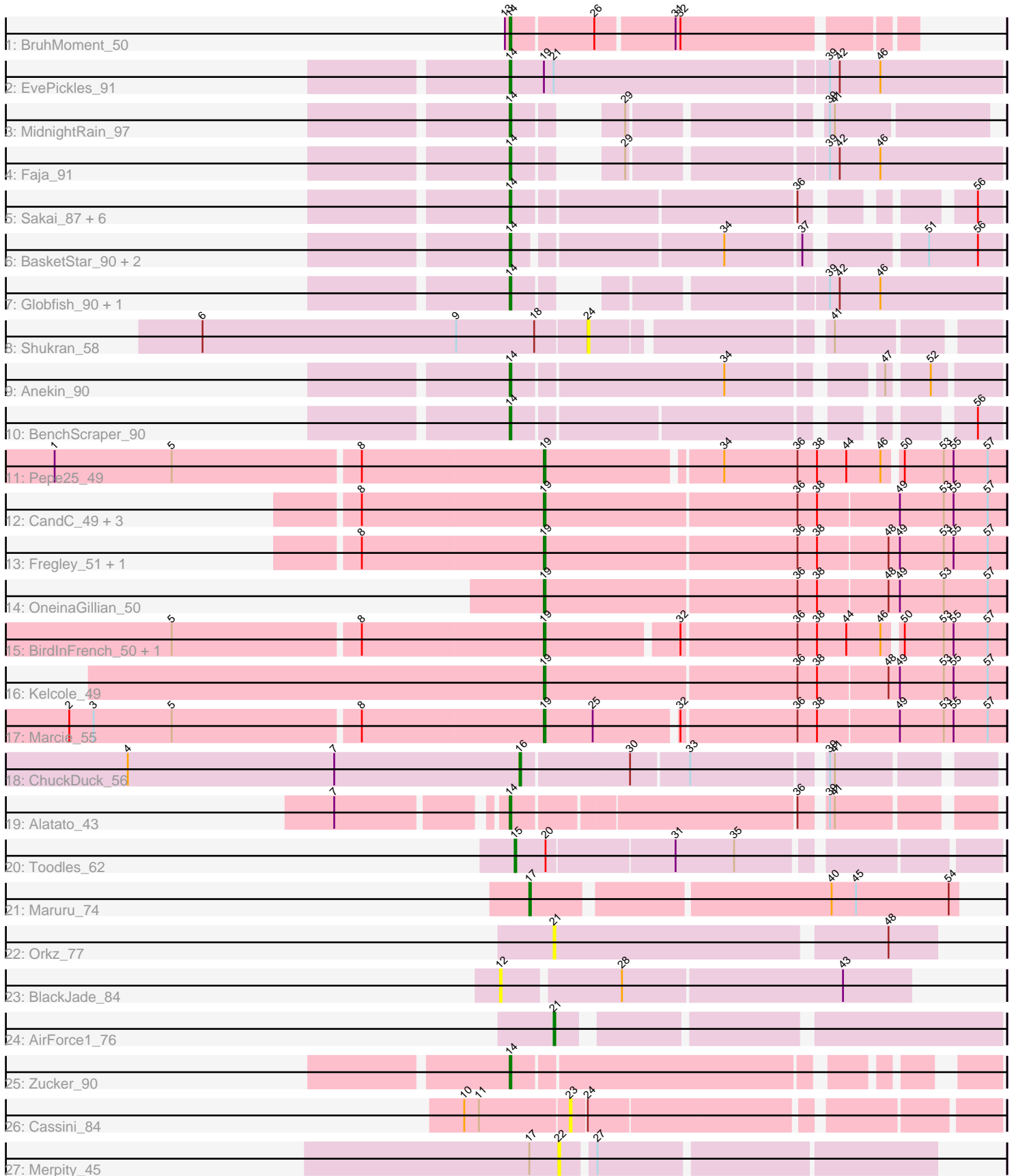


Pham 311780



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 311780 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311780 has 41 members, 8 are drafts.

Phages represented in each track:

- Track 1 : BruhMoment\_50
- Track 2 : EvePickles\_91
- Track 3 : MidnightRain\_97
- Track 4 : Faja\_91
- Track 5 : Sakai\_87, Seahorse\_96, Gorpy\_88, Mapleville\_83, Crescenzo\_91, Nyilah\_97, Richie\_93
- Track 6 : BasketStar\_90, DarwinJr\_93, Isolde\_91
- Track 7 : Globfish\_90, SpicyFrank\_92
- Track 8 : Shukran\_58
- Track 9 : Anekin\_90
- Track 10 : BenchScraper\_90
- Track 11 : Pepe25\_49
- Track 12 : CandC\_49, RobinRose\_52, KillerQueen\_51, Romm\_52
- Track 13 : Fregley\_51, Tempo\_50
- Track 14 : OneinaGillian\_50
- Track 15 : BirdInFrench\_50, Wilca\_50
- Track 16 : Kelcole\_49
- Track 17 : Marcie\_55
- Track 18 : ChuckDuck\_56
- Track 19 : Alatato\_43
- Track 20 : Toodles\_62
- Track 21 : Maruru\_74
- Track 22 : Orkz\_77
- Track 23 : BlackJade\_84
- Track 24 : AirForce1\_76
- Track 25 : Zucker\_90
- Track 26 : Cassini\_84
- Track 27 : Merpity\_45

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

The start number called the most often in the published annotations is 14, it was called in 18 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alatato\_43, Anekin\_90, BasketStar\_90, BenchScraper\_90, BruhMoment\_50, Crescenzo\_91, DarwinJr\_93, EvePickles\_91, Faja\_91, Globfish\_90, Gorpy\_88, Isolde\_91, Mapleville\_83, MidnightRain\_97, Nyilah\_97, Richie\_93, Sakai\_87, Seahorse\_96, SpicyFrank\_92, Zucker\_90,

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

- 

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

- AirForce1\_76, BirdInFrench\_50, BlackJade\_84, CandC\_49, Cassini\_84, ChuckDuck\_56, Fregley\_51, Kelcole\_49, KillerQueen\_51, Marcie\_55, Maruru\_74, Merpity\_45, OneinaGillian\_50, Orkz\_77, Pepe25\_49, RobinRose\_52, Romm\_52, Shukran\_58, Tempo\_50, Toodles\_62, Wilca\_50,

### Summary by start number:

Start 12:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackJade\_84 (FL),

Start 14:

- Found in 20 of 41 ( 48.8% ) of genes in pham
- Manual Annotations of this start: 18 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alatato\_43 (FB), Anekin\_90 (AY), BasketStar\_90 (AY), BenchScraper\_90 (AY), BruhMoment\_50 (AP3), Crescenzo\_91 (AY), DarwinJr\_93 (AY), EvePickles\_91 (AY), Faja\_91 (AY), Globfish\_90 (AY), Gorpy\_88 (AY), Isolde\_91 (AY), Mapleville\_83 (AY), MidnightRain\_97 (AY), Nyilah\_97 (AY), Richie\_93 (AY), Sakai\_87 (AY), Seahorse\_96 (AY), SpicyFrank\_92 (AY), Zucker\_90 (FN),

Start 15:

- Found in 1 of 41 ( 2.4% ) 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: Toodles\_62 (FF),

Start 16:

- Found in 1 of 41 ( 2.4% ) 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: ChuckDuck\_56 (FA),

Start 17:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Maruru\_74 (FG),

Start 19:

- Found in 13 of 41 ( 31.7% ) of genes in pham
- Manual Annotations of this start: 11 of 33
- Called 92.3% of time when present
- Phage (with cluster) where this start called: BirdInFrench\_50 (EG), CandC\_49 (EG), Fregley\_51 (EG), Kelcole\_49 (EG), KillerQueen\_51 (EG), Marcie\_55 (EG), OneinaGillian\_50 (EG), Pepe25\_49 (EG), RobinRose\_52 (EG), Romm\_52 (EG), Tempo\_50 (EG), Wilca\_50 (EG),

#### Start 21:

- Found in 3 of 41 ( 7.3% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AirForce1\_76 (FL), Orkz\_77 (FL),

#### Start 22:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Merpity\_45 (FQ1),

#### Start 23:

- Found in 1 of 41 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cassini\_84 (FN),

#### Start 24:

- Found in 2 of 41 ( 4.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Shukran\_58 (AY),

### Summary by clusters:

There are 10 clusters represented in this pham: AP3, EG, FA, FB, FF, FG, AY, FQ1, FL, FN,

Info for manual annotations of cluster AP3:

- Start number 14 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AY:

- Start number 14 was manually annotated 15 times for cluster AY.

Info for manual annotations of cluster EG:

- Start number 19 was manually annotated 11 times for cluster EG.

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FB:

- Start number 14 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FF:

- Start number 15 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FG:

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

Info for manual annotations of cluster FL:

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

Info for manual annotations of cluster FN:

- Start number 14 was manually annotated 1 time for cluster FN.

### ***Gene Information:***

Gene: AirForce1\_76 Start: 43771, Stop: 44016, Start Num: 21

Candidate Starts for AirForce1\_76:

(Start: 21 @43771 has 1 MA's),

Gene: Alatato\_43 Start: 27741, Stop: 28007, Start Num: 14

Candidate Starts for Alatato\_43:

(7, 27651), (Start: 14 @27741 has 18 MA's), (36, 27906), (39, 27918), (41, 27921),

Gene: Anekin\_90 Start: 50152, Stop: 50415, Start Num: 14

Candidate Starts for Anekin\_90:

(Start: 14 @50152 has 18 MA's), (34, 50278), (47, 50356), (52, 50377),

Gene: BasketStar\_90 Start: 49766, Stop: 50035, Start Num: 14

Candidate Starts for BasketStar\_90:

(Start: 14 @49766 has 18 MA's), (34, 49886), (37, 49931), (51, 49991), (56, 50021),

Gene: BenchScraper\_90 Start: 48171, Stop: 48425, Start Num: 14

Candidate Starts for BenchScraper\_90:

(Start: 14 @48171 has 18 MA's), (56, 48411),

Gene: BirdInFrench\_50 Start: 35488, Stop: 35219, Start Num: 19

Candidate Starts for BirdInFrench\_50:

(5, 35710), (8, 35599), (Start: 19 @35488 has 11 MA's), (32, 35410), (36, 35341), (38, 35329), (44, 35311), (46, 35290), (50, 35281), (53, 35257), (55, 35251), (57, 35230),

Gene: BlackJade\_84 Start: 44740, Stop: 44979, Start Num: 12

Candidate Starts for BlackJade\_84:

(12, 44740), (28, 44809), (43, 44941),

Gene: BruhMoment\_50 Start: 39910, Stop: 39683, Start Num: 14

Candidate Starts for BruhMoment\_50:

(13, 39913), (Start: 14 @39910 has 18 MA's), (26, 39862), (31, 39817), (32, 39814),

Gene: CandC\_49 Start: 35861, Stop: 35583, Start Num: 19

Candidate Starts for CandC\_49:

(8, 35972), (Start: 19 @35861 has 11 MA's), (36, 35708), (38, 35696), (49, 35648), (53, 35621), (55, 35615), (57, 35594),

Gene: Cassini\_84 Start: 48452, Stop: 48691, Start Num: 23

Candidate Starts for Cassini\_84:

(10, 48389), (11, 48398), (23, 48452), (24, 48461),

Gene: ChuckDuck\_56 Start: 35927, Stop: 36187, Start Num: 16

Candidate Starts for ChuckDuck\_56:

(4, 35687), (7, 35813), (Start: 16 @35927 has 1 MA's), (30, 35990), (33, 36023), (39, 36098), (41, 36101),

Gene: Crescenzo\_91 Start: 51175, Stop: 51429, Start Num: 14

Candidate Starts for Crescenzo\_91:

(Start: 14 @51175 has 18 MA's), (36, 51340), (56, 51415),

Gene: DarwinJr\_93 Start: 51289, Stop: 51558, Start Num: 14

Candidate Starts for DarwinJr\_93:

(Start: 14 @51289 has 18 MA's), (34, 51409), (37, 51454), (51, 51514), (56, 51544),

Gene: EvePickles\_91 Start: 50887, Stop: 51183, Start Num: 14

Candidate Starts for EvePickles\_91:

(Start: 14 @50887 has 18 MA's), (Start: 19 @50908 has 11 MA's), (Start: 21 @50914 has 1 MA's), (39, 51079), (42, 51085), (46, 51109),

Gene: Faja\_91 Start: 50148, Stop: 50402, Start Num: 14

Candidate Starts for Faja\_91:

(Start: 14 @50148 has 18 MA's), (29, 50187), (39, 50298), (42, 50304), (46, 50328),

Gene: Fregley\_51 Start: 36422, Stop: 36144, Start Num: 19

Candidate Starts for Fregley\_51:

(8, 36533), (Start: 19 @36422 has 11 MA's), (36, 36269), (38, 36257), (48, 36215), (49, 36209), (53, 36182), (55, 36176), (57, 36155),

Gene: Globfish\_90 Start: 48891, Stop: 49145, Start Num: 14

Candidate Starts for Globfish\_90:

(Start: 14 @48891 has 18 MA's), (39, 49041), (42, 49047), (46, 49071),

Gene: Gorpy\_88 Start: 50899, Stop: 51153, Start Num: 14

Candidate Starts for Gorpy\_88:

(Start: 14 @50899 has 18 MA's), (36, 51064), (56, 51139),

Gene: Isolde\_91 Start: 50741, Stop: 51010, Start Num: 14

Candidate Starts for Isolde\_91:

(Start: 14 @50741 has 18 MA's), (34, 50861), (37, 50906), (51, 50966), (56, 50996),

Gene: Kelcole\_49 Start: 36313, Stop: 36035, Start Num: 19

Candidate Starts for Kelcole\_49:

(Start: 19 @36313 has 11 MA's), (36, 36160), (38, 36148), (48, 36106), (49, 36100), (53, 36073), (55, 36067), (57, 36046),

Gene: KillerQueen\_51 Start: 36305, Stop: 36027, Start Num: 19

Candidate Starts for KillerQueen\_51:

(8, 36416), (Start: 19 @36305 has 11 MA's), (36, 36152), (38, 36140), (49, 36092), (53, 36065), (55, 36059), (57, 36038),

Gene: Mapleville\_83 Start: 48385, Stop: 48639, Start Num: 14  
Candidate Starts for Mapleville\_83:  
(Start: 14 @48385 has 18 MA's), (36, 48550), (56, 48625),

Gene: Marcie\_55 Start: 36924, Stop: 36652, Start Num: 19  
Candidate Starts for Marcie\_55:  
(2, 37209), (3, 37194), (5, 37146), (8, 37035), (Start: 19 @36924 has 11 MA's), (25, 36894), (32, 36846), (36, 36777), (38, 36765), (49, 36717), (53, 36690), (55, 36684), (57, 36663),

Gene: Maruru\_74 Start: 47670, Stop: 47918, Start Num: 17  
Candidate Starts for Maruru\_74:  
(Start: 17 @47670 has 1 MA's), (40, 47841), (45, 47856), (54, 47913),

Gene: Merpity\_45 Start: 28400, Stop: 28615, Start Num: 22  
Candidate Starts for Merpity\_45:  
(Start: 17 @28382 has 1 MA's), (22, 28400), (27, 28418),

Gene: MidnightRain\_97 Start: 51392, Stop: 51628, Start Num: 14  
Candidate Starts for MidnightRain\_97:  
(Start: 14 @51392 has 18 MA's), (29, 51431), (39, 51536), (41, 51539),

Gene: Nyilah\_97 Start: 49853, Stop: 50107, Start Num: 14  
Candidate Starts for Nyilah\_97:  
(Start: 14 @49853 has 18 MA's), (36, 50018), (56, 50093),

Gene: OneinaGillian\_50 Start: 35958, Stop: 35680, Start Num: 19  
Candidate Starts for OneinaGillian\_50:  
(Start: 19 @35958 has 11 MA's), (36, 35805), (38, 35793), (48, 35751), (49, 35745), (53, 35718), (57, 35691),

Gene: Orkz\_77 Start: 42490, Stop: 42714, Start Num: 21  
Candidate Starts for Orkz\_77:  
(Start: 21 @42490 has 1 MA's), (48, 42685),

Gene: Pepe25\_49 Start: 35500, Stop: 35231, Start Num: 19  
Candidate Starts for Pepe25\_49:  
(1, 35794), (5, 35722), (8, 35611), (Start: 19 @35500 has 11 MA's), (34, 35398), (36, 35353), (38, 35341), (44, 35323), (46, 35302), (50, 35293), (53, 35269), (55, 35263), (57, 35242),

Gene: Richie\_93 Start: 50743, Stop: 50997, Start Num: 14  
Candidate Starts for Richie\_93:  
(Start: 14 @50743 has 18 MA's), (36, 50908), (56, 50983),

Gene: RobinRose\_52 Start: 36467, Stop: 36189, Start Num: 19  
Candidate Starts for RobinRose\_52:  
(8, 36578), (Start: 19 @36467 has 11 MA's), (36, 36314), (38, 36302), (49, 36254), (53, 36227), (55, 36221), (57, 36200),

Gene: Romm\_52 Start: 36467, Stop: 36189, Start Num: 19  
Candidate Starts for Romm\_52:  
(8, 36578), (Start: 19 @36467 has 11 MA's), (36, 36314), (38, 36302), (49, 36254), (53, 36227), (55, 36221), (57, 36200),

Gene: Sakai\_87 Start: 49610, Stop: 49864, Start Num: 14  
Candidate Starts for Sakai\_87:  
(Start: 14 @49610 has 18 MA's), (36, 49775), (56, 49850),

Gene: Seahorse\_96 Start: 54256, Stop: 54510, Start Num: 14  
Candidate Starts for Seahorse\_96:  
(Start: 14 @54256 has 18 MA's), (36, 54421), (56, 54496),

Gene: Shukran\_58 Start: 32719, Stop: 32940, Start Num: 24  
Candidate Starts for Shukran\_58:  
(6, 32485), (9, 32641), (18, 32689), (24, 32719), (41, 32851),

Gene: SpicyFrank\_92 Start: 49662, Stop: 49916, Start Num: 14  
Candidate Starts for SpicyFrank\_92:  
(Start: 14 @49662 has 18 MA's), (39, 49812), (42, 49818), (46, 49842),

Gene: Tempo\_50 Start: 36346, Stop: 36068, Start Num: 19  
Candidate Starts for Tempo\_50:  
(8, 36457), (Start: 19 @36346 has 11 MA's), (36, 36193), (38, 36181), (48, 36139), (49, 36133), (53, 36106), (55, 36100), (57, 36079),

Gene: Toodles\_62 Start: 39232, Stop: 39504, Start Num: 15  
Candidate Starts for Toodles\_62:  
(Start: 15 @39232 has 1 MA's), (20, 39250), (31, 39325), (35, 39361),

Gene: Wilca\_50 Start: 35488, Stop: 35219, Start Num: 19  
Candidate Starts for Wilca\_50:  
(5, 35710), (8, 35599), (Start: 19 @35488 has 11 MA's), (32, 35410), (36, 35341), (38, 35329), (44, 35311), (46, 35290), (50, 35281), (53, 35257), (55, 35251), (57, 35230),

Gene: Zucker\_90 Start: 50853, Stop: 51107, Start Num: 14  
Candidate Starts for Zucker\_90:  
(Start: 14 @50853 has 18 MA's),