631080
5' a g a c a a a a c c g a t g t a t a a g t c a a c a t a t c c t g a a t c a g a c a t a c a a t a t c g c a a t g a a a a t c a a t a a t a t t t t 3'
   -       -       -       -       -       -       -       -       -       -       -       -       -       -    -fMet - lys - ile - asn - asn - ile -
   -       -       -       -       -       ●       -       -       -       -       -       -       -       -       -       ●       -       -       -       -       -fMet
   - asp - lys - thr - asp - val -  ●    -       -       -    ●    -       -       -       -       -       -       -       -       ●    -       -       -
   - thr - lys - pro - met - tyr - lys - ser - thr - tyr - pro - glu - ser - asp - ile - gln - tyr - arg - asn - glu - asn - gln -  ●    -       -       -
                              [###> orf 38 codons                                                                              [-------------------------------------- ... NC_000913.ydfK
```