

piece 1, NC\_000913, cirA\_lysP+, config: linear, direction: +, begin: 2244762, end: 2245104

\*2244770 \*2244780 \*2244790 \*2244800 \*2244810 \*2244820 \*2244830 \*2244840

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

- asp - pro - tyr - glu - arg - val - gln - pro - lys - his - ser - ile - ser - pro - fMet - gly - tyr - arg - ser - his -

- thr - arg - thr - lys - gly - phe - asn - leu - asn - ile - pro - tyr - leu - his - glu - val - thr - thr - lys - ile - lys - trp - val - ile - ala - his - ile -

- pro - val - arg - lys - gly - ser - thr - fMet - arg -

-----] NC\_000913.cirA

\*2244850 \*2244860 \*2244870 \*2244880 \*2244890 \*2244900 \*2244910 \*2244920

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

- leu - leu - his - val - pro - leu - arg - thr - ala - ala - ser - arg - trp - thr - tyr - phe - leu - cys - arg -

- phe - phe - thr - ser - pro - cys - val - arg - gln - his - arg - gly - gly - leu - ile - phe - tyr - ala - gly - asp - his - pro - arg - lys - pro - glu - gln -

- fMet - asp - leu - phe - phe - met - gln - val - ile - pro - glu - ser - arg - asn - ser -

p35 4.4 bits p10 2.3 bits

{-----} p35-(22)-p10 2244902 Gap 2.3 bits

{-----} p35-p10 2244902 total 4.4 bits

\*2244930 \*2244940 \*2244950 \*2244960 \*2244970 \*2244980 \*2244990 \*2245000

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

- fMet - ser - ala - phe - phe - asp - cys - gly - val - thr - ile - met - gln - thr - ile - thr - ile - ile - ile - asn - pro - asn - val - lys - phe -

- pro - leu - ile - cys - gln - pro - phe - leu - ile - ala - ala - fMet - arg - arg - asn - asp - asn - ala - asn - asp - asn - asn - tyr - gln - ser - lys - cys -

- leu - fMet - arg - arg - asn - asp - asn - ala - asn - asp - asn - asn - tyr - gln - ser - lys - cys -

sd ir cirA\_lysP+

{-----} sd-(11)-ir 2244966 Gap 3.0 bits

{-----} sd-ir 2244966 cirA\_lysP+ total 10.8 bits

\*2245010 \*2245020 \*2245030 \*2245040 \*2245050 \*2245060 \*2245070 \*2245080

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

- tyr - ile - arg - met - ile - cys - gln - gly - val - gly - ile - glu - lys - ala - leu - ser - val - glu - arg - ala -

- ile - ser - ala - fMet - ser - gly - lys - trp - asn - glu - leu - lys - lys - pro - ser - arg - leu - arg - gly - leu - ser - lys - glu - gly - arg - lys - leu -

sd ir cirA\_lysP+ orf 34 codons

{-----} sd-(9)-ir 2245036 Gap 2.3 bits

{-----} sd-ir 2245036 cirA\_lysP+ total 6.8 bits

\*2245090 \*2245100

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

- ile - ser - tyr - arg - ser - ala -

... NC\_000913.lysP