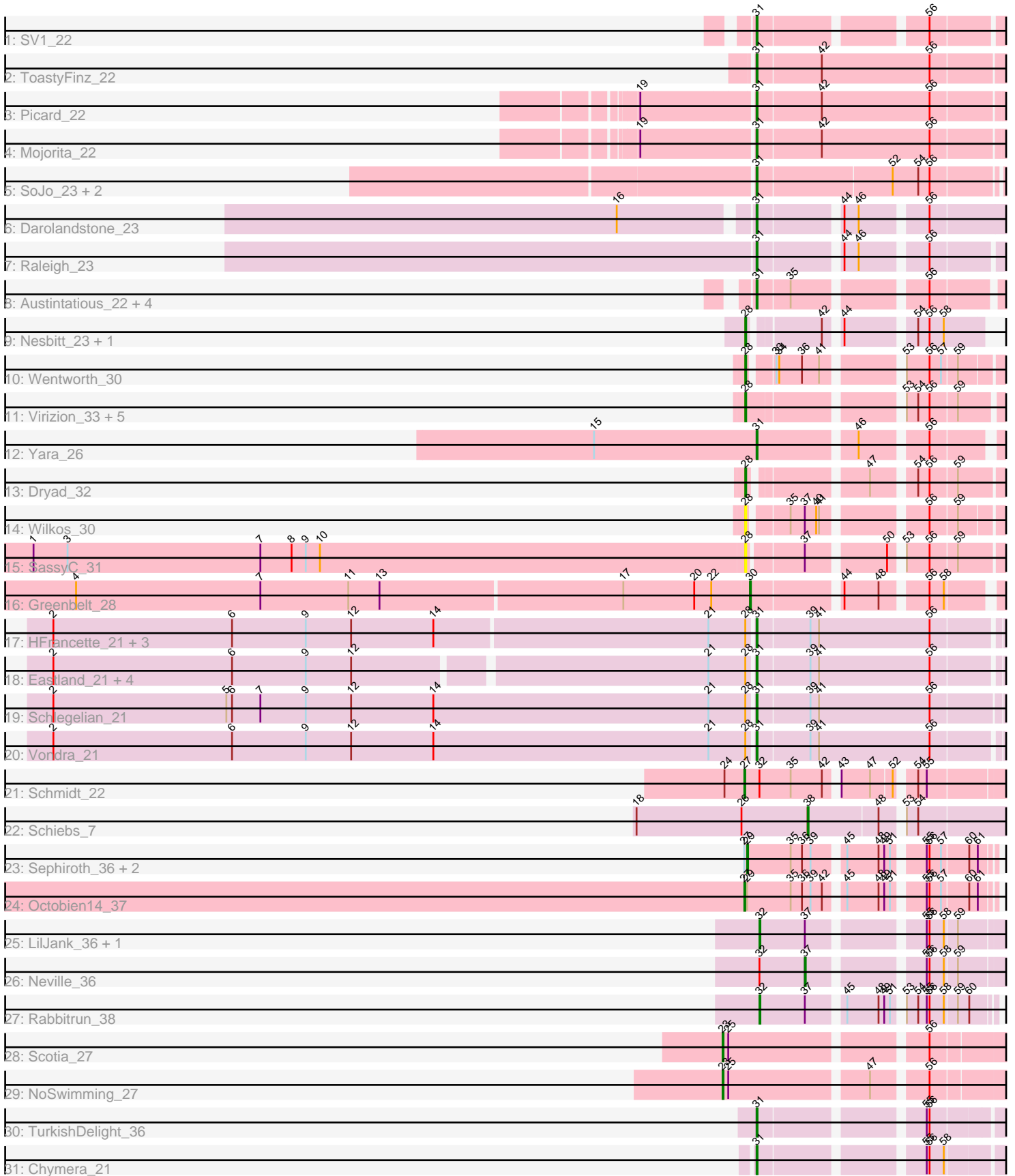


Pham 305063



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 305063 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305063 has 53 members, 5 are drafts.

Phages represented in each track:

- Track 1 : SV1\_22
- Track 2 : ToastyFinz\_22
- Track 3 : Picard\_22
- Track 4 : Mojorita\_22
- Track 5 : SoJo\_23, Tubberson\_23, DaRealMyers\_23
- Track 6 : Darolandstone\_23
- Track 7 : Raleigh\_23
- Track 8 : Austintatious\_22, Bioscum\_22, Ididsumtinwong\_22, Lishka\_22, PapayaSalad\_22
- Track 9 : Nesbitt\_23, AbbeyMikolon\_23
- Track 10 : Wentworth\_30
- Track 11 : Virizion\_33, PHTowN\_29, Rooney\_29, ShakeNBake\_29, Lizz\_29, Gibson\_29
- Track 12 : Yara\_26
- Track 13 : Dryad\_32
- Track 14 : Wilkos\_30
- Track 15 : SassyC\_31
- Track 16 : Greenbelt\_28
- Track 17 : HFrancette\_21, Cumberbatch\_21, Ignacio\_21, ArizonaGT\_21
- Track 18 : Eastland\_21, AxeJC\_21, Eklok\_21, Piccadilly\_21, FrumpyGal\_21
- Track 19 : Schlegelian\_21
- Track 20 : Vondra\_21
- Track 21 : Schmidt\_22
- Track 22 : Schiebs\_7
- Track 23 : Sephiroth\_36, Syleon\_36, Kudefre\_35
- Track 24 : Octobien14\_37
- Track 25 : LilJank\_36, Trax\_36
- Track 26 : Neville\_36
- Track 27 : Rabbitrun\_38
- Track 28 : Scotia\_27
- Track 29 : NoSwimming\_27
- Track 30 : TurkishDelight\_36
- Track 31 : Chymera\_21

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

The start number called the most often in the published annotations is 31, it was called in 27 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT\_21, Austintatious\_22, AxeJC\_21, Bioscum\_22, Chymera\_21, Cumberbatch\_21, DaRealMyers\_23, Darolandstone\_23, Eastland\_21, Eklok\_21, FrumpyGal\_21, HFrancette\_21, Ididsumtinwong\_22, Ignacio\_21, Lishka\_22, Mojorita\_22, PapayaSalad\_22, Picard\_22, Piccadilly\_21, Raleigh\_23, SV1\_22, Schlegelian\_21, SoJo\_23, ToastyFinz\_22, Tubberson\_23, TurkishDelight\_36, Vondra\_21, Yara\_26,

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

- 

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

- AbbeyMikolon\_23, Dryad\_32, Gibson\_29, Greenbelt\_28, Kudfre\_35, LilJank\_36, Lizz\_29, Nesbitt\_23, Neville\_36, NoSwimming\_27, Octobien14\_37, PHTowN\_29, Rabbitrun\_38, Rooney\_29, SassyC\_31, Schiebs\_7, Schmidt\_22, Scotia\_27, Sephiroth\_36, ShakeNBake\_29, Syleon\_36, Trax\_36, Virizion\_33, Wentworth\_30, Wilkos\_30,

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

Start 23:

- Found in 2 of 53 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoSwimming\_27 (FO), Scotia\_27 (FO),

Start 27:

- Found in 5 of 53 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Octobien14\_37 (DU1), Schmidt\_22 (CU4),

Start 28:

- Found in 23 of 53 ( 43.4% ) of genes in pham
- Manual Annotations of this start: 9 of 48
- Called 52.2% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon\_23 (BL), Dryad\_32 (BN), Gibson\_29 (BN), Lizz\_29 (BN), Nesbitt\_23 (BL), PHTowN\_29 (BN), Rooney\_29 (BN), SassyC\_31 (BN), ShakeNBake\_29 (BN), Virizion\_33 (BN), Wentworth\_30 (BN), Wilkos\_30 (BN),

Start 29:

- Found in 4 of 53 ( 7.5% ) of genes in pham

- Manual Annotations of this start: 3 of 48
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Kudrefre\_35 (DU1), Sephiroth\_36 (DU1), Syleon\_36 (DU1),

Start 30:

- Found in 1 of 53 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greenbelt\_28 (BN),

Start 31:

- Found in 28 of 53 ( 52.8% ) of genes in pham
- Manual Annotations of this start: 27 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_21 (BP), Austintatious\_22 (BC3), AxeJC\_21 (BP), Bioscum\_22 (BC3), Chymera\_21 (singleton), Cumberbatch\_21 (BP), DaRealMyers\_23 (BC1), Darolandstone\_23 (BC2), Eastland\_21 (BP), Eklok\_21 (BP), FrumpyGal\_21 (BP), HFrancette\_21 (BP), Ididsumtinwong\_22 (BC3), Ignacio\_21 (BP), Lishka\_22 (BC3), Mojorita\_22 (BC1), PapayaSalad\_22 (BC3), Picard\_22 (BC1), Piccadilly\_21 (BP), Raleigh\_23 (BC2), SV1\_22 (BC1), Schlegelian\_21 (BP), SoJo\_23 (BC1), ToastyFinz\_22 (BC1), Tubberson\_23 (BC1), TurkishDelight\_36 (singleton), Vondra\_21 (BP), Yara\_26 (BN),

Start 32:

- Found in 5 of 53 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 60.0% of time when present
- Phage (with cluster) where this start called: LilJank\_36 (DU2), Rabbitrun\_38 (DU2), Trax\_36 (DU2),

Start 37:

- Found in 6 of 53 ( 11.3% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Neville\_36 (DU2),

Start 38:

- Found in 1 of 53 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schiebs\_7 (CW3),

### **Summary by clusters:**

There are 12 clusters represented in this pham: singleton, CU4, BL, BN, CW3, BP, DU1, DU2, FO, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 31 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 31 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 31 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BL:

- Start number 28 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster BN:

- Start number 28 was manually annotated 7 times for cluster BN.
- Start number 30 was manually annotated 1 time for cluster BN.
- Start number 31 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BP:

- Start number 31 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster CU4:

- Start number 27 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CW3:

- Start number 38 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DU1:

- Start number 27 was manually annotated 1 time for cluster DU1.
- Start number 29 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 32 was manually annotated 2 times for cluster DU2.
- Start number 37 was manually annotated 1 time for cluster DU2.

Info for manual annotations of cluster FO:

- Start number 23 was manually annotated 2 times for cluster FO.

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

Gene: AbbeyMikolon\_23 Start: 18386, Stop: 18598, Start Num: 28

Candidate Starts for AbbeyMikolon\_23:

(Start: 28 @18386 has 9 MA's), (42, 18452), (44, 18464), (54, 18530), (56, 18542), (58, 18557),

Gene: ArizonaGT\_21 Start: 17942, Stop: 18202, Start Num: 31

Candidate Starts for ArizonaGT\_21:

(2, 17210), (6, 17399), (9, 17477), (12, 17525), (14, 17612), (21, 17897), (Start: 28 @17936 has 9 MA's), (Start: 31 @17942 has 27 MA's), (39, 17996), (41, 18005), (56, 18122),

Gene: Austintatious\_22 Start: 17098, Stop: 17331, Start Num: 31

Candidate Starts for Austintatious\_22:

(Start: 31 @17098 has 27 MA's), (35, 17131), (56, 17254),

Gene: AxeJC\_21 Start: 17926, Stop: 18183, Start Num: 31

Candidate Starts for AxeJC\_21:

(2, 17209), (6, 17398), (9, 17476), (12, 17524), (21, 17881), (Start: 28 @17920 has 9 MA's), (Start: 31 @17926 has 27 MA's), (39, 17980), (41, 17989), (56, 18106),

Gene: Bioscum\_22 Start: 17134, Stop: 17367, Start Num: 31

Candidate Starts for Bioscum\_22:

(Start: 31 @17134 has 27 MA's), (35, 17167), (56, 17290),

Gene: Chymera\_21 Start: 17166, Stop: 17393, Start Num: 31

Candidate Starts for Chymera\_21:

(Start: 31 @17166 has 27 MA's), (55, 17319), (56, 17322), (58, 17337),

Gene: Cumberbatch\_21 Start: 17942, Stop: 18202, Start Num: 31

Candidate Starts for Cumberbatch\_21:

(2, 17210), (6, 17399), (9, 17477), (12, 17525), (14, 17612), (21, 17897), (Start: 28 @17936 has 9 MA's), (Start: 31 @17942 has 27 MA's), (39, 17996), (41, 18005), (56, 18122),

Gene: DaRealMyers\_23 Start: 19333, Stop: 19587, Start Num: 31

Candidate Starts for DaRealMyers\_23:

(Start: 31 @19333 has 27 MA's), (52, 19471), (54, 19498), (56, 19510),

Gene: Darolandstone\_23 Start: 19517, Stop: 19762, Start Num: 31

Candidate Starts for Darolandstone\_23:

(16, 19388), (Start: 31 @19517 has 27 MA's), (44, 19595), (46, 19610), (56, 19673),

Gene: Dryad\_32 Start: 21653, Stop: 21880, Start Num: 28

Candidate Starts for Dryad\_32:

(Start: 28 @21653 has 9 MA's), (47, 21758), (54, 21797), (56, 21809), (59, 21836),

Gene: Eastland\_21 Start: 17911, Stop: 18168, Start Num: 31

Candidate Starts for Eastland\_21:

(2, 17194), (6, 17383), (9, 17461), (12, 17509), (21, 17866), (Start: 28 @17905 has 9 MA's), (Start: 31 @17911 has 27 MA's), (39, 17965), (41, 17974), (56, 18091),

Gene: Eklok\_21 Start: 17926, Stop: 18183, Start Num: 31

Candidate Starts for Eklok\_21:

(2, 17209), (6, 17398), (9, 17476), (12, 17524), (21, 17881), (Start: 28 @17920 has 9 MA's), (Start: 31 @17926 has 27 MA's), (39, 17980), (41, 17989), (56, 18106),

Gene: FrumpyGal\_21 Start: 17911, Stop: 18168, Start Num: 31

Candidate Starts for FrumpyGal\_21:

(2, 17194), (6, 17383), (9, 17461), (12, 17509), (21, 17866), (Start: 28 @17905 has 9 MA's), (Start: 31 @17911 has 27 MA's), (39, 17965), (41, 17974), (56, 18091),

Gene: Gibson\_29 Start: 20816, Stop: 21049, Start Num: 28

Candidate Starts for Gibson\_29:

(Start: 28 @20816 has 9 MA's), (53, 20957), (54, 20969), (56, 20981), (59, 21008),

Gene: Greenbelt\_28 Start: 20069, Stop: 20296, Start Num: 30

Candidate Starts for Greenbelt\_28:

(4, 19364), (7, 19559), (11, 19652), (13, 19685), (17, 19937), (20, 20012), (22, 20030), (Start: 30 @20069 has 1 MA's), (44, 20153), (48, 20189), (56, 20231), (58, 20246),

Gene: HFrancette\_21 Start: 17957, Stop: 18214, Start Num: 31

Candidate Starts for HFrancette\_21:

(2, 17225), (6, 17414), (9, 17492), (12, 17540), (14, 17627), (21, 17912), (Start: 28 @17951 has 9 MA's), (Start: 31 @17957 has 27 MA's), (39, 18011), (41, 18020), (56, 18137),

Gene: Ididsumtinwong\_22 Start: 17134, Stop: 17367, Start Num: 31

Candidate Starts for Ididsumtinwong\_22:

(Start: 31 @17134 has 27 MA's), (35, 17167), (56, 17290),

Gene: Ignacio\_21 Start: 17957, Stop: 18214, Start Num: 31

Candidate Starts for Ignacio\_21:

(2, 17225), (6, 17414), (9, 17492), (12, 17540), (14, 17627), (21, 17912), (Start: 28 @17951 has 9 MA's), (Start: 31 @17957 has 27 MA's), (39, 18011), (41, 18020), (56, 18137),

Gene: Kudrefre\_35 Start: 29727, Stop: 29957, Start Num: 29

Candidate Starts for Kudrefre\_35:

(Start: 27 @29724 has 2 MA's), (Start: 29 @29727 has 3 MA's), (35, 29772), (36, 29784), (39, 29793), (45, 29820), (48, 29853), (49, 29859), (51, 29865), (55, 29892), (56, 29895), (57, 29907), (60, 29934), (61, 29943),

Gene: LilJank\_36 Start: 31388, Stop: 31618, Start Num: 32

Candidate Starts for LilJank\_36:

(Start: 32 @31388 has 2 MA's), (Start: 37 @31436 has 1 MA's), (55, 31541), (56, 31544), (58, 31559), (59, 31571),

Gene: Lishka\_22 Start: 17098, Stop: 17331, Start Num: 31

Candidate Starts for Lishka\_22:

(Start: 31 @17098 has 27 MA's), (35, 17131), (56, 17254),

Gene: Lizz\_29 Start: 20625, Stop: 20858, Start Num: 28

Candidate Starts for Lizz\_29:

(Start: 28 @20625 has 9 MA's), (53, 20766), (54, 20778), (56, 20790), (59, 20817),

Gene: Mojorita\_22 Start: 17147, Stop: 17407, Start Num: 31

Candidate Starts for Mojorita\_22:

(19, 17030), (Start: 31 @17147 has 27 MA's), (42, 17213), (56, 17327),

Gene: Nesbitt\_23 Start: 18458, Stop: 18670, Start Num: 28

Candidate Starts for Nesbitt\_23:

(Start: 28 @18458 has 9 MA's), (42, 18524), (44, 18536), (54, 18602), (56, 18614), (58, 18629),

Gene: Neville\_36 Start: 31076, Stop: 31258, Start Num: 37

Candidate Starts for Neville\_36:

(Start: 32 @31028 has 2 MA's), (Start: 37 @31076 has 1 MA's), (55, 31181), (56, 31184), (58, 31199), (59, 31211),

Gene: NoSwimming\_27 Start: 24543, Stop: 24818, Start Num: 23

Candidate Starts for NoSwimming\_27:

(Start: 23 @24543 has 2 MA's), (25, 24549), (47, 24687), (56, 24738),

Gene: Octobien14\_37 Start: 30411, Stop: 30644, Start Num: 27

Candidate Starts for Octobien14\_37:

(Start: 27 @30411 has 2 MA's), (Start: 29 @30414 has 3 MA's), (35, 30459), (36, 30471), (39, 30480), (42, 30492), (45, 30507), (48, 30540), (49, 30546), (51, 30552), (55, 30579), (56, 30582), (57, 30594), (60, 30621), (61, 30630),

Gene: PHTown\_29 Start: 20623, Stop: 20856, Start Num: 28

Candidate Starts for PHTown\_29:

(Start: 28 @20623 has 9 MA's), (53, 20764), (54, 20776), (56, 20788), (59, 20815),

Gene: PapayaSalad\_22 Start: 17109, Stop: 17342, Start Num: 31

Candidate Starts for PapayaSalad\_22:

(Start: 31 @17109 has 27 MA's), (35, 17142), (56, 17265),

Gene: Picard\_22 Start: 17138, Stop: 17398, Start Num: 31

Candidate Starts for Picard\_22:

(19, 17024), (Start: 31 @17138 has 27 MA's), (42, 17204), (56, 17318),

Gene: Piccadilly\_21 Start: 17910, Stop: 18167, Start Num: 31

Candidate Starts for Piccadilly\_21:

(2, 17193), (6, 17382), (9, 17460), (12, 17508), (21, 17865), (Start: 28 @17904 has 9 MA's), (Start: 31 @17910 has 27 MA's), (39, 17964), (41, 17973), (56, 18090),

Gene: Rabbitrun\_38 Start: 31471, Stop: 31689, Start Num: 32

Candidate Starts for Rabbitrun\_38:

(Start: 32 @31471 has 2 MA's), (Start: 37 @31519 has 1 MA's), (45, 31552), (48, 31585), (49, 31591), (51, 31597), (53, 31603), (54, 31615), (55, 31624), (56, 31627), (58, 31642), (59, 31654), (60, 31666),

Gene: Raleigh\_23 Start: 19748, Stop: 19987, Start Num: 31

Candidate Starts for Raleigh\_23:

(Start: 31 @19748 has 27 MA's), (44, 19826), (46, 19841), (56, 19904),

Gene: Rooney\_29 Start: 20813, Stop: 21046, Start Num: 28

Candidate Starts for Rooney\_29:

(Start: 28 @20813 has 9 MA's), (53, 20954), (54, 20966), (56, 20978), (59, 21005),

Gene: SV1\_22 Start: 17352, Stop: 17588, Start Num: 31

Candidate Starts for SV1\_22:

(Start: 31 @17352 has 27 MA's), (56, 17508),

Gene: SassyC\_31 Start: 20941, Stop: 21174, Start Num: 28

Candidate Starts for SassyC\_31:

(1, 20191), (3, 20227), (7, 20431), (8, 20464), (9, 20479), (10, 20494), (Start: 28 @20941 has 9 MA's), (Start: 37 @20995 has 1 MA's), (50, 21070), (53, 21079), (56, 21103), (59, 21130),

Gene: Schiebs\_7 Start: 3981, Stop: 4202, Start Num: 38

Candidate Starts for Schiebs\_7:

(18, 3801), (26, 3912), (Start: 38 @3981 has 1 MA's), (48, 4053), (53, 4071), (54, 4083),

Gene: Schlegelian\_21 Start: 17946, Stop: 18206, Start Num: 31

Candidate Starts for Schlegelian\_21:

(2, 17208), (5, 17391), (6, 17397), (7, 17427), (9, 17475), (12, 17523), (14, 17610), (21, 17901), (Start: 28 @17940 has 9 MA's), (Start: 31 @17946 has 27 MA's), (39, 18000), (41, 18009), (56, 18126),

Gene: Schmidt\_22 Start: 17098, Stop: 17373, Start Num: 27

Candidate Starts for Schmidt\_22:

(24, 17077), (Start: 27 @17098 has 2 MA's), (Start: 32 @17113 has 2 MA's), (35, 17146), (42, 17179), (43, 17188), (47, 17218), (52, 17239), (54, 17254), (55, 17263),

Gene: Scotia\_27 Start: 24546, Stop: 24821, Start Num: 23

Candidate Starts for Scotia\_27:

(Start: 23 @24546 has 2 MA's), (25, 24552), (56, 24741),

Gene: Sephiroth\_36 Start: 29898, Stop: 30128, Start Num: 29

Candidate Starts for Sephiroth\_36:

(Start: 27 @29895 has 2 MA's), (Start: 29 @29898 has 3 MA's), (35, 29943), (36, 29955), (39, 29964), (45, 29991), (48, 30024), (49, 30030), (51, 30036), (55, 30063), (56, 30066), (57, 30078), (60, 30105), (61, 30114),

Gene: ShakeNBake\_29 Start: 20641, Stop: 20874, Start Num: 28

Candidate Starts for ShakeNBake\_29:

(Start: 28 @20641 has 9 MA's), (53, 20782), (54, 20794), (56, 20806), (59, 20833),

Gene: SoJo\_23 Start: 19328, Stop: 19582, Start Num: 31

Candidate Starts for SoJo\_23:

(Start: 31 @19328 has 27 MA's), (52, 19466), (54, 19493), (56, 19505),

Gene: Syleon\_36 Start: 29820, Stop: 30050, Start Num: 29

Candidate Starts for Syleon\_36:

(Start: 27 @29817 has 2 MA's), (Start: 29 @29820 has 3 MA's), (35, 29865), (36, 29877), (39, 29886), (45, 29913), (48, 29946), (49, 29952), (51, 29958), (55, 29985), (56, 29988), (57, 30000), (60, 30027), (61, 30036),

Gene: ToastyFinz\_22 Start: 19068, Stop: 19331, Start Num: 31

Candidate Starts for ToastyFinz\_22:

(Start: 31 @19068 has 27 MA's), (42, 19134), (56, 19248),

Gene: Trax\_36 Start: 31334, Stop: 31564, Start Num: 32

Candidate Starts for Trax\_36:

(Start: 32 @31334 has 2 MA's), (Start: 37 @31382 has 1 MA's), (55, 31487), (56, 31490), (58, 31505), (59, 31517),

Gene: Tubberson\_23 Start: 19333, Stop: 19587, Start Num: 31

Candidate Starts for Tubberson\_23:

(Start: 31 @19333 has 27 MA's), (52, 19471), (54, 19498), (56, 19510),

Gene: TurkishDelight\_36 Start: 34260, Stop: 34487, Start Num: 31

Candidate Starts for TurkishDelight\_36:

(Start: 31 @34260 has 27 MA's), (55, 34413), (56, 34416),

Gene: Virizion\_33 Start: 21012, Stop: 21245, Start Num: 28

Candidate Starts for Virizion\_33:

(Start: 28 @21012 has 9 MA's), (53, 21153), (54, 21165), (56, 21177), (59, 21204),

Gene: Vondra\_21 Start: 17962, Stop: 18219, Start Num: 31

Candidate Starts for Vondra\_21:

(2, 17224), (6, 17413), (9, 17491), (12, 17539), (14, 17626), (21, 17917), (Start: 28 @17956 has 9 MA's), (Start: 31 @17962 has 27 MA's), (39, 18016), (41, 18025), (56, 18142),

Gene: Wentworth\_30 Start: 20992, Stop: 21219, Start Num: 28

Candidate Starts for Wentworth\_30:

(Start: 28 @20992 has 9 MA's), (33, 21013), (34, 21016), (36, 21040), (41, 21058), (53, 21127), (56, 21151), (57, 21163), (59, 21178),

Gene: Wilkos\_30 Start: 20904, Stop: 21131, Start Num: 28

Candidate Starts for Wilkos\_30:

(Start: 28 @20904 has 9 MA's), (35, 20940), (Start: 37 @20955 has 1 MA's), (40, 20967), (41, 20970), (56, 21063), (59, 21090),

Gene: Yara\_26 Start: 20240, Stop: 20461, Start Num: 31

Candidate Starts for Yara\_26:

(15, 20069), (Start: 31 @20240 has 27 MA's), (46, 20336), (56, 20399),