

piece 1, NC_000913, RIP69_cydA-, config: linear, direction: -, begin: 770710, end: 769977

*770710 * *770700 * *770690 * *770680 * *770670 * *770660 * *770650 * *770640 * *770630

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

-fMet - leu - ile - ala - - -fMet - leu - ile - ala - - -fMet - lys - asp - ser - glu - ser - glu - pro - arg - -

- lys - arg - asp - ser - thr - ile - ser - asn - ile - met - thr - pro - cys - ser - ser - his - glu - asp - ser - glu - ser - glu - pro - arg - -

- ser - ala - thr - val - arg - leu - tyr - leu - thr - ser - - -fMet - lys - thr - pro - arg - val - asn - pro - val - arg - lys -



*770620 * *770610 * *770600 * *770590 * *770580 * *770570 * *770560 * *770550

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

-fMet - pro - gln - - -fMet - phe - glu - his - phe - his - his - thr - met - -fMet - asn - ala - his - lys - asn - gly - val - lys -

- gly - his - thr - his - ala - pro - ile - glu - ile - cys - leu - asn - thr - phe - ile - ile - pro - cys - glu - cys - thr - gln - lys - arg - arg - lys - glu -



orf 4 codons

{-----} sd-(9)-ir 770617 Gap 2.3 bits

{-----} sd-ir 770617 RIP69_cydA- total 5.3 bits

*770540 * *770530 * *770520 * *770510 * *770500 * *770490 * *770480 * *770470

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

-fMet - leu - ile - lys - thr - gln - ile - asp - pro - thr - tyr - ile - leu - arg - arg - lys - ile - leu - thr - ile - asn - arg - phe -

- arg - leu - gln - thr - cys - - -fMet - ile - pro - arg - ile - tyr - tyr - ala - ala - lys - ser - leu - gln - - -



{-----} sd-(9)-ir 770535 Gap 2.3 bits

p35 4.2 bits p10 6.9 bits

|-----| sd-ir 770535 RIP69_cydA- total 10.9 bits

p35 6.1 bits p10 2.8 bits |-----| p35-(23)-p10 770481 Gap 1.4 bits

|-----| p35-p10 770481 total 6.1 bits

{-----} p35-(23)-p10 770519 Gap 1.4 bits

{-----} p35-p10 770519 total 7.5 bits

{-----} p35-(25)-p10 770490 Gap 4.0 bits

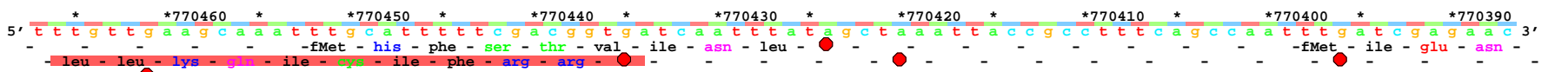
{-----} p35-p10 770490 total 4.9 bits

*770460 * *770450 * *770440 * *770430 * *770420 * *770410 * *770400 * *770390

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

-fMet - his - phe - ser - thr - val - ile - asn - leu - - -fMet - ile - glu - asn -

- leu - leu - lys - gln - ile - cys - ile - phe - arg - arg - - -



p35 3.4 bits

... p35-(24)-p10 770373 Gap

{-----} p35-(24)-p10 770420 Gap 2.4 bits

{-----} p35-p10 770420 total 6.7 bits

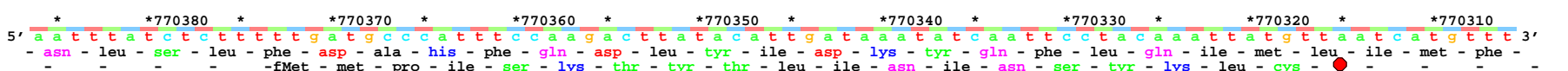
... p35-p10 770373 total 4.3

*770380 * *770370 * *770360 * *770350 * *770340 * *770330 * *770320 * *770310

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

-fMet - met - pro - ile - ser - lys - thr - tyr - thr - leu - ile - asn - ile - asn - ser - tyr - lys - leu - cys - -

- asn - leu - ser - leu - phe - asp - ala - his - phe - gln - asp - leu - tyr - ile - asp - lys - tyr - gln - phe - leu - gln - ile - met - leu - ile - met - phe -



... p35-(24)-p10 770373 Gap 2.4 bits - 2 - p10 2.5 bits p10 4.6 bits

... p35-p10 770373 total 4.3 bits p35 5.6 bits

p35 4.7 bits p35-(22)-p10 770323 Gap 2.3 bits

p35-(23)-p10 770349 Gap 1.4 bits p35-p10 770349 total 8.3 bits p35 5.2 bits p35-p10 770323 total 6.5 bits

p35-(22)-p10 770340 Gap 2.3 bits p35-p10 770340 total 5.4 bits p35-(25)-p10 770320 Gap 4.0 bits p35-p10 770320 total 6.1 bits

* 770300 * 770290 * 770280 * 770270 * 770260 * 770250 * 770240 * 770230 *
5' c a a t a a g g t a a c t t t a g t g a c a t t t a t g t t t a a a a t g t g t g a g t t a t a a g g c t g a a a t t a g t t t c g g t t g g c a a t t a a a g a 3'
gln -fMet - thr - phe - met - phe - lys - met - cys - glu - leu - -fMet - ala - ile - lys - asp -
-fMet - ser - tyr - lys - ala - glu - ile - ser - phe - gly - trp - gln - leu - lys - ile -
ir RIP69_cydA- [###] orf 11 codons

sd-(9)-ir 770289 Gap 2.3 bits p10 3.3 bits

sd-ir 770289 RIP69 cydA- total 9.4 bits ir RIP69_cydA-

sd-(18)-ir 770280 Gap 6.9 bits sd-ir 770280 RIP69_cydA- total 6.9 bits p35 3.8 bits

p35-(22)-p10 770260 Gap 2.3 bits p35-p10 770260 total 4.8 bits

* 770220 * 770210 * 770200 * 770190 * 770180 * 770170 * 770160 * 770150 *
5' t a a a a a g a g a c g a a g c a a a a a c a g c a c g g t t g a c c t t a a t t c t t t t t t t g g t c a c t g g c t a a t a c g a c g c a g a g t t t c a g g 3'
- lys - lys - arg - arg - ser - lys - asn - ser - thr - val - asp - leu - asn - ser - phe - phe - gly - his - trp - leu - ile - arg - arg - arg - val - ser - gly -
- lys - arg - asp - glu - ala - lys - thr - ala - arg - leu - thr - leu - ile - leu - phe - leu - val - thr - gly -

p35 4.3 bits

... p35-(23)-p10 770126 Gap p35-p10 770126 total 4.3

* 770140 * 770130 * 770120 * 770110 * 770100 * 770090 * 770080 * 770070 *
5' a t t a c t a a t a a a g g c a t a a a t c c a c c c c g c c a a t a t t a a c a t t t a g t t a a c t t a t a a t t a t a t t a a t t a a c t c a c c c a g 3'
- leu - leu - ile - lys - ala -

p10 1.4 bits p35 2.7 bits p10 6.5 bits

p35-(23)-p10 770126 Gap 1.4 bits p35-(23)-p10 770084 Gap 1.4 bits

... -----| p35-p10 770126 total 4.3 bits

- 3 -

-----| p35-p10 770084 total 7.7 bits

p35 3.8 bits

p10 7.1 bits

-----| p35-(25)-p10 770082 Gap 4.0 bits
-----| p35-p10 770082 total 5.7 bits

p10 8.4 bits

-----| p35-(22)-p10 770079 Gap 2.3 bits
-----| p35-p10 770079 total 9.9 bits

p35 1.6 bits

-----| ... p35-(23)-p10 770058 Gap
-----| ... p35-p10 770058 total 7.3

p35 1.6 bits

-----| ... p35-(24)-p10 770055 Gap
-----| ... p35-p10 770055 total 4.3

*770060 * *770050 * *770040 * *770030 * *770020 * *770010 * *770000 * *769990 *
5' g g t t a t t a t t t t g t t a a a a a t a a a g c c a c a t a t a c g t g g c t t g a g a g t g a a g a t a a a c g c a a a a t t a c c t g a t g c g c t a c g 3'
-fMet - leu - lys - ile - lys - pro - his - ile - arg - gly - leu - arg - val - lys - ile - asn - ala - lys - leu - pro - asp - ala - leu - arg -
-fMet - ala -

p10 7.1 bits

p35 3.2 bits

p10 4.7 bits

p10 5.2 bits

-----| p35-(23)-p10 770002 Gap 1.4 bits

-----| p35-p10 770002 total 6.5 bits

... -----| p35-(23)-p10 770058 Gap 1.4 bits
... -----| p35-p10 770058 total 7.3 bits

... -----| p35-(24)-p10 770055 Gap 2.4 bits
... -----| p35-p10 770055 total 4.3 bits

*769980
5' c t t g c 3'
- leu -
- cys -