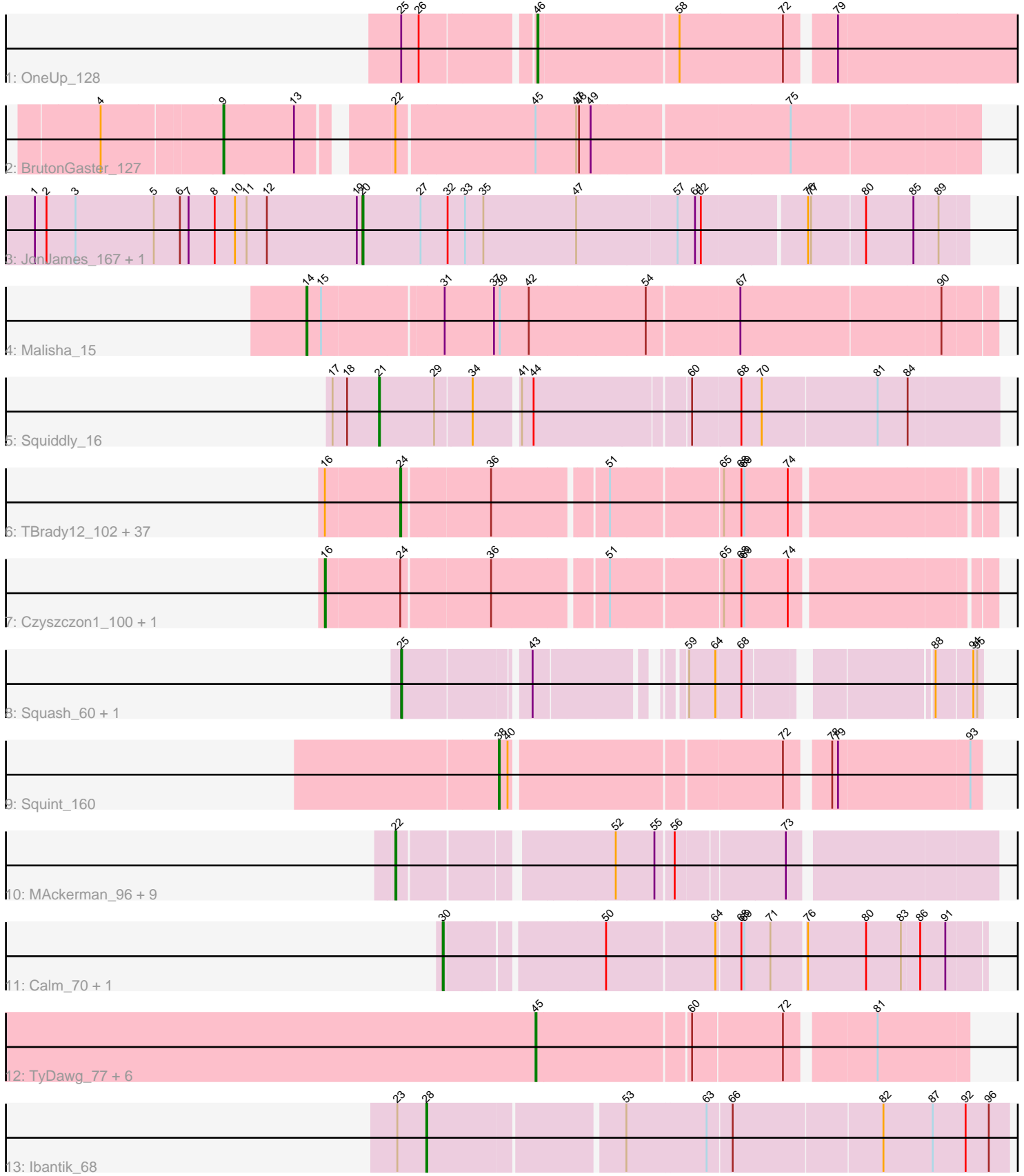


Pham 189736



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 189736 Report

This analysis was run 11/02/24 on database version 579.

Pham number 189736 has 69 members, 0 are drafts.

Phages represented in each track:

- Track 1 : OneUp_128
- Track 2 : BrutonGaster_127
- Track 3 : JonJames_167, Yvonnetastic_162
- Track 4 : Malisha_15
- Track 5 : Squiddly_16
- Track 6 : TBrady12_102, DoctorDiddles_98, Marshmallow_96, Inca_96, Kimchi_103, Command613_101, 244_100, Asriel_97, Phaja_97, Barbarian_98, BigBubba_99, Argent26_103, Stank_101, Holt_104, GooberAzure_102, Xandras_98, IHOP_97, Myrale_99, Gage_101, Harella_99, Nimrod_99, Balomoji_99, Easy2Say_99, GoldenSpark_103, Wiggin_101, xkcd_102, YassJohnny_96, Kostya_99, Icee_100, Rakim_100, Youngblood_102, AmericanBeauty_103, Gemini_104, Traaww1_95, Flypotenuse_95, Glexan_98, Bask21_99, Adnama_103
- Track 7 : Czyszczonek_100, Gator_97
- Track 8 : Squash_60, Blab_54
- Track 9 : Squint_160
- Track 10 : MAckerman_96, LeBron_96, UPIE_96, Tyson_99, Calm_99, AvadaKedavra_97, Acquire49_97, Wyatt2_98, Zaria_98, Halena_95
- Track 11 : Calm_70, Wamburgexpress_69
- Track 12 : TyDawg_77, Dulcita_78, Skinny_80, Diminimus_78, Bongo_77, PegLeg_76, LilhomieP_77
- Track 13 : Ibantik_68

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

The start number called the most often in the published annotations is 24, it was called in 38 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_100, Adnama_103, AmericanBeauty_103, Argent26_103, Asriel_97, Balomoji_99, Barbarian_98, Bask21_99, BigBubba_99, Command613_101, DoctorDiddles_98, Easy2Say_99, Flypotenuse_95, Gage_101, Gemini_104, Glexan_98, GoldenSpark_103, GooberAzure_102, Harella_99, Holt_104, IHOP_97, Icee_100, Inca_96, Kimchi_103, Kostya_99, Marshmallow_96, Myrale_99, Nimrod_99, Phaja_97, Rakim_100, Stank_101, TBrady12_102, Traaww1_95,

Wiggin_101, Xandras_98, YassJohnny_96, Youngblood_102, xkcd_102,

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

- Czyszczone1_100, Gator_97,

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

- Acquire49_97, AvadaKedavra_97, Blab_54, Bongo_77, BrutonGaster_127, Calm_70, Calm_99, Diminimus_78, Dulcita_78, Halena_95, Ibantik_68, JonJames_167, LeBron_96, LilhomieP_77, MAckerman_96, Malisha_15, OneUp_128, PegLeg_76, Skinny_80, Squash_60, Squiddly_16, Squint_160, TyDawg_77, Tyson_99, UPIE_96, Wamburggrxpress_69, Wyatt2_98, Yvonnestic_162, Zaria_98,

Summary by start number:

Start 9:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_127 (CQ2),

Start 14:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malisha_15 (DN),

Start 16:

- Found in 40 of 69 (58.0%) of genes in pham
- Manual Annotations of this start: 2 of 69
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Czyszczone1_100 (E), Gator_97 (E),

Start 20:

- Found in 2 of 69 (2.9%) of genes in pham
- Manual Annotations of this start: 2 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_167 (DD), Yvonnestic_162 (DD),

Start 21:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Squiddly_16 (DN2),

Start 22:

- Found in 11 of 69 (15.9%) of genes in pham
- Manual Annotations of this start: 10 of 69
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Acquire49_97 (L1), AvadaKedavra_97 (L1), Calm_99 (L1), Halena_95 (L1), LeBron_96 (L1), MAckerman_96 (L1), Tyson_99 (L1), UPIE_96 (L1), Wyatt2_98 (L1), Zaria_98 (L1),

Start 24:

- Found in 40 of 69 (58.0%) of genes in pham
- Manual Annotations of this start: 38 of 69
- Called 95.0% of time when present
- Phage (with cluster) where this start called: 244_100 (E), Adnama_103 (E), AmericanBeauty_103 (E), Argent26_103 (E), Asriel_97 (E), Balomoji_99 (E), Barbarian_98 (E), Bask21_99 (E), BigBubba_99 (E), Command613_101 (E), DoctorDiddles_98 (E), Easy2Say_99 (E), Flypotenuse_95 (E), Gage_101 (E), Gemini_104 (E), Glexan_98 (E), GoldenSpark_103 (E), GooberAzure_102 (E), Harella_99 (E), Holt_104 (E), IHOP_97 (E), Icee_100 (E), Inca_96 (E), Kimchi_103 (E), Kostya_99 (E), Marshmallow_96 (E), Myrale_99 (E), Nimrod_99 (E), Phaja_97 (E), Rakim_100 (E), Stank_101 (E), TBrady12_102 (E), Traaww1_95 (E), Wiggin_101 (E), Xandras_98 (E), YassJohnny_96 (E), Youngblood_102 (E), xkcd_102 (E),

Start 25:

- Found in 3 of 69 (4.3%) of genes in pham
- Manual Annotations of this start: 2 of 69
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Blab_54 (EG), Squash_60 (EG),

Start 28:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_68 (singleton),

Start 30:

- Found in 2 of 69 (2.9%) of genes in pham
- Manual Annotations of this start: 2 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Calm_70 (L1), Wamburgrxpress_69 (L1),

Start 38:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Squint_160 (J),

Start 45:

- Found in 8 of 69 (11.6%) of genes in pham
- Manual Annotations of this start: 7 of 69
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bongo_77 (M1), Diminimus_78 (M1), Dulcita_78 (M1), LilhomieP_77 (M1), PegLeg_76 (M1), Skinny_80 (M1), TyDawg_77 (M1),

Start 46:

- Found in 1 of 69 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OneUp_128 (CQ2),

Summary by clusters:

There are 10 clusters represented in this pham: DN, singleton, E, DD, J, DN2, M1, L1, CQ2, EG,

Info for manual annotations of cluster CQ2:

- Start number 9 was manually annotated 1 time for cluster CQ2.
- Start number 46 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 20 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster DN2:

- Start number 21 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster E:

- Start number 16 was manually annotated 2 times for cluster E.
- Start number 24 was manually annotated 38 times for cluster E.

Info for manual annotations of cluster EG:

- Start number 25 was manually annotated 2 times for cluster EG.

Info for manual annotations of cluster J:

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

Info for manual annotations of cluster L1:

- Start number 22 was manually annotated 10 times for cluster L1.
- Start number 30 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster M1:

- Start number 45 was manually annotated 7 times for cluster M1.

Gene Information:

Gene: 244_100 Start: 58683, Stop: 59246, Start Num: 24

Candidate Starts for 244_100:

(Start: 16 @58608 has 2 MA's), (Start: 24 @58683 has 38 MA's), (36, 58770), (51, 58878), (65, 58986), (68, 59004), (69, 59007), (74, 59052),

Gene: Acquire49_97 Start: 59589, Stop: 60149, Start Num: 22

Candidate Starts for Acquire49_97:

(Start: 22 @59589 has 10 MA's), (52, 59790), (55, 59829), (56, 59844), (73, 59949),

Gene: Adnama_103 Start: 58978, Stop: 59541, Start Num: 24

Candidate Starts for Adnama_103:

(Start: 16 @58903 has 2 MA's), (Start: 24 @58978 has 38 MA's), (36, 59065), (51, 59173), (65, 59281), (68, 59299), (69, 59302), (74, 59347),

Gene: AmericanBeauty_103 Start: 59218, Stop: 59781, Start Num: 24

Candidate Starts for AmericanBeauty_103:

(Start: 16 @59143 has 2 MA's), (Start: 24 @59218 has 38 MA's), (36, 59305), (51, 59413), (65, 59521), (68, 59539), (69, 59542), (74, 59587),

Gene: Argent26_103 Start: 58902, Stop: 59465, Start Num: 24

Candidate Starts for Argent26_103:

(Start: 16 @58827 has 2 MA's), (Start: 24 @58902 has 38 MA's), (36, 58989), (51, 59097), (65, 59205), (68, 59223), (69, 59226), (74, 59271),

Gene: Asriel_97 Start: 57315, Stop: 57878, Start Num: 24

Candidate Starts for Asriel_97:

(Start: 16 @57240 has 2 MA's), (Start: 24 @57315 has 38 MA's), (36, 57402), (51, 57510), (65, 57618), (68, 57636), (69, 57639), (74, 57684),

Gene: AvadaKedavra_97 Start: 59701, Stop: 60261, Start Num: 22

Candidate Starts for AvadaKedavra_97:

(Start: 22 @59701 has 10 MA's), (52, 59902), (55, 59941), (56, 59956), (73, 60061),

Gene: Balomoji_99 Start: 59098, Stop: 59661, Start Num: 24

Candidate Starts for Balomoji_99:

(Start: 16 @59023 has 2 MA's), (Start: 24 @59098 has 38 MA's), (36, 59185), (51, 59293), (65, 59401), (68, 59419), (69, 59422), (74, 59467),

Gene: Barbarian_98 Start: 57315, Stop: 57878, Start Num: 24

Candidate Starts for Barbarian_98:

(Start: 16 @57240 has 2 MA's), (Start: 24 @57315 has 38 MA's), (36, 57402), (51, 57510), (65, 57618), (68, 57636), (69, 57639), (74, 57684),

Gene: Bask21_99 Start: 57954, Stop: 58517, Start Num: 24

Candidate Starts for Bask21_99:

(Start: 16 @57879 has 2 MA's), (Start: 24 @57954 has 38 MA's), (36, 58041), (51, 58149), (65, 58257), (68, 58275), (69, 58278), (74, 58323),

Gene: BigBubba_99 Start: 58010, Stop: 58573, Start Num: 24

Candidate Starts for BigBubba_99:

(Start: 16 @57935 has 2 MA's), (Start: 24 @58010 has 38 MA's), (36, 58097), (51, 58205), (65, 58313), (68, 58331), (69, 58334), (74, 58379),

Gene: Blab_54 Start: 42170, Stop: 41670, Start Num: 25

Candidate Starts for Blab_54:

(Start: 25 @42170 has 2 MA's), (43, 42053), (59, 41930), (64, 41903), (68, 41879), (88, 41714), (94, 41678), (95, 41675),

Gene: Bongo_77 Start: 49178, Stop: 49594, Start Num: 45

Candidate Starts for Bongo_77:

(Start: 45 @49178 has 7 MA's), (60, 49331), (72, 49421), (81, 49502),

Gene: BrutonGaster_127 Start: 75924, Stop: 76652, Start Num: 9

Candidate Starts for BrutonGaster_127:

(4, 75816), (Start: 9 @75924 has 1 MA's), (13, 75996), (Start: 22 @76074 has 10 MA's), (Start: 45 @76212 has 7 MA's), (47, 76254), (48, 76257), (49, 76269), (75, 76464),

Gene: Calm_70 Start: 47119, Stop: 47640, Start Num: 30

Candidate Starts for Calm_70:

(Start: 30 @47119 has 2 MA's), (50, 47269), (64, 47377), (68, 47401), (69, 47404), (71, 47431), (76, 47464), (80, 47524), (83, 47560), (86, 47578), (91, 47602),

Gene: Calm_99 Start: 59968, Stop: 60528, Start Num: 22

Candidate Starts for Calm_99:

(Start: 22 @59968 has 10 MA's), (52, 60169), (55, 60208), (56, 60223), (73, 60328),

Gene: Command613_101 Start: 59112, Stop: 59675, Start Num: 24

Candidate Starts for Command613_101:

(Start: 16 @59037 has 2 MA's), (Start: 24 @59112 has 38 MA's), (36, 59199), (51, 59307), (65, 59415), (68, 59433), (69, 59436), (74, 59481),

Gene: Czyszczone1_100 Start: 58822, Stop: 59460, Start Num: 16

Candidate Starts for Czyszczone1_100:

(Start: 16 @58822 has 2 MA's), (Start: 24 @58897 has 38 MA's), (36, 58984), (51, 59092), (65, 59200), (68, 59218), (69, 59221), (74, 59266),

Gene: Diminimus_78 Start: 49173, Stop: 49589, Start Num: 45

Candidate Starts for Diminimus_78:

(Start: 45 @49173 has 7 MA's), (60, 49326), (72, 49416), (81, 49497),

Gene: DoctorDiddles_98 Start: 58360, Stop: 58923, Start Num: 24

Candidate Starts for DoctorDiddles_98:

(Start: 16 @58285 has 2 MA's), (Start: 24 @58360 has 38 MA's), (36, 58447), (51, 58555), (65, 58663), (68, 58681), (69, 58684), (74, 58729),

Gene: Dulcita_78 Start: 49174, Stop: 49590, Start Num: 45

Candidate Starts for Dulcita_78:

(Start: 45 @49174 has 7 MA's), (60, 49327), (72, 49417), (81, 49498),

Gene: Easy2Say_99 Start: 59369, Stop: 59932, Start Num: 24

Candidate Starts for Easy2Say_99:

(Start: 16 @59294 has 2 MA's), (Start: 24 @59369 has 38 MA's), (36, 59456), (51, 59564), (65, 59672), (68, 59690), (69, 59693), (74, 59738),

Gene: Flypotenuse_95 Start: 57969, Stop: 58532, Start Num: 24

Candidate Starts for Flypotenuse_95:

(Start: 16 @57894 has 2 MA's), (Start: 24 @57969 has 38 MA's), (36, 58056), (51, 58164), (65, 58272), (68, 58290), (69, 58293), (74, 58338),

Gene: Gage_101 Start: 59040, Stop: 59603, Start Num: 24

Candidate Starts for Gage_101:

(Start: 16 @58965 has 2 MA's), (Start: 24 @59040 has 38 MA's), (36, 59127), (51, 59235), (65, 59343), (68, 59361), (69, 59364), (74, 59409),

Gene: Gator_97 Start: 58750, Stop: 59388, Start Num: 16

Candidate Starts for Gator_97:

(Start: 16 @58750 has 2 MA's), (Start: 24 @58825 has 38 MA's), (36, 58912), (51, 59020), (65, 59128), (68, 59146), (69, 59149), (74, 59194),

Gene: Gemini_104 Start: 59419, Stop: 59982, Start Num: 24

Candidate Starts for Gemini_104:

(Start: 16 @59344 has 2 MA's), (Start: 24 @59419 has 38 MA's), (36, 59506), (51, 59614), (65, 59722), (68, 59740), (69, 59743), (74, 59788),

Gene: Glexan_98 Start: 59099, Stop: 59662, Start Num: 24

Candidate Starts for Glexan_98:

(Start: 16 @59024 has 2 MA's), (Start: 24 @59099 has 38 MA's), (36, 59186), (51, 59294), (65, 59402), (68, 59420), (69, 59423), (74, 59468),

Gene: GoldenSpark_103 Start: 58902, Stop: 59465, Start Num: 24

Candidate Starts for GoldenSpark_103:

(Start: 16 @58827 has 2 MA's), (Start: 24 @58902 has 38 MA's), (36, 58989), (51, 59097), (65, 59205), (68, 59223), (69, 59226), (74, 59271),

Gene: GooberAzure_102 Start: 58902, Stop: 59465, Start Num: 24

Candidate Starts for GooberAzure_102:

(Start: 16 @58827 has 2 MA's), (Start: 24 @58902 has 38 MA's), (36, 58989), (51, 59097), (65, 59205), (68, 59223), (69, 59226), (74, 59271),

Gene: Halena_95 Start: 58884, Stop: 59444, Start Num: 22

Candidate Starts for Halena_95:

(Start: 22 @58884 has 10 MA's), (52, 59085), (55, 59124), (56, 59139), (73, 59244),

Gene: Harella_99 Start: 59615, Stop: 60178, Start Num: 24

Candidate Starts for Harella_99:

(Start: 16 @59540 has 2 MA's), (Start: 24 @59615 has 38 MA's), (36, 59702), (51, 59810), (65, 59918), (68, 59936), (69, 59939), (74, 59984),

Gene: Holt_104 Start: 59316, Stop: 59879, Start Num: 24

Candidate Starts for Holt_104:

(Start: 16 @59241 has 2 MA's), (Start: 24 @59316 has 38 MA's), (36, 59403), (51, 59511), (65, 59619), (68, 59637), (69, 59640), (74, 59685),

Gene: IHOP_97 Start: 58618, Stop: 59181, Start Num: 24

Candidate Starts for IHOP_97:

(Start: 16 @58543 has 2 MA's), (Start: 24 @58618 has 38 MA's), (36, 58705), (51, 58813), (65, 58921), (68, 58939), (69, 58942), (74, 58987),

Gene: Ibantik_68 Start: 30229, Stop: 30804, Start Num: 28

Candidate Starts for Ibantik_68:

(23, 30199), (Start: 28 @30229 has 1 MA's), (53, 30421), (63, 30502), (66, 30526), (82, 30676), (87, 30727), (92, 30760), (96, 30784),

Gene: Icee_100 Start: 58426, Stop: 58989, Start Num: 24

Candidate Starts for Icee_100:

(Start: 16 @58351 has 2 MA's), (Start: 24 @58426 has 38 MA's), (36, 58513), (51, 58621), (65, 58729), (68, 58747), (69, 58750), (74, 58795),

Gene: Inca_96 Start: 57107, Stop: 57670, Start Num: 24

Candidate Starts for Inca_96:

(Start: 16 @57032 has 2 MA's), (Start: 24 @57107 has 38 MA's), (36, 57194), (51, 57302), (65, 57410), (68, 57428), (69, 57431), (74, 57476),

Gene: JonJames_167 Start: 89129, Stop: 89734, Start Num: 20

Candidate Starts for JonJames_167:

(1, 88790), (2, 88802), (3, 88832), (5, 88913), (6, 88940), (7, 88949), (8, 88976), (10, 88997), (11, 89009), (12, 89030), (19, 89123), (Start: 20 @89129 has 2 MA's), (27, 89189), (32, 89216), (33, 89234), (35, 89252), (47, 89348), (57, 89450), (61, 89468), (62, 89474), (76, 89576), (77, 89579), (80, 89633), (85, 89681), (89, 89705),

Gene: Kimchi_103 Start: 59043, Stop: 59606, Start Num: 24

Candidate Starts for Kimchi_103:

(Start: 16 @58968 has 2 MA's), (Start: 24 @59043 has 38 MA's), (36, 59130), (51, 59238), (65, 59346), (68, 59364), (69, 59367), (74, 59412),

Gene: Kostya_99 Start: 58720, Stop: 59283, Start Num: 24

Candidate Starts for Kostya_99:

(Start: 16 @58645 has 2 MA's), (Start: 24 @58720 has 38 MA's), (36, 58807), (51, 58915), (65, 59023), (68, 59041), (69, 59044), (74, 59089),

Gene: LeBron_96 Start: 59191, Stop: 59751, Start Num: 22

Candidate Starts for LeBron_96:

(Start: 22 @59191 has 10 MA's), (52, 59392), (55, 59431), (56, 59446), (73, 59551),

Gene: LilhomieP_77 Start: 49657, Stop: 50073, Start Num: 45

Candidate Starts for LilhomieP_77:

(Start: 45 @49657 has 7 MA's), (60, 49810), (72, 49900), (81, 49981),

Gene: MAckerman_96 Start: 58877, Stop: 59437, Start Num: 22

Candidate Starts for MAckerman_96:

(Start: 22 @58877 has 10 MA's), (52, 59078), (55, 59117), (56, 59132), (73, 59237),

Gene: Malisha_15 Start: 9435, Stop: 10115, Start Num: 14

Candidate Starts for Malisha_15:

(Start: 14 @9435 has 1 MA's), (15, 9450), (31, 9567), (37, 9618), (39, 9624), (42, 9654), (54, 9771), (67, 9861), (90, 10062),

Gene: Marshmallow_96 Start: 59240, Stop: 59803, Start Num: 24

Candidate Starts for Marshmallow_96:

(Start: 16 @59165 has 2 MA's), (Start: 24 @59240 has 38 MA's), (36, 59327), (51, 59435), (65, 59543), (68, 59561), (69, 59564), (74, 59609),

Gene: Myrale_99 Start: 59400, Stop: 59963, Start Num: 24

Candidate Starts for Myrale_99:

(Start: 16 @59325 has 2 MA's), (Start: 24 @59400 has 38 MA's), (36, 59487), (51, 59595), (65, 59703), (68, 59721), (69, 59724), (74, 59769),

Gene: Nimrod_99 Start: 59367, Stop: 59930, Start Num: 24

Candidate Starts for Nimrod_99:

(Start: 16 @59292 has 2 MA's), (Start: 24 @59367 has 38 MA's), (36, 59454), (51, 59562), (65, 59670), (68, 59688), (69, 59691), (74, 59736),

Gene: OneUp_128 Start: 76398, Stop: 76883, Start Num: 46

Candidate Starts for OneUp_128:

(Start: 25 @76275 has 2 MA's), (26, 76293), (Start: 46 @76398 has 1 MA's), (58, 76539), (72, 76644), (79, 76686),

Gene: PegLeg_76 Start: 48918, Stop: 49334, Start Num: 45
Candidate Starts for PegLeg_76:
(Start: 45 @48918 has 7 MA's), (60, 49071), (72, 49161), (81, 49242),

Gene: Phaja_97 Start: 58620, Stop: 59183, Start Num: 24
Candidate Starts for Phaja_97:
(Start: 16 @58545 has 2 MA's), (Start: 24 @58620 has 38 MA's), (36, 58707), (51, 58815), (65, 58923), (68, 58941), (69, 58944), (74, 58989),

Gene: Rakim_100 Start: 58852, Stop: 59415, Start Num: 24
Candidate Starts for Rakim_100:
(Start: 16 @58777 has 2 MA's), (Start: 24 @58852 has 38 MA's), (36, 58939), (51, 59047), (65, 59155), (68, 59173), (69, 59176), (74, 59221),

Gene: Skinny_80 Start: 50086, Stop: 50502, Start Num: 45
Candidate Starts for Skinny_80:
(Start: 45 @50086 has 7 MA's), (60, 50239), (72, 50329), (81, 50410),

Gene: Squash_60 Start: 43129, Stop: 42629, Start Num: 25
Candidate Starts for Squash_60:
(Start: 25 @43129 has 2 MA's), (43, 43012), (59, 42889), (64, 42862), (68, 42838), (88, 42673), (94, 42637), (95, 42634),

Gene: Squiddly_16 Start: 9132, Stop: 9740, Start Num: 21
Candidate Starts for Squiddly_16:
(17, 9084), (18, 9099), (Start: 21 @9132 has 1 MA's), (29, 9189), (34, 9225), (41, 9267), (44, 9279), (60, 9432), (68, 9480), (70, 9501), (81, 9618), (84, 9648),

Gene: Squint_160 Start: 85250, Stop: 85708, Start Num: 38
Candidate Starts for Squint_160:
(Start: 38 @85250 has 1 MA's), (40, 85259), (72, 85523), (78, 85559), (79, 85565), (93, 85697),

Gene: Stank_101 Start: 59115, Stop: 59678, Start Num: 24
Candidate Starts for Stank_101:
(Start: 16 @59040 has 2 MA's), (Start: 24 @59115 has 38 MA's), (36, 59202), (51, 59310), (65, 59418), (68, 59436), (69, 59439), (74, 59484),

Gene: TBrady12_102 Start: 58555, Stop: 59118, Start Num: 24
Candidate Starts for TBrady12_102:
(Start: 16 @58480 has 2 MA's), (Start: 24 @58555 has 38 MA's), (36, 58642), (51, 58750), (65, 58858), (68, 58876), (69, 58879), (74, 58924),

Gene: Traaww1_95 Start: 58144, Stop: 58707, Start Num: 24
Candidate Starts for Traaww1_95:
(Start: 16 @58069 has 2 MA's), (Start: 24 @58144 has 38 MA's), (36, 58231), (51, 58339), (65, 58447), (68, 58465), (69, 58468), (74, 58513),

Gene: TyDawg_77 Start: 49178, Stop: 49594, Start Num: 45
Candidate Starts for TyDawg_77:
(Start: 45 @49178 has 7 MA's), (60, 49331), (72, 49421), (81, 49502),

Gene: Tyson_99 Start: 60294, Stop: 60854, Start Num: 22
Candidate Starts for Tyson_99:
(Start: 22 @60294 has 10 MA's), (52, 60495), (55, 60534), (56, 60549), (73, 60654),

Gene: UPIE_96 Start: 59534, Stop: 60094, Start Num: 22
Candidate Starts for UPIE_96:
(Start: 22 @59534 has 10 MA's), (52, 59735), (55, 59774), (56, 59789), (73, 59894),

Gene: Wamburgexpress_69 Start: 47295, Stop: 47816, Start Num: 30
Candidate Starts for Wamburgexpress_69:
(Start: 30 @47295 has 2 MA's), (50, 47445), (64, 47553), (68, 47577), (69, 47580), (71, 47607), (76, 47640), (80, 47700), (83, 47736), (86, 47754), (91, 47778),

Gene: Wiggin_101 Start: 58545, Stop: 59108, Start Num: 24
Candidate Starts for Wiggin_101:
(Start: 16 @58470 has 2 MA's), (Start: 24 @58545 has 38 MA's), (36, 58632), (51, 58740), (65, 58848), (68, 58866), (69, 58869), (74, 58914),

Gene: Wyatt2_98 Start: 59957, Stop: 60517, Start Num: 22
Candidate Starts for Wyatt2_98:
(Start: 22 @59957 has 10 MA's), (52, 60158), (55, 60197), (56, 60212), (73, 60317),

Gene: Xandras_98 Start: 58368, Stop: 58931, Start Num: 24
Candidate Starts for Xandras_98:
(Start: 16 @58293 has 2 MA's), (Start: 24 @58368 has 38 MA's), (36, 58455), (51, 58563), (65, 58671), (68, 58689), (69, 58692), (74, 58737),

Gene: YassJohnny_96 Start: 57688, Stop: 58251, Start Num: 24
Candidate Starts for YassJohnny_96:
(Start: 16 @57613 has 2 MA's), (Start: 24 @57688 has 38 MA's), (36, 57775), (51, 57883), (65, 57991), (68, 58009), (69, 58012), (74, 58057),

Gene: Youngblood_102 Start: 59838, Stop: 60401, Start Num: 24
Candidate Starts for Youngblood_102:
(Start: 16 @59763 has 2 MA's), (Start: 24 @59838 has 38 MA's), (36, 59925), (51, 60033), (65, 60141), (68, 60159), (69, 60162), (74, 60207),

Gene: Yvonnetastic_162 Start: 85216, Stop: 85821, Start Num: 20
Candidate Starts for Yvonnetastic_162:
(1, 84877), (2, 84889), (3, 84919), (5, 85000), (6, 85027), (7, 85036), (8, 85063), (10, 85084), (11, 85096), (12, 85117), (19, 85210), (Start: 20 @85216 has 2 MA's), (27, 85276), (32, 85303), (33, 85321), (35, 85339), (47, 85435), (57, 85537), (61, 85555), (62, 85561), (76, 85663), (77, 85666), (80, 85720), (85, 85768), (89, 85792),

Gene: Zaria_98 Start: 59433, Stop: 59993, Start Num: 22
Candidate Starts for Zaria_98:
(Start: 22 @59433 has 10 MA's), (52, 59634), (55, 59673), (56, 59688), (73, 59793),

Gene: xkcd_102 Start: 60022, Stop: 60585, Start Num: 24
Candidate Starts for xkcd_102:
(Start: 16 @59947 has 2 MA's), (Start: 24 @60022 has 38 MA's), (36, 60109), (51, 60217), (65, 60325), (68, 60343), (69, 60346), (74, 60391),

