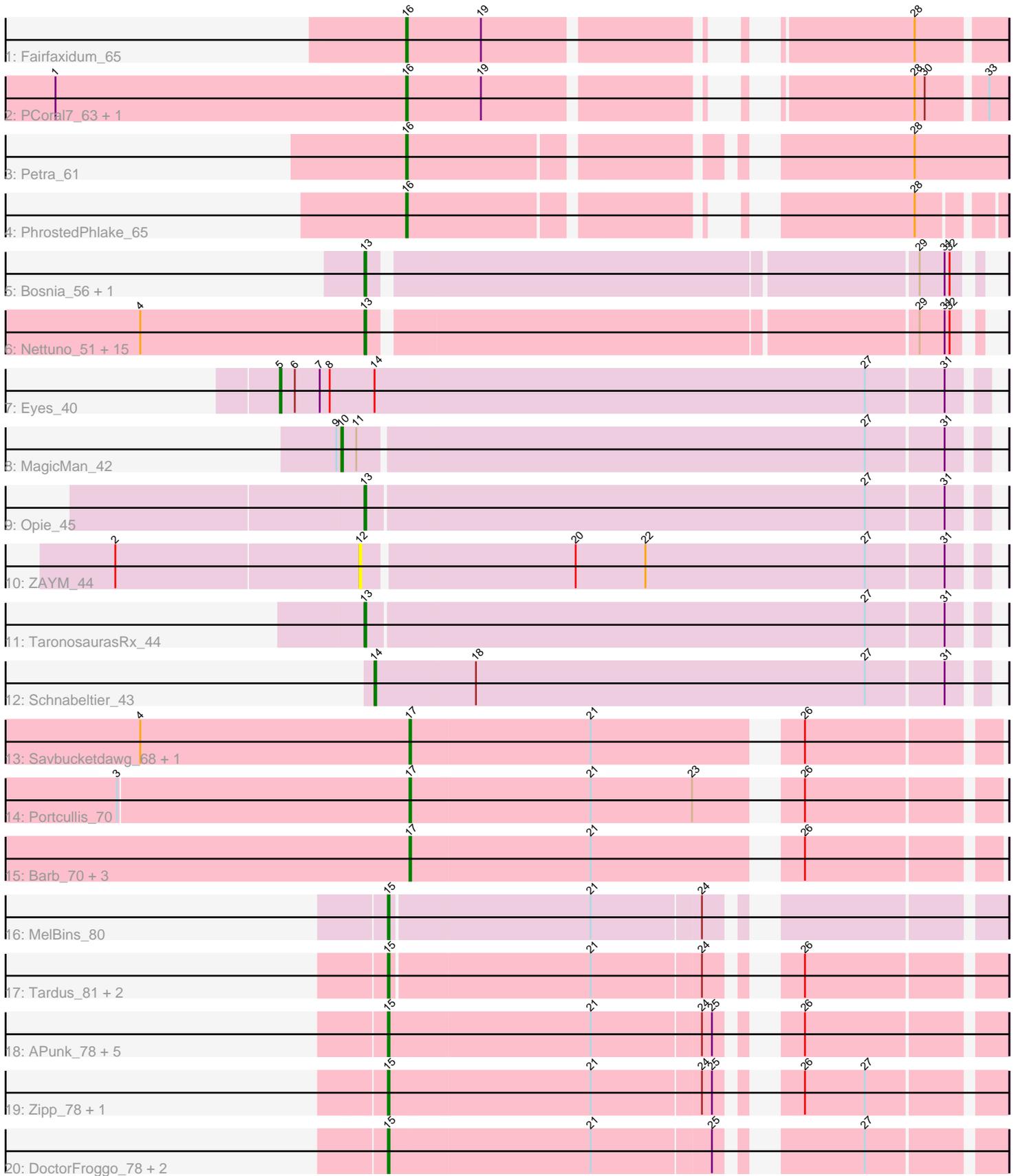


Pham 285652



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 285652 Report

This analysis was run 03/28/26 on database version 641.

Pham number 285652 has 51 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Fairfaxidum\_65
- Track 2 : PCoral7\_63, Toast\_63
- Track 3 : Petra\_61
- Track 4 : PhrostedPhlake\_65
- Track 5 : Bosnia\_56, Ohgeesy\_58
- Track 6 : Nettuno\_51, Mocha12\_55, Cynthia\_55, Clap\_55, Haley23\_55, Jalleen\_55, Lamberg\_51, GemG\_55, TuertoX\_55, Gizermo\_55, Ebert\_59, Savage\_55, Whiteclaw\_55, Sahara\_54, Sproutie\_55, Bjanes7\_52
- Track 7 : Eyes\_40
- Track 8 : MagicMan\_42
- Track 9 : Opie\_45
- Track 10 : ZAYM\_44
- Track 11 : TaronosaurusRx\_44
- Track 12 : Schnabeltier\_43
- Track 13 : Savbucketdawg\_68, Jambalaya\_68
- Track 14 : Portcullis\_70
- Track 15 : Barb\_70, Fugax\_71, ClamChowder\_70, Egi03\_68
- Track 16 : MelBins\_80
- Track 17 : Tardus\_81, BigHunkinEater\_77, Zitch\_79
- Track 18 : APunk\_78, ViaConlectus\_77, Scioto\_78, Natkenzie\_78, Sampson\_80, Abblin\_78
- Track 19 : Zipp\_78, Pumpkiney\_77
- Track 20 : DoctorFroggo\_78, Delrey21\_78, Verity\_77

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

The start number called the most often in the published annotations is 13, it was called in 19 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bjanes7\_52, Bosnia\_56, Clap\_55, Cynthia\_55, Ebert\_59, GemG\_55, Gizermo\_55, Haley23\_55, Jalleen\_55, Lamberg\_51, Mocha12\_55, Nettuno\_51, Ohgeesy\_58, Opie\_45, Sahara\_54, Savage\_55, Sproutie\_55, TaronosaurusRx\_44, TuertoX\_55, Whiteclaw\_55,

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

- 

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

- APunk\_78, Abblin\_78, Barb\_70, BigHunkinEater\_77, ClamChowder\_70, Delrey21\_78, DoctorFroggo\_78, Egi03\_68, Eyes\_40, Fairfaxidum\_65, Fugax\_71, Jambalaya\_68, MagicMan\_42, MelBins\_80, Natkenzie\_78, PCoral7\_63, Petra\_61, PhrostedPhlake\_65, Portcullis\_70, Pumpkiney\_77, Sampson\_80, Savbucketdawg\_68, Schnabeltier\_43, Scioto\_78, Tardus\_81, Toast\_63, Verity\_77, ViaConlectus\_77, ZAYM\_44, Zipp\_78, Zitch\_79,

### Summary by start number:

Start 5:

- Found in 1 of 51 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eyes\_40 (DB),

Start 10:

- Found in 1 of 51 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MagicMan\_42 (DB),

Start 12:

- Found in 1 of 51 ( 2.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ZAYM\_44 (DB),

Start 13:

- Found in 20 of 51 ( 39.2% ) of genes in pham
- Manual Annotations of this start: 19 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bjaner7\_52 (CZ2), Bosnia\_56 (CZ1), Clap\_55 (CZ2), Cynthia\_55 (CZ2), Ebert\_59 (CZ2), GemG\_55 (CZ2), Gizermo\_55 (CZ2), Haley23\_55 (CZ2), Jalleen\_55 (CZ2), Lamberg\_51 (CZ2), Mocha12\_55 (CZ2), Nettuno\_51 (CZ2), Ohgeesy\_58 (CZ), Opie\_45 (DB), Sahara\_54 (CZ2), Savage\_55 (CZ2), Sproutie\_55 (CZ2), TaronosaurusRx\_44 (DB), TuertoX\_55 (CZ2), Whiteclaw\_55 (CZ2),

Start 14:

- Found in 2 of 51 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Schnabeltier\_43 (DB),

Start 15:

- Found in 15 of 51 ( 29.4% ) of genes in pham
- Manual Annotations of this start: 10 of 44
- Called 100.0% of time when present

- Phage (with cluster) where this start called: APunk\_78 (DE4), Abblin\_78 (DE4), BigHunkinEater\_77 (DE4), Delrey21\_78 (DE4), DoctorFroggo\_78 (DE4), MelBins\_80 (DE2), Natkenzie\_78 (DE4), Pumpkiney\_77 (DE4), Sampson\_80 (DE4), Scioto\_78 (DE4), Tardus\_81 (DE4), Verity\_77 (DE4), ViaConlectus\_77 (DE4), Zipp\_78 (DE4), Zitch\_79 (DE4),

Start 16:

- Found in 5 of 51 ( 9.8% ) of genes in pham
- Manual Annotations of this start: 5 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fairfaxidum\_65 (CV), PCoral7\_63 (CV), Petra\_61 (CV), PhrostedPhlake\_65 (CV), Toast\_63 (CV),

Start 17:

- Found in 7 of 51 ( 13.7% ) of genes in pham
- Manual Annotations of this start: 7 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barb\_70 (DC1), ClamChowder\_70 (DC1), Egi03\_68 (DC1), Fugax\_71 (DC1), Jambalaya\_68 (DC1), Portcullis\_70 (DC1), Savbucketdawg\_68 (DC1),

### **Summary by clusters:**

There are 8 clusters represented in this pham: CZ2, DE4, DE2, CZ1, DB, CZ, CV, DC1,

Info for manual annotations of cluster CV:

- Start number 16 was manually annotated 5 times for cluster CV.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ1:

- Start number 13 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 13 was manually annotated 15 times for cluster CZ2.

Info for manual annotations of cluster DB:

- Start number 5 was manually annotated 1 time for cluster DB.
- Start number 10 was manually annotated 1 time for cluster DB.
- Start number 13 was manually annotated 2 times for cluster DB.
- Start number 14 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 17 was manually annotated 7 times for cluster DC1.

Info for manual annotations of cluster DE2:

- Start number 15 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DE4:

- Start number 15 was manually annotated 9 times for cluster DE4.

**Gene Information:**

Gene: APunk\_78 Start: 54783, Stop: 55109, Start Num: 15

Candidate Starts for APunk\_78:

(Start: 15 @54783 has 10 MA's), (21, 54903), (24, 54966), (25, 54972), (26, 54999),

Gene: Abblin\_78 Start: 54941, Stop: 55267, Start Num: 15

Candidate Starts for Abblin\_78:

(Start: 15 @54941 has 10 MA's), (21, 55061), (24, 55124), (25, 55130), (26, 55157),

Gene: Barb\_70 Start: 49043, Stop: 49366, Start Num: 17

Candidate Starts for Barb\_70:

(Start: 17 @49043 has 7 MA's), (21, 49151), (26, 49259),

Gene: BigHunkinEater\_77 Start: 54208, Stop: 54534, Start Num: 15

Candidate Starts for BigHunkinEater\_77:

(Start: 15 @54208 has 10 MA's), (21, 54328), (24, 54391), (26, 54424),

Gene: Bjaner7\_52 Start: 36877, Stop: 37221, Start Num: 13

Candidate Starts for Bjaner7\_52:

(4, 36742), (Start: 13 @36877 has 19 MA's), (29, 37192), (31, 37207), (32, 37210),

Gene: Bosnia\_56 Start: 42843, Stop: 43187, Start Num: 13

Candidate Starts for Bosnia\_56:

(Start: 13 @42843 has 19 MA's), (29, 43158), (31, 43173), (32, 43176),

Gene: ClamChowder\_70 Start: 49043, Stop: 49366, Start Num: 17

Candidate Starts for ClamChowder\_70:

(Start: 17 @49043 has 7 MA's), (21, 49151), (26, 49259),

Gene: Clap\_55 Start: 37056, Stop: 37400, Start Num: 13

Candidate Starts for Clap\_55:

(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Cynthia\_55 Start: 37054, Stop: 37398, Start Num: 13

Candidate Starts for Cynthia\_55:

(4, 36919), (Start: 13 @37054 has 19 MA's), (29, 37369), (31, 37384), (32, 37387),

Gene: Delrey21\_78 Start: 56364, Stop: 56690, Start Num: 15

Candidate Starts for Delrey21\_78:

(Start: 15 @56364 has 10 MA's), (21, 56484), (25, 56553), (27, 56616),

Gene: DoctorFroggo\_78 Start: 56364, Stop: 56690, Start Num: 15

Candidate Starts for DoctorFroggo\_78:

(Start: 15 @56364 has 10 MA's), (21, 56484), (25, 56553), (27, 56616),

Gene: Ebert\_59 Start: 37488, Stop: 37832, Start Num: 13

Candidate Starts for Ebert\_59:

(4, 37353), (Start: 13 @37488 has 19 MA's), (29, 37803), (31, 37818), (32, 37821),

Gene: Egi03\_68 Start: 48957, Stop: 49280, Start Num: 17

Candidate Starts for Egi03\_68:  
(Start: 17 @48957 has 7 MA's), (21, 49065), (26, 49173),

Gene: Eyes\_40 Start: 32626, Stop: 33042, Start Num: 5  
Candidate Starts for Eyes\_40:  
(Start: 5 @32626 has 1 MA's), (6, 32635), (7, 32650), (8, 32656), (Start: 14 @32683 has 1 MA's), (27, 32977), (31, 33022),

Gene: Fairfaxidum\_65 Start: 42953, Stop: 43249, Start Num: 16  
Candidate Starts for Fairfaxidum\_65:  
(Start: 16 @42953 has 5 MA's), (19, 42998), (28, 43199),

Gene: Fugax\_71 Start: 49035, Stop: 49358, Start Num: 17  
Candidate Starts for Fugax\_71:  
(Start: 17 @49035 has 7 MA's), (21, 49143), (26, 49251),

Gene: GemG\_55 Start: 37060, Stop: 37404, Start Num: 13  
Candidate Starts for GemG\_55:  
(4, 36925), (Start: 13 @37060 has 19 MA's), (29, 37375), (31, 37390), (32, 37393),

Gene: Gizermo\_55 Start: 37056, Stop: 37400, Start Num: 13  
Candidate Starts for Gizermo\_55:  
(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Haley23\_55 Start: 37056, Stop: 37400, Start Num: 13  
Candidate Starts for Haley23\_55:  
(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Jalleen\_55 Start: 36695, Stop: 37039, Start Num: 13  
Candidate Starts for Jalleen\_55:  
(4, 36560), (Start: 13 @36695 has 19 MA's), (29, 37010), (31, 37025), (32, 37028),

Gene: Jambalaya\_68 Start: 49218, Stop: 49541, Start Num: 17  
Candidate Starts for Jambalaya\_68:  
(4, 49056), (Start: 17 @49218 has 7 MA's), (21, 49326), (26, 49434),

Gene: Lamberg\_51 Start: 35565, Stop: 35909, Start Num: 13  
Candidate Starts for Lamberg\_51:  
(4, 35430), (Start: 13 @35565 has 19 MA's), (29, 35880), (31, 35895), (32, 35898),

Gene: MagicMan\_42 Start: 33173, Stop: 33547, Start Num: 10  
Candidate Starts for MagicMan\_42:  
(9, 33170), (Start: 10 @33173 has 1 MA's), (11, 33182), (27, 33482), (31, 33527),

Gene: MelBins\_80 Start: 55476, Stop: 55799, Start Num: 15  
Candidate Starts for MelBins\_80:  
(Start: 15 @55476 has 10 MA's), (21, 55593), (24, 55656),

Gene: Mocha12\_55 Start: 37056, Stop: 37400, Start Num: 13  
Candidate Starts for Mocha12\_55:  
(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Natkenzie\_78 Start: 54941, Stop: 55267, Start Num: 15

Candidate Starts for Natkenzie\_78:

(Start: 15 @54941 has 10 MA's), (21, 55061), (24, 55124), (25, 55130), (26, 55157),

Gene: Nettuno\_51 Start: 35565, Stop: 35909, Start Num: 13

Candidate Starts for Nettuno\_51:

(4, 35430), (Start: 13 @35565 has 19 MA's), (29, 35880), (31, 35895), (32, 35898),

Gene: Ohgeesy\_58 Start: 41538, Stop: 41882, Start Num: 13

Candidate Starts for Ohgeesy\_58:

(Start: 13 @41538 has 19 MA's), (29, 41853), (31, 41868), (32, 41871),

Gene: Opie\_45 Start: 33507, Stop: 33869, Start Num: 13

Candidate Starts for Opie\_45:

(Start: 13 @33507 has 19 MA's), (27, 33804), (31, 33849),

Gene: PCoral7\_63 Start: 42091, Stop: 42387, Start Num: 16

Candidate Starts for PCoral7\_63:

(1, 41887), (Start: 16 @42091 has 5 MA's), (19, 42136), (28, 42337), (30, 42343), (33, 42376),

Gene: Petra\_61 Start: 40223, Stop: 40537, Start Num: 16

Candidate Starts for Petra\_61:

(Start: 16 @40223 has 5 MA's), (28, 40481),

Gene: PhrostedPhlake\_65 Start: 40981, Stop: 41271, Start Num: 16

Candidate Starts for PhrostedPhlake\_65:

(Start: 16 @40981 has 5 MA's), (28, 41227),

Gene: Portcullis\_70 Start: 49254, Stop: 49577, Start Num: 17

Candidate Starts for Portcullis\_70:

(3, 49080), (Start: 17 @49254 has 7 MA's), (21, 49362), (23, 49422), (26, 49470),

Gene: Pumpkiney\_77 Start: 53168, Stop: 53494, Start Num: 15

Candidate Starts for Pumpkiney\_77:

(Start: 15 @53168 has 10 MA's), (21, 53288), (24, 53351), (25, 53357), (26, 53384), (27, 53420),

Gene: Sahara\_54 Start: 36803, Stop: 37147, Start Num: 13

Candidate Starts for Sahara\_54:

(4, 36668), (Start: 13 @36803 has 19 MA's), (29, 37118), (31, 37133), (32, 37136),

Gene: Sampson\_80 Start: 55092, Stop: 55418, Start Num: 15

Candidate Starts for Sampson\_80:

(Start: 15 @55092 has 10 MA's), (21, 55212), (24, 55275), (25, 55281), (26, 55308),

Gene: Savage\_55 Start: 37056, Stop: 37400, Start Num: 13

Candidate Starts for Savage\_55:

(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Savbucketdawg\_68 Start: 49218, Stop: 49541, Start Num: 17

Candidate Starts for Savbucketdawg\_68:

(4, 49056), (Start: 17 @49218 has 7 MA's), (21, 49326), (26, 49434),

Gene: Schnabeltier\_43 Start: 33377, Stop: 33736, Start Num: 14

Candidate Starts for Schnabeltier\_43:

(Start: 14 @33377 has 1 MA's), (18, 33437), (27, 33671), (31, 33716),

Gene: Scioto\_78 Start: 54942, Stop: 55268, Start Num: 15

Candidate Starts for Scioto\_78:

(Start: 15 @54942 has 10 MA's), (21, 55062), (24, 55125), (25, 55131), (26, 55158),

Gene: Sproutie\_55 Start: 37056, Stop: 37400, Start Num: 13

Candidate Starts for Sproutie\_55:

(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Tardus\_81 Start: 55676, Stop: 55999, Start Num: 15

Candidate Starts for Tardus\_81:

(Start: 15 @55676 has 10 MA's), (21, 55793), (24, 55856), (26, 55889),

Gene: TaronosaurusRx\_44 Start: 31909, Stop: 32271, Start Num: 13

Candidate Starts for TaronosaurusRx\_44:

(Start: 13 @31909 has 19 MA's), (27, 32206), (31, 32251),

Gene: Toast\_63 Start: 42091, Stop: 42387, Start Num: 16

Candidate Starts for Toast\_63:

(1, 41887), (Start: 16 @42091 has 5 MA's), (19, 42136), (28, 42337), (30, 42343), (33, 42376),

Gene: TuertoX\_55 Start: 37056, Stop: 37400, Start Num: 13

Candidate Starts for TuertoX\_55:

(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: Verity\_77 Start: 56226, Stop: 56552, Start Num: 15

Candidate Starts for Verity\_77:

(Start: 15 @56226 has 10 MA's), (21, 56346), (25, 56415), (27, 56478),

Gene: ViaConlectus\_77 Start: 53513, Stop: 53839, Start Num: 15

Candidate Starts for ViaConlectus\_77:

(Start: 15 @53513 has 10 MA's), (21, 53633), (24, 53696), (25, 53702), (26, 53729),

Gene: Whiteclaw\_55 Start: 37056, Stop: 37400, Start Num: 13

Candidate Starts for Whiteclaw\_55:

(4, 36921), (Start: 13 @37056 has 19 MA's), (29, 37371), (31, 37386), (32, 37389),

Gene: ZAYM\_44 Start: 32453, Stop: 32815, Start Num: 12

Candidate Starts for ZAYM\_44:

(2, 32309), (12, 32453), (20, 32576), (22, 32618), (27, 32750), (31, 32795),

Gene: Zipp\_78 Start: 55940, Stop: 56266, Start Num: 15

Candidate Starts for Zipp\_78:

(Start: 15 @55940 has 10 MA's), (21, 56060), (24, 56123), (25, 56129), (26, 56156), (27, 56192),

Gene: Zitch\_79 Start: 54390, Stop: 54716, Start Num: 15

Candidate Starts for Zitch\_79:

(Start: 15 @54390 has 10 MA's), (21, 54510), (24, 54573), (26, 54606),