

piece 1, NC\_000913, ydhZ\_pykF-, config: linear, direction: -, begin: 1753751, end: 1753146

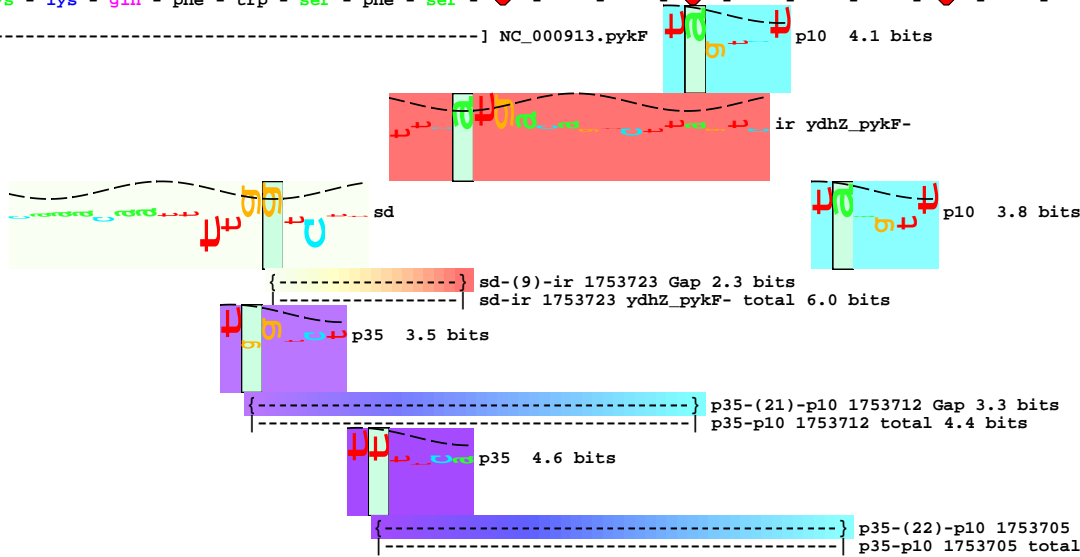
\*1753750 \* \*1753740 \* \*1753730 \* \*1753720 \* \*1753710 \* \*1753700 \* \*1753690 \* \*1753680 \*

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

- asp - gly - ala - asn - asn - phe - gly - leu - phe - his - asp - ser - leu - ser - leu - fMet - leu - ser - gly -

- met - val - gln - thr - ile - leu - val - phe - phe - met - thr - val - leu - val - phe - lys - leu - arg - arg - met - gly - glu - thr - cys - phe - leu - gly -

- trp - cys - lys - gln - phe - trp - ser - phe - ser



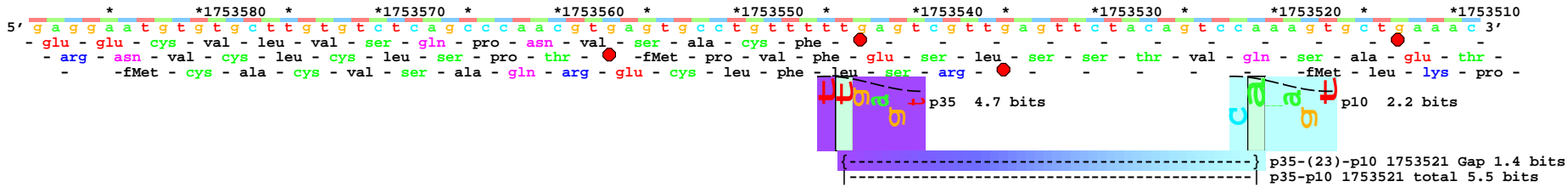
\*1753670 \* \*1753660 \* \*1753650 \* \*1753640 \* \*1753630 \* \*1753620 \* \*1753610 \* \*1753600 \* \*1753590 \*

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

- arg - thr - ala - gly - lys - arg - ile - arg - tyr - tyr - glu - ser - gly - gly - ala - ser - leu - -fMet - thr - ser - lys - arg - ala -

- ala - leu - pro - glu - ser - glu - ser - gly - ile - thr - lys - val - val - val - pro - arg - ser - lys - asp - arg - -fMet - gln -

### orf 39 codons

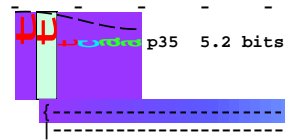


\*1753500 \* \*1753490 \* \*1753480 \* \*1753470 \* \*1753460 \* \*1753450 \* \*1753440 \* \*1753430 \*

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

- ile - gln - glu - ser - ile - gly - ala - his - tyr - thr - leu - lys - leu - ile - gln - lys - glu - asn - lys - asn - ser - val - ser - lys - asn - ile - gln -

- phe - lys - ser - gln - leu - ala - arg - ile - ile - arg -

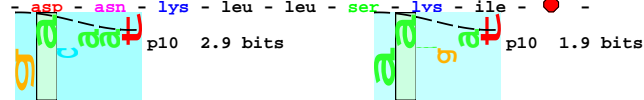


\*1753420 \* \*1753410 \* \*1753400 \* \*1753390 \* \*1753380 \* \*1753370 \* \*1753360 \* \*1753350 \*

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

- leu - val - arg - gln - -fMet - leu - asp - asn - lys - leu - leu - ser - lys - ile -

-fMet - leu - asp - asn - lys - leu - leu - ser - lys - ile -



... } p35-(24)-p10 1753418 Gap 2.4 bits  
... } p35-p10 1753418 total 5.7 bits

p35 4.7 bits

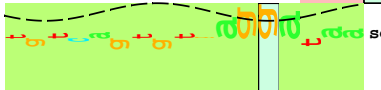
} p35-(23)-p10 1753401 Gap 1.4 bits  
} p35-p10 1753401 total 5.1 bits

\* \*1753340 \* \*1753330 \* \*1753320 \* \*1753310 \* \*1753300 \* \*1753290 \* \*1753280 \* \*1753270 \*  
5' t c t g g t g c c g a a g t t g t c a g t g t g a g g a t a a g t g a a a g t t c a t c c g g t g t a t a a a t a t a t c a t c g c t c a a t t g c t a c a g t t 3'  
-fMet - arg - ile - ser - glu - ser - ser - gly - val -  
-fMet - pro - lys - leu - ser - val -  
- trp - cys - arg - ser - cys - gln - cys - glu - asp - lys

ir ydhZ\_pykF-

p35 1.2 bits

... p10



} sd-(5)-ir 1753315 Gap 5.4 bits  
} sd-ir 1753315 ydhZ\_pykF- total 5.2 bits

} p35-(23)-p10 1753265 Gap

} p35-p10 1753265 total 7.4

\* \*1753260 \* \*1753250 \* \*1753240 \* \*1753230 \* \*1753220 \* \*1753210 \* \*1753200 \* \*1753190 \*  
5' a a a a t a a t t t a t c g c g t t a t t t g t c t g a t t t t g t t g a t t t t g t t t a a t t g g t t a g a t t g a t a t a t g c t g a t a g t t g g c a 3'  
- lys -  
-fMet - phe - asp - phe - cys - leu - ile - gly -  
-fMet - ile - phe - val -  
-fMet - phe - asn - trp - leu - asp -  
-fMet - leu - ile - val - gly - met -

... } p10 7.6 bits

fMet - ser - asp - phe - val -  
... } p35 5.6 bits

fMet - val - arg - leu - ile - tyr - ala - asp - ser - trp - his -  
... } p10 4.5 bits

sd

... ir

... } p35-(23)-p10 1753265 Gap 1.4 bits  
... } p35-p10 1753265 total 7.4 bits

} p35-(24)-p10 1753220 Gap 2.4 bits  
} p35-p10 1753220 total 7.7 bits

} sd-(10)-ir 1753185 Gap 2.7 bit  
} sd-ir 1753185 ydhZ\_pykF- total

[###] orf 19 codons

p35 4.8 bits

p10 1.8 bits

... sd

} p35-(23)-p10 1753211 Gap 1.4 bits

... p10

} p35-p10 1753211 total 5.1 bits  
p35 4.8 bits p10 4.7 bits

} p35-(24)-p10 1753210 Gap 2.4 bits  
} p35-p10 1753210 total 7.1 bits

p10 5.3 bits

} p35-(23)-p10 1753200 Gap 1.4 bits  
} p35-p10 1753200 total 8.7 bits

p35 5.6 bits

} p35-(21)-p10 1753185 Gap 3.3 b  
} p35-p10 1753185 total 5.9 bits

\* \*1753180 \* \*1753170 \* \*1753160 \* \*1753150 \*  
5' t g a t a a a t a g g t a t a a a g a a t g g g a a a t c g g a c a a a a g a 3'

- asp - lys -  
- ile - arg - arg - trp - lys - glu - trp - glu - ile - gly - gln - lys -

... } ir ydhZ\_pykF-

