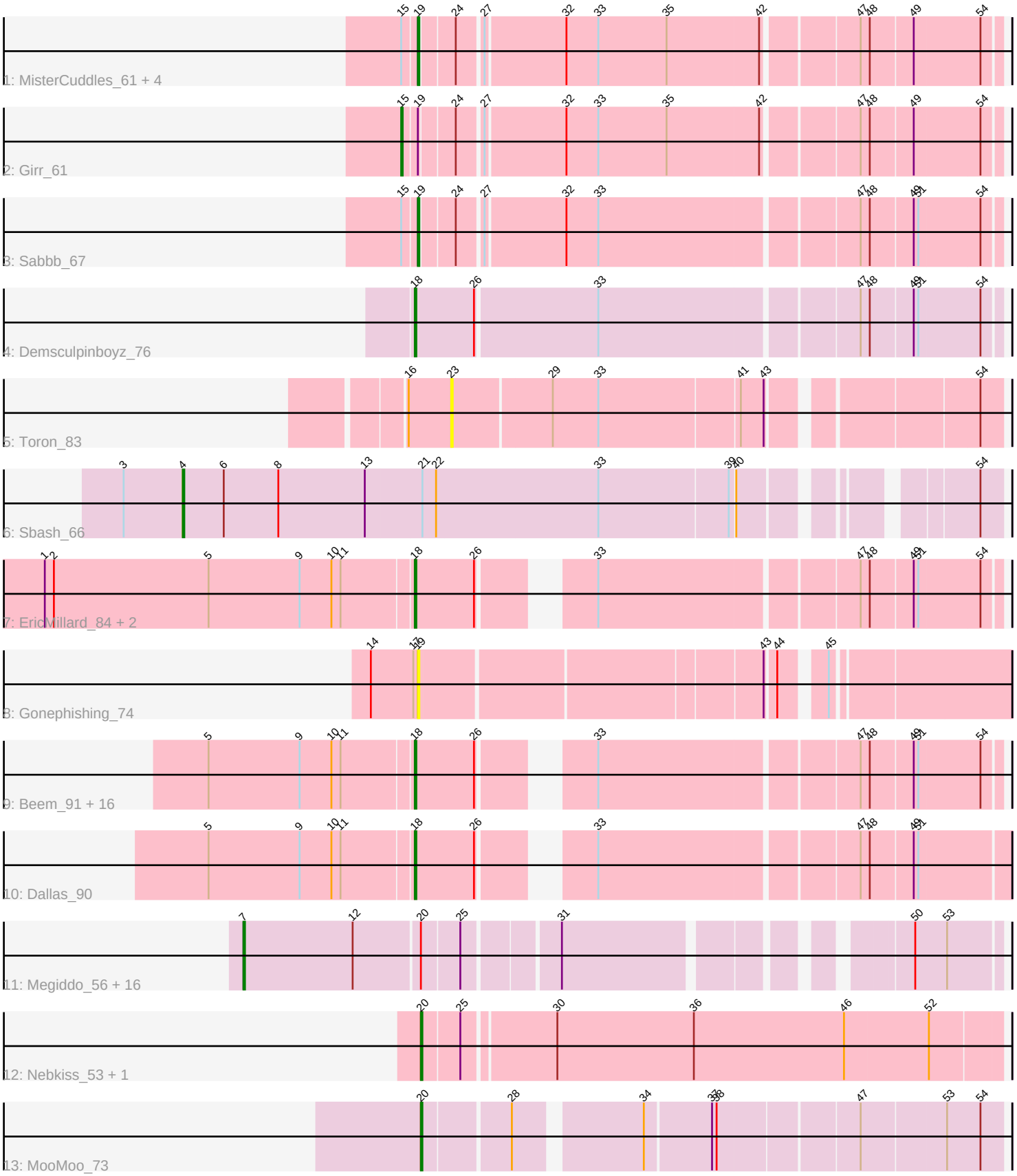
Pham 347703


1: MisterCuddles_61 + 4
2: Girr_61
3: Sabbb_67
4: Demsculpinboyz_76
5: Toron_83
6: Sbash_66
7: EricVillard_84 + 2
8: Gonephishing_74
9: Beem_91 + 16
10: Dallas_90
11: Megiddo_56 + 16
12: Nebkiss_53 + 1
13: MooMoo_73

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 347703 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347703 has 52 members, 4 are drafts.

Phages represented in each track:
• Track 1 : MisterCuddles_61, Zerg_63, Ruby_59, RockyHorror_64, Doug_65
• Track 2 : Girr_61
• Track 3 : Sabbb_67
• Track 4 : Demsculpinboyz_76
• Track 5 : Toron_83
• Track 6 : Sbash_66
• Track 7 : EricMillard_84, Optimus_85, BAKA_92
• Track 8 : Gonephishing_74
• Track 9 : Beem_91, Bagrid_90, DmpstrDiver_91, HokkenD_80, Halley_92, Bombitas_79, JuicyJay_88, Odette_89, Dove_76, Yeet_84, Schatzie_86, ThreeRngTarjay_88, Kalah2_85, NihilNomen_92, Phoebus_93, Hughesyang_91, Minerva_90
• Track 10 : Dallas_90
• Track 11 : Megiddo_56, Brusacoram_58, Necropolis_55, Dynamo_56, Glaske_55, Bobi_76, Gavriela_56, StressBall_56, Phalm_56, Malithi_57, Bogie_60, HUHilltop_59, Sonah_57, StevieRay_61, Atcoo_58, Willsammy_56, KilKor_56
• Track 12 : Nebkiss_53, Gaia_49
• Track 13 : 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 18, it was called in 20 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BAKA_92, Bagrid_90, Beem_91, Bombitas_79, Dallas_90, Demsculpinboyz_76, DmpstrDiver_91, Dove_76, EricMillard_84, Halley_92, HokkenD_80, Hughesyang_91, JuicyJay_88, Kalah2_85, Minerva_90, NihilNomen_92, Odette_89, Optimus_85, Phoebus_93, Schatzie_86, ThreeRngTarjay_88, Yeet_84,

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

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

• Atcoo_58, Bobi_76, Bogie_60, Brusacoram_58, Doug_65, Dynamo_56, Gaia_49, Gavriela_56, Girr_61, Glaske_55, Gonephishing_74, HUHilltop_59, KilKor_56, Malithi_57, Megiddo_56, MisterCuddles_61, MooMoo_73, Nebkiss_53, Necropolis_55, Phalm_56, RockyHorror_64, Ruby_59, Sabbb_67, Sbash_66, Sonah_57, StevieRay_61, StressBall_56, Toron_83, Willsammy_56, Zerg_63,

Summary by start number:

Start 4:
• Found in 1 of 52 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sbash_66 (I2),

Start 7:
• Found in 17 of 52 (32.7%) of genes in pham
• Manual Annotations of this start: 17 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atcoo_58 (P1), Bobi_76 (F1), Bogie_60 (P1), Brusacoram_58 (P1), Dynamo_56 (P1), Gavriela_56 (P1), Glaske_55 (P1), HUHilltop_59 (P1), KilKor_56 (P1), Malithi_57 (P1), Megiddo_56 (P1), Necropolis_55 (P1), Phalm_56 (P1), Sonah_57 (P1), StevieRay_61 (P1), StressBall_56 (P1), Willsammy_56 (P1),

Start 15:
• Found in 7 of 52 (13.5%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Girr_61 (F1),

Start 18:
• Found in 22 of 52 (42.3%) of genes in pham
• Manual Annotations of this start: 20 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BAKA_92 (J), Bagrid_90 (J), Beem_91 (J), Bombitas_79 (J), Dallas_90 (J), Demsculpinboyz_76 (F2), DmpstrDiver_91 (J), Dove_76 (J), EricMillard_84 (J), Halley_92 (J), HokkenD_80 (J), Hughesyang_91 (J), JuicyJay_88 (J), Kalah2_85 (J), Minerva_90 (J), NihilNomen_92 (J), Odette_89 (J), Optimus_85 (J), Phoebus_93 (J), Schatzie_86 (J), ThreeRngTarjay_88 (J), Yeet_84 (J),

Start 19:
• Found in 8 of 52 (15.4%) of genes in pham
• Manual Annotations of this start: 6 of 48
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Doug_65 (F1), Gonephishing_74 (J), MisterCuddles_61 (F1), RockyHorror_64 (F1), Ruby_59 (F1), Sabbb_67 (F1), Zerg_63 (F1),

Start 20:
• Found in 20 of 52 (38.5%) of genes in pham
• Manual Annotations of this start: 3 of 48
• Called 15.0% of time when present

• Phage (with cluster) where this start called: Gaia_49 (X), MooMoo_73 (singleton), Nebkiss_53 (X),

Start 23:
• Found in 1 of 52 (1.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toron_83 (F6),

Summary by clusters:

There are 8 clusters represented in this pham: F1, singleton, P1, F6, J, F2, X, I2,

Info for manual annotations of cluster F1:
•Start number 7 was manually annotated 1 time for cluster F1.
•Start number 15 was manually annotated 1 time for cluster F1.
•Start number 19 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 18 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster I2:
•Start number 4 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster J:
•Start number 18 was manually annotated 19 times for cluster J.

Info for manual annotations of cluster P1:
•Start number 7 was manually annotated 16 times for cluster P1.

Info for manual annotations of cluster X:
•Start number 20 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Atcoo_58 Start: 40217, Stop: 40654, Start Num: 7
Candidate Starts for Atcoo_58:
(Start: 7 @40217 has 17 MA's), (12, 40289), (Start: 20 @40331 has 3 MA's), (25, 40355), (31, 40412), (50, 40601), (53, 40622),

Gene: BAKA_92 Start: 57196, Stop: 57537, Start Num: 18
Candidate Starts for BAKA_92:
(1, 56956), (2, 56962), (5, 57064), (9, 57124), (10, 57145), (11, 57151), (Start: 18 @57196 has 20 MA's), (26, 57235), (33, 57289), (47, 57451), (48, 57457), (49, 57484), (51, 57487), (54, 57526),

Gene: Bagrid_90 Start: 56063, Stop: 56404, Start Num: 18
Candidate Starts for Bagrid_90:
(5, 55931), (9, 55991), (10, 56012), (11, 56018), (Start: 18 @56063 has 20 MA's), (26, 56102), (33, 56156), (47, 56318), (48, 56324), (49, 56351), (51, 56354), (54, 56393),

Gene: Beem_91 Start: 56924, Stop: 57265, Start Num: 18
Candidate Starts for Beem_91:
(5, 56792), (9, 56852), (10, 56873), (11, 56879), (Start: 18 @56924 has 20 MA's), (26, 56963), (33, 57017), (47, 57179), (48, 57185), (49, 57212), (51, 57215), (54, 57254),

Gene: Bobi_76 Start: 47153, Stop: 47593, Start Num: 7
Candidate Starts for Bobi_76:
(Start: 7 @47153 has 17 MA's), (12, 47225), (Start: 20 @47267 has 3 MA's), (25, 47291), (31, 47348), (50, 47540), (53, 47561),

Gene: Bogie_60 Start: 39977, Stop: 40417, Start Num: 7
Candidate Starts for Bogie_60:
(Start: 7 @39977 has 17 MA's), (12, 40049), (Start: 20 @40091 has 3 MA's), (25, 40115), (31, 40172), (50, 40364), (53, 40385),

Gene: Bombitas_79 Start: 54087, Stop: 54428, Start Num: 18
Candidate Starts for Bombitas_79:
(5, 53955), (9, 54015), (10, 54036), (11, 54042), (Start: 18 @54087 has 20 MA's), (26, 54126), (33, 54180), (47, 54342), (48, 54348), (49, 54375), (51, 54378), (54, 54417),

Gene: Brusacoram_58 Start: 38760, Stop: 39197, Start Num: 7
Candidate Starts for Brusacoram_58:
(Start: 7 @38760 has 17 MA's), (12, 38832), (Start: 20 @38874 has 3 MA's), (25, 38898), (31, 38955), (50, 39144), (53, 39165),

Gene: Dallas_90 Start: 55845, Stop: 56192, Start Num: 18
Candidate Starts for Dallas_90:
(5, 55713), (9, 55773), (10, 55794), (11, 55800), (Start: 18 @55845 has 20 MA's), (26, 55884), (33, 55938), (47, 56100), (48, 56106), (49, 56133), (51, 56136),

Gene: Demsculpinboyz_76 Start: 41371, Stop: 41736, Start Num: 18
Candidate Starts for Demsculpinboyz_76:
(Start: 18 @41371 has 20 MA's), (26, 41410), (33, 41488), (47, 41650), (48, 41656), (49, 41683), (51, 41686), (54, 41725),

Gene: DmpstrDiver_91 Start: 56259, Stop: 56600, Start Num: 18
Candidate Starts for DmpstrDiver_91:
(5, 56127), (9, 56187), (10, 56208), (11, 56214), (Start: 18 @56259 has 20 MA's), (26, 56298), (33, 56352), (47, 56514), (48, 56520), (49, 56547), (51, 56550), (54, 56589),

Gene: Doug_65 Start: 41707, Stop: 42063, Start Num: 19
Candidate Starts for Doug_65:
(Start: 15 @41698 has 1 MA's), (Start: 19 @41707 has 6 MA's), (24, 41728), (27, 41743), (32, 41794), (33, 41815), (35, 41860), (42, 41920), (47, 41977), (48, 41983), (49, 42010), (54, 42052),

Gene: Dove_76 Start: 52353, Stop: 52694, Start Num: 18
Candidate Starts for Dove_76:
(5, 52221), (9, 52281), (10, 52302), (11, 52308), (Start: 18 @52353 has 20 MA's), (26, 52392), (33, 52446), (47, 52608), (48, 52614), (49, 52641), (51, 52644), (54, 52683),

Gene: Dynamo_56 Start: 38011, Stop: 38451, Start Num: 7
Candidate Starts for Dynamo_56:

(Start: 7 @38011 has 17 MA's), (12, 38083), (Start: 20 @38125 has 3 MA's), (25, 38149), (31, 38206), (50, 38398), (53, 38419),

Gene: EricMillard_84 Start: 55991, Stop: 56332, Start Num: 18
Candidate Starts for EricMillard_84:
(1, 55751), (2, 55757), (5, 55859), (9, 55919), (10, 55940), (11, 55946), (Start: 18 @55991 has 20 MA's), (26, 56030), (33, 56084), (47, 56246), (48, 56252), (49, 56279), (51, 56282), (54, 56321),

Gene: Gaia_49 Start: 36916, Stop: 36548, Start Num: 20
Candidate Starts for Gaia_49:
(Start: 20 @36916 has 3 MA's), (25, 36892), (30, 36835), (36, 36745), (46, 36646), (52, 36592),

Gene: Gavriela_56 Start: 38975, Stop: 39412, Start Num: 7
Candidate Starts for Gavriela_56:
(Start: 7 @38975 has 17 MA's), (12, 39047), (Start: 20 @39089 has 3 MA's), (25, 39113), (31, 39170), (50, 39359), (53, 39380),

Gene: Girr_61 Start: 40755, Stop: 41120, Start Num: 15
Candidate Starts for Girr_61:
(Start: 15 @40755 has 1 MA's), (Start: 19 @40764 has 6 MA's), (24, 40785), (27, 40800), (32, 40851), (33, 40872), (35, 40917), (42, 40977), (47, 41034), (48, 41040), (49, 41067), (54, 41109),

Gene: Glaske_55 Start: 38975, Stop: 39412, Start Num: 7
Candidate Starts for Glaske_55:
(Start: 7 @38975 has 17 MA's), (12, 39047), (Start: 20 @39089 has 3 MA's), (25, 39113), (31, 39170), (50, 39359), (53, 39380),

Gene: Gonephishing_74 Start: 48434, Stop: 48081, Start Num: 19
Candidate Starts for Gonephishing_74:
(14, 48464), (17, 48437), (Start: 19 @48434 has 6 MA's), (43, 48221), (44, 48215), (45, 48191),

Gene: HUHilltop_59 Start: 38234, Stop: 38674, Start Num: 7
Candidate Starts for HUHilltop_59:
(Start: 7 @38234 has 17 MA's), (12, 38306), (Start: 20 @38348 has 3 MA's), (25, 38372), (31, 38429), (50, 38621), (53, 38642),

Gene: Halley_92 Start: 56924, Stop: 57265, Start Num: 18
Candidate Starts for Halley_92:
(5, 56792), (9, 56852), (10, 56873), (11, 56879), (Start: 18 @56924 has 20 MA's), (26, 56963), (33, 57017), (47, 57179), (48, 57185), (49, 57212), (51, 57215), (54, 57254),

Gene: HokkenD_80 Start: 55193, Stop: 55534, Start Num: 18
Candidate Starts for HokkenD_80:
(5, 55061), (9, 55121), (10, 55142), (11, 55148), (Start: 18 @55193 has 20 MA's), (26, 55232), (33, 55286), (47, 55448), (48, 55454), (49, 55481), (51, 55484), (54, 55523),

Gene: Hughesyang_91 Start: 56882, Stop: 57223, Start Num: 18
Candidate Starts for Hughesyang_91:
(5, 56750), (9, 56810), (10, 56831), (11, 56837), (Start: 18 @56882 has 20 MA's), (26, 56921), (33, 56975), (47, 57137), (48, 57143), (49, 57170), (51, 57173), (54, 57212),

Gene: JuicyJay_88 Start: 58058, Stop: 58399, Start Num: 18
Candidate Starts for JuicyJay_88:

(5, 57926), (9, 57986), (10, 58007), (11, 58013), (Start: 18 @58058 has 20 MA's), (26, 58097), (33, 58151), (47, 58313), (48, 58319), (49, 58346), (51, 58349), (54, 58388),

Gene: Kalah2_85 Start: 56217, Stop: 56558, Start Num: 18
Candidate Starts for Kalah2_85:
(5, 56085), (9, 56145), (10, 56166), (11, 56172), (Start: 18 @56217 has 20 MA's), (26, 56256), (33, 56310), (47, 56472), (48, 56478), (49, 56505), (51, 56508), (54, 56547),

Gene: KilKor_56 Start: 39668, Stop: 40105, Start Num: 7
Candidate Starts for KilKor_56:
(Start: 7 @39668 has 17 MA's), (12, 39740), (Start: 20 @39782 has 3 MA's), (25, 39806), (31, 39863), (50, 40052), (53, 40073),

Gene: Malithi_57 Start: 38149, Stop: 38589, Start Num: 7
Candidate Starts for Malithi_57:
(Start: 7 @38149 has 17 MA's), (12, 38221), (Start: 20 @38263 has 3 MA's), (25, 38287), (31, 38344), (50, 38536), (53, 38557),

Gene: Megiddo_56 Start: 38999, Stop: 39439, Start Num: 7
Candidate Starts for Megiddo_56:
(Start: 7 @38999 has 17 MA's), (12, 39071), (Start: 20 @39113 has 3 MA's), (25, 39137), (31, 39194), (50, 39386), (53, 39407),

Gene: Minerva_90 Start: 56841, Stop: 57182, Start Num: 18
Candidate Starts for Minerva_90:
(5, 56709), (9, 56769), (10, 56790), (11, 56796), (Start: 18 @56841 has 20 MA's), (26, 56880), (33, 56934), (47, 57096), (48, 57102), (49, 57129), (51, 57132), (54, 57171),

Gene: MisterCuddles_61 Start: 40764, Stop: 41120, Start Num: 19
Candidate Starts for MisterCuddles_61:
(Start: 15 @40755 has 1 MA's), (Start: 19 @40764 has 6 MA's), (24, 40785), (27, 40800), (32, 40851), (33, 40872), (35, 40917), (42, 40977), (47, 41034), (48, 41040), (49, 41067), (54, 41109),

Gene: MooMoo_73 Start: 46091, Stop: 46441, Start Num: 20
Candidate Starts for MooMoo_73:
(Start: 20 @46091 has 3 MA's), (28, 46145), (34, 46220), (37, 46262), (38, 46265), (47, 46352), (53, 46406), (54, 46427),

Gene: Nebkiss_53 Start: 36617, Stop: 36249, Start Num: 20
Candidate Starts for Nebkiss_53:
(Start: 20 @36617 has 3 MA's), (25, 36593), (30, 36536), (36, 36446), (46, 36347), (52, 36293),

Gene: Necropolis_55 Start: 37600, Stop: 38040, Start Num: 7
Candidate Starts for Necropolis_55:
(Start: 7 @37600 has 17 MA's), (12, 37672), (Start: 20 @37714 has 3 MA's), (25, 37738), (31, 37795), (50, 37987), (53, 38008),

Gene: NihilNomen_92 Start: 57011, Stop: 57352, Start Num: 18
Candidate Starts for NihilNomen_92:
(5, 56879), (9, 56939), (10, 56960), (11, 56966), (Start: 18 @57011 has 20 MA's), (26, 57050), (33, 57104), (47, 57266), (48, 57272), (49, 57299), (51, 57302), (54, 57341),

Gene: Odette_89 Start: 56053, Stop: 56394, Start Num: 18

Candidate Starts for Odette_89:
(5, 55921), (9, 55981), (10, 56002), (11, 56008), (Start: 18 @56053 has 20 MA's), (26, 56092), (33, 56146), (47, 56308), (48, 56314), (49, 56341), (51, 56344), (54, 56383),

Gene: Optimus_85 Start: 55545, Stop: 55886, Start Num: 18
Candidate Starts for Optimus_85:
(1, 55305), (2, 55311), (5, 55413), (9, 55473), (10, 55494), (11, 55500), (Start: 18 @55545 has 20 MA's), (26, 55584), (33, 55638), (47, 55800), (48, 55806), (49, 55833), (51, 55836), (54, 55875),

Gene: Phalm_56 Start: 38975, Stop: 39412, Start Num: 7
Candidate Starts for Phalm_56:
(Start: 7 @38975 has 17 MA's), (12, 39047), (Start: 20 @39089 has 3 MA's), (25, 39113), (31, 39170), (50, 39359), (53, 39380),

Gene: Phoebus_93 Start: 58193, Stop: 58534, Start Num: 18
Candidate Starts for Phoebus_93:
(5, 58061), (9, 58121), (10, 58142), (11, 58148), (Start: 18 @58193 has 20 MA's), (26, 58232), (33, 58286), (47, 58448), (48, 58454), (49, 58481), (51, 58484), (54, 58523),

Gene: RockyHorror_64 Start: 40636, Stop: 40992, Start Num: 19
Candidate Starts for RockyHorror_64:
(Start: 15 @40627 has 1 MA's), (Start: 19 @40636 has 6 MA's), (24, 40657), (27, 40672), (32, 40723), (33, 40744), (35, 40789), (42, 40849), (47, 40906), (48, 40912), (49, 40939), (54, 40981),

Gene: Ruby_59 Start: 40765, Stop: 41121, Start Num: 19
Candidate Starts for Ruby_59:
(Start: 15 @40756 has 1 MA's), (Start: 19 @40765 has 6 MA's), (24, 40786), (27, 40801), (32, 40852), (33, 40873), (35, 40918), (42, 40978), (47, 41035), (48, 41041), (49, 41068), (54, 41110),

Gene: Sabbb_67 Start: 41906, Stop: 42262, Start Num: 19
Candidate Starts for Sabbb_67:
(Start: 15 @41897 has 1 MA's), (Start: 19 @41906 has 6 MA's), (24, 41927), (27, 41942), (32, 41993), (33, 42014), (47, 42176), (48, 42182), (49, 42209), (51, 42212), (54, 42251),

Gene: Sbash_66 Start: 44659, Stop: 45153, Start Num: 4
Candidate Starts for Sbash_66:
(3, 44620), (Start: 4 @44659 has 1 MA's), (6, 44686), (8, 44722), (13, 44779), (21, 44815), (22, 44824), (33, 44929), (39, 45013), (40, 45016), (54, 45139),

Gene: Schatzie_86 Start: 55800, Stop: 56141, Start Num: 18
Candidate Starts for Schatzie_86:
(5, 55668), (9, 55728), (10, 55749), (11, 55755), (Start: 18 @55800 has 20 MA's), (26, 55839), (33, 55893), (47, 56055), (48, 56061), (49, 56088), (51, 56091), (54, 56130),

Gene: Sonah_57 Start: 37705, Stop: 38145, Start Num: 7
Candidate Starts for Sonah_57:
(Start: 7 @37705 has 17 MA's), (12, 37777), (Start: 20 @37819 has 3 MA's), (25, 37843), (31, 37900), (50, 38092), (53, 38113),

Gene: StevieRay_61 Start: 40026, Stop: 40466, Start Num: 7
Candidate Starts for StevieRay_61:
(Start: 7 @40026 has 17 MA's), (12, 40098), (Start: 20 @40140 has 3 MA's), (25, 40164), (31, 40221), (50, 40413), (53, 40434),

Gene: StressBall_56 Start: 38975, Stop: 39412, Start Num: 7
Candidate Starts for StressBall_56:
(Start: 7 @38975 has 17 MA's), (12, 39047), (Start: 20 @39089 has 3 MA's), (25, 39113), (31, 39170), (50, 39359), (53, 39380),

Gene: ThreeRngTarjay_88 Start: 57085, Stop: 57426, Start Num: 18
Candidate Starts for ThreeRngTarjay_88:
(5, 56953), (9, 57013), (10, 57034), (11, 57040), (Start: 18 @57085 has 20 MA's), (26, 57124), (33, 57178), (47, 57340), (48, 57346), (49, 57373), (51, 57376), (54, 57415),

Gene: Toron_83 Start: 50561, Stop: 50893, Start Num: 23
Candidate Starts for Toron_83:
(16, 50534), (23, 50561), (29, 50624), (33, 50654), (41, 50744), (43, 50759), (54, 50879),

Gene: Willsammy_56 Start: 39151, Stop: 39588, Start Num: 7
Candidate Starts for Willsammy_56:
(Start: 7 @39151 has 17 MA's), (12, 39223), (Start: 20 @39265 has 3 MA's), (25, 39289), (31, 39346), (50, 39535), (53, 39556),

Gene: Yeet_84 Start: 55302, Stop: 55643, Start Num: 18
Candidate Starts for Yeet_84:
(5, 55170), (9, 55230), (10, 55251), (11, 55257), (Start: 18 @55302 has 20 MA's), (26, 55341), (33, 55395), (47, 55557), (48, 55563), (49, 55590), (51, 55593), (54, 55632),

Gene: Zerg_63 Start: 40748, Stop: 41104, Start Num: 19
Candidate Starts for Zerg_63:
(Start: 15 @40739 has 1 MA's), (Start: 19 @40748 has 6 MA's), (24, 40769), (27, 40784), (32, 40835), (33, 40856), (35, 40901), (42, 40961), (47, 41018), (48, 41024), (49, 41051), (54, 41093),