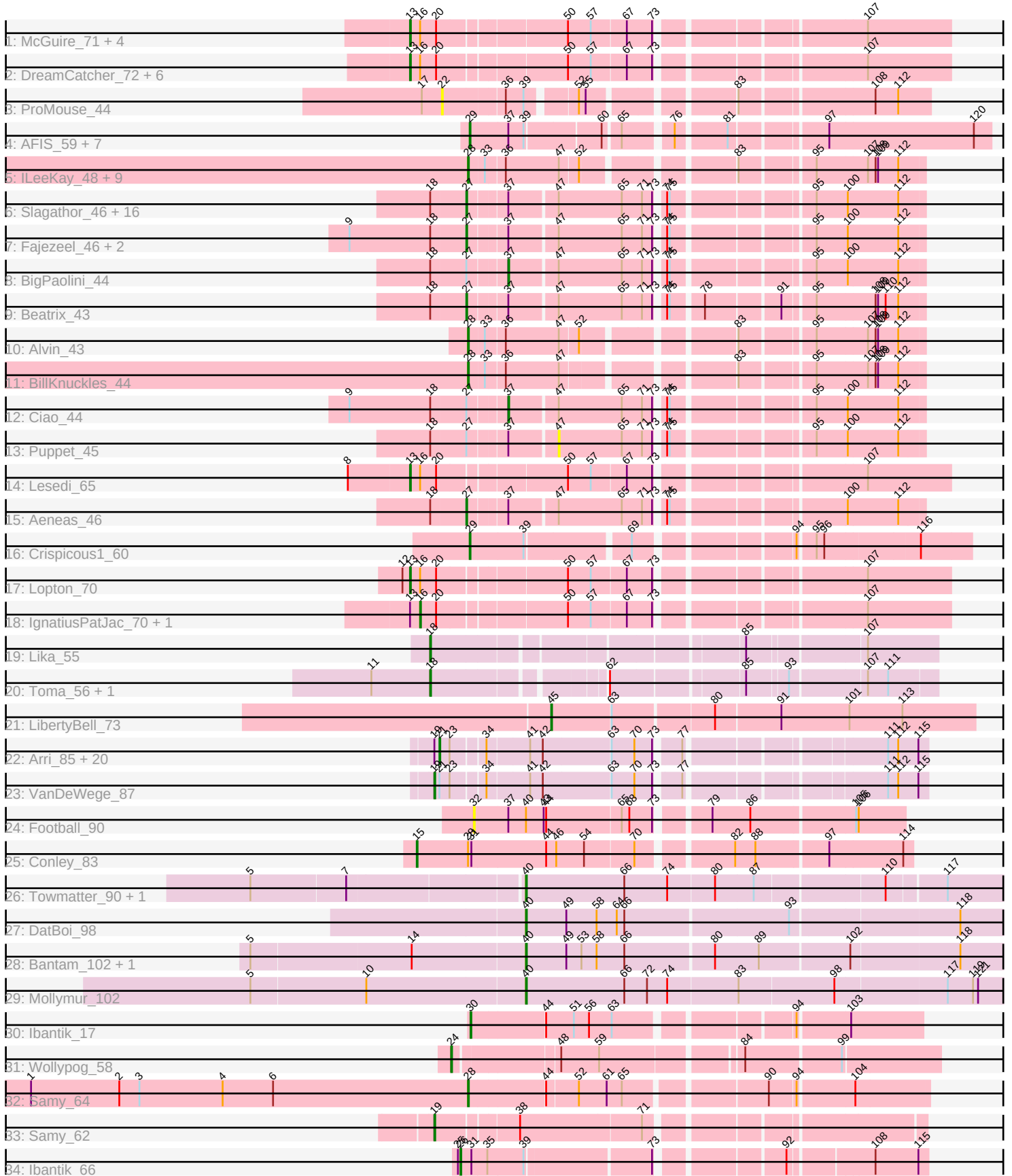


Pham 280279



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 280279 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280279 has 102 members, 5 are drafts.

Phages represented in each track:

- Track 1 : McGuire_71, BluSpix_68, Ichabod_74, Squee_73, McSinger_68
- Track 2 : DreamCatcher_72, GrecoEtereo_71, AFIS_66, Snazzy_68, Bigchung_69, SarFire_70, Thor_70
- Track 3 : ProMouse_44
- Track 4 : AFIS_59, NEHalo_60, SpikeBT_61, Moose_64, SwissCheese_66, GageAP_64, Forsytheast_64, Bruns_64
- Track 5 : ILeeKay_48, Fushigi_42, Trouble_45, BluSpix_41, IgnatiusPatJac_43, Petruchio_44, Ajay_44, Seanderson_46, Kykar_44, Marco3_46
- Track 6 : Slagathor_46, Naira_45, Marge_44, StrongArm_43, Eyeball_45, Bexan_42, Dexes_44, TheloniousMonk_45, Fenn_45, Rajelicia_45, Arcanine_45, Niza_46, Bones_44, Licorice_47, Ruotula_47, Sagefire_47, Smairt_46
- Track 7 : Fajezeel_46, Greg_46, Pippin_46
- Track 8 : BigPaolini_44
- Track 9 : Beatrix_43
- Track 10 : Alvin_43
- Track 11 : BillKnuckles_44
- Track 12 : Ciao_44
- Track 13 : Puppet_45
- Track 14 : Lesedi_65
- Track 15 : Aeneas_46
- Track 16 : Crispicous1_60
- Track 17 : Lopton_70
- Track 18 : IgnatiusPatJac_70, GMonster_70
- Track 19 : Lika_55
- Track 20 : Toma_56, Goby_56
- Track 21 : LibertyBell_73
- Track 22 : Arri_85, PullumCavea_83, SmokingBunny_86, Twister6_84, Wizard_80, Fireball_88, PinkCoffee_86, Gezellig_81, TillyBobJoe_83, Salvador_85, CherryCola_85, Savbucketdawg_80, Evamon_85, Phlop_82, KimmyK_83, Valary_86, RogerDodger_88, Togo_85, Egi03_83, Portcullis_85, Shinji_84
- Track 23 : VanDeWege_87
- Track 24 : Football_90
- Track 25 : Conley_83
- Track 26 : Towmatter_90, Daredevil_91
- Track 27 : DatBoi_98
- Track 28 : Bantam_102, SpeedDemon_1040
- Track 29 : Mollymur_102

- Track 30 : Ibantik_17
- Track 31 : Wollypog_58
- Track 32 : Samy_64
- Track 33 : Samy_62
- Track 34 : Ibantik_66

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

The start number called the most often in the published annotations is 27, it was called in 22 of the 97 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aeneas_46, Arcanine_45, Beatrix_43, Bexan_42, Bones_44, Dexes_44, Eyeball_45, Fajezeel_46, Fenn_45, Greg_46, Licorice_47, Marge_44, Naira_45, Niza_46, Pippin_46, Rajelicia_45, Ruotula_47, Sagefire_47, Slagathor_46, Smairt_46, StrongArm_43, TheloniousMonk_45,

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

- BigPaolini_44, Ciao_44, Puppet_45,

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

- AFIS_59, AFIS_66, Ajay_44, Alvin_43, Arri_85, Bantam_102, Bigchung_69, BillKnuckles_44, BluSpix_41, BluSpix_68, Bruns_64, CherryCola_85, Conley_83, Crispicous1_60, Daredevil_91, DatBoi_98, DreamCatcher_72, Egi03_83, Evamon_85, Fireball_88, Football_90, Forsytheast_64, Fushigi_42, GMonster_70, GageAP_64, Gezellig_81, Goby_56, GrecoEtereo_71, ILeeKay_48, Ibantik_17, Ibantik_66, Ichabod_74, IgnatiusPatJac_43, IgnatiusPatJac_70, KimmyK_83, Kykar_44, Lesedi_65, LibertyBell_73, Lika_55, Lopton_70, Marco3_46, McGuire_71, McSinger_68, Mollymur_102, Moose_64, NEHalo_60, Petruchio_44, Phlop_82, PinkCoffee_86, Portcullis_85, ProMouse_44, PullumCavea_83, RogerDodger_88, Salvador_85, Samy_62, Samy_64, SarFire_70, Savbucketdawg_80, Seanderson_46, Shinji_84, SmokingBunny_86, Snazzy_68, SpeedDemon_1040, SpikeBT_61, Squee_73, SwissCheese_66, Thor_70, TillyBobJoe_83, Togo_85, Toma_56, Towmatter_90, Trouble_45, Twister6_84, Valary_86, VanDeWege_87, Wizard_80, Wollypog_58,

Summary by start number:

Start 13:

- Found in 16 of 102 (15.7%) of genes in pham
- Manual Annotations of this start: 14 of 97
- Called 87.5% of time when present
- Phage (with cluster) where this start called: AFIS_66 (A1), Bigchung_69 (A1), BluSpix_68 (A1), DreamCatcher_72 (A1), GrecoEtereo_71 (A1), Ichabod_74 (A1), Lesedi_65 (A1), Lopton_70 (A1), McGuire_71 (A1), McSinger_68 (A1), SarFire_70 (A1), Snazzy_68 (A1), Squee_73 (A1), Thor_70 (A1),

Start 15:

- Found in 1 of 102 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 97

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Conley_83 (DJ),

Start 16:

- Found in 16 of 102 (15.7%) of genes in pham
- Manual Annotations of this start: 2 of 97
- Called 12.5% of time when present
- Phage (with cluster) where this start called: GMonster_70 (A1), IgnatiusPatJac_70 (A1),

Start 18:

- Found in 28 of 102 (27.5%) of genes in pham
- Manual Annotations of this start: 3 of 97
- Called 10.7% of time when present
- Phage (with cluster) where this start called: Goby_56 (BD1), Lika_55 (BD1), Toma_56 (BD1),

Start 19:

- Found in 23 of 102 (22.5%) of genes in pham
- Manual Annotations of this start: 2 of 97
- Called 8.7% of time when present
- Phage (with cluster) where this start called: Samy_62 (singleton), VanDeWege_87 (DC1),

Start 21:

- Found in 22 of 102 (21.6%) of genes in pham
- Manual Annotations of this start: 19 of 97
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Arri_85 (DC1), CherryCola_85 (DC1), Egi03_83 (DC1), Evamon_85 (DC1), Fireball_88 (DC1), Gezellig_81 (DC1), KimmyK_83 (DC1), Phlop_82 (DC1), PinkCoffee_86 (DC1), Portcullis_85 (DC1), PullumCavea_83 (DC1), RogerDodger_88 (DC1), Salvador_85 (DC1), Savbucketdawg_80 (DC1), Shinji_84 (DC1), SmokingBunny_86 (DC1), TillyBobJoe_83 (DC1), Togo_85 (DC1), Twister6_84 (DC1), Valary_86 (DC1), Wizard_80 (DC1),

Start 22:

- Found in 1 of 102 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ProMouse_44 (A1),

Start 24:

- Found in 1 of 102 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wollypog_58 (singleton),

Start 26:

- Found in 1 of 102 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_66 (singleton),

Start 27:

- Found in 25 of 102 (24.5%) of genes in pham
- Manual Annotations of this start: 22 of 97
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Aeneas_46 (A1), Arcanine_45 (A1), Beatrix_43 (A1), Bexan_42 (A1), Bones_44 (A1), Dexes_44 (A1), Eyeball_45 (A1), Fajezeel_46 (A1), Fenn_45 (A1), Greg_46 (A1), Licorice_47 (A1), Marge_44 (A1), Naira_45 (A1), Niza_46 (A1), Pippin_46 (A1), Rajelicia_45 (A1), Ruotula_47 (A1), Sagefire_47 (A1), Slagathor_46 (A1), Smairt_46 (A1), StrongArm_43 (A1), TheloniousMonk_45 (A1),

Start 28:

- Found in 14 of 102 (13.7%) of genes in pham
- Manual Annotations of this start: 13 of 97
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Ajay_44 (A1), Alvin_43 (A1), BillKnuckles_44 (A1), BluSpix_41 (A1), Fushigi_42 (A1), ILeeKay_48 (A1), IgnatiusPatJac_43 (A1), Kykar_44 (A1), Marco3_46 (A1), Petruchio_44 (A1), Samy_64 (singleton), Seanderson_46 (A1), Trouble_45 (A1),

Start 29:

- Found in 9 of 102 (8.8%) of genes in pham
- Manual Annotations of this start: 9 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AFIS_59 (A1), Bruns_64 (A1), Crispicous1_60 (A1), Forsytheast_64 (A1), GageAP_64 (A1), Moose_64 (A1), NEHalo_60 (A1), SpikeBT_61 (A1), SwissCheese_66 (A1),

Start 30:

- Found in 1 of 102 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_17 (singleton),

Start 32:

- Found in 1 of 102 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Football_90 (DJ),

Start 37:

- Found in 34 of 102 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 97
- Called 5.9% of time when present
- Phage (with cluster) where this start called: BigPaolini_44 (A1), Ciao_44 (A1),

Start 40:

- Found in 7 of 102 (6.9%) of genes in pham
- Manual Annotations of this start: 6 of 97
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Bantam_102 (DL), Daredevil_91 (DL), DatBoi_98 (DL), Mollymur_102 (DL), SpeedDemon_1040 (DL), Towmatter_90 (DL),

Start 45:

- Found in 1 of 102 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LibertyBell_73 (BI3),

Start 47:

- Found in 37 of 102 (36.3%) of genes in pham
- No Manual Annotations of this start.
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Puppet_45 (A1),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, DJ, DL, A1, BD1, BI3, DC1,

Info for manual annotations of cluster A1:

- Start number 13 was manually annotated 14 times for cluster A1.
- Start number 16 was manually annotated 2 times for cluster A1.
- Start number 27 was manually annotated 22 times for cluster A1.
- Start number 28 was manually annotated 12 times for cluster A1.
- Start number 29 was manually annotated 9 times for cluster A1.
- Start number 37 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster BD1:

- Start number 18 was manually annotated 3 times for cluster BD1.

Info for manual annotations of cluster BI3:

- Start number 45 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster DC1:

- Start number 19 was manually annotated 1 time for cluster DC1.
- Start number 21 was manually annotated 19 times for cluster DC1.

Info for manual annotations of cluster DJ:

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

Info for manual annotations of cluster DL:

- Start number 40 was manually annotated 6 times for cluster DL.

Gene Information:

Gene: AFIS_59 Start: 40536, Stop: 39979, Start Num: 29

Candidate Starts for AFIS_59:

(Start: 29 @40536 has 9 MA's), (Start: 37 @40494 has 2 MA's), (39, 40476), (60, 40392), (65, 40374), (76, 40323), (81, 40269), (97, 40167), (120, 39999),

Gene: AFIS_66 Start: 43840, Stop: 43262, Start Num: 13

Candidate Starts for AFIS_66:

(Start: 13 @43840 has 14 MA's), (Start: 16 @43828 has 2 MA's), (20, 43810), (50, 43669), (57, 43642), (67, 43603), (73, 43573), (107, 43360),

Gene: Aeneas_46 Start: 33206, Stop: 32721, Start Num: 27

Candidate Starts for Aeneas_46:

(Start: 18 @33245 has 3 MA's), (Start: 27 @33206 has 22 MA's), (Start: 37 @33164 has 2 MA's), (47, 33110), (65, 33035), (71, 33011), (73, 32999), (74, 32993), (75, 32990), (100, 32807), (112, 32750),

Gene: Ajay_44 Start: 32810, Stop: 32334, Start Num: 28

Candidate Starts for Ajay_44:

(Start: 28 @32810 has 13 MA's), (33, 32792), (36, 32771), (47, 32708), (52, 32687), (83, 32534), (95, 32456), (107, 32399), (108, 32390), (109, 32387), (112, 32363),

Gene: Alvin_43 Start: 33331, Stop: 32855, Start Num: 28

Candidate Starts for Alvin_43:

(Start: 28 @33331 has 13 MA's), (33, 33313), (36, 33292), (47, 33229), (52, 33208), (83, 33055), (95, 32977), (107, 32920), (108, 32911), (109, 32908), (112, 32884),

Gene: Arcanine_45 Start: 32773, Stop: 32288, Start Num: 27

Candidate Starts for Arcanine_45:

(Start: 18 @32812 has 3 MA's), (Start: 27 @32773 has 22 MA's), (Start: 37 @32731 has 2 MA's), (47, 32677), (65, 32602), (71, 32578), (73, 32566), (74, 32560), (75, 32557), (95, 32410), (100, 32374), (112, 32317),

Gene: Arri_85 Start: 56022, Stop: 55507, Start Num: 21

Candidate Starts for Arri_85:

(Start: 19 @56028 has 2 MA's), (Start: 21 @56022 has 19 MA's), (23, 56010), (34, 55974), (41, 55929), (42, 55914), (63, 55836), (70, 55809), (73, 55788), (77, 55764), (111, 55554), (112, 55542), (115, 55518),

Gene: Bantam_102 Start: 67594, Stop: 68172, Start Num: 40

Candidate Starts for Bantam_102:

(5, 67276), (14, 67462), (Start: 40 @67594 has 6 MA's), (49, 67642), (53, 67660), (58, 67678), (66, 67711), (80, 67813), (89, 67864), (102, 67966), (118, 68092),

Gene: Beatrix_43 Start: 34176, Stop: 33691, Start Num: 27

Candidate Starts for Beatrix_43:

(Start: 18 @34215 has 3 MA's), (Start: 27 @34176 has 22 MA's), (Start: 37 @34134 has 2 MA's), (47, 34080), (65, 34005), (71, 33981), (73, 33969), (74, 33963), (75, 33960), (78, 33927), (91, 33846), (95, 33813), (108, 33747), (109, 33744), (110, 33735), (112, 33720),

Gene: Bexan_42 Start: 33854, Stop: 33369, Start Num: 27

Candidate Starts for Bexan_42:

(Start: 18 @33893 has 3 MA's), (Start: 27 @33854 has 22 MA's), (Start: 37 @33812 has 2 MA's), (47, 33758), (65, 33683), (71, 33659), (73, 33647), (74, 33641), (75, 33638), (95, 33491), (100, 33455), (112, 33398),

Gene: BigPaolini_44 Start: 31801, Stop: 31358, Start Num: 37

Candidate Starts for BigPaolini_44:

(Start: 18 @31882 has 3 MA's), (Start: 27 @31843 has 22 MA's), (Start: 37 @31801 has 2 MA's), (47, 31747), (65, 31672), (71, 31648), (73, 31636), (74, 31630), (75, 31627), (95, 31480), (100, 31444), (112, 31387),

Gene: Bigchungi_69 Start: 44593, Stop: 44015, Start Num: 13

Candidate Starts for Bigchungi_69:

(Start: 13 @44593 has 14 MA's), (Start: 16 @44581 has 2 MA's), (20, 44563), (50, 44422), (57, 44395), (67, 44356), (73, 44326), (107, 44113),

Gene: BillKnuckles_44 Start: 33515, Stop: 33039, Start Num: 28

Candidate Starts for BillKnuckles_44:

(Start: 28 @33515 has 13 MA's), (33, 33497), (36, 33476), (47, 33413), (83, 33239), (95, 33161), (107, 33104), (108, 33095), (109, 33092), (112, 33068),

Gene: BluSpix_68 Start: 40281, Stop: 39703, Start Num: 13

Candidate Starts for BluSpix_68:

(Start: 13 @40281 has 14 MA's), (Start: 16 @40269 has 2 MA's), (20, 40251), (50, 40110), (57, 40083), (67, 40044), (73, 40014), (107, 39801),

Gene: BluSpix_41 Start: 28937, Stop: 28461, Start Num: 28

Candidate Starts for BluSpix_41:

(Start: 28 @28937 has 13 MA's), (33, 28919), (36, 28898), (47, 28835), (52, 28814), (83, 28661), (95, 28583), (107, 28526), (108, 28517), (109, 28514), (112, 28490),

Gene: Bones_44 Start: 33339, Stop: 32854, Start Num: 27

Candidate Starts for Bones_44:

(Start: 18 @33378 has 3 MA's), (Start: 27 @33339 has 22 MA's), (Start: 37 @33297 has 2 MA's), (47, 33243), (65, 33168), (71, 33144), (73, 33132), (74, 33126), (75, 33123), (95, 32976), (100, 32940), (112, 32883),

Gene: Bruns_64 Start: 41012, Stop: 40455, Start Num: 29

Candidate Starts for Bruns_64:

(Start: 29 @41012 has 9 MA's), (Start: 37 @40970 has 2 MA's), (39, 40952), (60, 40868), (65, 40850), (76, 40799), (81, 40745), (97, 40643), (120, 40475),

Gene: CherryCola_85 Start: 56435, Stop: 55920, Start Num: 21

Candidate Starts for CherryCola_85:

(Start: 19 @56441 has 2 MA's), (Start: 21 @56435 has 19 MA's), (23, 56423), (34, 56387), (41, 56342), (42, 56327), (63, 56249), (70, 56222), (73, 56201), (77, 56177), (111, 55967), (112, 55955), (115, 55931),

Gene: Ciao_44 Start: 32944, Stop: 32501, Start Num: 37

Candidate Starts for Ciao_44:

(9, 33121), (Start: 18 @33025 has 3 MA's), (Start: 27 @32986 has 22 MA's), (Start: 37 @32944 has 2 MA's), (47, 32890), (65, 32815), (71, 32791), (73, 32779), (74, 32773), (75, 32770), (95, 32623), (100, 32587), (112, 32530),

Gene: Conley_83 Start: 53384, Stop: 53935, Start Num: 15

Candidate Starts for Conley_83:

(Start: 15 @53384 has 1 MA's), (Start: 28 @53444 has 13 MA's), (31, 53447), (44, 53534), (46, 53546), (54, 53579), (70, 53636), (82, 53735), (88, 53759), (97, 53840), (114, 53924),

Gene: Crispicous1_60 Start: 40522, Stop: 39992, Start Num: 29

Candidate Starts for Crispicous1_60:

(Start: 29 @40522 has 9 MA's), (39, 40462), (69, 40348), (94, 40186), (95, 40168), (96, 40159), (116, 40051),

Gene: Daredevil_91 Start: 63069, Stop: 63638, Start Num: 40

Candidate Starts for Daredevil_91:

(5, 62760), (7, 62871), (Start: 40 @63069 has 6 MA's), (66, 63186), (74, 63237), (80, 63291), (87, 63336), (110, 63480), (117, 63546),

Gene: DatBoi_98 Start: 66730, Stop: 67308, Start Num: 40

Candidate Starts for DatBoi_98:

(Start: 40 @66730 has 6 MA's), (49, 66778), (58, 66814), (64, 66838), (66, 66847), (93, 67036), (118, 67228),

Gene: Dexes_44 Start: 33602, Stop: 33117, Start Num: 27

Candidate Starts for Dexes_44:

(Start: 18 @33641 has 3 MA's), (Start: 27 @33602 has 22 MA's), (Start: 37 @33560 has 2 MA's), (47, 33506), (65, 33431), (71, 33407), (73, 33395), (74, 33389), (75, 33386), (95, 33239), (100, 33203), (112, 33146),

Gene: DreamCatcher_72 Start: 44845, Stop: 44267, Start Num: 13

Candidate Starts for DreamCatcher_72:

(Start: 13 @44845 has 14 MA's), (Start: 16 @44833 has 2 MA's), (20, 44815), (50, 44674), (57, 44647), (67, 44608), (73, 44578), (107, 44365),

Gene: Egi03_83 Start: 55457, Stop: 54942, Start Num: 21

Candidate Starts for Egi03_83:

(Start: 19 @55463 has 2 MA's), (Start: 21 @55457 has 19 MA's), (23, 55445), (34, 55409), (41, 55364), (42, 55349), (63, 55271), (70, 55244), (73, 55223), (77, 55199), (111, 54989), (112, 54977), (115, 54953),

Gene: Evamon_85 Start: 55834, Stop: 55319, Start Num: 21

Candidate Starts for Evamon_85:

(Start: 19 @55840 has 2 MA's), (Start: 21 @55834 has 19 MA's), (23, 55822), (34, 55786), (41, 55741), (42, 55726), (63, 55648), (70, 55621), (73, 55600), (77, 55576), (111, 55366), (112, 55354), (115, 55330),

Gene: Eyeball_45 Start: 33249, Stop: 32764, Start Num: 27

Candidate Starts for Eyeball_45:

(Start: 18 @33288 has 3 MA's), (Start: 27 @33249 has 22 MA's), (Start: 37 @33207 has 2 MA's), (47, 33153), (65, 33078), (71, 33054), (73, 33042), (74, 33036), (75, 33033), (95, 32886), (100, 32850), (112, 32793),

Gene: Fajezeel_46 Start: 33359, Stop: 32874, Start Num: 27

Candidate Starts for Fajezeel_46:

(9, 33494), (Start: 18 @33398 has 3 MA's), (Start: 27 @33359 has 22 MA's), (Start: 37 @33317 has 2 MA's), (47, 33263), (65, 33188), (71, 33164), (73, 33152), (74, 33146), (75, 33143), (95, 32996), (100, 32960), (112, 32903),

Gene: Fenn_45 Start: 34680, Stop: 34195, Start Num: 27

Candidate Starts for Fenn_45:

(Start: 18 @34719 has 3 MA's), (Start: 27 @34680 has 22 MA's), (Start: 37 @34638 has 2 MA's), (47, 34584), (65, 34509), (71, 34485), (73, 34473), (74, 34467), (75, 34464), (95, 34317), (100, 34281), (112, 34224),

Gene: Fireball_88 Start: 56296, Stop: 55781, Start Num: 21

Candidate Starts for Fireball_88:

(Start: 19 @56302 has 2 MA's), (Start: 21 @56296 has 19 MA's), (23, 56284), (34, 56248), (41, 56203), (42, 56188), (63, 56110), (70, 56083), (73, 56062), (77, 56038), (111, 55828), (112, 55816), (115, 55792),

Gene: Football_90 Start: 53214, Stop: 53690, Start Num: 32

Candidate Starts for Football_90:

(32, 53214), (Start: 37 @53253 has 2 MA's), (Start: 40 @53274 has 6 MA's), (43, 53295), (44, 53298), (65, 53385), (68, 53394), (73, 53421), (79, 53472), (86, 53517), (105, 53634), (106, 53637),

Gene: Forsytheast_64 Start: 41180, Stop: 40623, Start Num: 29

Candidate Starts for Forsytheast_64:

(Start: 29 @41180 has 9 MA's), (Start: 37 @41138 has 2 MA's), (39, 41120), (60, 41036), (65, 41018), (76, 40967), (81, 40913), (97, 40811), (120, 40643),

Gene: Fushigi_42 Start: 30914, Stop: 30438, Start Num: 28

Candidate Starts for Fushigi_42:

(Start: 28 @30914 has 13 MA's), (33, 30896), (36, 30875), (47, 30812), (52, 30791), (83, 30638), (95, 30560), (107, 30503), (108, 30494), (109, 30491), (112, 30467),

Gene: GMonster_70 Start: 44872, Stop: 44306, Start Num: 16

Candidate Starts for GMonster_70:

(Start: 13 @44884 has 14 MA's), (Start: 16 @44872 has 2 MA's), (20, 44854), (50, 44713), (57, 44686), (67, 44647), (73, 44617), (107, 44404),

Gene: GageAP_64 Start: 42203, Stop: 41646, Start Num: 29

Candidate Starts for GageAP_64:

(Start: 29 @42203 has 9 MA's), (Start: 37 @42161 has 2 MA's), (39, 42143), (60, 42059), (65, 42041), (76, 41990), (81, 41936), (97, 41834), (120, 41666),

Gene: Gezellig_81 Start: 55680, Stop: 55165, Start Num: 21

Candidate Starts for Gezellig_81:

(Start: 19 @55686 has 2 MA's), (Start: 21 @55680 has 19 MA's), (23, 55668), (34, 55632), (41, 55587), (42, 55572), (63, 55494), (70, 55467), (73, 55446), (77, 55422), (111, 55212), (112, 55200), (115, 55176),

Gene: Goby_56 Start: 42305, Stop: 41778, Start Num: 18

Candidate Starts for Goby_56:

(11, 42374), (Start: 18 @42305 has 3 MA's), (62, 42131), (85, 41987), (93, 41942), (107, 41858), (111, 41834),

Gene: GrecoEtereo_71 Start: 44625, Stop: 44047, Start Num: 13

Candidate Starts for GrecoEtereo_71:

(Start: 13 @44625 has 14 MA's), (Start: 16 @44613 has 2 MA's), (20, 44595), (50, 44454), (57, 44427), (67, 44388), (73, 44358), (107, 44145),

Gene: Greg_46 Start: 33359, Stop: 32874, Start Num: 27

Candidate Starts for Greg_46:

(9, 33494), (Start: 18 @33398 has 3 MA's), (Start: 27 @33359 has 22 MA's), (Start: 37 @33317 has 2 MA's), (47, 33263), (65, 33188), (71, 33164), (73, 33152), (74, 33146), (75, 33143), (95, 32996), (100, 32960), (112, 32903),

Gene: ILeeKay_48 Start: 33858, Stop: 33382, Start Num: 28

Candidate Starts for ILeeKay_48:

(Start: 28 @33858 has 13 MA's), (33, 33840), (36, 33819), (47, 33756), (52, 33735), (83, 33582), (95, 33504), (107, 33447), (108, 33438), (109, 33435), (112, 33411),

Gene: Ibantik_17 Start: 6683, Stop: 6195, Start Num: 30

Candidate Starts for Ibantik_17:

(Start: 30 @6683 has 1 MA's), (44, 6599), (51, 6566), (56, 6548), (63, 6521), (94, 6335), (103, 6278),

Gene: Ibantik_66 Start: 28032, Stop: 28526, Start Num: 26

Candidate Starts for Ibantik_66:

(25, 28029), (Start: 26 @28032 has 1 MA's), (31, 28044), (35, 28062), (39, 28104), (73, 28245), (92, 28374), (108, 28464), (115, 28515),

Gene: Ichabod_74 Start: 45654, Stop: 45076, Start Num: 13

Candidate Starts for Ichabod_74:

(Start: 13 @45654 has 14 MA's), (Start: 16 @45642 has 2 MA's), (20, 45624), (50, 45483), (57, 45456), (67, 45417), (73, 45387), (107, 45174),

Gene: IgnatiusPatJac_43 Start: 32882, Stop: 32406, Start Num: 28

Candidate Starts for IgnatiusPatJac_43:

(Start: 28 @32882 has 13 MA's), (33, 32864), (36, 32843), (47, 32780), (52, 32759), (83, 32606), (95, 32528), (107, 32471), (108, 32462), (109, 32459), (112, 32435),

Gene: IgnatiusPatJac_70 Start: 44214, Stop: 43648, Start Num: 16

Candidate Starts for IgnatiusPatJac_70:

(Start: 13 @44226 has 14 MA's), (Start: 16 @44214 has 2 MA's), (20, 44196), (50, 44055), (57, 44028), (67, 43989), (73, 43959), (107, 43746),

Gene: KimmyK_83 Start: 56127, Stop: 55612, Start Num: 21

Candidate Starts for KimmyK_83:

(Start: 19 @56133 has 2 MA's), (Start: 21 @56127 has 19 MA's), (23, 56115), (34, 56079), (41, 56034), (42, 56019), (63, 55941), (70, 55914), (73, 55893), (77, 55869), (111, 55659), (112, 55647), (115, 55623),

Gene: Kykar_44 Start: 32934, Stop: 32458, Start Num: 28

Candidate Starts for Kykar_44:

(Start: 28 @32934 has 13 MA's), (33, 32916), (36, 32895), (47, 32832), (52, 32811), (83, 32658), (95, 32580), (107, 32523), (108, 32514), (109, 32511), (112, 32487),

Gene: Lesedi_65 Start: 42530, Stop: 41952, Start Num: 13

Candidate Starts for Lesedi_65:

(8, 42602), (Start: 13 @42530 has 14 MA's), (Start: 16 @42518 has 2 MA's), (20, 42500), (50, 42359), (57, 42332), (67, 42293), (73, 42263), (107, 42050),

Gene: LibertyBell_73 Start: 45969, Stop: 46457, Start Num: 45

Candidate Starts for LibertyBell_73:

(Start: 45 @45969 has 1 MA's), (63, 46038), (80, 46152), (91, 46227), (101, 46308), (113, 46371),

Gene: Licorice_47 Start: 34445, Stop: 33960, Start Num: 27

Candidate Starts for Licorice_47:

(Start: 18 @34484 has 3 MA's), (Start: 27 @34445 has 22 MA's), (Start: 37 @34403 has 2 MA's), (47, 34349), (65, 34274), (71, 34250), (73, 34238), (74, 34232), (75, 34229), (95, 34082), (100, 34046), (112, 33989),

Gene: Lika_55 Start: 42316, Stop: 41774, Start Num: 18

Candidate Starts for Lika_55:

(Start: 18 @42316 has 3 MA's), (85, 41986), (107, 41857),

Gene: Lopton_70 Start: 46302, Stop: 45724, Start Num: 13

Candidate Starts for Lopton_70:

(12, 46311), (Start: 13 @46302 has 14 MA's), (Start: 16 @46290 has 2 MA's), (20, 46272), (50, 46131), (57, 46104), (67, 46065), (73, 46035), (107, 45822),

Gene: Marco3_46 Start: 33679, Stop: 33203, Start Num: 28

Candidate Starts for Marco3_46:

(Start: 28 @33679 has 13 MA's), (33, 33661), (36, 33640), (47, 33577), (52, 33556), (83, 33403), (95, 33325), (107, 33268), (108, 33259), (109, 33256), (112, 33232),

Gene: Marge_44 Start: 33477, Stop: 32992, Start Num: 27

Candidate Starts for Marge_44:

(Start: 18 @33516 has 3 MA's), (Start: 27 @33477 has 22 MA's), (Start: 37 @33435 has 2 MA's), (47, 33381), (65, 33306), (71, 33282), (73, 33270), (74, 33264), (75, 33261), (95, 33114), (100, 33078), (112, 33021),

Gene: McGuire_71 Start: 44174, Stop: 43596, Start Num: 13

Candidate Starts for McGuire_71:

(Start: 13 @44174 has 14 MA's), (Start: 16 @44162 has 2 MA's), (20, 44144), (50, 44003), (57, 43976), (67, 43937), (73, 43907), (107, 43694),

Gene: McSinger_68 Start: 43534, Stop: 42956, Start Num: 13

Candidate Starts for McSinger_68:

(Start: 13 @43534 has 14 MA's), (Start: 16 @43522 has 2 MA's), (20, 43504), (50, 43363), (57, 43336), (67, 43297), (73, 43267), (107, 43054),

Gene: Mollymur_102 Start: 68397, Stop: 68978, Start Num: 40

Candidate Starts for Mollymur_102:

(5, 68076), (10, 68211), (Start: 40 @68397 has 6 MA's), (66, 68514), (72, 68541), (74, 68565), (83, 68646), (98, 68757), (117, 68886), (119, 68916), (121, 68922),

Gene: Moose_64 Start: 41180, Stop: 40623, Start Num: 29

Candidate Starts for Moose_64:

(Start: 29 @41180 has 9 MA's), (Start: 37 @41138 has 2 MA's), (39, 41120), (60, 41036), (65, 41018), (76, 40967), (81, 40913), (97, 40811), (120, 40643),

Gene: NEHalo_60 Start: 41604, Stop: 41047, Start Num: 29

Candidate Starts for NEHalo_60:

(Start: 29 @41604 has 9 MA's), (Start: 37 @41562 has 2 MA's), (39, 41544), (60, 41460), (65, 41442), (76, 41391), (81, 41337), (97, 41235), (120, 41067),

Gene: Naira_45 Start: 34727, Stop: 34242, Start Num: 27

Candidate Starts for Naira_45:

(Start: 18 @34766 has 3 MA's), (Start: 27 @34727 has 22 MA's), (Start: 37 @34685 has 2 MA's), (47, 34631), (65, 34556), (71, 34532), (73, 34520), (74, 34514), (75, 34511), (95, 34364), (100, 34328), (112, 34271),

Gene: Niza_46 Start: 34104, Stop: 33619, Start Num: 27

Candidate Starts for Niza_46:

(Start: 18 @34143 has 3 MA's), (Start: 27 @34104 has 22 MA's), (Start: 37 @34062 has 2 MA's), (47, 34008), (65, 33933), (71, 33909), (73, 33897), (74, 33891), (75, 33888), (95, 33741), (100, 33705), (112, 33648),

Gene: Petruchio_44 Start: 32947, Stop: 32471, Start Num: 28

Candidate Starts for Petruchio_44:

(Start: 28 @32947 has 13 MA's), (33, 32929), (36, 32908), (47, 32845), (52, 32824), (83, 32671), (95, 32593), (107, 32536), (108, 32527), (109, 32524), (112, 32500),

Gene: Phlop_82 Start: 55730, Stop: 55215, Start Num: 21

Candidate Starts for Phlop_82:

(Start: 19 @55736 has 2 MA's), (Start: 21 @55730 has 19 MA's), (23, 55718), (34, 55682), (41, 55637), (42, 55622), (63, 55544), (70, 55517), (73, 55496), (77, 55472), (111, 55262), (112, 55250), (115, 55226),

Gene: PinkCoffee_86 Start: 55594, Stop: 55079, Start Num: 21

Candidate Starts for PinkCoffee_86:

(Start: 19 @55600 has 2 MA's), (Start: 21 @55594 has 19 MA's), (23, 55582), (34, 55546), (41, 55501), (42, 55486), (63, 55408), (70, 55381), (73, 55360), (77, 55336), (111, 55126), (112, 55114), (115, 55090),

Gene: Pippin_46 Start: 33403, Stop: 32918, Start Num: 27

Candidate Starts for Pippin_46:

(9, 33538), (Start: 18 @33442 has 3 MA's), (Start: 27 @33403 has 22 MA's), (Start: 37 @33361 has 2 MA's), (47, 33307), (65, 33232), (71, 33208), (73, 33196), (74, 33190), (75, 33187), (95, 33040), (100, 33004), (112, 32947),

Gene: Portcullis_85 Start: 55736, Stop: 55221, Start Num: 21

Candidate Starts for Portcullis_85:

(Start: 19 @55742 has 2 MA's), (Start: 21 @55736 has 19 MA's), (23, 55724), (34, 55688), (41, 55643), (42, 55628), (63, 55550), (70, 55523), (73, 55502), (77, 55478), (111, 55268), (112, 55256), (115, 55232),

Gene: ProMouse_44 Start: 33305, Stop: 32802, Start Num: 22

Candidate Starts for ProMouse_44:

(17, 33329), (22, 33305), (36, 33236), (39, 33215), (52, 33164), (55, 33158), (83, 33011), (108, 32867), (112, 32840),

Gene: PullumCavea_83 Start: 55907, Stop: 55392, Start Num: 21

Candidate Starts for PullumCavea_83:

(Start: 19 @55913 has 2 MA's), (Start: 21 @55907 has 19 MA's), (23, 55895), (34, 55859), (41, 55814), (42, 55799), (63, 55721), (70, 55694), (73, 55673), (77, 55649), (111, 55439), (112, 55427), (115, 55403),

Gene: Puppet_45 Start: 33423, Stop: 33034, Start Num: 47

Candidate Starts for Puppet_45:

(Start: 18 @33558 has 3 MA's), (Start: 27 @33519 has 22 MA's), (Start: 37 @33477 has 2 MA's), (47, 33423), (65, 33348), (71, 33324), (73, 33312), (74, 33306), (75, 33303), (95, 33156), (100, 33120), (112, 33063),

Gene: Rajelicia_45 Start: 33435, Stop: 32950, Start Num: 27

Candidate Starts for Rajelicia_45:

(Start: 18 @33474 has 3 MA's), (Start: 27 @33435 has 22 MA's), (Start: 37 @33393 has 2 MA's), (47, 33339), (65, 33264), (71, 33240), (73, 33228), (74, 33222), (75, 33219), (95, 33072), (100, 33036), (112, 32979),

Gene: RogerDodger_88 Start: 56495, Stop: 55980, Start Num: 21

Candidate Starts for RogerDodger_88:

(Start: 19 @56501 has 2 MA's), (Start: 21 @56495 has 19 MA's), (23, 56483), (34, 56447), (41, 56402), (42, 56387), (63, 56309), (70, 56282), (73, 56261), (77, 56237), (111, 56027), (112, 56015), (115, 55991),

Gene: Ruotula_47 Start: 34572, Stop: 34078, Start Num: 27

Candidate Starts for Ruotula_47:

(Start: 18 @34611 has 3 MA's), (Start: 27 @34572 has 22 MA's), (Start: 37 @34530 has 2 MA's), (47, 34476), (65, 34401), (71, 34377), (73, 34365), (74, 34359), (75, 34356), (95, 34200), (100, 34164), (112, 34107),

Gene: Sagefire_47 Start: 34321, Stop: 33836, Start Num: 27

Candidate Starts for Sagefire_47:

(Start: 18 @34360 has 3 MA's), (Start: 27 @34321 has 22 MA's), (Start: 37 @34279 has 2 MA's), (47, 34225), (65, 34150), (71, 34126), (73, 34114), (74, 34108), (75, 34105), (95, 33958), (100, 33922), (112, 33865),

Gene: Salvador_85 Start: 55832, Stop: 55317, Start Num: 21

Candidate Starts for Salvador_85:

(Start: 19 @55838 has 2 MA's), (Start: 21 @55832 has 19 MA's), (23, 55820), (34, 55784), (41, 55739), (42, 55724), (63, 55646), (70, 55619), (73, 55598), (77, 55574), (111, 55364), (112, 55352), (115, 55328),

Gene: Samy_64 Start: 40970, Stop: 41473, Start Num: 28

Candidate Starts for Samy_64:

(1, 40451), (2, 40556), (3, 40580), (4, 40679), (6, 40739), (Start: 28 @40970 has 13 MA's), (44, 41057), (52, 41093), (61, 41126), (65, 41144), (90, 41297), (94, 41327), (104, 41390),

Gene: Samy_62 Start: 37969, Stop: 38490, Start Num: 19

Candidate Starts for Samy_62:

(Start: 19 @37969 has 2 MA's), (38, 38059), (71, 38200),

Gene: SarFire_70 Start: 44563, Stop: 43985, Start Num: 13

Candidate Starts for SarFire_70:

(Start: 13 @44563 has 14 MA's), (Start: 16 @44551 has 2 MA's), (20, 44533), (50, 44392), (57, 44365), (67, 44326), (73, 44296), (107, 44083),

Gene: Savbucketdawg_80 Start: 55174, Stop: 54659, Start Num: 21

Candidate Starts for Savbucketdawg_80:

(Start: 19 @55180 has 2 MA's), (Start: 21 @55174 has 19 MA's), (23, 55162), (34, 55126), (41, 55081), (42, 55066), (63, 54988), (70, 54961), (73, 54940), (77, 54916), (111, 54706), (112, 54694), (115, 54670),

Gene: Seanderson_46 Start: 33923, Stop: 33447, Start Num: 28

Candidate Starts for Seanderson_46:

(Start: 28 @33923 has 13 MA's), (33, 33905), (36, 33884), (47, 33821), (52, 33800), (83, 33647), (95, 33569), (107, 33512), (108, 33503), (109, 33500), (112, 33476),

Gene: Shinji_84 Start: 55913, Stop: 55398, Start Num: 21

Candidate Starts for Shinji_84:

(Start: 19 @55919 has 2 MA's), (Start: 21 @55913 has 19 MA's), (23, 55901), (34, 55865), (41, 55820), (42, 55805), (63, 55727), (70, 55700), (73, 55679), (77, 55655), (111, 55445), (112, 55433), (115, 55409),

Gene: Slagathor_46 Start: 33360, Stop: 32875, Start Num: 27

Candidate Starts for Slagathor_46:

(Start: 18 @33399 has 3 MA's), (Start: 27 @33360 has 22 MA's), (Start: 37 @33318 has 2 MA's), (47, 33264), (65, 33189), (71, 33165), (73, 33153), (74, 33147), (75, 33144), (95, 32997), (100, 32961), (112, 32904),

Gene: Smairt_46 Start: 33659, Stop: 33174, Start Num: 27

Candidate Starts for Smairt_46:

(Start: 18 @33698 has 3 MA's), (Start: 27 @33659 has 22 MA's), (Start: 37 @33617 has 2 MA's), (47, 33563), (65, 33488), (71, 33464), (73, 33452), (74, 33446), (75, 33443), (95, 33296), (100, 33260), (112, 33203),

Gene: SmokingBunny_86 Start: 56828, Stop: 56313, Start Num: 21

Candidate Starts for SmokingBunny_86:

(Start: 19 @56834 has 2 MA's), (Start: 21 @56828 has 19 MA's), (23, 56816), (34, 56780), (41, 56735), (42, 56720), (63, 56642), (70, 56615), (73, 56594), (77, 56570), (111, 56360), (112, 56348), (115, 56324),

Gene: Snazzy_68 Start: 43855, Stop: 43277, Start Num: 13

Candidate Starts for Snazzy_68:

(Start: 13 @43855 has 14 MA's), (Start: 16 @43843 has 2 MA's), (20, 43825), (50, 43684), (57, 43657), (67, 43618), (73, 43588), (107, 43375),

Gene: SpeedDemon_1040 Start: 70108, Stop: 70686, Start Num: 40

Candidate Starts for SpeedDemon_1040:

(5, 69790), (14, 69976), (Start: 40 @70108 has 6 MA's), (49, 70156), (53, 70174), (58, 70192), (66, 70225), (80, 70327), (89, 70378), (102, 70480), (118, 70606),

Gene: SpikeBT_61 Start: 41461, Stop: 40904, Start Num: 29

Candidate Starts for SpikeBT_61:

(Start: 29 @41461 has 9 MA's), (Start: 37 @41419 has 2 MA's), (39, 41401), (60, 41317), (65, 41299), (76, 41248), (81, 41194), (97, 41092), (120, 40924),

Gene: Squee_73 Start: 44893, Stop: 44315, Start Num: 13

Candidate Starts for Squee_73:

(Start: 13 @44893 has 14 MA's), (Start: 16 @44881 has 2 MA's), (20, 44863), (50, 44722), (57, 44695), (67, 44656), (73, 44626), (107, 44413),

Gene: StrongArm_43 Start: 33982, Stop: 33497, Start Num: 27

Candidate Starts for StrongArm_43:

(Start: 18 @34021 has 3 MA's), (Start: 27 @33982 has 22 MA's), (Start: 37 @33940 has 2 MA's), (47, 33886), (65, 33811), (71, 33787), (73, 33775), (74, 33769), (75, 33766), (95, 33619), (100, 33583), (112, 33526),

Gene: SwissCheese_66 Start: 41680, Stop: 41123, Start Num: 29

Candidate Starts for SwissCheese_66:

(Start: 29 @41680 has 9 MA's), (Start: 37 @41638 has 2 MA's), (39, 41620), (60, 41536), (65, 41518), (76, 41467), (81, 41413), (97, 41311), (120, 41143),

Gene: TheloniousMonk_45 Start: 34368, Stop: 33883, Start Num: 27

Candidate Starts for TheloniousMonk_45:

(Start: 18 @34407 has 3 MA's), (Start: 27 @34368 has 22 MA's), (Start: 37 @34326 has 2 MA's), (47, 34272), (65, 34197), (71, 34173), (73, 34161), (74, 34155), (75, 34152), (95, 34005), (100, 33969), (112, 33912),

Gene: Thor_70 Start: 43921, Stop: 43343, Start Num: 13

Candidate Starts for Thor_70:

(Start: 13 @43921 has 14 MA's), (Start: 16 @43909 has 2 MA's), (20, 43891), (50, 43750), (57, 43723), (67, 43684), (73, 43654), (107, 43441),

Gene: TillyBobJoe_83 Start: 55714, Stop: 55199, Start Num: 21

Candidate Starts for TillyBobJoe_83:

(Start: 19 @55720 has 2 MA's), (Start: 21 @55714 has 19 MA's), (23, 55702), (34, 55666), (41, 55621), (42, 55606), (63, 55528), (70, 55501), (73, 55480), (77, 55456), (111, 55246), (112, 55234), (115, 55210),

Gene: Togo_85 Start: 56828, Stop: 56313, Start Num: 21

Candidate Starts for Togo_85:

(Start: 19 @56834 has 2 MA's), (Start: 21 @56828 has 19 MA's), (23, 56816), (34, 56780), (41, 56735), (42, 56720), (63, 56642), (70, 56615), (73, 56594), (77, 56570), (111, 56360), (112, 56348), (115, 56324),

Gene: Toma_56 Start: 42308, Stop: 41778, Start Num: 18

Candidate Starts for Toma_56:

(11, 42377), (Start: 18 @42308 has 3 MA's), (62, 42131), (85, 41987), (93, 41942), (107, 41858), (111, 41834),

Gene: Towmatter_90 Start: 63151, Stop: 63720, Start Num: 40

Candidate Starts for Towmatter_90:

(5, 62842), (7, 62953), (Start: 40 @63151 has 6 MA's), (66, 63268), (74, 63319), (80, 63373), (87, 63418), (110, 63562), (117, 63628),

Gene: Trouble_45 Start: 34048, Stop: 33572, Start Num: 28

Candidate Starts for Trouble_45:

(Start: 28 @34048 has 13 MA's), (33, 34030), (36, 34009), (47, 33946), (52, 33925), (83, 33772), (95, 33694), (107, 33637), (108, 33628), (109, 33625), (112, 33601),

Gene: Twister6_84 Start: 55177, Stop: 54662, Start Num: 21

Candidate Starts for Twister6_84:

(Start: 19 @55183 has 2 MA's), (Start: 21 @55177 has 19 MA's), (23, 55165), (34, 55129), (41, 55084), (42, 55069), (63, 54991), (70, 54964), (73, 54943), (77, 54919), (111, 54709), (112, 54697), (115, 54673),

Gene: Valary_86 Start: 56820, Stop: 56305, Start Num: 21

Candidate Starts for Valary_86:

(Start: 19 @56826 has 2 MA's), (Start: 21 @56820 has 19 MA's), (23, 56808), (34, 56772), (41, 56727), (42, 56712), (63, 56634), (70, 56607), (73, 56586), (77, 56562), (111, 56352), (112, 56340), (115, 56316),

Gene: VanDeWege_87 Start: 56351, Stop: 55830, Start Num: 19

Candidate Starts for VanDeWege_87:

(Start: 19 @56351 has 2 MA's), (Start: 21 @56345 has 19 MA's), (23, 56333), (34, 56297), (41, 56252), (42, 56237), (63, 56159), (70, 56132), (73, 56111), (77, 56087), (111, 55877), (112, 55865), (115, 55841),

Gene: Wizard_80 Start: 55680, Stop: 55165, Start Num: 21

Candidate Starts for Wizard_80:

(Start: 19 @55686 has 2 MA's), (Start: 21 @55680 has 19 MA's), (23, 55668), (34, 55632), (41, 55587), (42, 55572), (63, 55494), (70, 55467), (73, 55446), (77, 55422), (111, 55212), (112, 55200), (115, 55176),

Gene: Wollypog_58 Start: 43704, Stop: 44234, Start Num: 24

Candidate Starts for Wollypog_58:

(Start: 24 @43704 has 1 MA's), (48, 43818), (59, 43863), (84, 44016), (99, 44124),