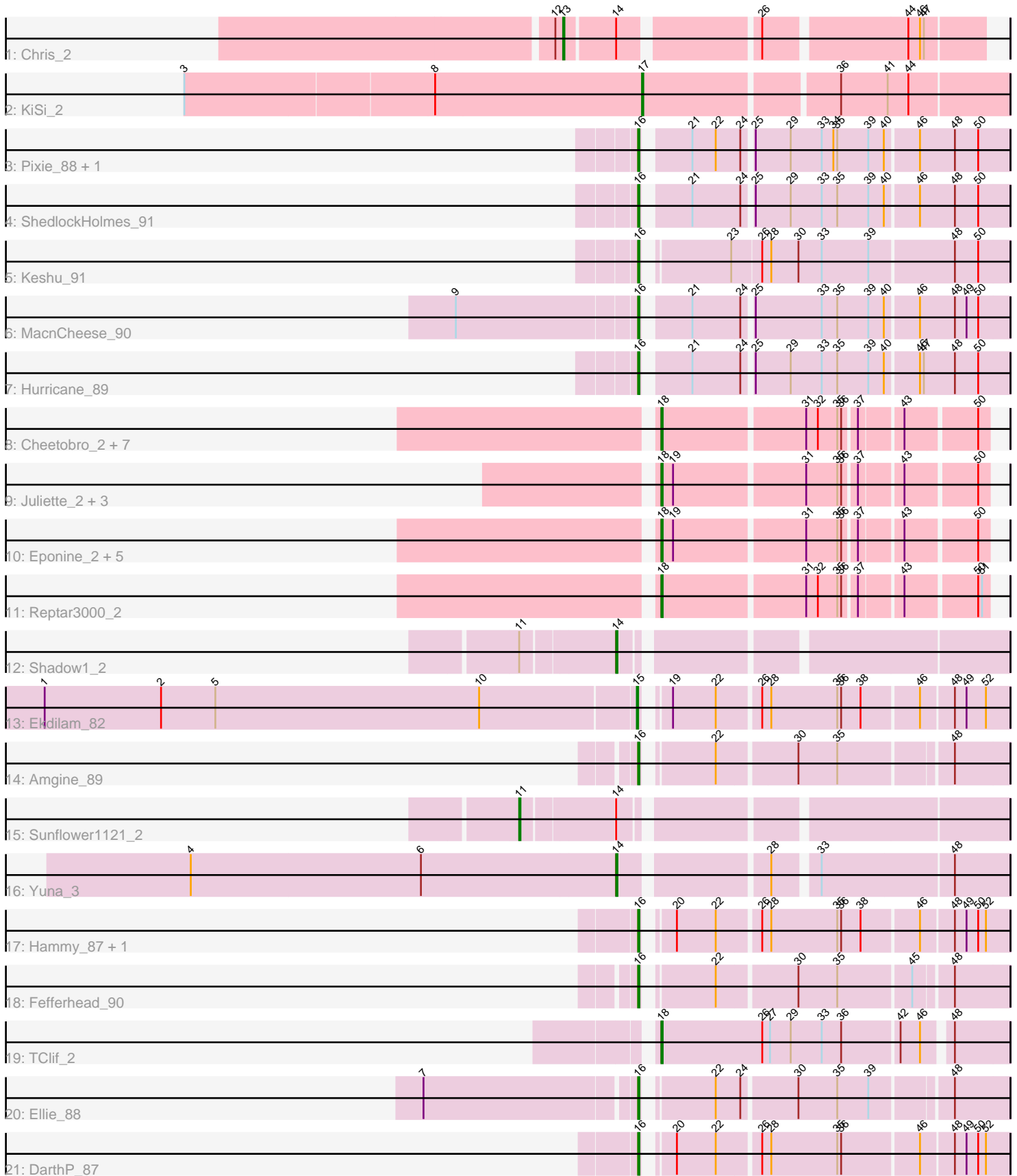


Pham 203114



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 203114 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203114 has 38 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Chris\_2
- Track 2 : KiSi\_2
- Track 3 : Pixie\_88, TBond007\_85
- Track 4 : ShedlockHolmes\_91
- Track 5 : Keshu\_91
- Track 6 : MacnCheese\_90
- Track 7 : Hurricane\_89
- Track 8 : Cheetobro\_2, Slarp\_2, Taquito\_2, Mitti\_2, OmniCritical\_2, SamScheppers\_2, Patt\_2, Chancellor\_2
- Track 9 : Juliette\_2, Kraw\_2, Malthus\_2, Ruthiejr\_2
- Track 10 : Eponine\_2, Fionnbharth\_2, Y10\_02, Y2\_02, Wintermute\_2, JF1\_2
- Track 11 : Reptar3000\_2
- Track 12 : Shadow1\_2
- Track 13 : Ekdilam\_82
- Track 14 : Amgine\_89
- Track 15 : Sunflower1121\_2
- Track 16 : Yuna\_3
- Track 17 : Hammy\_87, Amohnition\_87
- Track 18 : Fefferhead\_90
- Track 19 : TClif\_2
- Track 20 : Ellie\_88
- Track 21 : DarthP\_87

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 18, it was called in 19 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chancellor\_2, Cheetobro\_2, Eponine\_2, Fionnbharth\_2, JF1\_2, Juliette\_2, Kraw\_2, Malthus\_2, Mitti\_2, OmniCritical\_2, Patt\_2, Reptar3000\_2, Ruthiejr\_2, SamScheppers\_2, Slarp\_2, TClif\_2, Taquito\_2, Wintermute\_2, Y10\_02, Y2\_02,

Genes that have the "Most Annotated" start but do not call it:

- 

Genes that do not have the "Most Annotated" start:

- Amgine\_89, Amohnition\_87, Chris\_2, DarthP\_87, Ekdilam\_82, Ellie\_88, Fefferhead\_90, Hammy\_87, Hurricane\_89, Keshu\_91, KiSi\_2, MacnCheese\_90, Pixie\_88, Shadow1\_2, ShedlockHolmes\_91, Sunflower1121\_2, TBond007\_85, Yuna\_3,

### Summary by start number:

Start 11:

- Found in 2 of 38 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sunflower1121\_2 (K6),

Start 13:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chris\_2 (K1),

Start 14:

- Found in 4 of 38 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Shadow1\_2 (K6), Yuna\_3 (K6),

Start 15:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ekdilam\_82 (K6),

Start 16:

- Found in 12 of 38 ( 31.6% ) of genes in pham
- Manual Annotations of this start: 12 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amgine\_89 (K6), Amohnition\_87 (K6), DarthP\_87 (K6), Ellie\_88 (K6), Fefferhead\_90 (K6), Hammy\_87 (K6), Hurricane\_89 (K3), Keshu\_91 (K3), MacnCheese\_90 (K3), Pixie\_88 (K3), ShedlockHolmes\_91 (K3), TBond007\_85 (K3),

Start 17:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi\_2 (K1),

Start 18:

- Found in 20 of 38 ( 52.6% ) of genes in pham
- Manual Annotations of this start: 19 of 37
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Chancellor\_2 (K4), Cheetobro\_2 (K4), Eponine\_2 (K4), Fionnbharth\_2 (K4), JF1\_2 (K4), Juliette\_2 (K4), Kraw\_2 (K4), Malthus\_2 (K4), Mitti\_2 (K4), OmniCritical\_2 (K4), Patt\_2 (K4), Reptar3000\_2 (K4), Ruthiejr\_2 (K4), SamScheppers\_2 (K4), Slarp\_2 (K4), TClif\_2 (K6), Taquito\_2 (K4), Wintermute\_2 (K4), Y10\_02 (K4), Y2\_02 (K4),

### **Summary by clusters:**

There are 4 clusters represented in this pham: K3, K1, K6, K4,

Info for manual annotations of cluster K1:

- Start number 13 was manually annotated 1 time for cluster K1.
- Start number 17 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K3:

- Start number 16 was manually annotated 6 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 18 was manually annotated 18 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 11 was manually annotated 1 time for cluster K6.
- Start number 14 was manually annotated 2 times for cluster K6.
- Start number 15 was manually annotated 1 time for cluster K6.
- Start number 16 was manually annotated 6 times for cluster K6.
- Start number 18 was manually annotated 1 time for cluster K6.

### **Gene Information:**

Gene: Amgine\_89 Start: 58064, Stop: 58318, Start Num: 16

Candidate Starts for Amgine\_89:

(Start: 16 @58064 has 12 MA's), (22, 58109), (30, 58166), (35, 58196), (48, 58277),

Gene: Amohnition\_87 Start: 57065, Stop: 57322, Start Num: 16

Candidate Starts for Amohnition\_87:

(Start: 16 @57065 has 12 MA's), (20, 57080), (22, 57110), (26, 57140), (28, 57146), (35, 57197), (36, 57200), (38, 57215), (46, 57257), (48, 57281), (49, 57290), (50, 57299), (52, 57305),

Gene: Chancellor\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Chancellor\_2:

(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Cheetobro\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Cheetobro\_2:

(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Chris\_2 Start: 375, Stop: 665, Start Num: 13

Candidate Starts for Chris\_2:

(12, 369), (Start: 13 @375 has 1 MA's), (Start: 14 @411 has 2 MA's), (26, 507), (44, 609), (46, 618), (47, 621),

Gene: DarthP\_87 Start: 56918, Stop: 57175, Start Num: 16

Candidate Starts for DarthP\_87:

(Start: 16 @56918 has 12 MA's), (20, 56933), (22, 56963), (26, 56993), (28, 56999), (35, 57050), (36, 57053), (46, 57110), (48, 57134), (49, 57143), (50, 57152), (52, 57158),

Gene: Ekdilam\_82 Start: 56617, Stop: 56874, Start Num: 15

Candidate Starts for Ekdilam\_82:

(1, 56164), (2, 56254), (5, 56296), (10, 56500), (Start: 15 @56617 has 1 MA's), (19, 56629), (22, 56662), (26, 56692), (28, 56698), (35, 56749), (36, 56752), (38, 56767), (46, 56809), (48, 56833), (49, 56842), (52, 56857),

Gene: Ellie\_88 Start: 57234, Stop: 57488, Start Num: 16

Candidate Starts for Ellie\_88:

(7, 57078), (Start: 16 @57234 has 12 MA's), (22, 57279), (24, 57297), (30, 57336), (35, 57366), (39, 57390), (48, 57447),

Gene: Eponine\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Eponine\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Fefferhead\_90 Start: 57025, Stop: 57279, Start Num: 16

Candidate Starts for Fefferhead\_90:

(Start: 16 @57025 has 12 MA's), (22, 57070), (30, 57127), (35, 57157), (45, 57211), (48, 57238),

Gene: Fionnbharth\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Fionnbharth\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Hammy\_87 Start: 56908, Stop: 57165, Start Num: 16

Candidate Starts for Hammy\_87:

(Start: 16 @56908 has 12 MA's), (20, 56923), (22, 56953), (26, 56983), (28, 56989), (35, 57040), (36, 57043), (38, 57058), (46, 57100), (48, 57124), (49, 57133), (50, 57142), (52, 57148),

Gene: Hurricane\_89 Start: 56085, Stop: 56348, Start Num: 16

Candidate Starts for Hurricane\_89:

(Start: 16 @56085 has 12 MA's), (21, 56115), (24, 56151), (25, 56157), (29, 56184), (33, 56208), (35, 56220), (39, 56244), (40, 56256), (46, 56280), (47, 56283), (48, 56307), (50, 56325),

Gene: JF1\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for JF1\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Juliette\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Juliette\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Keshu\_91 Start: 56377, Stop: 56640, Start Num: 16

Candidate Starts for Keshu\_91:

(Start: 16 @56377 has 12 MA's), (23, 56434), (26, 56455), (28, 56461), (30, 56482), (33, 56500), (39, 56536), (48, 56599), (50, 56617),

Gene: KiSi\_2 Start: 346, Stop: 612, Start Num: 17

Candidate Starts for KiSi\_2:

(3, 1), (8, 187), (Start: 17 @346 has 1 MA's), (36, 487), (41, 523), (44, 538),

Gene: Kraw\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Kraw\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: MacnCheese\_90 Start: 56613, Stop: 56876, Start Num: 16

Candidate Starts for MacnCheese\_90:

(9, 56478), (Start: 16 @56613 has 12 MA's), (21, 56643), (24, 56679), (25, 56685), (33, 56736), (35, 56748), (39, 56772), (40, 56784), (46, 56808), (48, 56835), (49, 56844), (50, 56853),

Gene: Malthus\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Malthus\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Mitti\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Mitti\_2:

(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: OmniCritical\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for OmniCritical\_2:

(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Patt\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Patt\_2:

(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Pixie\_88 Start: 55789, Stop: 56052, Start Num: 16

Candidate Starts for Pixie\_88:

(Start: 16 @55789 has 12 MA's), (21, 55819), (22, 55837), (24, 55855), (25, 55861), (29, 55888), (33, 55912), (34, 55921), (35, 55924), (39, 55948), (40, 55960), (46, 55984), (48, 56011), (50, 56029),

Gene: Reptar3000\_2 Start: 250, Stop: 480, Start Num: 18

Candidate Starts for Reptar3000\_2:

(Start: 18 @250 has 19 MA's), (31, 355), (32, 364), (35, 379), (36, 382), (37, 391), (43, 421), (50, 472), (51, 475),

Gene: Ruthiejr\_2 Start: 251, Stop: 481, Start Num: 18

Candidate Starts for Ruthiejr\_2:

(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: SamScheppers\_2 Start: 250, Stop: 480, Start Num: 18

Candidate Starts for SamScheppers\_2:

(Start: 18 @250 has 19 MA's), (31, 355), (32, 364), (35, 379), (36, 382), (37, 391), (43, 421), (50, 472),

Gene: Shadow1\_2 Start: 396, Stop: 665, Start Num: 14

Candidate Starts for Shadow1\_2:

(Start: 11 @330 has 1 MA's), (Start: 14 @396 has 2 MA's),

Gene: ShedlockHolmes\_91 Start: 56212, Stop: 56475, Start Num: 16

Candidate Starts for ShedlockHolmes\_91:

(Start: 16 @56212 has 12 MA's), (21, 56242), (24, 56278), (25, 56284), (29, 56311), (33, 56335), (35, 56347), (39, 56371), (40, 56383), (46, 56407), (48, 56434), (50, 56452),

Gene: Slarp\_2 Start: 251, Stop: 481, Start Num: 18  
Candidate Starts for Slarp\_2:  
(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Sunflower1121\_2 Start: 329, Stop: 664, Start Num: 11  
Candidate Starts for Sunflower1121\_2:  
(Start: 11 @329 has 1 MA's), (Start: 14 @395 has 2 MA's),

Gene: TBond007\_85 Start: 55787, Stop: 56050, Start Num: 16  
Candidate Starts for TBond007\_85:  
(Start: 16 @55787 has 12 MA's), (21, 55817), (22, 55835), (24, 55853), (25, 55859), (29, 55886), (33, 55910), (34, 55919), (35, 55922), (39, 55946), (40, 55958), (46, 55982), (48, 56009), (50, 56027),

Gene: TClif\_2 Start: 240, Stop: 494, Start Num: 18  
Candidate Starts for TClif\_2:  
(Start: 18 @240 has 19 MA's), (26, 318), (27, 324), (29, 339), (33, 363), (36, 378), (42, 420), (46, 435), (48, 453),

Gene: Taquito\_2 Start: 251, Stop: 481, Start Num: 18  
Candidate Starts for Taquito\_2:  
(Start: 18 @251 has 19 MA's), (31, 356), (32, 365), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Wintermute\_2 Start: 250, Stop: 480, Start Num: 18  
Candidate Starts for Wintermute\_2:  
(Start: 18 @250 has 19 MA's), (19, 259), (31, 355), (35, 379), (36, 382), (37, 391), (43, 421), (50, 472),

Gene: Y10\_02 Start: 251, Stop: 481, Start Num: 18  
Candidate Starts for Y10\_02:  
(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Y2\_02 Start: 251, Stop: 481, Start Num: 18  
Candidate Starts for Y2\_02:  
(Start: 18 @251 has 19 MA's), (19, 260), (31, 356), (35, 380), (36, 383), (37, 392), (43, 422), (50, 473),

Gene: Yuna\_3 Start: 525, Stop: 797, Start Num: 14  
Candidate Starts for Yuna\_3:  
(4, 201), (6, 378), (Start: 14 @525 has 2 MA's), (28, 627), (33, 657), (48, 756),