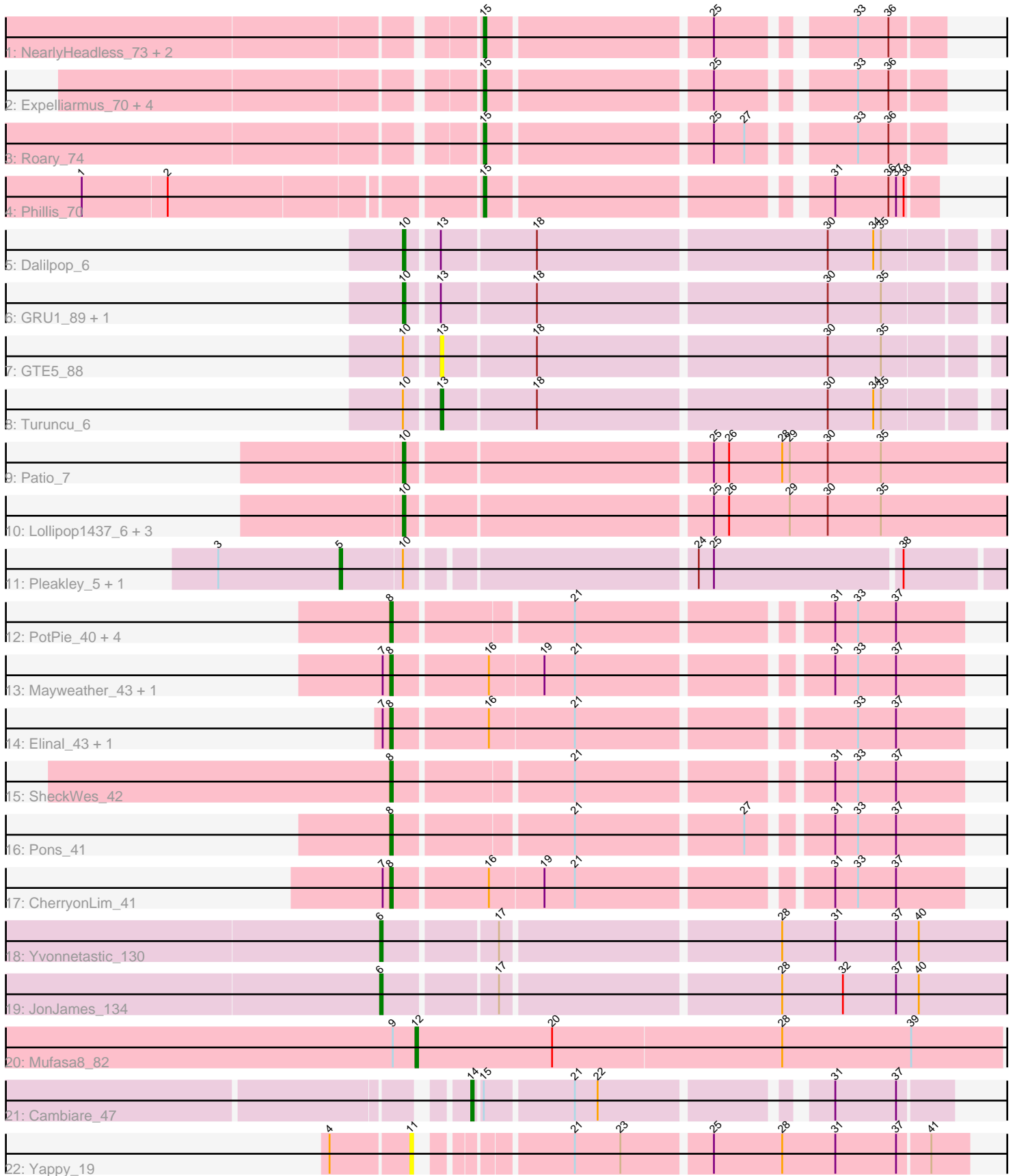


Pham 196670



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 196670 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196670 has 39 members, 3 are drafts.

Phages represented in each track:

- Track 1 : NearlyHeadless\_73, Saintus\_68, Dixon\_72
- Track 2 : Expelliarmus\_70, Groundhog\_72, Astro\_73, Danforth\_73, Smeadley\_73
- Track 3 : Roary\_74
- Track 4 : Phillis\_70
- Track 5 : Dalilpop\_6
- Track 6 : GRU1\_89, Flapper\_6
- Track 7 : GTE5\_88
- Track 8 : Turuncu\_6
- Track 9 : Patio\_7
- Track 10 : Lollipop1437\_6, Float294\_6, Ennea\_6, Skysand\_6
- Track 11 : Pleakley\_5, Fury\_5
- Track 12 : PotPie\_40, SummitAcademy\_39, BigChungus\_39, Vine\_42, Feastonyeet\_39
- Track 13 : Mayweather\_43, Lauer\_36
- Track 14 : Elinal\_43, KayGee\_41
- Track 15 : SheckWes\_42
- Track 16 : Pons\_41
- Track 17 : CherryonLim\_41
- Track 18 : Yvonnetastic\_130
- Track 19 : JonJames\_134
- Track 20 : Mufasa8\_82
- Track 21 : Cambiare\_47
- Track 22 : Yappy\_19

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

The start number called the most often in the published annotations is 8, it was called in 12 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BigChungus\_39, CherryonLim\_41, Elinal\_43, Feastonyeet\_39, KayGee\_41, Lauer\_36, Mayweather\_43, Pons\_41, PotPie\_40, SheckWes\_42, SummitAcademy\_39, Vine\_42,

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

- 

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

- Astro\_73, Cambiare\_47, Dalilpop\_6, Danforth\_73, Dixon\_72, Ennea\_6, Expelliarmus\_70, Flapper\_6, Float294\_6, Fury\_5, GRU1\_89, GTE5\_88, Groundhog\_72, JonJames\_134, Lollipop1437\_6, Mufasa8\_82, NearlyHeadless\_73, Patio\_7, Phillis\_70, Pleakley\_5, Roary\_74, Saintus\_68, Skysand\_6, Smeadley\_73, Turuncu\_6, Yappy\_19, Yvonnetastic\_130,

### Summary by start number:

Start 5:

- Found in 2 of 39 ( 5.1% ) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury\_5 (CR5), Pleakley\_5 (CR5),

Start 6:

- Found in 2 of 39 ( 5.1% ) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames\_134 (DD), Yvonnetastic\_130 (DD),

Start 8:

- Found in 12 of 39 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 12 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigChungus\_39 (CT), CherryonLim\_41 (CT), Elinal\_43 (CT), Feastonyeet\_39 (CT), KayGee\_41 (CT), Lauer\_36 (CT), Mayweather\_43 (CT), Pons\_41 (CT), PotPie\_40 (CT), SheckWes\_42 (CT), SummitAcademy\_39 (CT), Vine\_42 (CT),

Start 10:

- Found in 12 of 39 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 7 of 36
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dalilpop\_6 (CR1), Ennea\_6 (CR3), Flapper\_6 (CR1), Float294\_6 (CR3), GRU1\_89 (CR1), Lollipop1437\_6 (CR3), Patio\_7 (CR3), Skysand\_6 (CR3),

Start 11:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yappy\_19 (singleton),

Start 12:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mufasa8\_82 (FG),

Start 13:

- Found in 5 of 39 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 40.0% of time when present
- Phage (with cluster) where this start called: GTE5\_88 (CR1), Turuncu\_6 (CR1),

Start 14:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cambiare\_47 (G2),

Start 15:

- Found in 11 of 39 ( 28.2% ) of genes in pham
- Manual Annotations of this start: 10 of 36
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Astro\_73 (A8), Danforth\_73 (A8), Dixon\_72 (A8), Expelliarmus\_70 (A8), Groundhog\_72 (A8), NearlyHeadless\_73 (A8), Phillis\_70 (A8), Roary\_74 (A8), Saintus\_68 (A8), Smeadley\_73 (A8),

**Summary by clusters:**

There are 9 clusters represented in this pham: CR3, singleton, CR1, G2, CR5, DD, FG, A8, CT,

Info for manual annotations of cluster A8:

- Start number 15 was manually annotated 10 times for cluster A8.

Info for manual annotations of cluster CR1:

- Start number 10 was manually annotated 2 times for cluster CR1.
- Start number 13 was manually annotated 1 time for cluster CR1.

Info for manual annotations of cluster CR3:

- Start number 10 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR5:

- Start number 5 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CT:

- Start number 8 was manually annotated 12 times for cluster CT.

Info for manual annotations of cluster DD:

- Start number 6 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster FG:

- Start number 12 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster G2:

- Start number 14 was manually annotated 1 time for cluster G2.

**Gene Information:**

Gene: Astro\_73 Start: 40939, Stop: 40778, Start Num: 15

Candidate Starts for Astro\_73:

(Start: 15 @40939 has 10 MA's), (25, 40855), (33, 40810), (36, 40798),

Gene: BigChungus\_39 Start: 28782, Stop: 28576, Start Num: 8

Candidate Starts for BigChungus\_39:

(Start: 8 @28782 has 12 MA's), (21, 28716), (31, 28626), (33, 28617), (37, 28602),

Gene: Cambiare\_47 Start: 37281, Stop: 37448, Start Num: 14

Candidate Starts for Cambiare\_47:

(Start: 14 @37281 has 1 MA's), (Start: 15 @37284 has 10 MA's), (21, 37317), (22, 37326), (31, 37404), (37, 37428),

Gene: CherryonLim\_41 Start: 29932, Stop: 29723, Start Num: 8

Candidate Starts for CherryonLim\_41:

(7, 29935), (Start: 8 @29932 has 12 MA's), (16, 29896), (19, 29875), (21, 29863), (31, 29773), (33, 29764), (37, 29749),

Gene: Dalilpop\_6 Start: 4569, Stop: 4790, Start Num: 10

Candidate Starts for Dalilpop\_6:

(Start: 10 @4569 has 7 MA's), (Start: 13 @4581 has 1 MA's), (18, 4617), (30, 4728), (34, 4746), (35, 4749),

Gene: Danforth\_73 Start: 40987, Stop: 40826, Start Num: 15

Candidate Starts for Danforth\_73:

(Start: 15 @40987 has 10 MA's), (25, 40903), (33, 40858), (36, 40846),

Gene: Dixon\_72 Start: 40507, Stop: 40346, Start Num: 15

Candidate Starts for Dixon\_72:

(Start: 15 @40507 has 10 MA's), (25, 40423), (33, 40378), (36, 40366),

Gene: Elinal\_43 Start: 29167, Stop: 28958, Start Num: 8

Candidate Starts for Elinal\_43:

(7, 29170), (Start: 8 @29167 has 12 MA's), (16, 29131), (21, 29098), (33, 28999), (37, 28984),

Gene: Ennea\_6 Start: 4376, Stop: 4606, Start Num: 10

Candidate Starts for Ennea\_6:

(Start: 10 @4376 has 7 MA's), (25, 4490), (26, 4496), (29, 4520), (30, 4535), (35, 4556),

Gene: Expelliarmus\_70 Start: 40711, Stop: 40550, Start Num: 15

Candidate Starts for Expelliarmus\_70:

(Start: 15 @40711 has 10 MA's), (25, 40627), (33, 40582), (36, 40570),

Gene: Feastonyeet\_39 Start: 28782, Stop: 28576, Start Num: 8

Candidate Starts for Feastonyeet\_39:

(Start: 8 @28782 has 12 MA's), (21, 28716), (31, 28626), (33, 28617), (37, 28602),

Gene: Flapper\_6 Start: 3864, Stop: 4085, Start Num: 10

Candidate Starts for Flapper\_6:

(Start: 10 @3864 has 7 MA's), (Start: 13 @3876 has 1 MA's), (18, 3912), (30, 4023), (35, 4044),

Gene: Float294\_6 Start: 4362, Stop: 4592, Start Num: 10

Candidate Starts for Float294\_6:

(Start: 10 @4362 has 7 MA's), (25, 4476), (26, 4482), (29, 4506), (30, 4521), (35, 4542),

Gene: Fury\_5 Start: 2948, Stop: 3193, Start Num: 5

Candidate Starts for Fury\_5:

(3, 2900), (Start: 5 @2948 has 2 MA's), (Start: 10 @2972 has 7 MA's), (24, 3077), (25, 3083), (38, 3155),

Gene: GRU1\_89 Start: 62882, Stop: 63103, Start Num: 10

Candidate Starts for GRU1\_89:

(Start: 10 @62882 has 7 MA's), (Start: 13 @62894 has 1 MA's), (18, 62930), (30, 63041), (35, 63062),

Gene: GTE5\_88 Start: 63789, Stop: 63998, Start Num: 13

Candidate Starts for GTE5\_88:

(Start: 10 @63777 has 7 MA's), (Start: 13 @63789 has 1 MA's), (18, 63825), (30, 63936), (35, 63957),

Gene: Groundhog\_72 Start: 40917, Stop: 40756, Start Num: 15

Candidate Starts for Groundhog\_72:

(Start: 15 @40917 has 10 MA's), (25, 40833), (33, 40788), (36, 40776),

Gene: JonJames\_134 Start: 77470, Stop: 77718, Start Num: 6

Candidate Starts for JonJames\_134:

(Start: 6 @77470 has 2 MA's), (17, 77512), (28, 77617), (32, 77641), (37, 77662), (40, 77671),

Gene: KayGee\_41 Start: 29167, Stop: 28958, Start Num: 8

Candidate Starts for KayGee\_41:

(7, 29170), (Start: 8 @29167 has 12 MA's), (16, 29131), (21, 29098), (33, 28999), (37, 28984),

Gene: Lauer\_36 Start: 29997, Stop: 29788, Start Num: 8

Candidate Starts for Lauer\_36:

(7, 30000), (Start: 8 @29997 has 12 MA's), (16, 29961), (19, 29940), (21, 29928), (31, 29838), (33, 29829), (37, 29814),

Gene: Lollipop1437\_6 Start: 4364, Stop: 4594, Start Num: 10

Candidate Starts for Lollipop1437\_6:

(Start: 10 @4364 has 7 MA's), (25, 4478), (26, 4484), (29, 4508), (30, 4523), (35, 4544),

Gene: Mayweather\_43 Start: 29791, Stop: 29582, Start Num: 8

Candidate Starts for Mayweather\_43:

(7, 29794), (Start: 8 @29791 has 12 MA's), (16, 29755), (19, 29734), (21, 29722), (31, 29632), (33, 29623), (37, 29608),

Gene: Mufasa8\_82 Start: 49257, Stop: 49487, Start Num: 12

Candidate Starts for Mufasa8\_82:

(9, 49248), (Start: 12 @49257 has 1 MA's), (20, 49311), (28, 49401), (39, 49452),

Gene: NearlyHeadless\_73 Start: 40753, Stop: 40592, Start Num: 15

Candidate Starts for NearlyHeadless\_73:

(Start: 15 @40753 has 10 MA's), (25, 40669), (33, 40624), (36, 40612),

Gene: Patio\_7 Start: 5032, Stop: 5262, Start Num: 10

Candidate Starts for Patio\_7:

(Start: 10 @5032 has 7 MA's), (25, 5146), (26, 5152), (28, 5173), (29, 5176), (30, 5191), (35, 5212),

Gene: Phillis\_70 Start: 40207, Stop: 40049, Start Num: 15

Candidate Starts for Phillis\_70:

(1, 40354), (2, 40321), (Start: 15 @40207 has 10 MA's), (31, 40087), (36, 40066), (37, 40063), (38, 40060),

Gene: Pleakley\_5 Start: 2948, Stop: 3193, Start Num: 5

Candidate Starts for Pleakley\_5:

(3, 2900), (Start: 5 @2948 has 2 MA's), (Start: 10 @2972 has 7 MA's), (24, 3077), (25, 3083), (38, 3155),

Gene: Pons\_41 Start: 29139, Stop: 28933, Start Num: 8

Candidate Starts for Pons\_41:

(Start: 8 @29139 has 12 MA's), (21, 29073), (27, 29010), (31, 28983), (33, 28974), (37, 28959),

Gene: PotPie\_40 Start: 30073, Stop: 29867, Start Num: 8

Candidate Starts for PotPie\_40:

(Start: 8 @30073 has 12 MA's), (21, 30007), (31, 29917), (33, 29908), (37, 29893),

Gene: Roary\_74 Start: 40972, Stop: 40811, Start Num: 15

Candidate Starts for Roary\_74:

(Start: 15 @40972 has 10 MA's), (25, 40888), (27, 40876), (33, 40843), (36, 40831),

Gene: Saintus\_68 Start: 37637, Stop: 37476, Start Num: 15

Candidate Starts for Saintus\_68:

(Start: 15 @37637 has 10 MA's), (25, 37553), (33, 37508), (36, 37496),

Gene: SheckWes\_42 Start: 28660, Stop: 28454, Start Num: 8

Candidate Starts for SheckWes\_42:

(Start: 8 @28660 has 12 MA's), (21, 28594), (31, 28504), (33, 28495), (37, 28480),

Gene: Skysand\_6 Start: 4364, Stop: 4594, Start Num: 10

Candidate Starts for Skysand\_6:

(Start: 10 @4364 has 7 MA's), (25, 4478), (26, 4484), (29, 4508), (30, 4523), (35, 4544),

Gene: Smeadley\_73 Start: 40833, Stop: 40672, Start Num: 15

Candidate Starts for Smeadley\_73:

(Start: 15 @40833 has 10 MA's), (25, 40749), (33, 40704), (36, 40692),

Gene: SummitAcademy\_39 Start: 28702, Stop: 28496, Start Num: 8

Candidate Starts for SummitAcademy\_39:

(Start: 8 @28702 has 12 MA's), (21, 28636), (31, 28546), (33, 28537), (37, 28522),

Gene: Turuncu\_6 Start: 3772, Stop: 3981, Start Num: 13

Candidate Starts for Turuncu\_6:

(Start: 10 @3760 has 7 MA's), (Start: 13 @3772 has 1 MA's), (18, 3808), (30, 3919), (34, 3937), (35, 3940),

Gene: Vine\_42 Start: 29438, Stop: 29232, Start Num: 8

Candidate Starts for Vine\_42:

(Start: 8 @29438 has 12 MA's), (21, 29372), (31, 29282), (33, 29273), (37, 29258),

Gene: Yappy\_19 Start: 5650, Stop: 5847, Start Num: 11

Candidate Starts for Yappy\_19:

(4, 5620), (11, 5650), (21, 5698), (23, 5716), (25, 5749), (28, 5776), (31, 5797), (37, 5821), (41, 5833),

Gene: Yvonnetastic\_130 Start: 73750, Stop: 73998, Start Num: 6

Candidate Starts for Yvonnetastic\_130:

(Start: 6 @73750 has 2 MA's), (17, 73792), (28, 73897), (31, 73918), (37, 73942), (40, 73951),