piece 1, NC_000913, ygbA_mutS-, config: linear, direction: -, begin: 2855144, end: 2854809

```
        *2855140  *      *2855130  *      *2855120  *      *2855110  *      *2855100  *      *2855090  *      *2855080  *      *2855070  *
5' a t g t t g c g t c g a a a t t t t c t a t t g c a c t c a t g g g g t t a t g t c c g g t t c c c t g a t a t t a a a t g g g g t g t g a t g g t t t t t a t t 3'
  -fMet - gly - val - glu - ile - phe - tyr - cys - thr - his - gly - val - met - ser - gly - ser - leu - ile - leu - asn - gly - val -        -        -       -fMet - gly - cys - asp - gly - phe - tyr - phe -
     - trp - ala - ser - lys - phe - ser - ile - ala - leu - met - gly - leu - cys - pro - val - pro -        -              -             val - met - val - phe - ile - phe -
        - gly - arg - arg - asn - phe - leu - leu - his - ser - trp - gly - tyr - val - arg - phe - pro - asp - ile - lys - trp - gly - val -
... ------------------------------------------------------] NC_000913.mutS                                                                      ... ir
```

sd

... p10

{-----------} sd-(5)-ir 2855076 Gap 5.4 bits
|---------| sd-ir 2855076 ygbA_mutS- total 7.0 bits

p35   2.5 bits

{<-------------------------------->} p35-(23)-p10 2855067 Gap 1.4 bits
|----------------------------------| p35-p10 2855067 total 6.2 bits

```
        *2855060  *      *2855050  *      *2855040  *      *2855030  *      *2855020  *      *2855010  *      *2855000  *      *2854990  *
5' t c g t t g t a a t c a c a t a a g g c g c a g t t a a t c a t t a t c a t t c a g g g g a a g a a g c g a a c g g c g a g t t c t t g a t g c t g 3'
  -       -fMet -       -      -     -      -     -     -fMet - ile - pro - glu - leu - ile - ile - ser - gly - glu - glu - ala - asn - gly - glu - phe - leu - met - leu -
        - arg - cys - asn - his - ile - arg - arg - thr -
           - val - val - ile - thr -                         [###> orf 10 codons
```

... ir ygbA_mutS-

... p10   5.2 bits

ir ygbA_mutS-

sd

{-----------} sd-(6)-ir 2855039 Gap 4.3 bits
|----------| sd-ir 2855039 ygbA_mutS- total 7.1 bits

```
        *2854980  *      *2854970  *      *2854960  *      *2854950  *      *2854940  *      *2854930  *      *2854920  *      *2854910  *
5' g t t c c g g g a a a g a t g c t g t t t t g c a g c t t t t g c g t g a t g c t t a t g a a g c a a g t a c g c a a a a t t g t a t c g g t t g g c t a a c c c 3'
  - val - pro - gly - lys - met - leu - phe - cys - ser - phe - cys - val - met - leu - met - lys - gln - val - arg - lys - ile - val - ser - val - gly -        -
      -       -      -     -     -      -     -     -     -     -     -      -      -      -      -      -      -     -      -     -fMet - tyr - arg - leu - ala - asn - pro -
        -      -     -     -     -     -fMet - gln - leu - leu - arg - asp - ala - tyr - glu - ala - ser - thr - gln - asn - cys - ile - gly - trp - leu - thr - leu -
                                                                                                                                     [###> orf 45 codons
```

```
        *2854900  *      *2854890  *      *2854880  *      *2854870  *      *2854860  *      *2854850  *      *2854840  *      *2854830  *
5' t t c t t c t t g g a g t c a t a g t g c c c t t a a g a t t a a g a t g t a a t a a a t a c a t c t t a a t g a g t g g a g g c a g c a t g t c c g g 3'
  - ser - ser - leu - glu - ser -        -fMet - pro - phe - lys - ile - lys - met -      -     -     -      -     -     -      -fMet - arg - trp - arg - gln - his - val - arg -
     - leu - leu - trp - ser - his - ser - ala - leu -       -     -     -     -     -      -     -     -     -     -      -       -fMet - ser - gly -
        - leu - leu - trp - ser - his - ser - ala - leu -                                                        -fMet - glu - ala - ala - ala - cys - pro - ala -
```

p35   2.6 bits

p10   5.7 bits

sd

[-------------- ... NC_000913.ygbA

... ir

{<------------------------------->} p35-(24)-p10 2854868 Gap 2.4 bits

{-----------} sd-(11)-ir 2854828 Gap 3.0 bits
|-----------------| p35-p10 2854868 total 5.9 bits
|------------------| sd-ir 2854828 ygbA_mutS- total 7.5 bits

```
        *2854820  *      *2854810  *
5' c a a g c g t a t c t c 3'
  - gln - ala - tyr - leu -
      - lys - arg - ile -
        - ser - val - ser -
... ---------------------- ... NC_000913.ygbA
```

...ir ygbA_mutS-