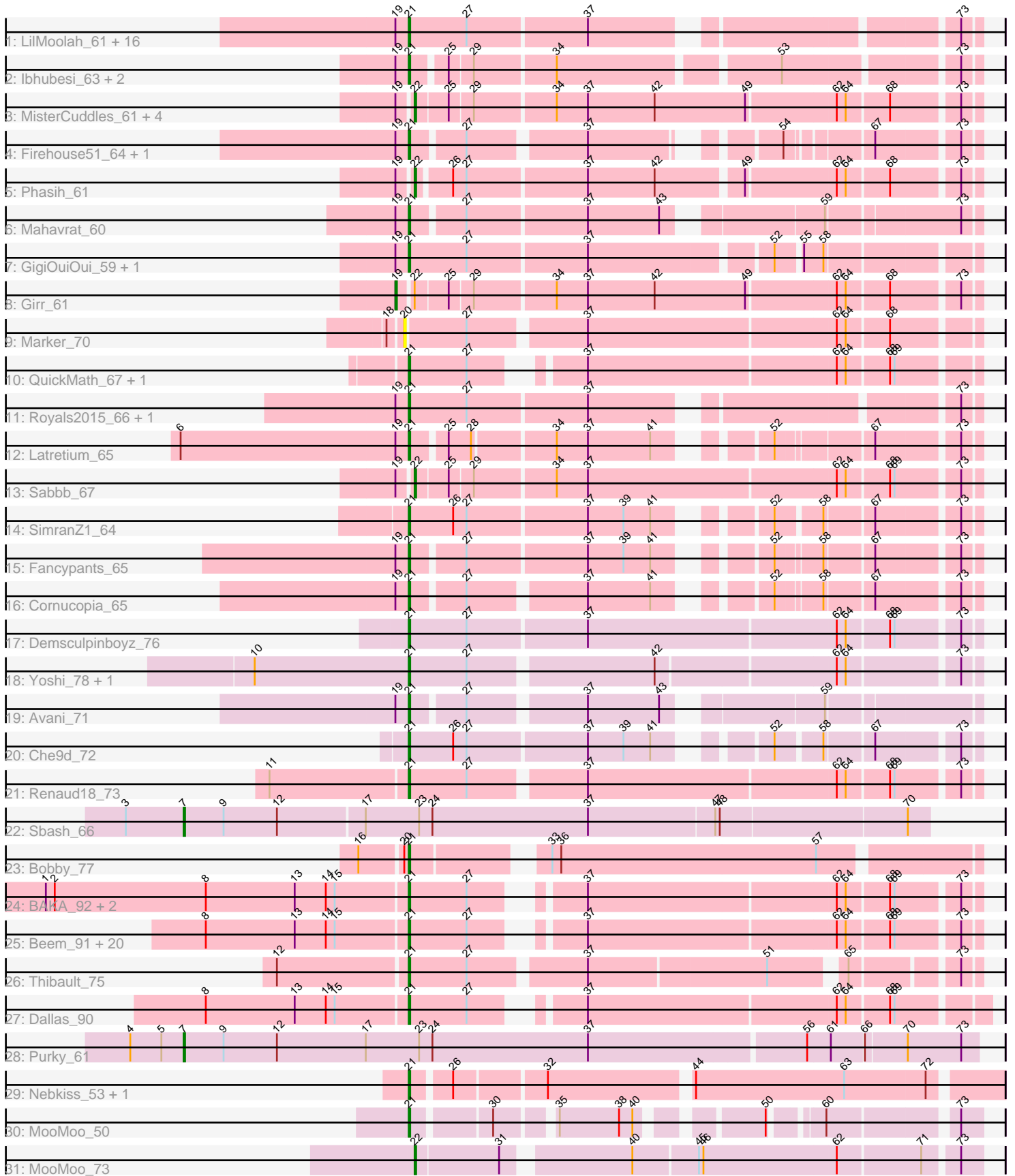


Pham 163549



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 163549 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163549 has 81 members, 5 are drafts.

Phages represented in each track:

- Track 1 : LilMoolah_61, Che8_68, Job42_65, James_67, Eradicator_56, Mattes_67, BuzzLyseyear_69, Lizziana_69, Nivrat_59, Philus_66, Saal_65, Yorick_62, GUmbie_61, Guppsters_63, Gorge_67, OlympiaSaint_65, DRBy19_66
- Track 2 : lbhubesi_63, LunaBlu_65, Galactic_62
- Track 3 : MisterCuddles_61, Zerg_63, Ruby_59, Doug_65, RockyHorror_64
- Track 4 : Firehouse51_64, Mutaforma13_67
- Track 5 : Phasih_61
- Track 6 : Mahavrat_60
- Track 7 : GigiOuiOui_59, Soul22_69
- Track 8 : Girr_61
- Track 9 : Marker_70
- Track 10 : QuickMath_67, Kimberlium_68
- Track 11 : Royals2015_66, Pollywog_64
- Track 12 : Latretium_65
- Track 13 : Sabbb_67
- Track 14 : SimranZ1_64
- Track 15 : Fancypants_65
- Track 16 : Cornucopia_65
- Track 17 : Demsculpinboyz_76
- Track 18 : Yoshi_78, ThetaBob_70
- Track 19 : Avani_71
- Track 20 : Che9d_72
- Track 21 : Renaud18_73
- Track 22 : Sbash_66
- Track 23 : Bobby_77
- Track 24 : BAKA_92, EricMillard_84, Optimus_85
- Track 25 : Beem_91, Bagrid_90, DmpstrDiver_91, HokkenD_80, Halley_92, Kalah2_85, Bombitas_79, JuicyJay_88, Odette_89, Klein_91, Yeet_84, Dove_78, Wanda_95, Schatzie_86, ThreeRngTarjay_88, Constella_76, Zelink_88, Minerva_90, NihilNomen_92, Phoebus_93, Hughesyang_91
- Track 26 : Thibault_75
- Track 27 : Dallas_90
- Track 28 : Purky_61
- Track 29 : Nebkiss_53, Gaia_49
- Track 30 : MooMoo_50
- Track 31 : MooMoo_73

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

The start number called the most often in the published annotations is 21, it was called in 65 of the 76 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Avani_71, BAKA_92, Bagrid_90, Beem_91, Bobby_77, Bombitas_79, BuzzLyseyear_69, Che8_68, Che9d_72, Constella_76, Cornucopia_65, DRBy19_66, Dallas_90, Demsculpinboyz_76, DmpstrDiver_91, Dove_78, Eradicator_56, EricMillard_84, Fancypants_65, Firehouse51_64, GUmbie_61, Gaia_49, Galactic_62, GigiOuiOui_59, Gorge_67, Guppsters_63, Halley_92, HokkenD_80, Hughesyang_91, Ibhuesi_63, James_67, Job42_65, JuicyJay_88, Kalah2_85, Kimberlium_68, Klein_91, Latretium_65, LilMoolah_61, Lizziana_69, LunaBlu_65, Mahavrat_60, Mattes_67, Minerva_90, MooMoo_50, Mutaforma13_67, Nebkiss_53, NihilNomen_92, Nivrat_59, Odette_89, OlympiaSaint_65, Optimus_85, Philus_66, Phoebus_93, Pollywog_64, QuickMath_67, Renaud18_73, Royals2015_66, Saal_65, Schatzie_86, SimranZ1_64, Soul22_69, ThetaBob_70, Thibault_75, ThreeRngTarjay_88, Wanda_95, Yeet_84, Yorick_62, Yoshi_78, Zelink_88,

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

-

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

- Doug_65, Girr_61, Marker_70, MisterCuddles_61, MooMoo_73, Phasih_61, Purky_61, RockyHorror_64, Ruby_59, Sabbb_67, Sbash_66, Zerg_63,

Summary by start number:

Start 7:

- Found in 2 of 81 (2.5%) of genes in pham
- Manual Annotations of this start: 2 of 76
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Purky_61 (P6), Sbash_66 (I2),

Start 19:

- Found in 39 of 81 (48.1%) of genes in pham
- Manual Annotations of this start: 1 of 76
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Girr_61 (F1),

Start 20:

- Found in 2 of 81 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Marker_70 (F1),

Start 21:

- Found in 69 of 81 (85.2%) of genes in pham
- Manual Annotations of this start: 65 of 76
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Avani_71 (F2), BAKA_92 (J), Bagrid_90 (J), Beem_91 (J), Bobby_77 (J), Bombitas_79 (J), BuzzLyseyear_69 (F1), Che8_68 (F1), Che9d_72 (F2), Constella_76 (J), Cornucopia_65 (F1), DRBy19_66 (F1), Dallas_90 (J), Demsculpinboyz_76 (F2), DmpstrDiver_91 (J), Dove_78 (J), Eradicator_56 (F1), EricMillard_84 (J), Fancypants_65 (F1), Firehouse51_64 (F1), GUmbie_61 (F1), Gaia_49 (X), Galactic_62 (F1), GigiOuiOui_59 (F1), Gorge_67 (F1), Guppsters_63 (F1), Halley_92 (J), HokkenD_80 (J), Hughesyang_91 (J), Ibhbesi_63 (F1), James_67 (F1), Job42_65 (F1), JuicyJay_88 (J), Kalah2_85 (J), Kimberlium_68 (F1), Klein_91 (J), Latretium_65 (F1), LilMoolah_61 (F1), Lizziana_69 (F1), LunaBlu_65 (F1), Mahavrat_60 (F1), Mattes_67 (F1), Minerva_90 (J), MooMoo_50 (singleton), Mutaforma13_67 (F1), Nebkiss_53 (X), NihilNomen_92 (J), Nivrat_59 (F1), Odette_89 (J), OlympiaSaint_65 (F1), Optimus_85 (J), Philus_66 (F1), Phoebus_93 (J), Pollywog_64 (F1), QuickMath_67 (F1), Renaud18_73 (F4), Royals2015_66 (F1), Saal_65 (F1), Schatzie_86 (J), SimranZ1_64 (F1), Soul22_69 (F2), ThetaBob_70 (F4), Thibault_75 (J), ThreeRngTarjay_88 (J), Wanda_95 (J), Yeet_84 (J), Yorick_62 (F1), Yoshi_78 (F2), Zelink_88 (J),

Start 22:

- Found in 9 of 81 (11.1%) of genes in pham
- Manual Annotations of this start: 8 of 76
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Doug_65 (F1), MisterCuddles_61 (F1), MooMoo_73 (singleton), Phasih_61 (F1), RockyHorror_64 (F1), Ruby_59 (F1), Sabbb_67 (F1), Zerg_63 (F1),

Summary by clusters:

There are 8 clusters represented in this pham: F1, F2, I2, P6, F4, J, singleton, X,

Info for manual annotations of cluster F1:

- Start number 19 was manually annotated 1 time for cluster F1.
- Start number 21 was manually annotated 31 times for cluster F1.
- Start number 22 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 21 was manually annotated 5 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 21 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster I2:

- Start number 7 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster J:

- Start number 21 was manually annotated 24 times for cluster J.

Info for manual annotations of cluster P6:

- Start number 7 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster X:

- Start number 21 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Avani_71 Start: 41759, Stop: 42094, Start Num: 21

Candidate Starts for Avani_71:

(Start: 19 @41750 has 1 MA's), (Start: 21 @41759 has 65 MA's), (27, 41792), (37, 41864), (43, 41912), (59, 41999),

Gene: BAKA_92 Start: 57196, Stop: 57537, Start Num: 21

Candidate Starts for BAKA_92:

(1, 56956), (2, 56962), (8, 57064), (13, 57124), (14, 57145), (15, 57151), (Start: 21 @57196 has 65 MA's), (27, 57235), (37, 57289), (62, 57451), (64, 57457), (68, 57484), (69, 57487), (73, 57526),

Gene: Bagrid_90 Start: 56063, Stop: 56404, Start Num: 21

Candidate Starts for Bagrid_90:

(8, 55931), (13, 55991), (14, 56012), (15, 56018), (Start: 21 @56063 has 65 MA's), (27, 56102), (37, 56156), (62, 56318), (64, 56324), (68, 56351), (69, 56354), (73, 56393),

Gene: Beem_91 Start: 56924, Stop: 57265, Start Num: 21

Candidate Starts for Beem_91:

(8, 56792), (13, 56852), (14, 56873), (15, 56879), (Start: 21 @56924 has 65 MA's), (27, 56963), (37, 57017), (62, 57179), (64, 57185), (68, 57212), (69, 57215), (73, 57254),

Gene: Bobby_77 Start: 51896, Stop: 51546, Start Num: 21

Candidate Starts for Bobby_77:

(16, 51926), (20, 51899), (Start: 21 @51896 has 65 MA's), (33, 51821), (36, 51815), (57, 51644),

Gene: Bombitas_79 Start: 54087, Stop: 54428, Start Num: 21

Candidate Starts for Bombitas_79:

(8, 53955), (13, 54015), (14, 54036), (15, 54042), (Start: 21 @54087 has 65 MA's), (27, 54126), (37, 54180), (62, 54342), (64, 54348), (68, 54375), (69, 54378), (73, 54417),

Gene: BuzzLyseyear_69 Start: 42383, Stop: 42724, Start Num: 21

Candidate Starts for BuzzLyseyear_69:

(Start: 19 @42374 has 1 MA's), (Start: 21 @42383 has 65 MA's), (27, 42422), (37, 42500), (73, 42713),

Gene: Che8_68 Start: 43879, Stop: 44220, Start Num: 21

Candidate Starts for Che8_68:

(Start: 19 @43870 has 1 MA's), (Start: 21 @43879 has 65 MA's), (27, 43918), (37, 43996), (73, 44209),

Gene: Che9d_72 Start: 41100, Stop: 41432, Start Num: 21

Candidate Starts for Che9d_72:

(Start: 21 @41100 has 65 MA's), (26, 41130), (27, 41139), (37, 41217), (39, 41241), (41, 41259), (52, 41313), (58, 41340), (67, 41370), (73, 41421),

Gene: Constella_76 Start: 51061, Stop: 51402, Start Num: 21

Candidate Starts for Constella_76:

(8, 50929), (13, 50989), (14, 51010), (15, 51016), (Start: 21 @51061 has 65 MA's), (27, 51100), (37, 51154), (62, 51316), (64, 51322), (68, 51349), (69, 51352), (73, 51391),

Gene: Cornucopia_65 Start: 41687, Stop: 42007, Start Num: 21

Candidate Starts for Cornucopia_65:

(Start: 19 @41678 has 1 MA's), (Start: 21 @41687 has 65 MA's), (27, 41720), (37, 41792), (41, 41834), (52, 41888), (58, 41915), (67, 41945), (73, 41996),

Gene: DRBy19_66 Start: 42134, Stop: 42475, Start Num: 21

Candidate Starts for DRBy19_66:

(Start: 19 @42125 has 1 MA's), (Start: 21 @42134 has 65 MA's), (27, 42173), (37, 42251), (73, 42464),

Gene: Dallas_90 Start: 55845, Stop: 56192, Start Num: 21

Candidate Starts for Dallas_90:

(8, 55713), (13, 55773), (14, 55794), (15, 55800), (Start: 21 @55845 has 65 MA's), (27, 55884), (37, 55938), (62, 56100), (64, 56106), (68, 56133), (69, 56136),

Gene: Demsculpinboyz_76 Start: 41371, Stop: 41736, Start Num: 21

Candidate Starts for Demsculpinboyz_76:

(Start: 21 @41371 has 65 MA's), (27, 41410), (37, 41488), (62, 41650), (64, 41656), (68, 41683), (69, 41686), (73, 41725),

Gene: DmpstrDiver_91 Start: 56259, Stop: 56600, Start Num: 21

Candidate Starts for DmpstrDiver_91:

(8, 56127), (13, 56187), (14, 56208), (15, 56214), (Start: 21 @56259 has 65 MA's), (27, 56298), (37, 56352), (62, 56514), (64, 56520), (68, 56547), (69, 56550), (73, 56589),

Gene: Doug_65 Start: 41707, Stop: 42063, Start Num: 22

Candidate Starts for Doug_65:

(Start: 19 @41698 has 1 MA's), (Start: 22 @41707 has 8 MA's), (25, 41728), (29, 41743), (34, 41794), (37, 41815), (42, 41860), (49, 41920), (62, 41977), (64, 41983), (68, 42010), (73, 42052),

Gene: Dove_78 Start: 52353, Stop: 52694, Start Num: 21

Candidate Starts for Dove_78:

(8, 52221), (13, 52281), (14, 52302), (15, 52308), (Start: 21 @52353 has 65 MA's), (27, 52392), (37, 52446), (62, 52608), (64, 52614), (68, 52641), (69, 52644), (73, 52683),

Gene: Eradicator_56 Start: 39233, Stop: 39574, Start Num: 21

Candidate Starts for Eradicator_56:

(Start: 19 @39224 has 1 MA's), (Start: 21 @39233 has 65 MA's), (27, 39272), (37, 39350), (73, 39563),

Gene: EricMillard_84 Start: 55991, Stop: 56332, Start Num: 21

Candidate Starts for EricMillard_84:

(1, 55751), (2, 55757), (8, 55859), (13, 55919), (14, 55940), (15, 55946), (Start: 21 @55991 has 65 MA's), (27, 56030), (37, 56084), (62, 56246), (64, 56252), (68, 56279), (69, 56282), (73, 56321),

Gene: Fancypants_65 Start: 41674, Stop: 42000, Start Num: 21

Candidate Starts for Fancypants_65:

(Start: 19 @41665 has 1 MA's), (Start: 21 @41674 has 65 MA's), (27, 41707), (37, 41785), (39, 41809), (41, 41827), (52, 41881), (58, 41908), (67, 41938), (73, 41989),

Gene: Firehouse51_64 Start: 44558, Stop: 44872, Start Num: 21

Candidate Starts for Firehouse51_64:

(Start: 19 @44549 has 1 MA's), (Start: 21 @44558 has 65 MA's), (27, 44591), (37, 44663), (54, 44762), (67, 44810), (73, 44861),

Gene: GUmble_61 Start: 40460, Stop: 40801, Start Num: 21
Candidate Starts for GUmble_61:
(Start: 19 @40451 has 1 MA's), (Start: 21 @40460 has 65 MA's), (27, 40499), (37, 40577), (73, 40790),

Gene: Gaia_49 Start: 36916, Stop: 36548, Start Num: 21
Candidate Starts for Gaia_49:
(Start: 21 @36916 has 65 MA's), (26, 36892), (32, 36835), (44, 36745), (63, 36646), (72, 36592),

Gene: Galactic_62 Start: 40920, Stop: 41261, Start Num: 21
Candidate Starts for Galactic_62:
(Start: 19 @40911 has 1 MA's), (Start: 21 @40920 has 65 MA's), (25, 40941), (29, 40956), (34, 41007), (53, 41145), (73, 41250),

Gene: GigiOuiOui_59 Start: 39900, Stop: 40250, Start Num: 21
Candidate Starts for GigiOuiOui_59:
(Start: 19 @39891 has 1 MA's), (Start: 21 @39900 has 65 MA's), (27, 39939), (37, 40017), (52, 40131), (55, 40146), (58, 40158),

Gene: Girr_61 Start: 40755, Stop: 41120, Start Num: 19
Candidate Starts for Girr_61:
(Start: 19 @40755 has 1 MA's), (Start: 22 @40764 has 8 MA's), (25, 40785), (29, 40800), (34, 40851), (37, 40872), (42, 40917), (49, 40977), (62, 41034), (64, 41040), (68, 41067), (73, 41109),

Gene: Gorge_67 Start: 42402, Stop: 42743, Start Num: 21
Candidate Starts for Gorge_67:
(Start: 19 @42393 has 1 MA's), (Start: 21 @42402 has 65 MA's), (27, 42441), (37, 42519), (73, 42732),

Gene: Guppsters_63 Start: 40585, Stop: 40926, Start Num: 21
Candidate Starts for Guppsters_63:
(Start: 19 @40576 has 1 MA's), (Start: 21 @40585 has 65 MA's), (27, 40624), (37, 40702), (73, 40915),

Gene: Halley_92 Start: 56924, Stop: 57265, Start Num: 21
Candidate Starts for Halley_92:
(8, 56792), (13, 56852), (14, 56873), (15, 56879), (Start: 21 @56924 has 65 MA's), (27, 56963), (37, 57017), (62, 57179), (64, 57185), (68, 57212), (69, 57215), (73, 57254),

Gene: HokkenD_80 Start: 55193, Stop: 55534, Start Num: 21
Candidate Starts for HokkenD_80:
(8, 55061), (13, 55121), (14, 55142), (15, 55148), (Start: 21 @55193 has 65 MA's), (27, 55232), (37, 55286), (62, 55448), (64, 55454), (68, 55481), (69, 55484), (73, 55523),

Gene: Hughesyang_91 Start: 56882, Stop: 57223, Start Num: 21
Candidate Starts for Hughesyang_91:
(8, 56750), (13, 56810), (14, 56831), (15, 56837), (Start: 21 @56882 has 65 MA's), (27, 56921), (37, 56975), (62, 57137), (64, 57143), (68, 57170), (69, 57173), (73, 57212),

Gene: lbhubesi_63 Start: 41044, Stop: 41385, Start Num: 21
Candidate Starts for lbhubesi_63:
(Start: 19 @41035 has 1 MA's), (Start: 21 @41044 has 65 MA's), (25, 41065), (29, 41080), (34, 41131), (53, 41269), (73, 41374),

Gene: James_67 Start: 42527, Stop: 42868, Start Num: 21

Candidate Starts for James_67:

(Start: 19 @42518 has 1 MA's), (Start: 21 @42527 has 65 MA's), (27, 42566), (37, 42644), (73, 42857),

Gene: Job42_65 Start: 42942, Stop: 43283, Start Num: 21

Candidate Starts for Job42_65:

(Start: 19 @42933 has 1 MA's), (Start: 21 @42942 has 65 MA's), (27, 42981), (37, 43059), (73, 43272),

Gene: JuicyJay_88 Start: 58058, Stop: 58399, Start Num: 21

Candidate Starts for JuicyJay_88:

(8, 57926), (13, 57986), (14, 58007), (15, 58013), (Start: 21 @58058 has 65 MA's), (27, 58097), (37, 58151), (62, 58313), (64, 58319), (68, 58346), (69, 58349), (73, 58388),

Gene: Kalah2_85 Start: 56217, Stop: 56558, Start Num: 21

Candidate Starts for Kalah2_85:

(8, 56085), (13, 56145), (14, 56166), (15, 56172), (Start: 21 @56217 has 65 MA's), (27, 56256), (37, 56310), (62, 56472), (64, 56478), (68, 56505), (69, 56508), (73, 56547),

Gene: Kimberlium_68 Start: 43340, Stop: 43681, Start Num: 21

Candidate Starts for Kimberlium_68:

(Start: 21 @43340 has 65 MA's), (27, 43379), (37, 43433), (62, 43595), (64, 43601), (68, 43628), (69, 43631),

Gene: Klein_91 Start: 55893, Stop: 56234, Start Num: 21

Candidate Starts for Klein_91:

(8, 55761), (13, 55821), (14, 55842), (15, 55848), (Start: 21 @55893 has 65 MA's), (27, 55932), (37, 55986), (62, 56148), (64, 56154), (68, 56181), (69, 56184), (73, 56223),

Gene: Latretium_65 Start: 41581, Stop: 41904, Start Num: 21

Candidate Starts for Latretium_65:

(6, 41428), (Start: 19 @41572 has 1 MA's), (Start: 21 @41581 has 65 MA's), (25, 41602), (28, 41617), (34, 41668), (37, 41689), (41, 41731), (52, 41785), (67, 41842), (73, 41893),

Gene: LilMoolah_61 Start: 40447, Stop: 40788, Start Num: 21

Candidate Starts for LilMoolah_61:

(Start: 19 @40438 has 1 MA's), (Start: 21 @40447 has 65 MA's), (27, 40486), (37, 40564), (73, 40777),

Gene: Lizziana_69 Start: 42008, Stop: 42349, Start Num: 21

Candidate Starts for Lizziana_69:

(Start: 19 @41999 has 1 MA's), (Start: 21 @42008 has 65 MA's), (27, 42047), (37, 42125), (73, 42338),

Gene: LunaBlu_65 Start: 41579, Stop: 41920, Start Num: 21

Candidate Starts for LunaBlu_65:

(Start: 19 @41570 has 1 MA's), (Start: 21 @41579 has 65 MA's), (25, 41600), (29, 41615), (34, 41666), (53, 41804), (73, 41909),

Gene: Mahavrat_60 Start: 40518, Stop: 40859, Start Num: 21

Candidate Starts for Mahavrat_60:

(Start: 19 @40509 has 1 MA's), (Start: 21 @40518 has 65 MA's), (27, 40551), (37, 40629), (43, 40677), (59, 40764), (73, 40848),

Gene: Marker_70 Start: 41128, Stop: 41487, Start Num: 20

Candidate Starts for Marker_70:

(18, 41119), (20, 41128), (27, 41167), (37, 41239), (62, 41401), (64, 41407), (68, 41434),

Gene: Mattes_67 Start: 42527, Stop: 42868, Start Num: 21

Candidate Starts for Mattes_67:

(Start: 19 @42518 has 1 MA's), (Start: 21 @42527 has 65 MA's), (27, 42566), (37, 42644), (73, 42857),

Gene: Minerva_90 Start: 56841, Stop: 57182, Start Num: 21

Candidate Starts for Minerva_90:

(8, 56709), (13, 56769), (14, 56790), (15, 56796), (Start: 21 @56841 has 65 MA's), (27, 56880), (37, 56934), (62, 57096), (64, 57102), (68, 57129), (69, 57132), (73, 57171),

Gene: MisterCuddles_61 Start: 40764, Stop: 41120, Start Num: 22

Candidate Starts for MisterCuddles_61:

(Start: 19 @40755 has 1 MA's), (Start: 22 @40764 has 8 MA's), (25, 40785), (29, 40800), (34, 40851), (37, 40872), (42, 40917), (49, 40977), (62, 41034), (64, 41040), (68, 41067), (73, 41109),

Gene: MooMoo_50 Start: 36541, Stop: 36855, Start Num: 21

Candidate Starts for MooMoo_50:

(Start: 21 @36541 has 65 MA's), (30, 36589), (35, 36622), (38, 36661), (40, 36670), (50, 36736), (60, 36763), (73, 36841),

Gene: MooMoo_73 Start: 46091, Stop: 46441, Start Num: 22

Candidate Starts for MooMoo_73:

(Start: 22 @46091 has 8 MA's), (31, 46145), (40, 46220), (45, 46262), (46, 46265), (62, 46352), (71, 46406), (73, 46427),

Gene: Mutaforma13_67 Start: 43868, Stop: 44182, Start Num: 21

Candidate Starts for Mutaforma13_67:

(Start: 19 @43859 has 1 MA's), (Start: 21 @43868 has 65 MA's), (27, 43901), (37, 43973), (54, 44072), (67, 44120), (73, 44171),

Gene: Nebkiss_53 Start: 36617, Stop: 36249, Start Num: 21

Candidate Starts for Nebkiss_53:

(Start: 21 @36617 has 65 MA's), (26, 36593), (32, 36536), (44, 36446), (63, 36347), (72, 36293),

Gene: NihilNomen_92 Start: 57011, Stop: 57352, Start Num: 21

Candidate Starts for NihilNomen_92:

(8, 56879), (13, 56939), (14, 56960), (15, 56966), (Start: 21 @57011 has 65 MA's), (27, 57050), (37, 57104), (62, 57266), (64, 57272), (68, 57299), (69, 57302), (73, 57341),

Gene: Nivrat_59 Start: 40320, Stop: 40661, Start Num: 21

Candidate Starts for Nivrat_59:

(Start: 19 @40311 has 1 MA's), (Start: 21 @40320 has 65 MA's), (27, 40359), (37, 40437), (73, 40650),

Gene: Odette_89 Start: 56053, Stop: 56394, Start Num: 21

Candidate Starts for Odette_89:

(8, 55921), (13, 55981), (14, 56002), (15, 56008), (Start: 21 @56053 has 65 MA's), (27, 56092), (37, 56146), (62, 56308), (64, 56314), (68, 56341), (69, 56344), (73, 56383),

Gene: OlympiaSaint_65 Start: 41469, Stop: 41810, Start Num: 21

Candidate Starts for OlympiaSaint_65:

(Start: 19 @41460 has 1 MA's), (Start: 21 @41469 has 65 MA's), (27, 41508), (37, 41586), (73, 41799),

Gene: Optimus_85 Start: 55545, Stop: 55886, Start Num: 21

Candidate Starts for Optimus_85:

(1, 55305), (2, 55311), (8, 55413), (13, 55473), (14, 55494), (15, 55500), (Start: 21 @55545 has 65 MA's), (27, 55584), (37, 55638), (62, 55800), (64, 55806), (68, 55833), (69, 55836), (73, 55875),

Gene: Phasih_61 Start: 41374, Stop: 41724, Start Num: 22

Candidate Starts for Phasih_61:

(Start: 19 @41365 has 1 MA's), (Start: 22 @41374 has 8 MA's), (26, 41395), (27, 41404), (37, 41482), (42, 41527), (49, 41581), (62, 41638), (64, 41644), (68, 41671), (73, 41713),

Gene: Philus_66 Start: 42110, Stop: 42451, Start Num: 21

Candidate Starts for Philus_66:

(Start: 19 @42101 has 1 MA's), (Start: 21 @42110 has 65 MA's), (27, 42149), (37, 42227), (73, 42440),

Gene: Phoebus_93 Start: 58193, Stop: 58534, Start Num: 21

Candidate Starts for Phoebus_93:

(8, 58061), (13, 58121), (14, 58142), (15, 58148), (Start: 21 @58193 has 65 MA's), (27, 58232), (37, 58286), (62, 58448), (64, 58454), (68, 58481), (69, 58484), (73, 58523),

Gene: Pollywog_64 Start: 41787, Stop: 42128, Start Num: 21

Candidate Starts for Pollywog_64:

(Start: 19 @41778 has 1 MA's), (Start: 21 @41787 has 65 MA's), (27, 41826), (37, 41904), (73, 42117),

Gene: Purky_61 Start: 40628, Stop: 41152, Start Num: 7

Candidate Starts for Purky_61:

(4, 40592), (5, 40613), (Start: 7 @40628 has 2 MA's), (9, 40655), (12, 40691), (17, 40751), (23, 40787), (24, 40796), (37, 40901), (56, 41042), (61, 41057), (66, 41078), (70, 41105), (73, 41141),

Gene: QuickMath_67 Start: 43563, Stop: 43904, Start Num: 21

Candidate Starts for QuickMath_67:

(Start: 21 @43563 has 65 MA's), (27, 43602), (37, 43656), (62, 43818), (64, 43824), (68, 43851), (69, 43854),

Gene: Renaud18_73 Start: 42883, Stop: 43242, Start Num: 21

Candidate Starts for Renaud18_73:

(11, 42793), (Start: 21 @42883 has 65 MA's), (27, 42922), (37, 42994), (62, 43156), (64, 43162), (68, 43189), (69, 43192), (73, 43231),

Gene: RockyHorror_64 Start: 40636, Stop: 40992, Start Num: 22

Candidate Starts for RockyHorror_64:

(Start: 19 @40627 has 1 MA's), (Start: 22 @40636 has 8 MA's), (25, 40657), (29, 40672), (34, 40723), (37, 40744), (42, 40789), (49, 40849), (62, 40906), (64, 40912), (68, 40939), (73, 40981),

Gene: Royals2015_66 Start: 41205, Stop: 41546, Start Num: 21
Candidate Starts for Royals2015_66:
(Start: 19 @41196 has 1 MA's), (Start: 21 @41205 has 65 MA's), (27, 41244), (37, 41322), (73, 41535),

Gene: Ruby_59 Start: 40765, Stop: 41121, Start Num: 22
Candidate Starts for Ruby_59:
(Start: 19 @40756 has 1 MA's), (Start: 22 @40765 has 8 MA's), (25, 40786), (29, 40801), (34, 40852), (37, 40873), (42, 40918), (49, 40978), (62, 41035), (64, 41041), (68, 41068), (73, 41110),

Gene: Saal_65 Start: 42221, Stop: 42562, Start Num: 21
Candidate Starts for Saal_65:
(Start: 19 @42212 has 1 MA's), (Start: 21 @42221 has 65 MA's), (27, 42260), (37, 42338), (73, 42551),

Gene: Sabbb_67 Start: 41906, Stop: 42262, Start Num: 22
Candidate Starts for Sabbb_67:
(Start: 19 @41897 has 1 MA's), (Start: 22 @41906 has 8 MA's), (25, 41927), (29, 41942), (34, 41993), (37, 42014), (62, 42176), (64, 42182), (68, 42209), (69, 42212), (73, 42251),

Gene: Sbash_66 Start: 44659, Stop: 45153, Start Num: 7
Candidate Starts for Sbash_66:
(3, 44620), (Start: 7 @44659 has 2 MA's), (9, 44686), (12, 44722), (17, 44779), (23, 44815), (24, 44824), (37, 44929), (47, 45013), (48, 45016), (70, 45139),

Gene: Schatzie_86 Start: 55800, Stop: 56141, Start Num: 21
Candidate Starts for Schatzie_86:
(8, 55668), (13, 55728), (14, 55749), (15, 55755), (Start: 21 @55800 has 65 MA's), (27, 55839), (37, 55893), (62, 56055), (64, 56061), (68, 56088), (69, 56091), (73, 56130),

Gene: SimranZ1_64 Start: 41403, Stop: 41735, Start Num: 21
Candidate Starts for SimranZ1_64:
(Start: 21 @41403 has 65 MA's), (26, 41433), (27, 41442), (37, 41520), (39, 41544), (41, 41562), (52, 41616), (58, 41643), (67, 41673), (73, 41724),

Gene: Soul22_69 Start: 42555, Stop: 42905, Start Num: 21
Candidate Starts for Soul22_69:
(Start: 19 @42546 has 1 MA's), (Start: 21 @42555 has 65 MA's), (27, 42594), (37, 42672), (52, 42786), (55, 42801), (58, 42813),

Gene: ThetaBob_70 Start: 42862, Stop: 43218, Start Num: 21
Candidate Starts for ThetaBob_70:
(10, 42760), (Start: 21 @42862 has 65 MA's), (27, 42901), (42, 43018), (62, 43132), (64, 43138), (73, 43207),

Gene: Thibault_75 Start: 51674, Stop: 52018, Start Num: 21
Candidate Starts for Thibault_75:
(12, 51590), (Start: 21 @51674 has 65 MA's), (27, 51713), (37, 51785), (51, 51902), (65, 51944), (73, 52007),

Gene: ThreeRngTarjay_88 Start: 57085, Stop: 57426, Start Num: 21
Candidate Starts for ThreeRngTarjay_88:

(8, 56953), (13, 57013), (14, 57034), (15, 57040), (Start: 21 @57085 has 65 MA's), (27, 57124), (37, 57178), (62, 57340), (64, 57346), (68, 57373), (69, 57376), (73, 57415),

Gene: Wanda_95 Start: 56202, Stop: 56543, Start Num: 21

Candidate Starts for Wanda_95:

(8, 56070), (13, 56130), (14, 56151), (15, 56157), (Start: 21 @56202 has 65 MA's), (27, 56241), (37, 56295), (62, 56457), (64, 56463), (68, 56490), (69, 56493), (73, 56532),

Gene: Yeet_84 Start: 55302, Stop: 55643, Start Num: 21

Candidate Starts for Yeet_84:

(8, 55170), (13, 55230), (14, 55251), (15, 55257), (Start: 21 @55302 has 65 MA's), (27, 55341), (37, 55395), (62, 55557), (64, 55563), (68, 55590), (69, 55593), (73, 55632),

Gene: Yorick_62 Start: 41335, Stop: 41676, Start Num: 21

Candidate Starts for Yorick_62:

(Start: 19 @41326 has 1 MA's), (Start: 21 @41335 has 65 MA's), (27, 41374), (37, 41452), (73, 41665),

Gene: Yoshi_78 Start: 43126, Stop: 43482, Start Num: 21

Candidate Starts for Yoshi_78:

(10, 43024), (Start: 21 @43126 has 65 MA's), (27, 43165), (42, 43282), (62, 43396), (64, 43402), (73, 43471),

Gene: Zelink_88 Start: 57397, Stop: 57738, Start Num: 21

Candidate Starts for Zelink_88:

(8, 57265), (13, 57325), (14, 57346), (15, 57352), (Start: 21 @57397 has 65 MA's), (27, 57436), (37, 57490), (62, 57652), (64, 57658), (68, 57685), (69, 57688), (73, 57727),

Gene: Zerg_63 Start: 40748, Stop: 41104, Start Num: 22

Candidate Starts for Zerg_63:

(Start: 19 @40739 has 1 MA's), (Start: 22 @40748 has 8 MA's), (25, 40769), (29, 40784), (34, 40835), (37, 40856), (42, 40901), (49, 40961), (62, 41018), (64, 41024), (68, 41051), (73, 41093),