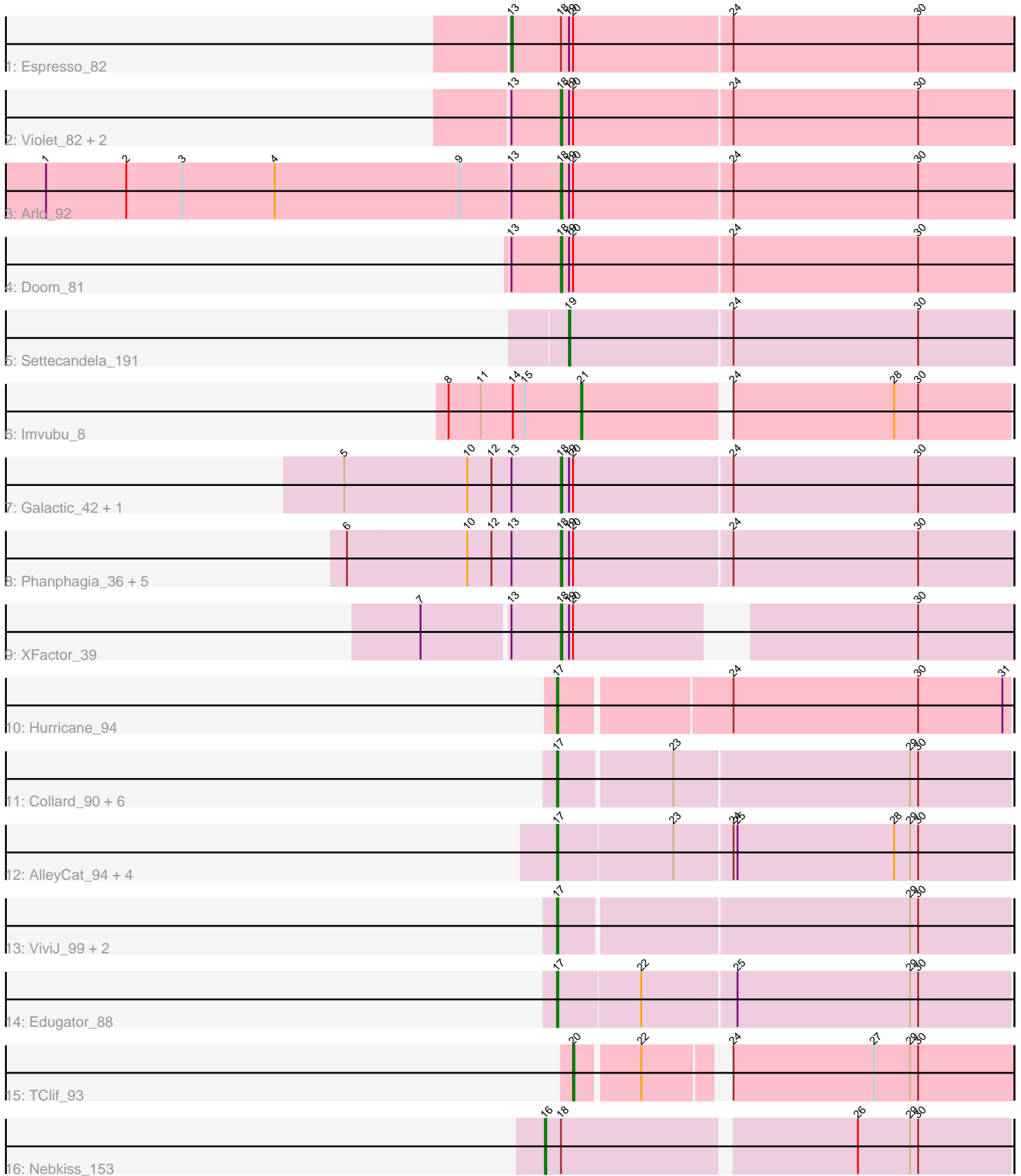


# Pham 200457



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 200457 Report

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

Pham number 200457 has 36 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Espresso\_82
- Track 2 : Violet\_82, lLeeKay\_87, Magnito\_88
- Track 3 : Arlo\_92
- Track 4 : Doom\_81
- Track 5 : Settecandela\_191
- Track 6 : lmvubu\_8
- Track 7 : Galactic\_42, lMpilo\_39
- Track 8 : Phanphagia\_36, Donkeykong\_40, Coco12\_39, MinionDave\_42, Byougenkin\_39, Soul22\_45
- Track 9 : XFactor\_39
- Track 10 : Hurricane\_94
- Track 11 : Collard\_90, OkiRoe\_91, Feyre\_93, Leston\_90, Gengar\_90, Kratio\_94, Waterfoul\_90
- Track 12 : AlleyCat\_94, Larva\_93, Dadosky\_94, Neighly\_94, Psycho\_92
- Track 13 : ViviJ\_99, InvictusManeo\_89, Agent47\_91
- Track 14 : Edugator\_88
- Track 15 : TClif\_93
- Track 16 : Nebkiss\_153

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

The start number called the most often in the published annotations is 17, it was called in 15 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agent47\_91, AlleyCat\_94, Collard\_90, Dadosky\_94, Edugator\_88, Feyre\_93, Gengar\_90, Hurricane\_94, InvictusManeo\_89, Kratio\_94, Larva\_93, Leston\_90, Neighly\_94, OkiRoe\_91, Psycho\_92, ViviJ\_99, Waterfoul\_90,

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

- 

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

- Arlo\_92, Byougenkin\_39, Coco12\_39, Donkeykong\_40, Doom\_81, Espresso\_82, Galactic\_42, ILeeKay\_87, IMpilo\_39, Imvubu\_8, Magnito\_88, MinionDave\_42, Nebkiss\_153, Phanphagia\_36, Settecandela\_191, Soul22\_45, TClif\_93, Violet\_82, XFactor\_39,

### Summary by start number:

#### Start 13:

- Found in 15 of 36 ( 41.7% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Espresso\_82 (A1),

#### Start 16:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nebkiss\_153 (X),

#### Start 17:

- Found in 17 of 36 ( 47.2% ) of genes in pham
- Manual Annotations of this start: 15 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47\_91 (K5), AlleyCat\_94 (K5), Collard\_90 (K5), Dadosky\_94 (K5), Edugator\_88 (K5), Feyre\_93 (K5), Gengar\_90 (K5), Hurricane\_94 (K3), InvictusManeo\_89 (K5), Kratio\_94 (K5), Larva\_93 (K5), Leston\_90 (K5), Neighly\_94 (K3), OkiRoe\_91 (K5), Psycho\_92 (K5), ViviJ\_99 (K5), Waterfoul\_90 (K5),

#### Start 18:

- Found in 16 of 36 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 13 of 33
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Arlo\_92 (A1), Byougenkin\_39 (F1), Coco12\_39 (F1), Donkeykong\_40 (F1), Doom\_81 (A1), Galactic\_42 (F1), ILeeKay\_87 (A1), IMpilo\_39 (F1), Magnito\_88 (A1), MinionDave\_42 (F1), Phanphagia\_36 (F1), Soul22\_45 (F2), Violet\_82 (A1), XFactor\_39 (F1),

#### Start 19:

- Found in 16 of 36 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Settecandela\_191 (AA),

#### Start 20:

- Found in 16 of 36 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 6.2% of time when present
- Phage (with cluster) where this start called: TClif\_93 (K6),

#### Start 21:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 33

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu\_8 (B10),

### **Summary by clusters:**

There are 9 clusters represented in this pham: AA, F1, F2, B10, A1, K6, K5, X, K3,

Info for manual annotations of cluster A1:

- Start number 13 was manually annotated 1 time for cluster A1.
- Start number 18 was manually annotated 5 times for cluster A1.

Info for manual annotations of cluster AA:

- Start number 19 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster B10:

- Start number 21 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster F1:

- Start number 18 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 18 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster K3:

- Start number 17 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K5:

- Start number 17 was manually annotated 14 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 20 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster X:

- Start number 16 was manually annotated 1 time for cluster X.

### **Gene Information:**

Gene: Agent47\_91 Start: 58078, Stop: 58407, Start Num: 17

Candidate Starts for Agent47\_91:

(Start: 17 @58078 has 15 MA's), (29, 58333), (30, 58339),

Gene: AlleyCat\_94 Start: 59367, Stop: 59699, Start Num: 17

Candidate Starts for AlleyCat\_94:

(Start: 17 @59367 has 15 MA's), (23, 59451), (24, 59493), (25, 59496), (28, 59613), (29, 59625), (30, 59631),

Gene: Arlo\_92 Start: 51494, Stop: 51159, Start Num: 18

Candidate Starts for Arlo\_92:

(1, 51875), (2, 51815), (3, 51773), (4, 51704), (9, 51566), (Start: 13 @51530 has 1 MA's), (Start: 18 @51494 has 13 MA's), (Start: 19 @51488 has 1 MA's), (Start: 20 @51485 has 1 MA's), (24, 51368), (30, 51230),

Gene: Byougenkin\_39 Start: 31630, Stop: 31295, Start Num: 18

Candidate Starts for Byougenkin\_39:

(6, 31786), (10, 31699), (12, 31681), (Start: 13 @31666 has 1 MA's), (Start: 18 @31630 has 13 MA's), (Start: 19 @31624 has 1 MA's), (Start: 20 @31621 has 1 MA's), (24, 31504), (30, 31366),

Gene: Coco12\_39 Start: 31609, Stop: 31274, Start Num: 18

Candidate Starts for Coco12\_39:

(6, 31765), (10, 31678), (12, 31660), (Start: 13 @31645 has 1 MA's), (Start: 18 @31609 has 13 MA's), (Start: 19 @31603 has 1 MA's), (Start: 20 @31600 has 1 MA's), (24, 31483), (30, 31345),

Gene: Collard\_90 Start: 58330, Stop: 58659, Start Num: 17

Candidate Starts for Collard\_90:

(Start: 17 @58330 has 15 MA's), (23, 58411), (29, 58585), (30, 58591),

Gene: Dadosky\_94 Start: 59368, Stop: 59700, Start Num: 17

Candidate Starts for Dadosky\_94:

(Start: 17 @59368 has 15 MA's), (23, 59452), (24, 59494), (25, 59497), (28, 59614), (29, 59626), (30, 59632),

Gene: Donkeykong\_40 Start: 31737, Stop: 31402, Start Num: 18

Candidate Starts for Donkeykong\_40:

(6, 31893), (10, 31806), (12, 31788), (Start: 13 @31773 has 1 MA's), (Start: 18 @31737 has 13 MA's), (Start: 19 @31731 has 1 MA's), (Start: 20 @31728 has 1 MA's), (24, 31611), (30, 31473),

Gene: Doom\_81 Start: 49545, Stop: 49210, Start Num: 18

Candidate Starts for Doom\_81:

(Start: 13 @49581 has 1 MA's), (Start: 18 @49545 has 13 MA's), (Start: 19 @49539 has 1 MA's), (Start: 20 @49536 has 1 MA's), (24, 49419), (30, 49281),

Gene: Edugator\_88 Start: 60566, Stop: 60898, Start Num: 17

Candidate Starts for Edugator\_88:

(Start: 17 @60566 has 15 MA's), (22, 60626), (25, 60695), (29, 60824), (30, 60830),

Gene: Espresso\_82 Start: 49468, Stop: 49097, Start Num: 13

Candidate Starts for Espresso\_82:

(Start: 13 @49468 has 1 MA's), (Start: 18 @49432 has 13 MA's), (Start: 19 @49426 has 1 MA's), (Start: 20 @49423 has 1 MA's), (24, 49306), (30, 49168),

Gene: Feyre\_93 Start: 60553, Stop: 60882, Start Num: 17

Candidate Starts for Feyre\_93:

(Start: 17 @60553 has 15 MA's), (23, 60634), (29, 60808), (30, 60814),

Gene: Galactic\_42 Start: 32399, Stop: 32064, Start Num: 18

Candidate Starts for Galactic\_42:

(5, 32558), (10, 32468), (12, 32450), (Start: 13 @32435 has 1 MA's), (Start: 18 @32399 has 13 MA's), (Start: 19 @32393 has 1 MA's), (Start: 20 @32390 has 1 MA's), (24, 32273), (30, 32135),

Gene: Gengar\_90 Start: 58624, Stop: 58953, Start Num: 17

Candidate Starts for Gengar\_90:

(Start: 17 @58624 has 15 MA's), (23, 58705), (29, 58879), (30, 58885),

Gene: Hurricane\_94 Start: 58705, Stop: 59034, Start Num: 17

Candidate Starts for Hurricane\_94:

(Start: 17 @58705 has 15 MA's), (24, 58828), (30, 58966), (31, 59029),

Gene: ILeeKay\_87 Start: 49541, Stop: 49206, Start Num: 18

Candidate Starts for ILeeKay\_87:

(Start: 13 @49577 has 1 MA's), (Start: 18 @49541 has 13 MA's), (Start: 19 @49535 has 1 MA's),

(Start: 20 @49532 has 1 MA's), (24, 49415), (30, 49277),

Gene: IMPilo\_39 Start: 31340, Stop: 31005, Start Num: 18

Candidate Starts for IMPilo\_39:

(5, 31499), (10, 31409), (12, 31391), (Start: 13 @31376 has 1 MA's), (Start: 18 @31340 has 13 MA's),

(Start: 19 @31334 has 1 MA's), (Start: 20 @31331 has 1 MA's), (24, 31214), (30, 31076),

Gene: Imvubu\_8 Start: 8549, Stop: 8241, Start Num: 21

Candidate Starts for Imvubu\_8:

(8, 8648), (11, 8624), (14, 8600), (15, 8591), (Start: 21 @8549 has 1 MA's), (24, 8447), (28, 8327), (30,

8309),

Gene: InvictusManeo\_89 Start: 58082, Stop: 58411, Start Num: 17

Candidate Starts for InvictusManeo\_89:

(Start: 17 @58082 has 15 MA's), (29, 58337), (30, 58343),

Gene: Kratio\_94 Start: 59262, Stop: 59591, Start Num: 17

Candidate Starts for Kratio\_94:

(Start: 17 @59262 has 15 MA's), (23, 59343), (29, 59517), (30, 59523),

Gene: Larva\_93 Start: 60240, Stop: 60572, Start Num: 17

Candidate Starts for Larva\_93:

(Start: 17 @60240 has 15 MA's), (23, 60324), (24, 60366), (25, 60369), (28, 60486), (29, 60498), (30,

60504),

Gene: Leston\_90 Start: 58573, Stop: 58902, Start Num: 17

Candidate Starts for Leston\_90:

(Start: 17 @58573 has 15 MA's), (23, 58654), (29, 58828), (30, 58834),

Gene: Magnito\_88 Start: 50110, Stop: 49775, Start Num: 18

Candidate Starts for Magnito\_88:

(Start: 13 @50146 has 1 MA's), (Start: 18 @50110 has 13 MA's), (Start: 19 @50104 has 1 MA's),

(Start: 20 @50101 has 1 MA's), (24, 49984), (30, 49846),

Gene: MinionDave\_42 Start: 32726, Stop: 32391, Start Num: 18

Candidate Starts for MinionDave\_42:

(6, 32882), (10, 32795), (12, 32777), (Start: 13 @32762 has 1 MA's), (Start: 18 @32726 has 13 MA's),

(Start: 19 @32720 has 1 MA's), (Start: 20 @32717 has 1 MA's), (24, 32600), (30, 32462),

Gene: Nebkiss\_153 Start: 76314, Stop: 75979, Start Num: 16

Candidate Starts for Nebkiss\_153:

(Start: 16 @76314 has 1 MA's), (Start: 18 @76302 has 13 MA's), (26, 76092), (29, 76053), (30, 76047),

Gene: Neighly\_94 Start: 60239, Stop: 60571, Start Num: 17

Candidate Starts for Neighly\_94:

(Start: 17 @60239 has 15 MA's), (23, 60323), (24, 60365), (25, 60368), (28, 60485), (29, 60497), (30,

60503),

Gene: OkiRoe\_91 Start: 59586, Stop: 59915, Start Num: 17  
Candidate Starts for OkiRoe\_91:  
(Start: 17 @59586 has 15 MA's), (23, 59667), (29, 59841), (30, 59847),

Gene: Phanphagia\_36 Start: 30684, Stop: 30349, Start Num: 18  
Candidate Starts for Phanphagia\_36:  
(6, 30840), (10, 30753), (12, 30735), (Start: 13 @30720 has 1 MA's), (Start: 18 @30684 has 13 MA's),  
(Start: 19 @30678 has 1 MA's), (Start: 20 @30675 has 1 MA's), (24, 30558), (30, 30420),

Gene: Psycho\_92 Start: 59365, Stop: 59697, Start Num: 17  
Candidate Starts for Psycho\_92:  
(Start: 17 @59365 has 15 MA's), (23, 59449), (24, 59491), (25, 59494), (28, 59611), (29, 59623), (30,  
59629),

Gene: Settecandela\_191 Start: 122658, Stop: 122987, Start Num: 19  
Candidate Starts for Settecandela\_191:  
(Start: 19 @122658 has 1 MA's), (24, 122778), (30, 122916),

Gene: Soul22\_45 Start: 31934, Stop: 31599, Start Num: 18  
Candidate Starts for Soul22\_45:  
(6, 32090), (10, 32003), (12, 31985), (Start: 13 @31970 has 1 MA's), (Start: 18 @31934 has 13 MA's),  
(Start: 19 @31928 has 1 MA's), (Start: 20 @31925 has 1 MA's), (24, 31808), (30, 31670),

Gene: TClif\_93 Start: 58143, Stop: 58448, Start Num: 20  
Candidate Starts for TClif\_93:  
(Start: 20 @58143 has 1 MA's), (22, 58188), (24, 58239), (27, 58344), (29, 58371), (30, 58377),

Gene: Violet\_82 Start: 50228, Stop: 49893, Start Num: 18  
Candidate Starts for Violet\_82:  
(Start: 13 @50264 has 1 MA's), (Start: 18 @50228 has 13 MA's), (Start: 19 @50222 has 1 MA's),  
(Start: 20 @50219 has 1 MA's), (24, 50102), (30, 49964),

Gene: ViviJ\_99 Start: 60419, Stop: 60748, Start Num: 17  
Candidate Starts for ViviJ\_99:  
(Start: 17 @60419 has 15 MA's), (29, 60674), (30, 60680),

Gene: Waterfoul\_90 Start: 58243, Stop: 58572, Start Num: 17  
Candidate Starts for Waterfoul\_90:  
(Start: 17 @58243 has 15 MA's), (23, 58324), (29, 58498), (30, 58504),

Gene: XFactor\_39 Start: 31705, Stop: 31403, Start Num: 18  
Candidate Starts for XFactor\_39:  
(7, 31804), (Start: 13 @31741 has 1 MA's), (Start: 18 @31705 has 13 MA's), (Start: 19 @31699 has 1  
MA's), (Start: 20 @31696 has 1 MA's), (30, 31474),