piece 1, NC_000913, adiY_adiA-, config: linear, direction: -, begin: 4336306, end: 4335933

```
        *      *4336300  *        *4336290  *        *4336280  *        *4336270  *        *4336260  *        *4336250  *        *4336240  *        *4336230
5' a t t a c c a c g t t a t g t g c g t g a a a g c g t a a c c a c t a t t c c g c t g a a g g c g t a a t t g t t t a a a t a a c a t t a c g c c g c c t g g c 3'
   - ile - tyr - his - val - met - cys - val - lys - ala -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
     - phe - thr - thr - leu - cys - ala -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
       - leu - pro - arg - tyr - val - arg - glu - ser - val - thr - thr - ile - pro - leu - lys - ala -     -fMet - phe - lys -     -     -     -     -     -     -
```
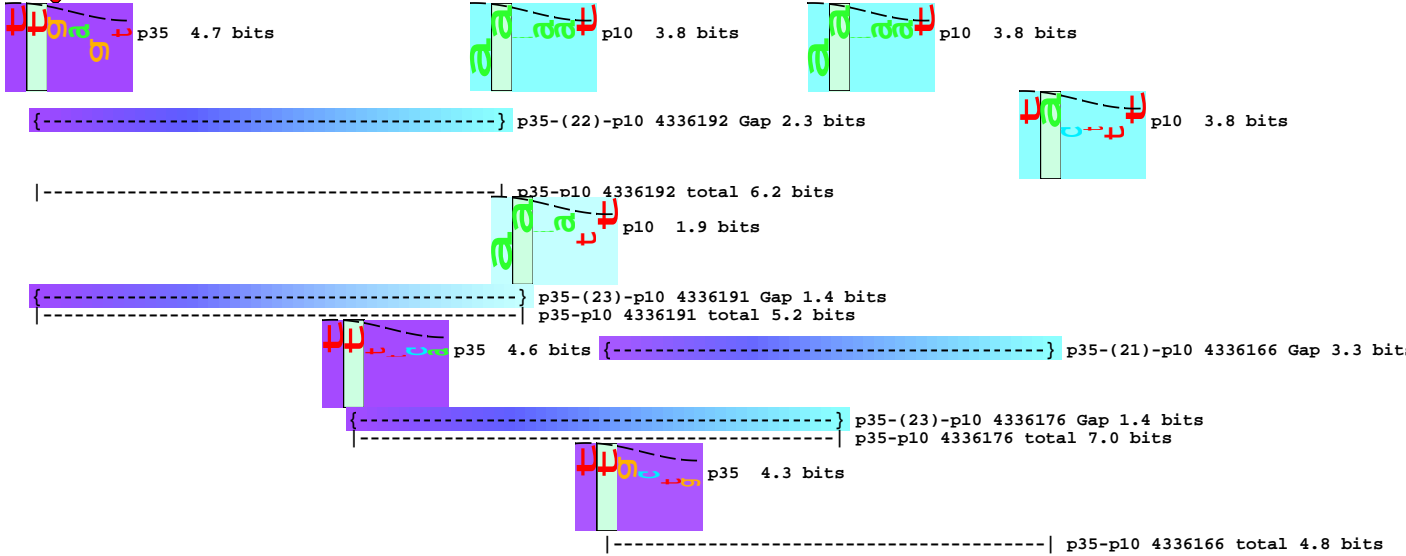
```
        *      *4336220  *        *4336210  *        *4336200  *        *4336190  *        *4336180  *        *4336170  *        *4336160  *        *4336150  *
5' c t t a g g c c t t t t g a g t a t g g c a a c g t t t c a t a a a a a t t g c t g c a a a c a a a a a t g t c a t a c t t t t t g c g c g g c c c c a c c c c 3'
   -     -     -     -fMet - ser - met - ala - thr - phe - ser -     -     -     -fMet - leu - gln - thr - lys - met - ser - tyr - phe - leu - arg - gly - pro - thr - pro -
```
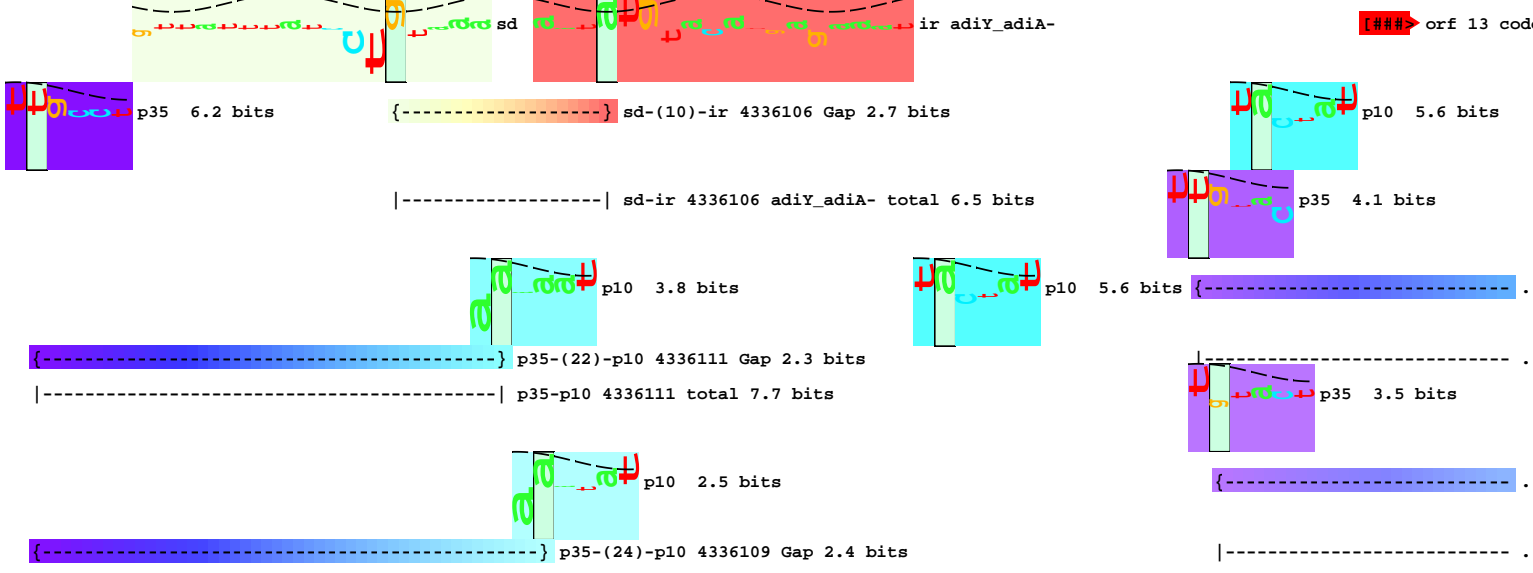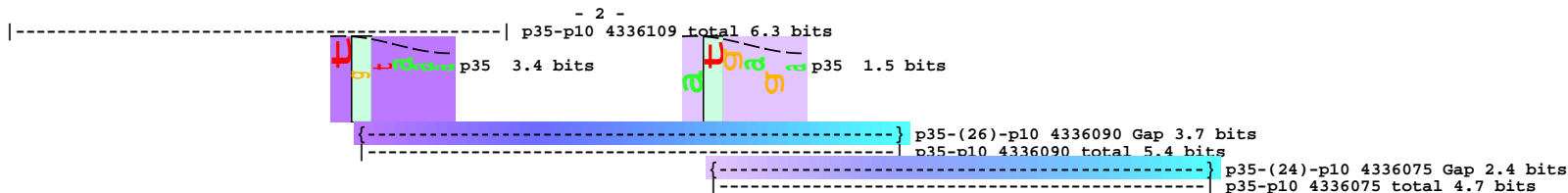
p35 4.7 bits

p10 3.8 bits

p10 3.8 bits

{- -} p35-(22)-p10 4336192 Gap 2.3 bits

p10 3.8 bits

|- -⌡ p35-p10 4336192 total 6.2 bits

p10 1.9 bits

{- -} p35-(23)-p10 4336191 Gap 1.4 bits
|- -| p35-p10 4336191 total 5.2 bits

p35 4.6 bits {- -} p35-(21)-p10 4336166 Gap 3.3 bits

{- -} p35-(23)-p10 4336176 Gap 1.4 bits
|- -| p35-p10 4336176 total 7.0 bits

p35 4.3 bits

|- -| p35-p10 4336166 total 4.8 bits

```
        *      *4336140  *        *4336130  *        *4336120  *        *4336110  *        *4336100  *        *4336090  *        *4336080  *        *4336070  *
5' g c g c t t t t t t t t g c c t g t t a t t t a t c c t g t a a a a a a a t a t g t a c a t g a g a a a t t a c t a t a a a a a t t t g t a c t a t t a g t a a a 3'
   - arg - phe - phe - leu - pro - val - ile - tyr - pro - val - lys - lys - tyr - val - his - glu - lys - leu - leu -     -     -     -     -     -     -     -     -     -
                                                                     -     -fMet - tyr - met - arg - asn - tyr - tyr - lys - asn - leu - tyr - tyr -     -     -     -     -
```
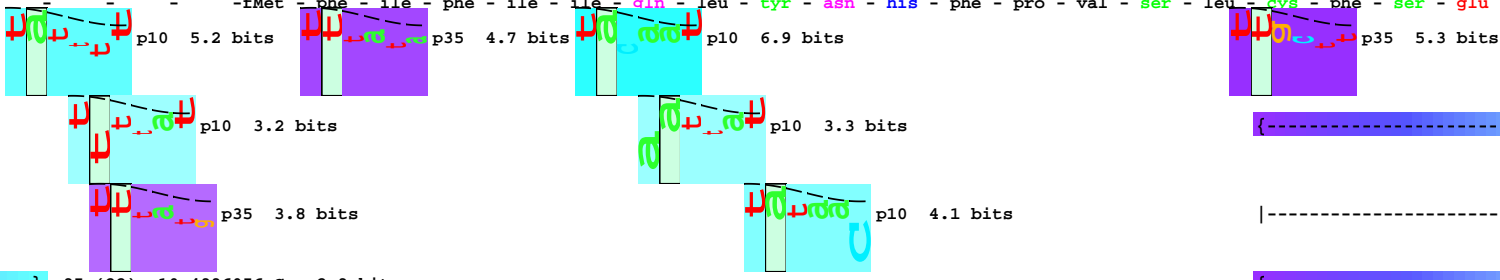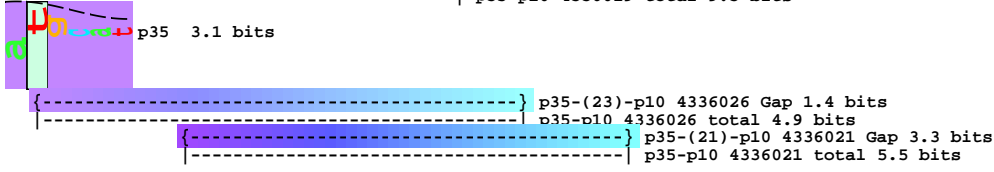
sd

ir adiY_adiA-

[###> orf 13 codons

p35 6.2 bits

{- - - - - - - - - - - - -} sd-(10)-ir 4336106 Gap 2.7 bits

p10 5.6 bits

p35 4.1 bits

|- - - - - - - - - - - - - - - - - - -| sd-ir 4336106 adiY_adiA- total 6.5 bits

p10 3.8 bits

p10 5.6 bits {- - - - - - - - - - - - - - - - - - - ... p35-(22)-p10 4336056 Gap

{- -} p35-(22)-p10 4336111 Gap 2.3 bits

|- - - - - - - - - - - - - - - - - - - ... p35-p10 4336056 total 7.0

|- -| p35-p10 4336111 total 7.7 bits

p35 3.5 bits

p10 2.5 bits

{- - - - - - - - - - - - - - - - - - - ... p35-(24)-p10 4336053 Gap

{- -} p35-(24)-p10 4336109 Gap 2.4 bits

|- - - - - - - - - - - - - - - - - - - ... p35-p10 4336053 total 4.3

- 2 -

|---| p35-p10 4336109 total 6.3 bits

p35   3.4 bits   p35   1.5 bits

{---} p35-(26)-p10 4336090 Gap 3.7 bits
|---| p35-p10 4336090 total 5.4 bits

{---} p35-(24)-p10 4336075 Gap 2.4 bits
|---| p35-p10 4336075 total 4.7 bits

*4336060 *   *4336050 *   *4336040 *   *4336030 *   *4336020 *   *4336010 *   *4336000 *   *4335990 *

5' a c t c g t t a t t t t a t g c a t g t t a t t c a t c a t a c a a t t a t a t a a c c a t t t c c c g g t a t c g c t t t g c t t t a g c g a g a a c t 3'

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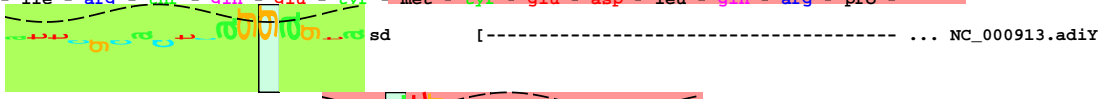   -fMet - leu - ● -

p10   5.2 bits   p35   4.7 bits   p10   6.9 bits   p35   5.3 bits

p10   3.2 bits   p10   3.3 bits   {-----------------------------... p35-(21)-p10 4335977 Gap

p35   3.8 bits   p10   4.1 bits |-----------------------------... p35-p10 4335977 total 5.2

...-----------} p35-(22)-p10 4336056 Gap 2.3 bits   {-----------------------------... p35-(22)-p10 4335976 Gap
...-----------| p35-p10 4336056 total 7.0 bits |-----------------------------... p35-p10 4335976 total 5.6

...-----------} p35-(24)-p10 4336053 Gap 2.4 bits   {----------------} p35-(23)-p10 4336029 Gap 1.4 bits
...-----------| p35-p10 4336053 total 4.3 bits |--| p35-p10 4336029 total 9.3 bits

p35   3.1 bits

{-----------------} p35-(23)-p10 4336026 Gap 1.4 bits
|-----------------| p35-p10 4336026 total 4.9 bits

{-------------} p35-(21)-p10 4336021 Gap 3.3 bits
|-------------| p35-p10 4336021 total 5.5 bits

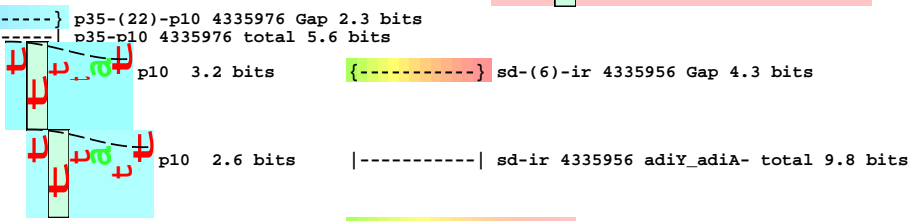*4335980 *   *4335970 *   *4335960 *   *4335950 *   *4335940 *

5' g g t c t t t t a t t c g c a c t c a g g a g t a c a t g t a t g a g g a t t t g c a g c g a c c a 3'

-fMet - arg - ile - cys - ser - asp -
- ser - phe - ile - arg - thr - gln - glu - tyr - met - tyr - glu - asp - leu - gln - arg - pro -

sd   [--------------------------------------- ... NC_000913.adiY

...-----------} p35-(21)-p10 4335977 Gap 3.3 bits   ir adiY_adiA-

...-----------| p35-p10 4335977 total 5.2 bits   ir adiY_adiA-

...-----------} p35-(22)-p10 4335976 Gap 2.3 bits
...-----------| p35-p10 4335976 total 5.6 bits

p10   3.2 bits   {-------------} sd-(6)-ir 4335956 Gap 4.3 bits

p10   2.6 bits |-----------| sd-ir 4335956 adiY_adiA- total 9.8 bits

{-------------------} sd-(10)-ir 4335952 Gap 2.7 bits
|-------------------| sd-ir 4335952 adiY_adiA- total 8.8 bits