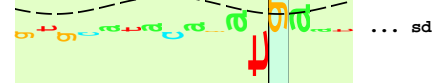


piece 1, NC\_000913, mdh\_argR-, config: linear, direction: -, begin: 3382754, end: 3382271

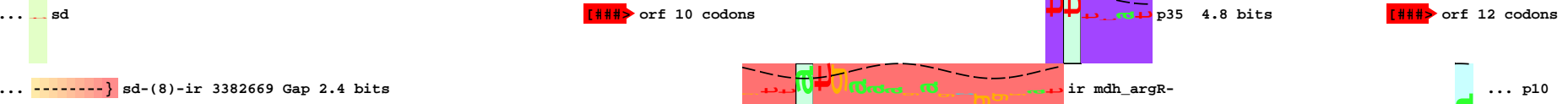
5' <sup>\*3382750 \*</sup> t a g t t c t t c t t g c t t a g c c g a g c t t c g c a t a a g t c a c c c g a t a t g g t g g t t g a t a c a a c a t t a t t g t g c a t a c a g a t g a a t 3'  
-fMet - leu - ser - arg - ala - ser - his - lys - ser - pro - asp - met - val - val - asp - thr - thr - leu - leu - cys - ile - gln - met - asn -  
- ser - ser - ser - cys - leu - ala - glu - leu - arg - ile - ser - his - pro - ile - trp - trp - leu - ile - gln - his - tyr - cys - ala - tyr - arg -  
- val - leu - leu - ala -

-----] NC\_000913.argR



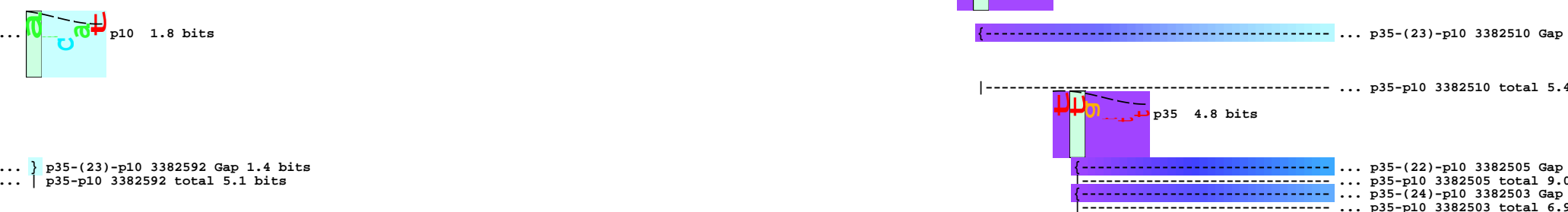
-----] sd ... sd-ir 3382669 Gap  
-----] sd-ir 3382669 mdh\_argR-

5' <sup>\*3382670 \*</sup> t t t t a t g c a a a c a g t c a g c c t g a a g a a g g c t g a a a t a t g t t a t g a a a g a g c g g g a t t t t a t c a a a t t t c g t t a t t g a g a 3'  
- phe - tyr - ala - asn - ser - gln - pro - glu - glu - gly - fMet - lys - glu - arg - asp - phe - ile - lys - phe - arg - tyr - fMet - arg -  
- leu - cys - lys - gln - ser - ala - leu - lys - lys - ala - glu - ile - met - leu -

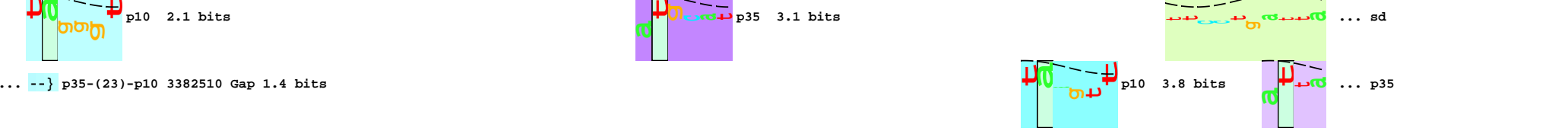


sd-ir 3382669 mdh\_argR- total 6.7 bits  
sd-ir 3382630 mdh\_argR- total 5.5 bits  
sd-ir 3382630 mdh\_argR- total 5.5 bits  
p35-ir 3382630 mdh\_argR- total 4.9 bits  
sd-ir 3382630 mdh\_argR- total 5.5 bits

5' <sup>\*3382590 \*</sup> a a c a t g c c t g c g c t c a c g g c a t g c a a a t t c t g c t t a a a a g t a a a t t a a t t g t t a t c a a a t t g a t g t t g t t t g g c t g a a c g g 3'  
- asn - met - pro - ala - ser - arg - his - ala - asn - ser - ala - fMet - gln - ile - leu - leu - lys - ser - lys - leu - ile - val - ile - lys - leu - met - leu - phe - trp - leu - asn - gly -  
- fMet - leu - ser - asn -



5' <sup>\*3382510 \*</sup> t a g g g t a t a t t g t c a c c a c c t g t t g g a a t g t t g c g c t a a t g c a t a a g c g a c t g t t a a t t a c g t a a g t t a g g t t c c t g a t t a 3'  
-fMet - ser - pro - pro - val - gly - met - leu - arg - asn - ala - fMet - his - lys - arg - leu - leu - ile - thr -  
- arg - val - tyr - cys - his - his - leu - leu - glu - cys - cys -



... --| p35-p10 3382510 total 5.4 bits

p10 6.5 bits

{-----} p35-(24)-p10 3382448 Gap 2.4 bits

|-----| p35-p10 3382448 total 4.5 bits

... {-----} p35-(22)-p10 3382505 Gap 2.3 bits

... {-----} p35-p10 3382505 total 9.0 bits

... {-----} p35-(24)-p10 3382503 Gap 2.4 bits

... {-----} p35-p10 3382503 total 6.9 bits

p10 4.6 bits

{-----} ... p35-(26)-p10 3382407 Gap

{-----} ... p35-p10 3382407 total 4.3

5' \*3382430 \* \*3382420 \* \*3382410 \* \*3382400 \* \*3382390 \* \*3382380 \* \*3382370 \* \*3382360 \* \*3382350

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

-fMet - his - lys - arg - -fMet - arg - asp - tyr - thr - phe - leu - arg - cys - gly - his - cys - lys - arg - gln - phe - cys - gly -

-fMet - thr - thr - his - ser - -fMet - val - ile - val - asn - gly - asn - phe - val - asp - -fMet - trp - ser - leu - -fMet - trp - ile -

sd

### orf 5 codons

p35 5.5 bits

... p35 1.5 bits

p10 6.5 bits

{-----} ... p35-(23)-p10 3382347 Gap

ir mdh\_argR-

|-----} ... p35-p10 3382347 total 7.3

... {-----} sd-(8)-ir 3382420 Gap 2.4 bits

... {-----} p35-(26)-p10 3382407 Gap 3.7 bits

... {-----} p35-p10 3382407 total 4.3 bits

|-----| sd-ir 3382420 mdh\_argR- total 7.0 bits

5' \*3382340 \* \*3382330 \* \*3382320 \* \*3382310 \* \*3382300 \* \*3382290 \* \*3382280 \*

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

-leu - arg - ser - arg - gln - arg - ser - asn - ile - ser - -leu - val - tyr - gln - tyr - asn - lys - glu - phe - arg - met - lys - val - ala - val - leu -

-lys - val - ala - ala - ala - glu - gln - his - ile - leu - val - tyr - gln - tyr - asn - lys - glu - phe - arg - met - lys - val - ala - val - leu -

p10 3.2 bits

sd

[-----} ... NC\_000913.mdh

... {-----} p35-(23)-p10 3382347 Gap 1.4 bits

p35 3.3 bits

ir mdh\_argR-

... {-----} p35-p10 3382347 total 7.3 bits

{-----} sd-(9)-ir 3382290 Gap 2.3 bits

{-----} sd-ir 3382290 mdh\_argR- total 15.2 bits

p10 4.6 bits

{-----} p35-(22)-p10 3382293 Gap 2.3 bits

{-----} p35-p10 3382293 total 5.6 bits