piece 1, NC_000913, pinR_ynaE+, config: linear, direction: +, begin: 1431669, end: 1432034

```
       *1431670  *        *1431680  *        *1431690  *        *1431700  *        *1431710  *        *1431720  *        *1431730  *        *1431740  *
5' tatccgacagtaagcaaaaattcgagacatagtgagactctatacgaaattggtgttcatatcataatgcatctcagaaaa 3'
  - tyr - pro - thr - val - ser - lys - asn - ser - arg - his - ser - glu - thr - leu - tyr - glu - ile - gly - val - his - ile - ile - met - his - leu - arg - lys -
    - ile - arg - gln -     -     -     -     -     -     -     -fMet - arg - leu - tyr - thr - lys - leu - val - phe - ile - ser -
      - ser - asp - ser - lys - gln - lys - phe - glu - thr -     -     -     -     -     -     -     -
```

... --] NC_000913.pinR

sd

ir pinR_ynaE+

sd-(14)-ir 1431735 Gap 4.9 bits
sd-ir 1431735 pinR_ynaE+ total 5.8 bits

p35   2.5 bits

... p10

p35-(23)-p10 1431746 Gap 1.4 bits
p35-p10 1431746 total 4.6 bits

p35   3.1 bits

... p35-(25)-p10 1431761 Gap
... p35-p10 1431761 total 4.3

```
       *1431750  *        *1431760  *        *1431770  *        *1431780  *        *1431790  *        *1431800  *        *1431810  *        *1431820  *        *1431830
5' taatttatgattatttttgtgcatatttgtatgtacacgttcgaaataaacgaatgcgtatgcaacccc gtaatttttggtg 3'
  -     -     -     -     -     -     -fMet - cys - ile - phe - val - cys - thr - arg - ser - lys - ile - asn - glu - cys - val - cys - asn - pro - val - ile - leu - val -
    -     -     -     -     -     -     -fMet - tyr - val - his - val - arg - lys -     -     -     -     -     -     -     -     -     -     -
      -     -     -fMet - ile - ile - phe - val - his - ile - cys - met - tyr - thr - phe - glu - asn - lys - arg - met - arg - met - gln - pro - arg - asn - phe - gly - glu -
```

[###> orf 6 codons   p10   5.2 bits

... p10   3.6 bits

... ----------------------} p35-(25)-p10 1431761 Gap 4.0 bits
... ----------------------| p35-p10 1431761 total 4.3 bits

```
            *         *1431840  *        *1431850  *        *1431860  *        *1431870  *        *1431880  *        *1431890  *        *1431900  *        *1431910
5' agacccaaaatcgattttgtgaaaaatggctttaactcggtttgttttttcgagttccggccggactcaaggaagaagaata 3'
  - arg - pro - lys - ile - asp - phe - val - lys - asn - gly - phe - asn - ser - val - cys - phe - ser - ser - ser - gly - arg - thr - gln - gly - arg - arg - ile -
    -     -     -     -     -fMet -     -     -fMet - ala - leu - thr - arg - phe - val - phe - arg - val - pro - gly - gly - leu - lys - glu - glu - glu -
      -     - thr - gln - asn - arg - phe - cys - glu - lys - trp - leu -     -     -     -fMet - phe - phe - glu - phe - arg - ala - asp - ser - arg - lys - lys - asn - ser -
```

```
            *         *1431920  *        *1431930  *        *1431940  *        *1431950  *        *1431960  *        *1431970  *        *1431980  *        *1431990
5' gtgttcgtgttattttaaccagatttcaagttgtttggtcgtggaaaagtggagcaaaatgttgttaaagtggaaaaatg 3'
  - val - leu - arg - val - ile - leu - thr - arg - phe - gln - val - val - trp - ser - trp - lys - val - glu - gln - asn - val - val - lys - val - glu - glu -     -     -fMet -
    -     -fMet - leu - phe -     -     -     -     -     -fMet - phe - gly - arg - gly - lys - lys - trp - ser - lys - met - leu - leu - lys - trp - lys - asn - asp -
      -     - val - ala - cys - tyr - phe - asn - gln - ile - ser - ser - cys - leu - val - val - glu - lys - trp - ser - lys - met - leu - leu - lys - trp - lys - asn - asp -
```

p35   4.8 bits

ir pinR_ynaE+

[### ... orf

sd

p10   4.7 bits

... ir

sd-(5)-ir 1431961 Gap 5.4 bits
sd-ir 1431961 pinR_ynaE+ total 5.3 bits

sd-(5)-ir 1431990 Gap 5.4 bits
sd-ir 1431990 pinR_ynaE+ total 12.

p35   4.3 bits

sd{--- ... p35-(21)-p10 1432012 Gap

{----------------------} p35-(24)-p10 1431968 Gap 2.4 bits

... p35

|---| p35-p10 1431968 total 7.1 bits {------------------------ ... p35-(23)-p10 1432007 Gap

p10 5.1 bits |--- ... p35-p10 1432012 total 5.7

{--} p35-(24)-p10 1431979 Gap 2.4 bits
|--| p35-p10 1431979 total 7.0 bits

p35 4.7 bits

{--------------------------------} ... p35-(23)-p10 1431998 Gap
|--------------------------------| ... p35-p10 1431998 total 4.6

p35 4.3 bits

|-------------------| ... p35-p10 1432007 total 5.5
{-------------------| ... p35-(25)-p10 1432009 Gap
|-------------------| ... p35-p10 1432009 total 7.4

```
        *      *1432000  *       *1432010  *       *1432020  *        *1432030
5' a t a a a a a g t a a g t t t a t t a t a t t a c a t t t a c c a t t t a a a t 3'
  - ile - lys - lys -  ●   -    -    -    -    -    -    -    -    -    -    -  ●  -
          - lys - lys - val - ser - leu - leu - tyr - tyr - ile - leu - pro - phe - lys -
          -     -     -     -     -     -     -     -     -     -     -     -     -
... > orf 11 codons  [###> orf 5 codons      <------------------------------------ ... NC_000913.ynaE
```

... ir pinR_ynaE+

p10 3.7 bits

p10 1.3 bits   p10 6.5 bits

p10 2.6 bits

... {---------------------------} p35-(21)-p10 1432012 Gap 3.3 bits

... p35 2.5 bits   p10 7.1 bits

... {---------------------} p35-(23)-p10 1432007 Gap 1.4 bits
... |----------------------------------| p35-p10 1432012 total 5.7 bits

p35 4.8 bits

{---------------------------------------} p35-(23)-p10 1432030 Gap 1.4 bits
|---------------------------------------| p35-p10 1432030 total 7.1 bits

... ---------| p35-(23)-p10 1431998 Gap 1.4 bits
... ---------| p35-p10 1431998 total 4.6 bits

... --------------------------| p35-p10 1432007 total 5.5 bits
... {-------------------------} p35-(25)-p10 1432009 Gap 4.0 bits
... --------------------------| p35-p10 1432009 total 7.4 bits