piece 1, NC_000913, cysG_yhfL+, config: linear, direction: +, begin: 3497194, end: 3497489
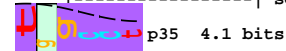
```
       *      *3497200  *      *3497210  *      *3497220  *      *3497230  *      *3497240  *      *3497250  *      *3497260  *      *3497270
5' g a t a a a c t g a a c t g g t t c t c c a a c c a t t a a t t t a a c c c g g g c c a g a g a a t t c t g g c c t t c t t a a t g a c t c t t t t t a t a t a t 3'
    - asp - lys - leu - asn - trp - phe - ser - asn - his -    -     -     -     -     -     -     -     -     - fMet - thr - leu - phe - ile - lys -
    - ile - asn -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
```

ir cysG_yhfL+

sd

... p10
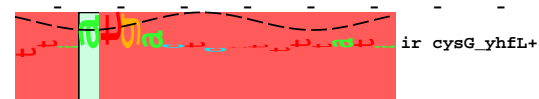
{-------------} sd-(9)-ir 3497257 Gap 2.3 bits
|-------------- sd-ir 3497257 cysG_yhfL+ total 7.0 bits

p35   4.1 bits

{---} p35-(24)-p10 3497271 Gap 2.4 bits
|--- p35-p10 3497271 total 8.1 bits

```
       *      *3497280  *      *3497290  *      *3497300  *      *3497310  *      *3497320  *      *3497330  *      *3497340  *      *3497350  *
5' t c a g c a a a t a a a a c a t a g c c c c t t a a t a a t t a t c t g c t a a t g g g t t a t a t t c a c c g t t a c a g c g a c t t a c a a a a t t a a 3'
    - ser - ala - asn - lys - thr -    -     -     -     -     -     -     -     -     - fMet - gly - tyr - ile - his - arg - tyr - ser - asp - leu - gln - asn -
    -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
```
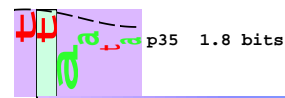
[###> orf 12 codons

p10   6.5 bits
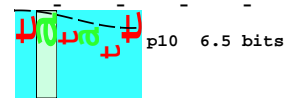
... p10   6.5 bits

p35   1.8 bits

{---------------------------------} p35-(26)-p10 3497324 Gap 3.7 bits
|----------------------------------- p35-p10 3497324 total 4.6 bits

```
       *      *3497360  *      *3497370  *      *3497380  *      *3497390  *      *3497400  *      *3497410  *      *3497420  *      *3497430  *
5' g t c a t t c g c t c a c t g a c g c c a a t t a a a t a t t c c t g t a t c g t t c t t a a c g a g c a g t c t g c t t a t a t t c a t a t a a t c a a t g a a 3'
    -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     - fMet - asn -
    -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
```
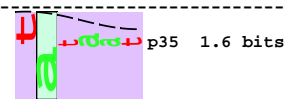
p35   1.8 bits

p10   8.4 bits
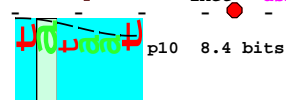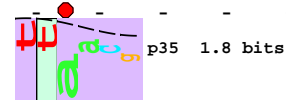
{-----------------------------------} p35-(25)-p10 3497425 Gap 4.0 bits
|------------------------------------- p35-p10 3497425 total 6.1 bits

p35   2.2 bits
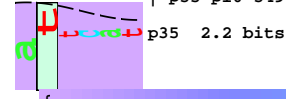
{--------------------------------- ... p35-(25)-p10 3497445 Gap
|---------------------------------- ... p35-p10 3497445 total 4.5

p35   1.6 bits

{--------------------------------- ... p35-(25)-p10 3497450 Gap
|---------------------------------- ... p35-p10 3497450 total 5.9

```
       *      *3497440  *      *3497450  *      *3497460  *      *3497470  *      *3497480  *
5' t a t t a a t t a a t a t a t a a t a c a t a g g g a a t g t a a t g a a c a a a t t t a t t a a a g t 3'
    - ile - asn -     -     -     -     -     -     - fMet -    - fMet - asn - lys - phe - ile - lys -
    -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
```

sd

[--- ... NC_000913.yhfL

p10   6.3 bits

- 2 -

ir cysG_yhfL+

p10   8.4 bits {-----------------} sd-(8)-ir 3497470 Gap 2.4 bits

|---------------| sd-ir 3497470 cysG_yhfL+ total 15.9 bits
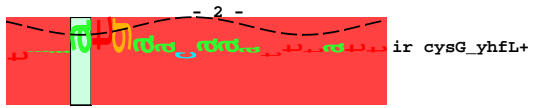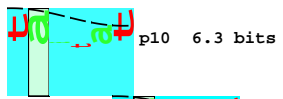
... {----------------} p35-(25)-p10 3497445 Gap 4.0 bits
... ---------------| p35-p10 3497445 total 4.5 bits

... {------------------------} p35-(25)-p10 3497450 Gap 4.0 bits
... ------------------------| p35-p10 3497450 total 5.9 bits