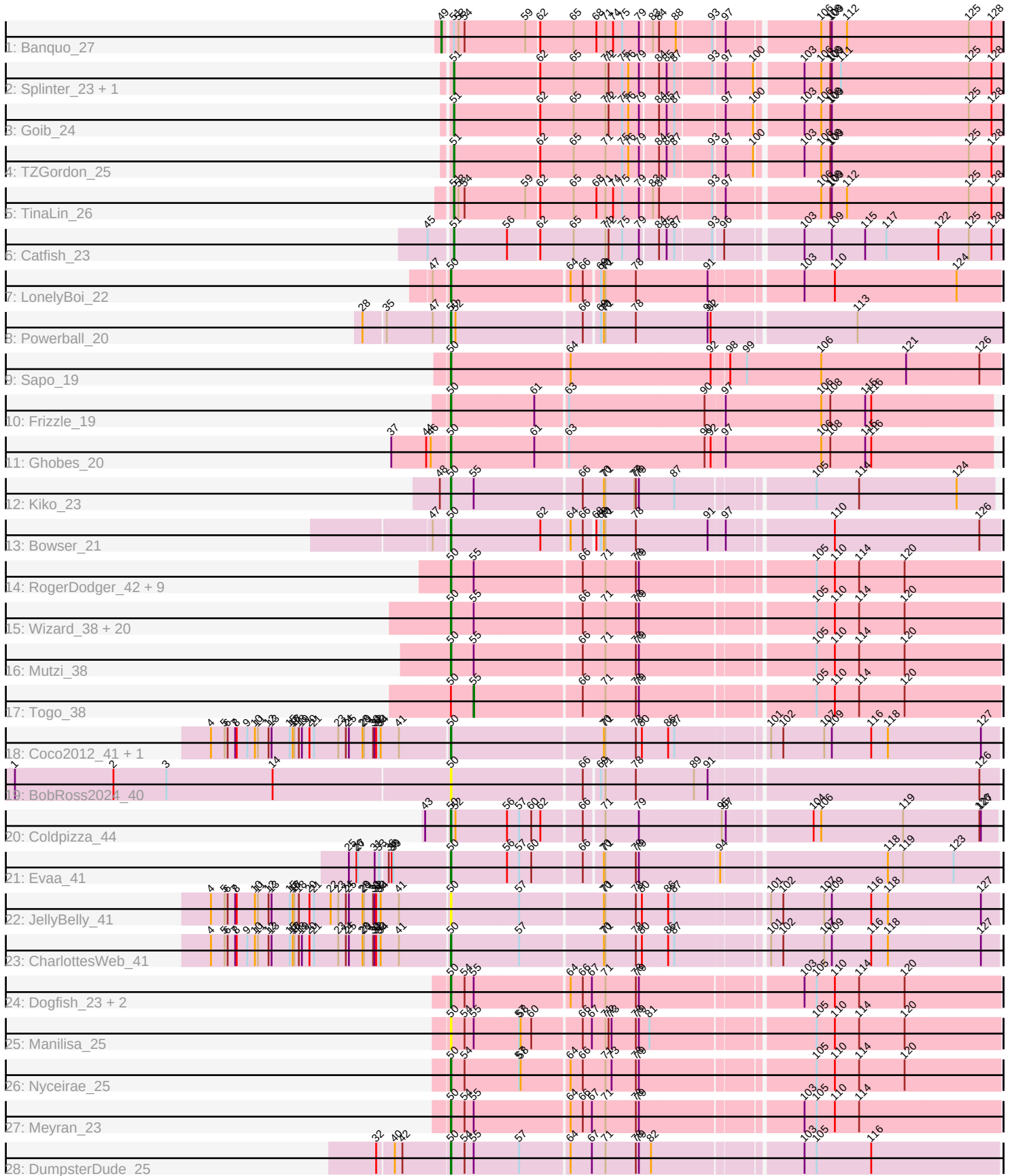


Pham 325223



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 325223 Report

This analysis was run 09/05/26 on database version 662.

Pham number 325223 has 61 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Banquo_27
- Track 2 : Splinter_23, Vendetta_23
- Track 3 : Goib_24
- Track 4 : TZGordon_25
- Track 5 : TinaLin_26
- Track 6 : Catfish_23
- Track 7 : LonelyBoi_22
- Track 8 : Powerball_20
- Track 9 : Sapo_19
- Track 10 : Frizzle_19
- Track 11 : Ghobes_20
- Track 12 : Kiko_23
- Track 13 : Browser_21
- Track 14 : RogerDodger_42, Arri_42, Barb_41, Fugax_42, Shinji_39, PinkCoffee_41, VanDeWege_42, CherryCola_41, ClamChowder_41, Valary_41
- Track 15 : Wizard_38, Nubi_39, Fireball_40, Sendy_40, Jambalaya_39, Danyall_41, Egi03_39, Twister6_41, SmokingBunny_39, JohnPork_40, Gezellig_38, Salvador_38, CoveyB_42, Savbucketdawg_39, Phlop_38, Evamon_38, Portcullis_40, Halo3_39, TillyBobJoe_39, KimmyK_40, PullumCavea_38
- Track 16 : Mutzi_38
- Track 17 : Togo_38
- Track 18 : Coco2012_41, Mariokart_41
- Track 19 : BobRoss2024_40
- Track 20 : Coldpizza_44
- Track 21 : Evaa_41
- Track 22 : JellyBelly_41
- Track 23 : CharlottesWeb_41
- Track 24 : Dogfish_23, Phishy_24, Vordorf_24
- Track 25 : Manilisa_25
- Track 26 : Nyceirae_25
- Track 27 : Meyran_23
- Track 28 : DumpsterDude_25

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

The start number called the most often in the published annotations is 50, it was called in 45 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri_42, Barb_41, BobRoss2024_40, Bowser_21, CharlottesWeb_41, CherryCola_41, ClamChowder_41, Coco2012_41, Coldpizza_44, CoveyB_42, Danyall_41, Dogfish_23, DumpsterDude_25, Egi03_39, Evaa_41, Evamon_38, Fireball_40, Frizzle_19, Fugax_42, Gezellig_38, Ghobes_20, Halo3_39, Jambalaya_39, JellyBelly_41, JohnPork_40, Kiko_23, KimmyK_40, LonelyBoi_22, Manilisa_25, Mariokart_41, Meyran_23, Mutzi_38, Nubi_39, Nyceirae_25, Phishy_24, Phlop_38, PinkCoffee_41, Portcullis_40, Powerball_20, PullumCavea_38, RogerDodger_42, Salvador_38, Sapo_19, Savbucketdawg_39, Sendy_40, Shinji_39, SmokingBunny_39, TillyBobJoe_39, Twister6_41, Valary_41, VanDeWege_42, Vordorf_24, Wizard_38,

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

- Togo_38,

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

- Banquo_27, Catfish_23, Goib_24, Splinter_23, TZGordon_25, TinaLin_26, Vendetta_23,

Summary by start number:

Start 49:

- Found in 1 of 61 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo_27 (CU1),

Start 50:

- Found in 54 of 61 (88.5%) of genes in pham
- Manual Annotations of this start: 45 of 53
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Arri_42 (DC1), Barb_41 (DC1), BobRoss2024_40 (DR), Bowser_21 (DB), CharlottesWeb_41 (DR), CherryCola_41 (DC1), ClamChowder_41 (DC1), Coco2012_41 (DR), Coldpizza_44 (DR), CoveyB_42 (DC1), Danyall_41 (DC1), Dogfish_23 (DT), DumpsterDude_25 (DW), Egi03_39 (DC1), Evaa_41 (DR), Evamon_38 (DC1), Fireball_40 (DC1), Frizzle_19 (DA), Fugax_42 (DC1), Gezellig_38 (DC1), Ghobes_20 (DA), Halo3_39 (DC1), Jambalaya_39 (DC1), JellyBelly_41 (DR), JohnPork_40 (DC1), Kiko_23 (DB), KimmyK_40 (DC1), LonelyBoi_22 (CY7), Manilisa_25 (DT), Mariokart_41 (DR), Meyran_23 (DT), Mutzi_38 (DC1), Nubi_39 (DC1), Nyceirae_25 (DT), Phishy_24 (DT), Phlop_38 (DC1), PinkCoffee_41 (DC1), Portcullis_40 (DC1), Powerball_20 (CZ4), PullumCavea_38 (DC1), RogerDodger_42 (DC1), Salvador_38 (DC1), Sapo_19 (DA), Savbucketdawg_39 (DC1), Sendy_40 (DC1), Shinji_39 (DC1), SmokingBunny_39 (DC1), TillyBobJoe_39 (DC1), Twister6_41 (DC1), Valary_41 (DC1), VanDeWege_42 (DC1), Vordorf_24 (DT), Wizard_38 (DC1),

Start 51:

- Found in 7 of 61 (11.5%) of genes in pham
- Manual Annotations of this start: 6 of 53

- Called 85.7% of time when present
- Phage (with cluster) where this start called: Catfish_23 (CU5), Goib_24 (CU1), Splinter_23 (CU1), TZGordon_25 (CU1), TinaLin_26 (CU1), Vendetta_23 (CU1),

Start 55:

- Found in 40 of 61 (65.6%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 2.5% of time when present
- Phage (with cluster) where this start called: Togo_38 (DC1),

Summary by clusters:

There are 10 clusters represented in this pham: CU5, CY7, CU1, DB, CZ4, DA, DW, DT, DR, DC1,

Info for manual annotations of cluster CU1:

- Start number 49 was manually annotated 1 time for cluster CU1.
- Start number 51 was manually annotated 5 times for cluster CU1.

Info for manual annotations of cluster CU5:

- Start number 51 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CY7:

- Start number 50 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ4:

- Start number 50 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DA:

- Start number 50 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster DB:

- Start number 50 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 50 was manually annotated 29 times for cluster DC1.
- Start number 55 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DR:

- Start number 50 was manually annotated 4 times for cluster DR.

Info for manual annotations of cluster DT:

- Start number 50 was manually annotated 4 times for cluster DT.

Info for manual annotations of cluster DW:

- Start number 50 was manually annotated 1 time for cluster DW.

Gene Information:

Gene: Arri_42 Start: 33965, Stop: 35005, Start Num: 50

Candidate Starts for Arri_42:

(Start: 50 @33965 has 45 MA's), (Start: 55 @34010 has 1 MA's), (66, 34214), (71, 34256), (78, 34316), (79, 34322), (105, 34643), (110, 34679), (114, 34727), (120, 34817),

Gene: Banquo_27 Start: 19155, Stop: 20201, Start Num: 49

Candidate Starts for Banquo_27:

(Start: 49 @19155 has 1 MA's), (Start: 51 @19170 has 6 MA's), (53, 19179), (54, 19191), (59, 19311), (62, 19335), (65, 19401), (68, 19446), (71, 19464), (74, 19479), (75, 19497), (79, 19530), (83, 19551), (84, 19563), (88, 19596), (93, 19662), (97, 19683), (106, 19851), (108, 19869), (109, 19872), (112, 19902), (125, 20133), (128, 20178),

Gene: Barb_41 Start: 33982, Stop: 35022, Start Num: 50

Candidate Starts for Barb_41:

(Start: 50 @33982 has 45 MA's), (Start: 55 @34027 has 1 MA's), (66, 34231), (71, 34273), (78, 34333), (79, 34339), (105, 34660), (110, 34696), (114, 34744), (120, 34834),

Gene: BobRoss2024_40 Start: 34256, Stop: 35284, Start Num: 50

Candidate Starts for BobRoss2024_40:

(1, 33404), (2, 33599), (3, 33704), (14, 33914), (Start: 50 @34256 has 45 MA's), (66, 34505), (69, 34529), (71, 34538), (78, 34598), (89, 34712), (91, 34739), (126, 35246),

Gene: Bowser_21 Start: 18893, Stop: 19924, Start Num: 50

Candidate Starts for Bowser_21:

(47, 18863), (Start: 50 @18893 has 45 MA's), (62, 19067), (64, 19118), (66, 19142), (68, 19157), (69, 19166), (70, 19172), (71, 19175), (78, 19235), (91, 19376), (97, 19403), (110, 19601), (126, 19883),

Gene: Catfish_23 Start: 19814, Stop: 20845, Start Num: 51

Candidate Starts for Catfish_23:

(45, 19772), (Start: 51 @19814 has 6 MA's), (56, 19919), (62, 19979), (65, 20045), (71, 20108), (72, 20114), (75, 20141), (79, 20174), (84, 20207), (85, 20222), (87, 20237), (93, 20306), (96, 20324), (103, 20462), (109, 20516), (115, 20579), (117, 20621), (122, 20720), (125, 20777), (128, 20822),

Gene: CharlottesWeb_41 Start: 34058, Stop: 35095, Start Num: 50

Candidate Starts for CharlottesWeb_41:

(4, 33593), (5, 33620), (6, 33626), (7, 33641), (8, 33644), (9, 33665), (10, 33680), (11, 33686), (12, 33707), (13, 33713), (15, 33746), (16, 33752), (17, 33755), (18, 33764), (19, 33770), (20, 33785), (21, 33794), (23, 33842), (24, 33857), (25, 33863), (28, 33890), (29, 33893), (30, 33911), (31, 33914), (32, 33917), (33, 33923), (34, 33926), (41, 33962), (Start: 50 @34058 has 45 MA's), (57, 34190), (70, 34346), (71, 34349), (78, 34409), (80, 34421), (86, 34472), (87, 34484), (101, 34649), (102, 34673), (107, 34754), (109, 34769), (116, 34847), (118, 34880), (127, 35060),

Gene: CherryCola_41 Start: 34738, Stop: 35778, Start Num: 50

Candidate Starts for CherryCola_41:

(Start: 50 @34738 has 45 MA's), (Start: 55 @34783 has 1 MA's), (66, 34987), (71, 35029), (78, 35089), (79, 35095), (105, 35416), (110, 35452), (114, 35500), (120, 35590),

Gene: ClamChowder_41 Start: 33982, Stop: 35022, Start Num: 50

Candidate Starts for ClamChowder_41:

(Start: 50 @33982 has 45 MA's), (Start: 55 @34027 has 1 MA's), (66, 34231), (71, 34273), (78, 34333), (79, 34339), (105, 34660), (110, 34696), (114, 34744), (120, 34834),

Gene: Coco2012_41 Start: 34055, Stop: 35089, Start Num: 50

Candidate Starts for Coco2012_41:

(4, 33590), (5, 33617), (6, 33623), (7, 33638), (8, 33641), (9, 33662), (10, 33677), (11, 33683), (12, 33704), (13, 33710), (15, 33743), (16, 33749), (17, 33752), (18, 33761), (19, 33767), (20, 33782), (21, 33791), (23, 33839), (24, 33854), (25, 33860), (28, 33887), (29, 33890), (30, 33908), (31, 33911), (32, 33914), (33, 33920), (34, 33923), (41, 33959), (Start: 50 @34055 has 45 MA's), (70, 34343), (71, 34346), (78, 34406), (80, 34418), (86, 34469), (87, 34481), (101, 34646), (102, 34670), (107, 34751), (109, 34766), (116, 34844), (118, 34877), (127, 35057),

Gene: Coldpizza_44 Start: 38779, Stop: 39807, Start Num: 50

Candidate Starts for Coldpizza_44:

(43, 38740), (Start: 50 @38779 has 45 MA's), (52, 38788), (56, 38887), (57, 38911), (60, 38935), (62, 38953), (66, 39028), (71, 39061), (79, 39127), (95, 39286), (97, 39289), (104, 39445), (106, 39460), (119, 39622), (126, 39772), (127, 39775),

Gene: CoveyB_42 Start: 33783, Stop: 34823, Start Num: 50

Candidate Starts for CoveyB_42:

(Start: 50 @33783 has 45 MA's), (Start: 55 @33828 has 1 MA's), (66, 34032), (71, 34074), (78, 34134), (79, 34140), (105, 34461), (110, 34497), (114, 34545), (120, 34635),

Gene: Danyall_41 Start: 33785, Stop: 34825, Start Num: 50

Candidate Starts for Danyall_41:

(Start: 50 @33785 has 45 MA's), (Start: 55 @33830 has 1 MA's), (66, 34034), (71, 34076), (78, 34136), (79, 34142), (105, 34463), (110, 34499), (114, 34547), (120, 34637),

Gene: Dogfish_23 Start: 20217, Stop: 21257, Start Num: 50

Candidate Starts for Dogfish_23:

(Start: 50 @20217 has 45 MA's), (54, 20244), (Start: 55 @20262 has 1 MA's), (64, 20442), (66, 20466), (67, 20481), (71, 20508), (78, 20568), (79, 20574), (103, 20871), (105, 20895), (110, 20931), (114, 20979), (120, 21069),

Gene: DumpsterDude_25 Start: 23551, Stop: 24588, Start Num: 50

Candidate Starts for DumpsterDude_25:

(32, 23416), (40, 23446), (42, 23461), (Start: 50 @23551 has 45 MA's), (54, 23578), (Start: 55 @23596 has 1 MA's), (57, 23683), (64, 23776), (67, 23815), (71, 23842), (78, 23902), (79, 23908), (82, 23932), (103, 24205), (105, 24229), (116, 24337),

Gene: Egi03_39 Start: 33463, Stop: 34503, Start Num: 50

Candidate Starts for Egi03_39:

(Start: 50 @33463 has 45 MA's), (Start: 55 @33508 has 1 MA's), (66, 33712), (71, 33754), (78, 33814), (79, 33820), (105, 34141), (110, 34177), (114, 34225), (120, 34315),

Gene: Evaa_41 Start: 35093, Stop: 36121, Start Num: 50

Candidate Starts for Evaa_41:

(25, 34910), (26, 34925), (27, 34928), (31, 34961), (33, 34970), (36, 34982), (38, 34988), (39, 34991), (Start: 50 @35093 has 45 MA's), (56, 35201), (57, 35225), (60, 35249), (66, 35342), (70, 35372), (71, 35375), (78, 35435), (79, 35441), (94, 35594), (118, 35903), (119, 35933), (123, 36032),

Gene: Evamon_38 Start: 33804, Stop: 34844, Start Num: 50

Candidate Starts for Evamon_38:

(Start: 50 @33804 has 45 MA's), (Start: 55 @33849 has 1 MA's), (66, 34053), (71, 34095), (78, 34155), (79, 34161), (105, 34482), (110, 34518), (114, 34566), (120, 34656),

Gene: Fireball_40 Start: 33927, Stop: 34967, Start Num: 50

Candidate Starts for Fireball_40:

(Start: 50 @33927 has 45 MA's), (Start: 55 @33972 has 1 MA's), (66, 34176), (71, 34218), (78, 34278), (79, 34284), (105, 34605), (110, 34641), (114, 34689), (120, 34779),

Gene: Frizzle_19 Start: 17505, Stop: 18545, Start Num: 50

Candidate Starts for Frizzle_19:

(Start: 50 @17505 has 45 MA's), (61, 17667), (63, 17727), (90, 17988), (97, 18021), (106, 18210), (108, 18228), (115, 18297), (116, 18309),

Gene: Fugax_42 Start: 33974, Stop: 35014, Start Num: 50

Candidate Starts for Fugax_42:

(Start: 50 @33974 has 45 MA's), (Start: 55 @34019 has 1 MA's), (66, 34223), (71, 34265), (78, 34325), (79, 34331), (105, 34652), (110, 34688), (114, 34736), (120, 34826),

Gene: Gezellig_38 Start: 33936, Stop: 34976, Start Num: 50

Candidate Starts for Gezellig_38:

(Start: 50 @33936 has 45 MA's), (Start: 55 @33981 has 1 MA's), (66, 34185), (71, 34227), (78, 34287), (79, 34293), (105, 34614), (110, 34650), (114, 34698), (120, 34788),

Gene: Ghobes_20 Start: 17505, Stop: 18545, Start Num: 50

Candidate Starts for Ghobes_20:

(37, 17394), (44, 17463), (46, 17472), (Start: 50 @17505 has 45 MA's), (61, 17667), (63, 17727), (90, 17988), (92, 18000), (97, 18021), (106, 18210), (108, 18228), (115, 18297), (116, 18309),

Gene: Goib_24 Start: 17824, Stop: 18855, Start Num: 51

Candidate Starts for Goib_24:

(Start: 51 @17824 has 6 MA's), (62, 17989), (65, 18055), (71, 18118), (72, 18124), (75, 18151), (76, 18163), (79, 18184), (84, 18217), (85, 18232), (87, 18247), (97, 18337), (100, 18391), (103, 18472), (106, 18505), (108, 18523), (109, 18526), (125, 18787), (128, 18832),

Gene: Halo3_39 Start: 34229, Stop: 35269, Start Num: 50

Candidate Starts for Halo3_39:

(Start: 50 @34229 has 45 MA's), (Start: 55 @34274 has 1 MA's), (66, 34478), (71, 34520), (78, 34580), (79, 34586), (105, 34907), (110, 34943), (114, 34991), (120, 35081),

Gene: Jambalaya_39 Start: 33583, Stop: 34623, Start Num: 50

Candidate Starts for Jambalaya_39:

(Start: 50 @33583 has 45 MA's), (Start: 55 @33628 has 1 MA's), (66, 33832), (71, 33874), (78, 33934), (79, 33940), (105, 34261), (110, 34297), (114, 34345), (120, 34435),

Gene: JellyBelly_41 Start: 34061, Stop: 35095, Start Num: 50

Candidate Starts for JellyBelly_41:

(4, 33596), (5, 33623), (6, 33629), (7, 33644), (8, 33647), (10, 33683), (11, 33689), (12, 33710), (13, 33716), (15, 33749), (16, 33755), (17, 33758), (18, 33767), (20, 33788), (21, 33797), (22, 33830), (23, 33845), (24, 33860), (25, 33866), (28, 33893), (29, 33896), (30, 33914), (31, 33917), (32, 33920), (33, 33926), (34, 33929), (41, 33965), (Start: 50 @34061 has 45 MA's), (57, 34193), (70, 34349), (71, 34352), (78, 34412), (80, 34424), (86, 34475), (87, 34487), (101, 34652), (102, 34676), (107, 34757), (109, 34772), (116, 34850), (118, 34883), (127, 35063),

Gene: JohnPork_40 Start: 33304, Stop: 34344, Start Num: 50

Candidate Starts for JohnPork_40:

(Start: 50 @33304 has 45 MA's), (Start: 55 @33349 has 1 MA's), (66, 33553), (71, 33595), (78, 33655), (79, 33661), (105, 33982), (110, 34018), (114, 34066), (120, 34156),

Gene: Kiko_23 Start: 19207, Stop: 20232, Start Num: 50

Candidate Starts for Kiko_23:

(48, 19189), (Start: 50 @19207 has 45 MA's), (Start: 55 @19252 has 1 MA's), (66, 19456), (70, 19495), (71, 19498), (77, 19555), (78, 19558), (79, 19564), (87, 19633), (105, 19885), (114, 19969), (124, 20158),

Gene: KimmyK_40 Start: 34518, Stop: 35558, Start Num: 50

Candidate Starts for KimmyK_40:

(Start: 50 @34518 has 45 MA's), (Start: 55 @34563 has 1 MA's), (66, 34767), (71, 34809), (78, 34869), (79, 34875), (105, 35196), (110, 35232), (114, 35280), (120, 35370),

Gene: LonelyBoi_22 Start: 19826, Stop: 20857, Start Num: 50

Candidate Starts for LonelyBoi_22:

(47, 19796), (Start: 50 @19826 has 45 MA's), (64, 20051), (66, 20075), (69, 20099), (70, 20105), (71, 20108), (78, 20168), (91, 20309), (103, 20474), (110, 20534), (124, 20771),

Gene: Manilisa_25 Start: 21085, Stop: 22125, Start Num: 50

Candidate Starts for Manilisa_25:

(Start: 50 @21085 has 45 MA's), (54, 21112), (Start: 55 @21130 has 1 MA's), (57, 21217), (58, 21220), (60, 21241), (66, 21334), (67, 21349), (71, 21376), (72, 21382), (73, 21388), (78, 21436), (79, 21442), (81, 21463), (105, 21763), (110, 21799), (114, 21847), (120, 21937),

Gene: Mariokart_41 Start: 34075, Stop: 35109, Start Num: 50

Candidate Starts for Mariokart_41:

(4, 33610), (5, 33637), (6, 33643), (7, 33658), (8, 33661), (9, 33682), (10, 33697), (11, 33703), (12, 33724), (13, 33730), (15, 33763), (16, 33769), (17, 33772), (18, 33781), (19, 33787), (20, 33802), (21, 33811), (23, 33859), (24, 33874), (25, 33880), (28, 33907), (29, 33910), (30, 33928), (31, 33931), (32, 33934), (33, 33940), (34, 33943), (41, 33979), (Start: 50 @34075 has 45 MA's), (70, 34363), (71, 34366), (78, 34426), (80, 34438), (86, 34489), (87, 34501), (101, 34666), (102, 34690), (107, 34771), (109, 34786), (116, 34864), (118, 34897), (127, 35077),

Gene: Meyran_23 Start: 20948, Stop: 21988, Start Num: 50

Candidate Starts for Meyran_23:

(Start: 50 @20948 has 45 MA's), (54, 20975), (Start: 55 @20993 has 1 MA's), (64, 21173), (66, 21197), (67, 21212), (71, 21239), (78, 21299), (79, 21305), (103, 21602), (105, 21626), (110, 21662), (114, 21710),

Gene: Mutzi_38 Start: 34662, Stop: 35702, Start Num: 50

Candidate Starts for Mutzi_38:

(Start: 50 @34662 has 45 MA's), (Start: 55 @34707 has 1 MA's), (66, 34911), (71, 34953), (78, 35013), (79, 35019), (105, 35340), (110, 35376), (114, 35424), (120, 35514),

Gene: Nubi_39 Start: 33807, Stop: 34847, Start Num: 50

Candidate Starts for Nubi_39:

(Start: 50 @33807 has 45 MA's), (Start: 55 @33852 has 1 MA's), (66, 34056), (71, 34098), (78, 34158), (79, 34164), (105, 34485), (110, 34521), (114, 34569), (120, 34659),

Gene: Nyceirae_25 Start: 20812, Stop: 21852, Start Num: 50

Candidate Starts for Nyceirae_25:

(Start: 50 @20812 has 45 MA's), (54, 20839), (57, 20944), (58, 20947), (64, 21037), (66, 21061), (71, 21103), (73, 21115), (78, 21163), (79, 21169), (105, 21490), (110, 21526), (114, 21574), (120, 21664),

Gene: Phishy_24 Start: 20814, Stop: 21854, Start Num: 50

Candidate Starts for Phishy_24:

(Start: 50 @20814 has 45 MA's), (54, 20841), (Start: 55 @20859 has 1 MA's), (64, 21039), (66, 21063), (67, 21078), (71, 21105), (78, 21165), (79, 21171), (103, 21468), (105, 21492), (110, 21528), (114, 21576), (120, 21666),

Gene: Phlop_38 Start: 33888, Stop: 34928, Start Num: 50

Candidate Starts for Phlop_38:

(Start: 50 @33888 has 45 MA's), (Start: 55 @33933 has 1 MA's), (66, 34137), (71, 34179), (78, 34239), (79, 34245), (105, 34566), (110, 34602), (114, 34650), (120, 34740),

Gene: PinkCoffee_41 Start: 33991, Stop: 35031, Start Num: 50

Candidate Starts for PinkCoffee_41:

(Start: 50 @33991 has 45 MA's), (Start: 55 @34036 has 1 MA's), (66, 34240), (71, 34282), (78, 34342), (79, 34348), (105, 34669), (110, 34705), (114, 34753), (120, 34843),

Gene: Portcullis_40 Start: 33304, Stop: 34344, Start Num: 50

Candidate Starts for Portcullis_40:

(Start: 50 @33304 has 45 MA's), (Start: 55 @33349 has 1 MA's), (66, 33553), (71, 33595), (78, 33655), (79, 33661), (105, 33982), (110, 34018), (114, 34066), (120, 34156),

Gene: Powerball_20 Start: 18486, Stop: 19532, Start Num: 50

Candidate Starts for Powerball_20:

(28, 18330), (35, 18369), (47, 18456), (Start: 50 @18486 has 45 MA's), (52, 18495), (66, 18735), (69, 18759), (70, 18765), (71, 18768), (78, 18828), (91, 18969), (92, 18975), (113, 19248),

Gene: PullumCavea_38 Start: 33888, Stop: 34928, Start Num: 50

Candidate Starts for PullumCavea_38:

(Start: 50 @33888 has 45 MA's), (Start: 55 @33933 has 1 MA's), (66, 34137), (71, 34179), (78, 34239), (79, 34245), (105, 34566), (110, 34602), (114, 34650), (120, 34740),

Gene: RogerDodger_42 Start: 34133, Stop: 35173, Start Num: 50

Candidate Starts for RogerDodger_42:

(Start: 50 @34133 has 45 MA's), (Start: 55 @34178 has 1 MA's), (66, 34382), (71, 34424), (78, 34484), (79, 34490), (105, 34811), (110, 34847), (114, 34895), (120, 34985),

Gene: Salvador_38 Start: 33802, Stop: 34842, Start Num: 50

Candidate Starts for Salvador_38:

(Start: 50 @33802 has 45 MA's), (Start: 55 @33847 has 1 MA's), (66, 34051), (71, 34093), (78, 34153), (79, 34159), (105, 34480), (110, 34516), (114, 34564), (120, 34654),

Gene: Sapo_19 Start: 17440, Stop: 18498, Start Num: 50

Candidate Starts for Sapo_19:

(Start: 50 @17440 has 45 MA's), (64, 17665), (92, 17938), (98, 17968), (99, 18001), (106, 18148), (121, 18316), (126, 18457),

Gene: Savbucketdawg_39 Start: 33583, Stop: 34623, Start Num: 50

Candidate Starts for Savbucketdawg_39:

(Start: 50 @33583 has 45 MA's), (Start: 55 @33628 has 1 MA's), (66, 33832), (71, 33874), (78, 33934), (79, 33940), (105, 34261), (110, 34297), (114, 34345), (120, 34435),

Gene: Sendy_40 Start: 34008, Stop: 35048, Start Num: 50

Candidate Starts for Sendy_40:

(Start: 50 @34008 has 45 MA's), (Start: 55 @34053 has 1 MA's), (66, 34257), (71, 34299), (78, 34359), (79, 34365), (105, 34686), (110, 34722), (114, 34770), (120, 34860),

Gene: Shinji_39 Start: 33244, Stop: 34284, Start Num: 50

Candidate Starts for Shinji_39:

(Start: 50 @33244 has 45 MA's), (Start: 55 @33289 has 1 MA's), (66, 33493), (71, 33535), (78, 33595), (79, 33601), (105, 33922), (110, 33958), (114, 34006), (120, 34096),

Gene: SmokingBunny_39 Start: 33793, Stop: 34833, Start Num: 50

Candidate Starts for SmokingBunny_39:

(Start: 50 @33793 has 45 MA's), (Start: 55 @33838 has 1 MA's), (66, 34042), (71, 34084), (78, 34144), (79, 34150), (105, 34471), (110, 34507), (114, 34555), (120, 34645),

Gene: Splinter_23 Start: 17824, Stop: 18855, Start Num: 51

Candidate Starts for Splinter_23:

(Start: 51 @17824 has 6 MA's), (62, 17989), (65, 18055), (71, 18118), (72, 18124), (75, 18151), (76, 18163), (79, 18184), (84, 18217), (85, 18232), (87, 18247), (93, 18316), (97, 18337), (100, 18391), (103, 18472), (106, 18505), (108, 18523), (109, 18526), (111, 18544), (125, 18787), (128, 18832),

Gene: TZGordon_25 Start: 17963, Stop: 18994, Start Num: 51

Candidate Starts for TZGordon_25:

(Start: 51 @17963 has 6 MA's), (62, 18128), (65, 18194), (71, 18257), (75, 18290), (76, 18302), (79, 18323), (84, 18356), (85, 18371), (87, 18386), (93, 18455), (97, 18476), (100, 18530), (103, 18611), (106, 18644), (108, 18662), (109, 18665), (125, 18926), (128, 18971),

Gene: TillyBobJoe_39 Start: 33597, Stop: 34637, Start Num: 50

Candidate Starts for TillyBobJoe_39:

(Start: 50 @33597 has 45 MA's), (Start: 55 @33642 has 1 MA's), (66, 33846), (71, 33888), (78, 33948), (79, 33954), (105, 34275), (110, 34311), (114, 34359), (120, 34449),

Gene: TinaLin_26 Start: 18794, Stop: 19825, Start Num: 51

Candidate Starts for TinaLin_26:

(Start: 51 @18794 has 6 MA's), (53, 18803), (54, 18815), (59, 18935), (62, 18959), (65, 19025), (68, 19070), (71, 19088), (74, 19103), (75, 19121), (79, 19154), (83, 19175), (84, 19187), (93, 19286), (97, 19307), (106, 19475), (108, 19493), (109, 19496), (112, 19526), (125, 19757), (128, 19802),

Gene: Togo_38 Start: 33838, Stop: 34833, Start Num: 55

Candidate Starts for Togo_38:

(Start: 50 @33793 has 45 MA's), (Start: 55 @33838 has 1 MA's), (66, 34042), (71, 34084), (78, 34144), (79, 34150), (105, 34471), (110, 34507), (114, 34555), (120, 34645),

Gene: Twister6_41 Start: 33696, Stop: 34736, Start Num: 50

Candidate Starts for Twister6_41:

(Start: 50 @33696 has 45 MA's), (Start: 55 @33741 has 1 MA's), (66, 33945), (71, 33987), (78, 34047), (79, 34053), (105, 34374), (110, 34410), (114, 34458), (120, 34548),

Gene: Valary_41 Start: 34738, Stop: 35778, Start Num: 50

Candidate Starts for Valary_41:

(Start: 50 @34738 has 45 MA's), (Start: 55 @34783 has 1 MA's), (66, 34987), (71, 35029), (78, 35089), (79, 35095), (105, 35416), (110, 35452), (114, 35500), (120, 35590),

Gene: VanDeWege_42 Start: 34030, Stop: 35070, Start Num: 50

Candidate Starts for VanDeWege_42:

(Start: 50 @34030 has 45 MA's), (Start: 55 @34075 has 1 MA's), (66, 34279), (71, 34321), (78, 34381), (79, 34387), (105, 34708), (110, 34744), (114, 34792), (120, 34882),

Gene: Vendetta_23 Start: 17824, Stop: 18855, Start Num: 51

Candidate Starts for Vendetta_23:

(Start: 51 @17824 has 6 MA's), (62, 17989), (65, 18055), (71, 18118), (72, 18124), (75, 18151), (76, 18163), (79, 18184), (84, 18217), (85, 18232), (87, 18247), (93, 18316), (97, 18337), (100, 18391), (103, 18472), (106, 18505), (108, 18523), (109, 18526), (111, 18544), (125, 18787), (128, 18832),

Gene: Vordorf_24 Start: 20415, Stop: 21455, Start Num: 50

Candidate Starts for Vordorf_24:

(Start: 50 @20415 has 45 MA's), (54, 20442), (Start: 55 @20460 has 1 MA's), (64, 20640), (66, 20664), (67, 20679), (71, 20706), (78, 20766), (79, 20772), (103, 21069), (105, 21093), (110, 21129), (114, 21177), (120, 21267),

Gene: Wizard_38 Start: 33936, Stop: 34976, Start Num: 50

Candidate Starts for Wizard_38:

(Start: 50 @33936 has 45 MA's), (Start: 55 @33981 has 1 MA's), (66, 34185), (71, 34227), (78, 34287), (79, 34293), (105, 34614), (110, 34650), (114, 34698), (120, 34788),