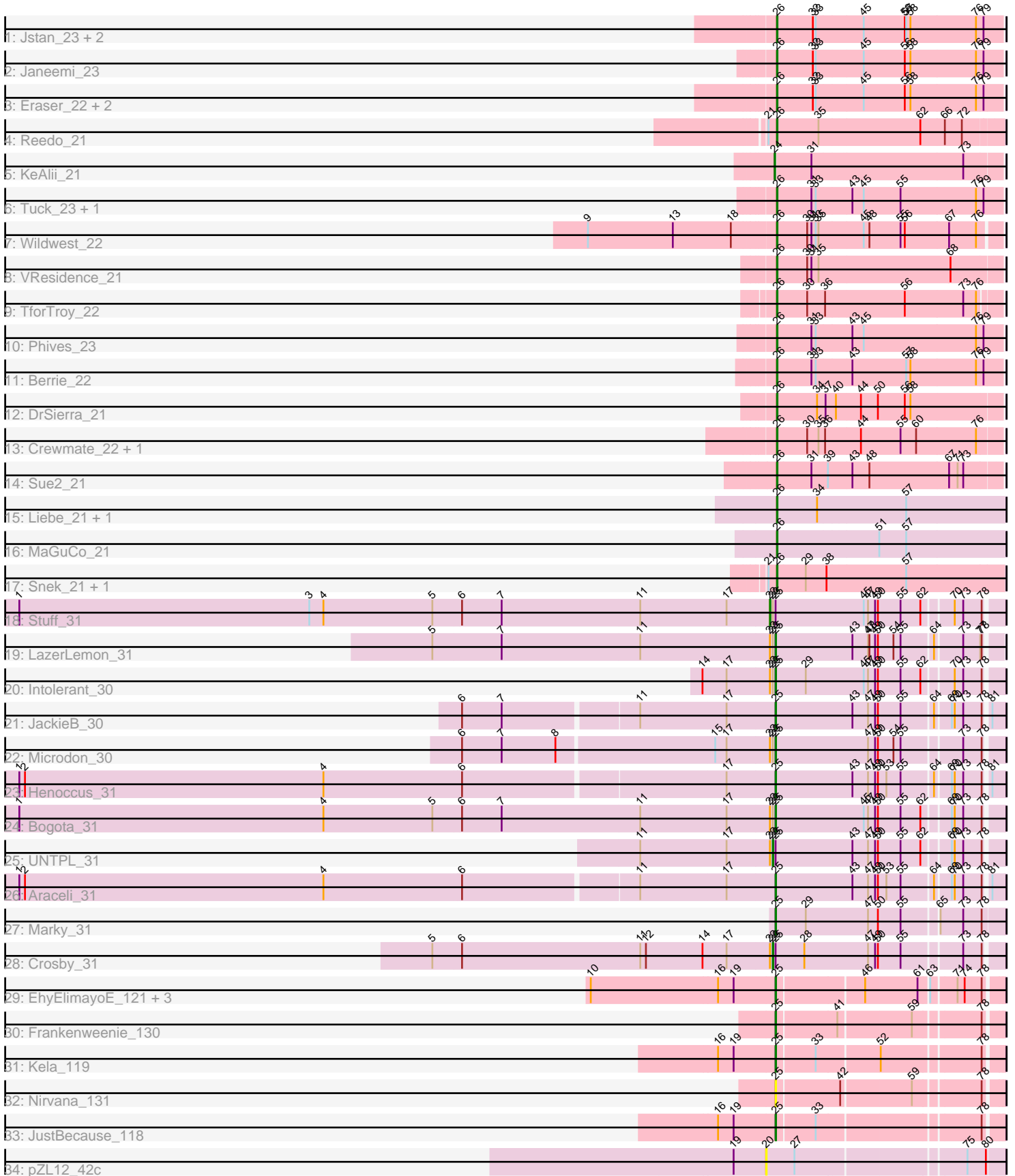


# Pham 203055



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 203055 Report

This analysis was run 01/18/25 on database version 583.

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 203055 has 45 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Jstan\_23, Asa16\_22, Niobe\_22
- Track 2 : Janeemi\_23
- Track 3 : Eraser\_22, Elezi\_22, London\_22
- Track 4 : Reedo\_21
- Track 5 : KeAlii\_21
- Track 6 : Tuck\_23, Community\_22
- Track 7 : Wildwest\_22
- Track 8 : VResidence\_21
- Track 9 : TforTroy\_22
- Track 10 : Phives\_23
- Track 11 : Berrie\_22
- Track 12 : DrSierra\_21
- Track 13 : Crewmate\_22, ObiToo\_21
- Track 14 : Sue2\_21
- Track 15 : Liebe\_21, Maureen\_21
- Track 16 : MaGuCo\_21
- Track 17 : Snek\_21, Tweety19\_21
- Track 18 : Stuff\_31
- Track 19 : LazerLemon\_31
- Track 20 : Intolerant\_30
- Track 21 : JackieB\_30
- Track 22 : Microdon\_30
- Track 23 : Henoccus\_31
- Track 24 : Bogota\_31
- Track 25 : UNTPL\_31
- Track 26 : Araceli\_31
- Track 27 : Marky\_31
- Track 28 : Crosby\_31
- Track 29 : EhyElimayoE\_121, Kradal\_120, Quantum\_119, Satis\_120
- Track 30 : Frankenweenie\_130
- Track 31 : Kela\_119
- Track 32 : Nirvana\_131
- Track 33 : JustBecause\_118

- Track 34 : pZL12\_42c

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

The start number called the most often in the published annotations is 26, it was called in 22 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Asa16\_22, Berrie\_22, Community\_22, Crewmate\_22, DrSierra\_21, Elezi\_22, Eraser\_22, Janeemi\_23, Jstan\_23, Liebe\_21, London\_22, MaGuCo\_21, Maureen\_21, Niobe\_22, ObiToo\_21, Phives\_23, Reedo\_21, Snek\_21, Sue2\_21, TforTroy\_22, Tuck\_23, Tweety19\_21, VResidence\_21, Wildwest\_22,

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

- 

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

- Araceli\_31, Bogota\_31, Crosby\_31, EhyElimayoE\_121, Frankenweenie\_130, Henoccus\_31, Intolerant\_30, JackieB\_30, JustBecause\_118, KeAlii\_21, Kela\_119, Kradal\_120, LazerLemon\_31, Marky\_31, Microdon\_30, Nirvana\_131, Quantum\_119, Satis\_120, Stuff\_31, UNTPL\_31, pZL12\_42c,

**Summary by start number:**

Start 20:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: pZL12\_42c (singleton),

Start 22:

- Found in 7 of 45 ( 15.6% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Stuff\_31 (BH),

Start 23:

- Found in 7 of 45 ( 15.6% ) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Crosby\_31 (BH), UNTPL\_31 (BH),

Start 24:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KeAlii\_21 (AZ1),

Start 25:

- Found in 19 of 45 ( 42.2% ) of genes in pham

- Manual Annotations of this start: 15 of 41
- Called 84.2% of time when present
- Phage (with cluster) where this start called: Araceli\_31 (BH), Bogota\_31 (BH), EhyElimayoE\_121 (BM), Frankenweenie\_130 (BM), Henoccus\_31 (BH), Intolerant\_30 (BH), JackieB\_30 (BH), JustBecause\_118 (BM), Kela\_119 (BM), Kradal\_120 (BM), LazerLemon\_31 (BH), Marky\_31 (BH), Microdon\_30 (BH), Nirvana\_131 (BM), Quantum\_119 (BM), Satis\_120 (BM),

Start 26:

- Found in 24 of 45 ( 53.3% ) of genes in pham
- Manual Annotations of this start: 22 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asa16\_22 (AZ1), Berrie\_22 (AZ1), Community\_22 (AZ1), Crewmate\_22 (AZ1), DrSierra\_21 (AZ1), Elezi\_22 (AZ1), Eraser\_22 (AZ1), Janeemi\_23 (AZ1), Jstan\_23 (AZ1), Liebe\_21 (AZ2), London\_22 (AZ1), MaGuCo\_21 (AZ2), Maureen\_21 (AZ2), Niobe\_22 (AZ1), ObiToo\_21 (AZ1), Phives\_23 (AZ1), Reedo\_21 (AZ1), Sneak\_21 (AZ3), Sue2\_21 (AZ1), TforTroy\_22 (AZ1), Tuck\_23 (AZ1), Tweety19\_21 (AZ3), VResidence\_21 (AZ1), Wildwest\_22 (AZ1),

### **Summary by clusters:**

There are 6 clusters represented in this pham: singleton, BM, BH, AZ1, AZ2, AZ3,

Info for manual annotations of cluster AZ1:

- Start number 24 was manually annotated 1 time for cluster AZ1.
- Start number 26 was manually annotated 17 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 26 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 26 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster BH:

- Start number 22 was manually annotated 1 time for cluster BH.
- Start number 23 was manually annotated 2 times for cluster BH.
- Start number 25 was manually annotated 8 times for cluster BH.

Info for manual annotations of cluster BM:

- Start number 25 was manually annotated 7 times for cluster BM.

### **Gene Information:**

Gene: Araceli\_31 Start: 26097, Stop: 26549, Start Num: 25

Candidate Starts for Araceli\_31:

(1, 24528), (2, 24540), (4, 25173), (6, 25461), (11, 25818), (17, 25998), (Start: 25 @26097 has 15 MA's), (43, 26259), (47, 26292), (49, 26307), (50, 26313), (53, 26328), (55, 26358), (64, 26421), (69, 26451), (70, 26457), (73, 26475), (78, 26514), (81, 26523),

Gene: Asa16\_22 Start: 19280, Stop: 19747, Start Num: 26

Candidate Starts for Asa16\_22:

(Start: 26 @19280 has 22 MA's), (32, 19355), (33, 19361), (45, 19457), (56, 19544), (57, 19547), (58, 19556), (76, 19694), (79, 19709),

Gene: Berrie\_22 Start: 19835, Stop: 20302, Start Num: 26

Candidate Starts for Berrie\_22:

(Start: 26 @19835 has 22 MA's), (31, 19907), (33, 19916), (43, 19988), (57, 20102), (58, 20111), (76, 20249), (79, 20264),

Gene: Bogota\_31 Start: 26235, Stop: 26687, Start Num: 25

Candidate Starts for Bogota\_31:

(1, 24645), (4, 25290), (5, 25521), (6, 25578), (7, 25662), (11, 25953), (17, 26136), (Start: 22 @26226 has 1 MA's), (Start: 23 @26232 has 2 MA's), (Start: 25 @26235 has 15 MA's), (45, 26421), (47, 26430), (49, 26445), (50, 26451), (55, 26496), (62, 26538), (69, 26589), (70, 26595), (73, 26613), (78, 26652),

Gene: Community\_22 Start: 20920, Stop: 21387, Start Num: 26

Candidate Starts for Community\_22:

(Start: 26 @20920 has 22 MA's), (31, 20992), (33, 21001), (43, 21073), (45, 21097), (55, 21175), (76, 21334), (79, 21349),

Gene: Crewmate\_22 Start: 17739, Stop: 18200, Start Num: 26

Candidate Starts for Crewmate\_22:

(Start: 26 @17739 has 22 MA's), (30, 17802), (35, 17826), (36, 17838), (44, 17907), (55, 17991), (60, 18024), (76, 18150),

Gene: Crosby\_31 Start: 26221, Stop: 26676, Start Num: 23

Candidate Starts for Crosby\_31:

(5, 25510), (6, 25570), (11, 25942), (12, 25954), (14, 26074), (17, 26125), (Start: 22 @26215 has 1 MA's), (Start: 23 @26221 has 2 MA's), (Start: 25 @26224 has 15 MA's), (28, 26284), (47, 26419), (49, 26434), (50, 26440), (55, 26485), (73, 26602), (78, 26641),

Gene: DrSierra\_21 Start: 17797, Stop: 18261, Start Num: 26

Candidate Starts for DrSierra\_21:

(Start: 26 @17797 has 22 MA's), (34, 17881), (37, 17899), (40, 17917), (44, 17968), (50, 18004), (56, 18061), (58, 18073),

Gene: EhyElimayoE\_121 Start: 79011, Stop: 79445, Start Num: 25

Candidate Starts for EhyElimayoE\_121:

(10, 78627), (16, 78894), (19, 78927), (Start: 25 @79011 has 15 MA's), (46, 79185), (61, 79293), (63, 79311), (71, 79359), (74, 79374), (78, 79410),

Gene: Elezi\_22 Start: 19281, Stop: 19748, Start Num: 26

Candidate Starts for Elezi\_22:

(Start: 26 @19281 has 22 MA's), (32, 19356), (33, 19362), (45, 19458), (56, 19545), (58, 19557), (76, 19695), (79, 19710),

Gene: Eraser\_22 Start: 19281, Stop: 19748, Start Num: 26

Candidate Starts for Eraser\_22:

(Start: 26 @19281 has 22 MA's), (32, 19356), (33, 19362), (45, 19458), (56, 19545), (58, 19557), (76, 19695), (79, 19710),

Gene: Frankenweenie\_130 Start: 83927, Stop: 84361, Start Num: 25

Candidate Starts for Frankenweenie\_130:

(Start: 25 @83927 has 15 MA's), (41, 84050), (59, 84197), (78, 84326),

Gene: Henococcus\_31 Start: 26107, Stop: 26559, Start Num: 25

Candidate Starts for Henococcus\_31:

(1, 24538), (2, 24550), (4, 25183), (6, 25471), (17, 26008), (Start: 25 @26107 has 15 MA's), (43, 26269), (47, 26302), (49, 26317), (50, 26323), (53, 26338), (55, 26368), (64, 26431), (69, 26461), (70, 26467), (73, 26485), (78, 26524), (81, 26533),

Gene: Intolerant\_30 Start: 26098, Stop: 26550, Start Num: 25

Candidate Starts for Intolerant\_30:

(14, 25948), (17, 25999), (Start: 22 @26089 has 1 MA's), (Start: 23 @26095 has 2 MA's), (Start: 25 @26098 has 15 MA's), (29, 26161), (45, 26284), (47, 26293), (49, 26308), (50, 26314), (55, 26359), (62, 26401), (70, 26458), (73, 26476), (78, 26515),

Gene: JackieB\_30 Start: 25962, Stop: 26414, Start Num: 25

Candidate Starts for JackieB\_30:

(6, 25326), (7, 25410), (11, 25683), (17, 25863), (Start: 25 @25962 has 15 MA's), (43, 26124), (47, 26157), (49, 26172), (50, 26178), (55, 26223), (64, 26286), (69, 26316), (70, 26322), (73, 26340), (78, 26379), (81, 26388),

Gene: Janeemi\_23 Start: 20928, Stop: 21395, Start Num: 26

Candidate Starts for Janeemi\_23:

(Start: 26 @20928 has 22 MA's), (32, 21003), (33, 21009), (45, 21105), (56, 21192), (58, 21204), (76, 21342), (79, 21357),

Gene: Jstan\_23 Start: 19281, Stop: 19748, Start Num: 26

Candidate Starts for Jstan\_23:

(Start: 26 @19281 has 22 MA's), (32, 19356), (33, 19362), (45, 19458), (56, 19545), (57, 19548), (58, 19557), (76, 19695), (79, 19710),

Gene: JustBecause\_118 Start: 78079, Stop: 78513, Start Num: 25

Candidate Starts for JustBecause\_118:

(16, 77962), (19, 77995), (Start: 25 @78079 has 15 MA's), (33, 78157), (78, 78478),

Gene: KeAlii\_21 Start: 17311, Stop: 17772, Start Num: 24

Candidate Starts for KeAlii\_21:

(Start: 24 @17311 has 1 MA's), (31, 17383), (73, 17695),

Gene: Kela\_119 Start: 77959, Stop: 78393, Start Num: 25

Candidate Starts for Kela\_119:

(16, 77842), (19, 77875), (Start: 25 @77959 has 15 MA's), (33, 78037), (52, 78163), (78, 78358),

Gene: Kradal\_120 Start: 79008, Stop: 79442, Start Num: 25

Candidate Starts for Kradal\_120:

(10, 78624), (16, 78891), (19, 78924), (Start: 25 @79008 has 15 MA's), (46, 79182), (61, 79290), (63, 79308), (71, 79356), (74, 79371), (78, 79407),

Gene: LazerLemon\_31 Start: 26614, Stop: 27063, Start Num: 25

Candidate Starts for LazerLemon\_31:

(5, 25897), (7, 26041), (11, 26332), (Start: 22 @26605 has 1 MA's), (Start: 23 @26611 has 2 MA's), (Start: 25 @26614 has 15 MA's), (43, 26776), (47, 26809), (48, 26812), (49, 26824), (50, 26830), (54, 26860), (55, 26875), (64, 26938), (73, 26992), (77, 27028), (78, 27031),

Gene: Liebe\_21 Start: 18736, Stop: 19206, Start Num: 26

Candidate Starts for Liebe\_21:

(Start: 26 @18736 has 22 MA's), (34, 18820), (57, 19000),

Gene: London\_22 Start: 19281, Stop: 19748, Start Num: 26

Candidate Starts for London\_22:

(Start: 26 @19281 has 22 MA's), (32, 19356), (33, 19362), (45, 19458), (56, 19545), (58, 19557), (76, 19695), (79, 19710),

Gene: MaGuCo\_21 Start: 18669, Stop: 19139, Start Num: 26

Candidate Starts for MaGuCo\_21:

(Start: 26 @18669 has 22 MA's), (51, 18876), (57, 18933),

Gene: Marky\_31 Start: 25965, Stop: 26429, Start Num: 25

Candidate Starts for Marky\_31:

(Start: 25 @25965 has 15 MA's), (29, 26028), (47, 26160), (50, 26181), (55, 26226), (65, 26295), (73, 26343), (78, 26382),

Gene: Maureen\_21 Start: 18736, Stop: 19206, Start Num: 26

Candidate Starts for Maureen\_21:

(Start: 26 @18736 has 22 MA's), (34, 18820), (57, 19000),

Gene: Microdon\_30 Start: 25921, Stop: 26373, Start Num: 25

Candidate Starts for Microdon\_30:

(6, 25276), (7, 25360), (8, 25474), (15, 25798), (17, 25822), (Start: 22 @25912 has 1 MA's), (Start: 23 @25918 has 2 MA's), (Start: 25 @25921 has 15 MA's), (47, 26116), (49, 26131), (50, 26137), (54, 26167), (55, 26182), (73, 26299), (78, 26338),

Gene: Niobe\_22 Start: 19281, Stop: 19748, Start Num: 26

Candidate Starts for Niobe\_22:

(Start: 26 @19281 has 22 MA's), (32, 19356), (33, 19362), (45, 19458), (56, 19545), (57, 19548), (58, 19557), (76, 19695), (79, 19710),

Gene: Nirvana\_131 Start: 82324, Stop: 82758, Start Num: 25

Candidate Starts for Nirvana\_131:

(Start: 25 @82324 has 15 MA's), (42, 82453), (59, 82594), (78, 82723),

Gene: ObiToo\_21 Start: 17476, Stop: 17937, Start Num: 26

Candidate Starts for ObiToo\_21:

(Start: 26 @17476 has 22 MA's), (30, 17539), (35, 17563), (36, 17575), (44, 17644), (55, 17728), (60, 17761), (76, 17887),

Gene: Phives\_23 Start: 20757, Stop: 21224, Start Num: 26

Candidate Starts for Phives\_23:

(Start: 26 @20757 has 22 MA's), (31, 20829), (33, 20838), (43, 20910), (45, 20934), (76, 21171), (79, 21186),

Gene: Quantum\_119 Start: 79008, Stop: 79442, Start Num: 25

Candidate Starts for Quantum\_119:

(10, 78624), (16, 78891), (19, 78924), (Start: 25 @79008 has 15 MA's), (46, 79182), (61, 79290), (63, 79308), (71, 79356), (74, 79371), (78, 79407),

Gene: Reedo\_21 Start: 17318, Stop: 17776, Start Num: 26

Candidate Starts for Reedo\_21:

(21, 17300), (Start: 26 @17318 has 22 MA's), (35, 17405), (62, 17612), (66, 17663), (72, 17699),

Gene: Satis\_120 Start: 79004, Stop: 79438, Start Num: 25

Candidate Starts for Satis\_120:

(10, 78620), (16, 78887), (19, 78920), (Start: 25 @79004 has 15 MA's), (46, 79178), (61, 79286), (63, 79304), (71, 79352), (74, 79367), (78, 79403),

Gene: Snek\_21 Start: 16347, Stop: 16814, Start Num: 26

Candidate Starts for Snek\_21:

(21, 16329), (Start: 26 @16347 has 22 MA's), (29, 16407), (38, 16449), (57, 16611),

Gene: Stuff\_31 Start: 26387, Stop: 26848, Start Num: 22

Candidate Starts for Stuff\_31:

(1, 24806), (3, 25421), (4, 25451), (5, 25682), (6, 25739), (7, 25823), (11, 26114), (17, 26297), (Start: 22 @26387 has 1 MA's), (Start: 23 @26393 has 2 MA's), (Start: 25 @26396 has 15 MA's), (45, 26582), (47, 26591), (49, 26606), (50, 26612), (55, 26657), (62, 26699), (70, 26756), (73, 26774), (78, 26813),

Gene: Sue2\_21 Start: 17971, Stop: 18432, Start Num: 26

Candidate Starts for Sue2\_21:

(Start: 26 @17971 has 22 MA's), (31, 18043), (39, 18076), (43, 18124), (48, 18160), (67, 18328), (71, 18346), (73, 18358),

Gene: TforTroy\_22 Start: 19431, Stop: 19886, Start Num: 26

Candidate Starts for TforTroy\_22:

(Start: 26 @19431 has 22 MA's), (30, 19494), (36, 19530), (56, 19692), (73, 19815), (76, 19842),

Gene: Tuck\_23 Start: 20900, Stop: 21367, Start Num: 26

Candidate Starts for Tuck\_23:

(Start: 26 @20900 has 22 MA's), (31, 20972), (33, 20981), (43, 21053), (45, 21077), (55, 21155), (76, 21314), (79, 21329),

Gene: Tweety19\_21 Start: 16346, Stop: 16813, Start Num: 26

Candidate Starts for Tweety19\_21:

(21, 16328), (Start: 26 @16346 has 22 MA's), (29, 16406), (38, 16448), (57, 16610),

Gene: UNTPL\_31 Start: 26213, Stop: 26668, Start Num: 23

Candidate Starts for UNTPL\_31:

(11, 25934), (17, 26117), (Start: 22 @26207 has 1 MA's), (Start: 23 @26213 has 2 MA's), (Start: 25 @26216 has 15 MA's), (43, 26378), (47, 26411), (49, 26426), (50, 26432), (55, 26477), (62, 26519), (69, 26570), (70, 26576), (73, 26594), (78, 26633),

Gene: VResidence\_21 Start: 17376, Stop: 17837, Start Num: 26

Candidate Starts for VResidence\_21:

(Start: 26 @17376 has 22 MA's), (30, 17439), (31, 17448), (35, 17463), (68, 17736),

Gene: Wildwest\_22 Start: 18728, Stop: 19186, Start Num: 26

Candidate Starts for Wildwest\_22:

(9, 18344), (13, 18524), (18, 18647), (Start: 26 @18728 has 22 MA's), (30, 18791), (31, 18800), (33, 18809), (35, 18815), (45, 18905), (48, 18917), (55, 18983), (56, 18992), (67, 19085), (76, 19142),

Gene: pZL12\_42c Start: 31108, Stop: 30641, Start Num: 20



Candidate Starts for pZL12\_42c:

(19, 31177), (20, 31108), (27, 31048), (75, 30715), (80, 30676),