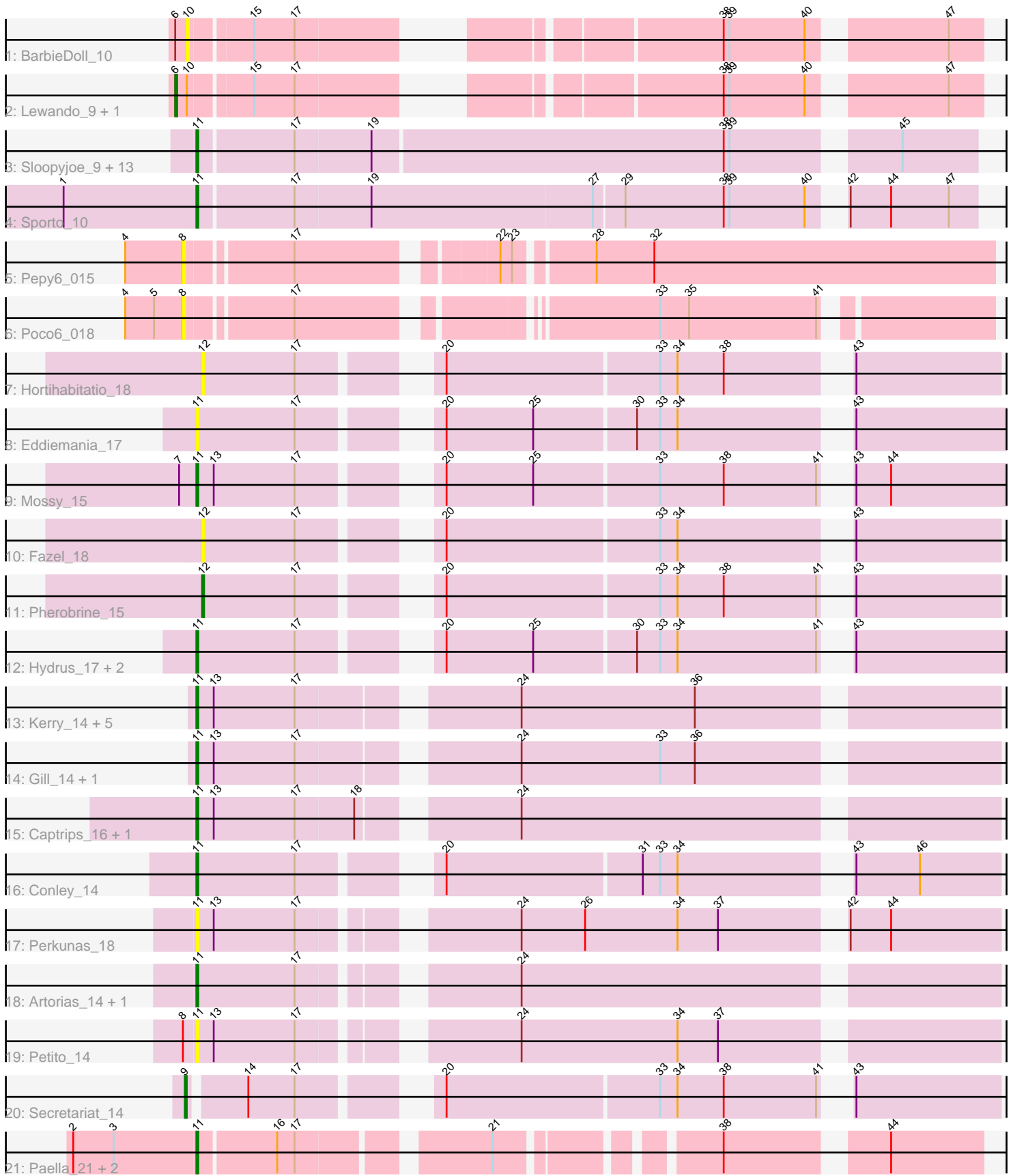


# Pham 153274



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 153274 Report

This analysis was run 04/28/24 on database version 559.

Pham number 153274 has 47 members, 17 are drafts.

Phages represented in each track:

- Track 1 : BarbieDoll\_10
- Track 2 : Lewando\_9, Renaldo\_10
- Track 3 : Sloopyjoe\_9, Linda\_9, Salk\_9, MrAaronian\_9, Djungelskog\_9, Michelle\_9, StarLord\_9, ProfFrink\_9, Stayer\_9, Egad\_9, Raunak\_9, DoctorPepper\_9, Shiba\_9, BronxBay\_9
- Track 4 : Sporto\_10
- Track 5 : Pepy6\_015
- Track 6 : Poco6\_018
- Track 7 : Hortihabitatio\_18
- Track 8 : Eddiemania\_17
- Track 9 : Mossy\_15
- Track 10 : Fazel\_18
- Track 11 : Pherobrine\_15
- Track 12 : Hydrus\_17, Kenosha\_15, Zeph\_18
- Track 13 : Kerry\_14, Roney\_14, Magel\_14, Capybara\_14, Gravy\_14, Odesza\_14
- Track 14 : Gill\_14, Tanis\_14
- Track 15 : Captrips\_16, Avazak\_14
- Track 16 : Conley\_14
- Track 17 : Perkunas\_18
- Track 18 : Artorias\_14, FortCran\_18
- Track 19 : Petito\_14
- Track 20 : Secretariat\_14
- Track 21 : Paella\_21, Elver\_20, Qui\_21

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

The start number called the most often in the published annotations is 11, it was called in 27 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artorias\_14, Avazak\_14, BronxBay\_9, Captrips\_16, Capybara\_14, Conley\_14, Djungelskog\_9, DoctorPepper\_9, Eddiemania\_17, Egad\_9, Elver\_20, FortCran\_18, Gill\_14, Gravy\_14, Hydrus\_17, Kenosha\_15, Kerry\_14, Linda\_9, Magel\_14, Michelle\_9, Mossy\_15, MrAaronian\_9, Odesza\_14, Paella\_21, Perkunas\_18,

Petito\_14, ProfFrink\_9, Qui\_21, Raunak\_9, Roney\_14, Salk\_9, Shiba\_9, Sloopyjoe\_9, Sporto\_10, StarLord\_9, Stayer\_9, Tanis\_14, Zeph\_18,

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

- 

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

- BarbieDoll\_10, Fazel\_18, Hortihabitatio\_18, Lewando\_9, Pepy6\_015, Pherobrine\_15, Poco6\_018, Renaldo\_10, Secretariat\_14,

### **Summary by start number:**

Start 6:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Lewando\_9 (AU6), Renaldo\_10 (AU6),

Start 8:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Pepy6\_015 (CC), Poco6\_018 (CC),

Start 9:

- Found in 1 of 47 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Secretariat\_14 (DJ),

Start 10:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BarbieDoll\_10 (AU6),

Start 11:

- Found in 38 of 47 ( 80.9% ) of genes in pham
- Manual Annotations of this start: 27 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artorias\_14 (DJ), Avazak\_14 (DJ), BronxBay\_9 (AW), Captrips\_16 (DJ), Cappybara\_14 (DJ), Conley\_14 (DJ), Djungelskog\_9 (AW), DoctorPepper\_9 (AW), Eddiemania\_17 (DJ), Egad\_9 (AW), Elver\_20 (FK), FortCran\_18 (DJ), Gill\_14 (DJ), Gravy\_14 (DJ), Hydrus\_17 (DJ), Kenosha\_15 (DJ), Kerry\_14 (DJ), Linda\_9 (AW), Magel\_14 (DJ), Michelle\_9 (AW), Mossy\_15 (DJ), MrAaronian\_9 (AW), Odesza\_14 (DJ), Paella\_21 (FK), Perkunas\_18 (DJ), Petite\_14 (DJ), ProfFrink\_9 (AW), Qui\_21 (FK), Raunak\_9 (AW), Roney\_14 (DJ), Salk\_9 (AW), Shiba\_9 (AW), Sloopyjoe\_9 (AW), Sporto\_10 (AW), StarLord\_9 (AW), Stayer\_9 (AW), Tanis\_14 (DJ), Zeph\_18 (DJ),

Start 12:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- Manual Annotations of this start: 1 of 30

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fazel\_18 (DJ), Hortihabitatio\_18 (DJ), Pherobrine\_15 (DJ),

### **Summary by clusters:**

There are 5 clusters represented in this pham: CC, FK, DJ, AW, AU6,

Info for manual annotations of cluster AU6:

- Start number 6 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 11 was manually annotated 12 times for cluster AW.

Info for manual annotations of cluster DJ:

- Start number 9 was manually annotated 1 time for cluster DJ.
- Start number 11 was manually annotated 13 times for cluster DJ.
- Start number 12 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster FK:

- Start number 11 was manually annotated 2 times for cluster FK.

### **Gene Information:**

Gene: Artorias\_14 Start: 9261, Stop: 9638, Start Num: 11

Candidate Starts for Artorias\_14:

(Start: 11 @9261 has 27 MA's), (17, 9312), (24, 9405),

Gene: Avazak\_14 Start: 9262, Stop: 9645, Start Num: 11

Candidate Starts for Avazak\_14:

(Start: 11 @9262 has 27 MA's), (13, 9271), (17, 9313), (18, 9343), (24, 9412),

Gene: BarbieDoll\_10 Start: 5426, Stop: 5770, Start Num: 10

Candidate Starts for BarbieDoll\_10:

(Start: 6 @5420 has 1 MA's), (10, 5426), (15, 5456), (17, 5477), (38, 5651), (39, 5654), (40, 5693), (47, 5753),

Gene: BronxBay\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for BronxBay\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Captrips\_16 Start: 9262, Stop: 9645, Start Num: 11

Candidate Starts for Captrips\_16:

(Start: 11 @9262 has 27 MA's), (13, 9271), (17, 9313), (18, 9343), (24, 9412),

Gene: Capybara\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Capybara\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Conley\_14 Start: 9292, Stop: 9663, Start Num: 11

Candidate Starts for Conley\_14:

(Start: 11 @9292 has 27 MA's), (17, 9343), (20, 9397), (31, 9496), (33, 9505), (34, 9514), (43, 9589), (46, 9622),

Gene: Djungelskog\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Djungelskog\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: DoctorPepper\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for DoctorPepper\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Eddiemania\_17 Start: 11431, Stop: 11808, Start Num: 11

Candidate Starts for Eddiemania\_17:

(Start: 11 @11431 has 27 MA's), (17, 11482), (20, 11536), (25, 11581), (30, 11632), (33, 11644), (34, 11653), (43, 11728),

Gene: Egad\_9 Start: 5364, Stop: 5747, Start Num: 11

Candidate Starts for Egad\_9:

(Start: 11 @5364 has 27 MA's), (17, 5412), (19, 5451), (38, 5631), (39, 5634), (45, 5709),

Gene: Elver\_20 Start: 12192, Stop: 12542, Start Num: 11

Candidate Starts for Elver\_20:

(2, 12129), (3, 12150), (Start: 11 @12192 has 27 MA's), (16, 12231), (17, 12240), (21, 12327), (38, 12423), (44, 12495),

Gene: Fazel\_18 Start: 10968, Stop: 11336, Start Num: 12

Candidate Starts for Fazel\_18:

(Start: 12 @10968 has 1 MA's), (17, 11016), (20, 11070), (33, 11178), (34, 11187), (43, 11262),

Gene: FortCran\_18 Start: 9261, Stop: 9638, Start Num: 11

Candidate Starts for FortCran\_18:

(Start: 11 @9261 has 27 MA's), (17, 9312), (24, 9405),

Gene: Gill\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Gill\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (33, 9203), (36, 9221),

Gene: Gravy\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Gravy\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Hortihabitatio\_18 Start: 11339, Stop: 11707, Start Num: 12

Candidate Starts for Hortihabitatio\_18:

(Start: 12 @11339 has 1 MA's), (17, 11387), (20, 11441), (33, 11549), (34, 11558), (38, 11582), (43, 11633),

Gene: Hydrus\_17 Start: 11248, Stop: 11625, Start Num: 11

Candidate Starts for Hydrus\_17:

(Start: 11 @11248 has 27 MA's), (17, 11299), (20, 11353), (25, 11398), (30, 11449), (33, 11461), (34, 11470), (41, 11542), (43, 11545),

Gene: Kenosha\_15 Start: 9849, Stop: 10226, Start Num: 11

Candidate Starts for Kenosha\_15:

(Start: 11 @9849 has 27 MA's), (17, 9900), (20, 9954), (25, 9999), (30, 10050), (33, 10062), (34, 10071), (41, 10143), (43, 10146),

Gene: Kerry\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Kerry\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Lewando\_9 Start: 5419, Stop: 5769, Start Num: 6

Candidate Starts for Lewando\_9:

(Start: 6 @5419 has 1 MA's), (10, 5425), (15, 5455), (17, 5476), (38, 5650), (39, 5653), (40, 5692), (47, 5752),

Gene: Linda\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Linda\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Magel\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Magel\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Michelle\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Michelle\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Mossy\_15 Start: 10137, Stop: 10514, Start Num: 11

Candidate Starts for Mossy\_15:

(7, 10128), (Start: 11 @10137 has 27 MA's), (13, 10146), (17, 10188), (20, 10242), (25, 10287), (33, 10350), (38, 10383), (41, 10431), (43, 10434), (44, 10452),

Gene: MrAaronian\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for MrAaronian\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Odesza\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Odesza\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Paella\_21 Start: 12194, Stop: 12544, Start Num: 11

Candidate Starts for Paella\_21:

(2, 12131), (3, 12152), (Start: 11 @12194 has 27 MA's), (16, 12233), (17, 12242), (21, 12329), (38, 12425), (44, 12497),

Gene: Pepy6\_015 Start: 14185, Stop: 14574, Start Num: 8

Candidate Starts for Pepy6\_015:

(4, 14155), (8, 14185), (17, 14236), (22, 14326), (23, 14332), (28, 14368), (32, 14398),

Gene: Perkunas\_18 Start: 9780, Stop: 10157, Start Num: 11

Candidate Starts for Perkunas\_18:

(Start: 11 @9780 has 27 MA's), (13, 9789), (17, 9831), (24, 9924), (26, 9957), (34, 10005), (37, 10026), (42, 10080), (44, 10101),

Gene: Petito\_14 Start: 9485, Stop: 9862, Start Num: 11

Candidate Starts for Petito\_14:

(8, 9479), (Start: 11 @9485 has 27 MA's), (13, 9494), (17, 9536), (24, 9629), (34, 9710), (37, 9731),

Gene: Pherobrine\_15 Start: 9816, Stop: 10184, Start Num: 12

Candidate Starts for Pherobrine\_15:

(Start: 12 @9816 has 1 MA's), (17, 9864), (20, 9918), (33, 10026), (34, 10035), (38, 10059), (41, 10107), (43, 10110),

Gene: Poco6\_018 Start: 17635, Stop: 18006, Start Num: 8

Candidate Starts for Poco6\_018:

(4, 17605), (5, 17620), (8, 17635), (17, 17686), (33, 17848), (35, 17863), (41, 17929),

Gene: ProfFrink\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for ProfFrink\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Qui\_21 Start: 12194, Stop: 12544, Start Num: 11

Candidate Starts for Qui\_21:

(2, 12131), (3, 12152), (Start: 11 @12194 has 27 MA's), (16, 12233), (17, 12242), (21, 12329), (38, 12425), (44, 12497),

Gene: Raunak\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Raunak\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Renaldo\_10 Start: 5420, Stop: 5770, Start Num: 6

Candidate Starts for Renaldo\_10:

(Start: 6 @5420 has 1 MA's), (10, 5426), (15, 5456), (17, 5477), (38, 5651), (39, 5654), (40, 5693), (47, 5753),

Gene: Roney\_14 Start: 8981, Stop: 9364, Start Num: 11

Candidate Starts for Roney\_14:

(Start: 11 @8981 has 27 MA's), (13, 8990), (17, 9032), (24, 9131), (36, 9221),

Gene: Salk\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Salk\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Secretariat\_14 Start: 9438, Stop: 9809, Start Num: 9

Candidate Starts for Secretariat\_14:

(Start: 9 @9438 has 1 MA's), (14, 9465), (17, 9489), (20, 9543), (33, 9651), (34, 9660), (38, 9684), (41, 9732), (43, 9735),

Gene: Shiba\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Shiba\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Sloopyjoe\_9 Start: 5364, Stop: 5747, Start Num: 11

Candidate Starts for Sloopyjoe\_9:

(Start: 11 @5364 has 27 MA's), (17, 5412), (19, 5451), (38, 5631), (39, 5634), (45, 5709),

Gene: Sporto\_10 Start: 6615, Stop: 6998, Start Num: 11

Candidate Starts for Sporto\_10:

(1, 6549), (Start: 11 @6615 has 27 MA's), (17, 6663), (19, 6702), (27, 6816), (29, 6831), (38, 6882), (39, 6885), (40, 6924), (42, 6933), (44, 6954), (47, 6984),

Gene: StarLord\_9 Start: 5364, Stop: 5747, Start Num: 11

Candidate Starts for StarLord\_9:

(Start: 11 @5364 has 27 MA's), (17, 5412), (19, 5451), (38, 5631), (39, 5634), (45, 5709),

Gene: Stayer\_9 Start: 5363, Stop: 5746, Start Num: 11

Candidate Starts for Stayer\_9:

(Start: 11 @5363 has 27 MA's), (17, 5411), (19, 5450), (38, 5630), (39, 5633), (45, 5708),

Gene: Tanis\_14 Start: 8831, Stop: 9214, Start Num: 11

Candidate Starts for Tanis\_14:

(Start: 11 @8831 has 27 MA's), (13, 8840), (17, 8882), (24, 8981), (33, 9053), (36, 9071),

Gene: Zeph\_18 Start: 11230, Stop: 11607, Start Num: 11

Candidate Starts for Zeph\_18:

(Start: 11 @11230 has 27 MA's), (17, 11281), (20, 11335), (25, 11380), (30, 11431), (33, 11443), (34, 11452), (41, 11524), (43, 11527),