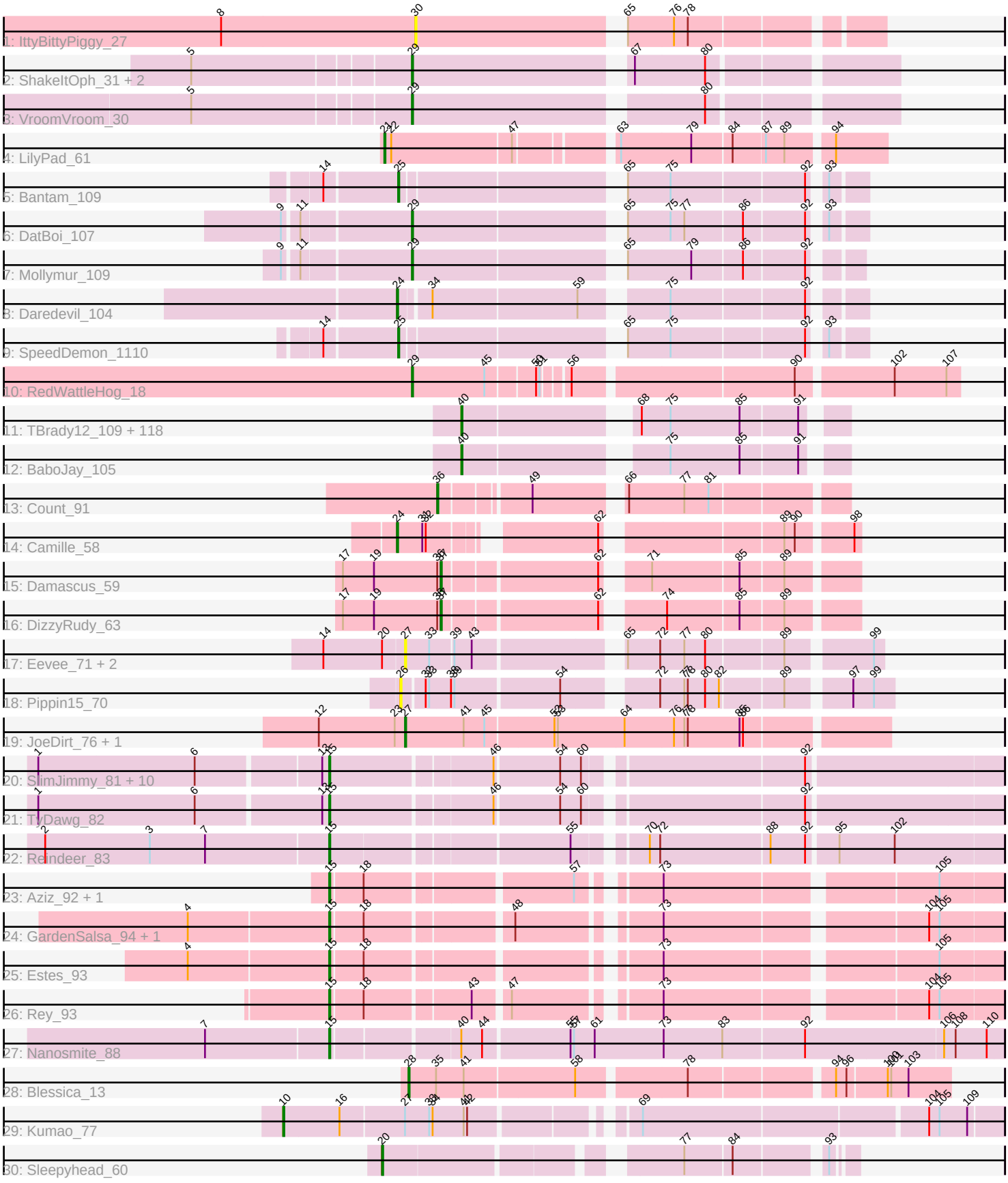
Pham 193783


1: IttyBittyPiggy_27
2: ShakeItOph_31 + 2
3: VroomVroom_30
4: LilyPad_61
5: Bantam_109
6: DatBoi_107
7: Mollymur_109
8: Daredevil_104
9: SpeedDemon_1110
10: RedWattleHog_18
11: TBrady12_109 + 118
12: BaboJay_105
13: Count_91
14: Camille_58
15: Damascus_59
16: DizzyRudy_63
17: Eevee_71 + 2
18: Pippin15_70
19: JoeDirt_76 + 1
20: SlimJimmy_81 + 10
21: TyDawg_82
22: Reindeer_83
23: Aziz_92 + 1
24: GardenSalsa_94 + 1
25: Estes_93
26: Rey_93
27: Nanosmite_88
28: Blessica_13
29: Kumao_77
30: Sleepyhead_60

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 193783 Report

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

Pham number 193783 has 165 members, 7 are drafts.

Phages represented in each track:
• Track 1 : IttyBittyPiggy_27
• Track 2 : ShakeItOph_31, MiniMommy_31, JasmineDragon_30
• Track 3 : VroomVroom_30
• Track 4 : LilyPad_61
• Track 5 : Bantam_109
• Track 6 : DatBoi_107
• Track 7 : Mollymur_109
• Track 8 : Daredevil_104
• Track 9 : SpeedDemon_1110
• Track 10 : RedWattleHog_18
• Track 11 : TBrady12_109, Lilizi_106, StellaBean_105, Glexan_105, Bench_108, JeTaime_104, Lilpickle_105, Nimrod_106, Hopey_106, Murphy_105, Paperbeatsrock_105, DrDrey_106, Stark_106, Nala_108, Moldemort_108, ShamWow_106, Emmina_106, Traaww1_102, RiverMonster_105, Contagion_102, Adnama_110, Pumpkin_107, Cjw1_106, Pat3_103, Misfit_107, Teaspoon_106, Inca_103, Henry_103, Murica_109, Phaja_104, Cookies_103, Kanye_103, HanKaySha_106, StolenFromERC_108, Bruin_103, Bask21_106, PhatBacter_109, Buck_107, Elite2014_105, Manda_107, GoldenSpark_110, Argent26_110, Phaux_108, ChosenOne_106, Miniwave_101, Harella_106, Kostya_106, NelitzaMV_103, Dumbo_105, Mindy_105, Gage_108, CrystalP_105, ChotaBhai_106, Wiggin_108, Tarkin_105, Ukulele_100, Barbarian_105, DoctorDiddles_105, 244_106, Gator_104, Hoonter_109, Easy2Say_106, TeardropMSU_102, Flypotenuse_102, ABCat_103, Saints25_102, FireRed_109, Lilac_107, Kimchi_110, Thresher_107, YassJohnny_103, xkcd_109, Sassay_101, Cactus_110, Sotrice96_107, Gemini_111, Goldilocks_109, SirDuracell_106, SophKB_104, Dusk_103, Icee_107, Balomoji_106, BadStone_103, Asriel_104, Youngblood_109, Tuco_107, Rimmer_104, Terminus_109, Phrux_102, Pharsalus_103, Elph10_105, HufflyPuff_108, Command613_108, Highbury_102, Czyszczon1_106, Filch_107, ShereKhan_104, Willez_101, MISSy_107, BigBubba_106, Goku_105, Mosby_102, Stank_108, Myrale_106, Marshmallow_103, MadamMonkfish_105, Eureka_105, OrionPax_104, NoSleep_106, GooberAzure_109, MPhalcon_107, Toto_104, Porky_104, Tomaszewski_101, Rakim_107, Holt_111, Simpliphy_104, Maxxinista_107, IHOP_104
• Track 12 : BaboJay_105
• Track 13 : Count_91
• Track 14 : Camille_58
• Track 15 : Damascus_59

• Track 16 : DizzyRudy_63
• Track 17 : Eevee_71, JoyLin_71, Yotsuba_70
• Track 18 : Pippin15_70
• Track 19 : JoeDirt_76, OhShagHennessy_74
• Track 20 : SlimJimmy_81, Auspice_82, Dulcita_83, IPhane7_81, Bricole_81, Diminimus_83, Glaske16_83, Skinny_86, PegLeg_81, Bongo_82, LilhomieP_82
• Track 21 : TyDawg_82
• Track 22 : Reindeer_83
• Track 23 : Aziz_92, GenevaB15_94
• Track 24 : GardenSalsa_94, MrMagoo_95
• Track 25 : Estes_93
• Track 26 : Rey_93
• Track 27 : Nanosmite_88
• Track 28 : Blessica_13
• Track 29 : Kumao_77
• Track 30 : Sleepyhead_60

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

The start number called the most often in the published annotations is 40, it was called in 120 of the 158 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 244_106, ABCat_103, Adnama_110, Argent26_110, Asriel_104, BaboJay_105, BadStone_103, Balomoji_106, Barbarian_105, Bask21_106, Bench_108, BigBubba_106, Bruin_103, Buck_107, Cactus_110, ChosenOne_106, ChotaBhai_106, Cjw1_106, Command613_108, Contagion_102, Cookies_103, CrystalP_105, Czyszczon1_106, DoctorDiddles_105, DrDrey_106, Dumbo_105, Dusk_103, Easy2Say_106, Elite2014_105, Elph10_105, Emmina_106, Eureka_105, Filch_107, FireRed_109, Flypotenuse_102, Gage_108, Gator_104, Gemini_111, Glexan_105, Goku_105, GoldenSpark_110, Goldilocks_109, GooberAzure_109, HanKaySha_106, Harella_106, Henry_103, Highbury_102, Holt_111, Hoonter_109, Hopey_106, HufflyPuff_108, IHOP_104, Icee_107, Inca_103, JeTaime_104, Kanye_103, Kimchi_110, Kostya_106, Lilac_107, Lilizi_106, Lilpickle_105, MISSy_107, MPhalcon_107, MadamMonkfish_105, Manda_107, Marshmallow_103, Maxxinista_107, Mindy_105, Miniwave_101, Misfit_107, Moldemort_108, Mosby_102, Murica_109, Murphy_105, Myrale_106, Nala_108, NelitzaMV_103, Nimrod_106, NoSleep_106, OrionPax_104, Paperbeatsrock_105, Pat3_103, Phaja_104, Pharsalus_103, PhatBacter_109, Phaux_108, Phrux_102, Porky_104, Pumpkin_107, Rakim_107, Rimmer_104, RiverMonster_105, Saints25_102, Sassay_101, ShamWow_106, ShereKhan_104, Simpliphy_104, SirDuracell_106, SophKB_104, Sotrice96_107, Stank_108, Stark_106, StellaBean_105, StolenFromERC_108, TBrady12_109, Tarkin_105, TeardropMSU_102, Teaspoon_106, Terminus_109, Thresher_107, Tomaszewski_101, Toto_104, Traaww1_102, Tuco_107, Ukulele_100, Wiggin_108, Willez_101, YassJohnny_103, Youngblood_109, xkcd_109,

Genes that have the "Most Annotated" start but do not call it:
• Nanosmite_88,

Genes that do not have the "Most Annotated" start:
• Auspice_82, Aziz_92, Bantam_109, Blessica_13, Bongo_82, Bricole_81, Camille_58, Count_91, Damascus_59, Daredevil_104, DatBoi_107, Diminimus_83, DizzyRudy_63, Dulcita_83, Eevee_71, Estes_93, GardenSalsa_94, GenevaB15_94, Glaske16_83, IPhane7_81, IttyBittyPiggy_27, JasmineDragon_30, JoeDirt_76, JoyLin_71, Kumao_77, LilhomieP_82, LilyPad_61, MiniMommy_31, Mollymur_109, MrMagoo_95, OhShagHennessy_74, PegLeg_81, Pippin15_70, RedWattleHog_18, Reindeer_83, Rey_93, ShakeItOph_31, Skinny_86, Sleepyhead_60, SlimJimmy_81, SpeedDemon_1110, TyDawg_82, VroomVroom_30, Yotsuba_70,

Summary by start number:

Start 10:
• Found in 1 of 165 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumao_77 (singleton),

Start 15:
• Found in 20 of 165 (12.1%) of genes in pham
• Manual Annotations of this start: 20 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Auspice_82 (M1), Aziz_92 (M2), Bongo_82 (M1), Bricole_81 (M1), Diminimus_83 (M1), Dulcita_83 (M1), Estes_93 (M2), GardenSalsa_94 (M2), GenevaB15_94 (M2), Glaske16_83 (M1), IPhane7_81 (M1), LilhomieP_82 (M1), MrMagoo_95 (M2), Nanosmite_88 (M3), PegLeg_81 (M1), Reindeer_83 (M1), Rey_93 (M2), Skinny_86 (M1), SlimJimmy_81 (M1), TyDawg_82 (M1),

Start 20:
• Found in 4 of 165 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 158
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Sleepyhead_60 (singleton),

Start 21:
• Found in 1 of 165 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilyPad_61 (DG1),

Start 24:
• Found in 2 of 165 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Camille_58 (EL), Daredevil_104 (DL),

Start 25:
• Found in 2 of 165 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_109 (DL), SpeedDemon_1110 (DL),

Start 26:
• Found in 1 of 165 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pippin15_70 (JA),

Start 27:
• Found in 6 of 165 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 158
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Eevee_71 (JA), JoeDirt_76 (L1), JoyLin_71 (JA), OhShagHennessy_74 (L1), Yotsuba_70 (JA),

Start 28:
• Found in 1 of 165 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Blessica_13 (O),

Start 29:
• Found in 7 of 165 (4.2%) of genes in pham
• Manual Annotations of this start: 5 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DatBoi_107 (DL), JasmineDragon_30 (AZ4), MiniMommy_31 (AZ4), Mollymur_109 (DL), RedWattleHog_18 (DX), ShakeItOph_31 (AZ4), VroomVroom_30 (AZ4),

Start 30:
• Found in 1 of 165 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: IttyBittyPiggy_27 (AZ1),

Start 36:
• Found in 3 of 165 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 158
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Count_91 (EL),

Start 37:
• Found in 2 of 165 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 158
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Damascus_59 (EL), DizzyRudy_63 (EL),

Start 40:
• Found in 121 of 165 (73.3%) of genes in pham
• Manual Annotations of this start: 120 of 158
• Called 99.2% of time when present
• Phage (with cluster) where this start called: 244_106 (E), ABCat_103 (E), Adnama_110 (E), Argent26_110 (E), Asriel_104 (E), BaboJay_105 (E), BadStone_103 (E), Balomoji_106 (E), Barbarian_105 (E), Bask21_106 (E),

Bench_108 (E), BigBubba_106 (E), Bruin_103 (E), Buck_107 (E), Cactus_110 (E), ChosenOne_106 (E), ChotaBhai_106 (E), Cjw1_106 (E), Command613_108 (E), Contagion_102 (E), Cookies_103 (E), CrystalP_105 (E), Czyszczon1_106 (E), DoctorDiddles_105 (E), DrDrey_106 (E), Dumbo_105 (E), Dusk_103 (E), Easy2Say_106 (E), Elite2014_105 (E), Elph10_105 (E), Emmina_106 (E), Eureka_105 (E), Filch_107 (E), FireRed_109 (E), Flypotenuse_102 (E), Gage_108 (E), Gator_104 (E), Gemini_111 (E), Glexan_105 (E), Goku_105 (E), GoldenSpark_110 (E), Goldilocks_109 (E), GooberAzure_109 (E), HanKaySha_106 (E), Harella_106 (E), Henry_103 (E), Highbury_102 (E), Holt_111 (E), Hoonter_109 (E), Hopey_106 (E), HufflyPuff_108 (E), IHOP_104 (E), Icee_107 (E), Inca_103 (E), JeTaime_104 (E), Kanye_103 (E), Kimchi_110 (E), Kostya_106 (E), Lilac_107 (E), Lilizi_106 (E), Lilpickle_105 (E), MISSy_107 (E), MPhalcon_107 (E), MadamMonkfish_105 (E), Manda_107 (E), Marshmallow_103 (E), Maxxinista_107 (E), Mindy_105 (E), Miniwave_101 (E), Misfit_107 (E), Moldemort_108 (E), Mosby_102 (E), Murica_109 (E), Murphy_105 (E), Myrale_106 (E), Nala_108 (E), NelitzaMV_103 (E), Nimrod_106 (E), NoSleep_106 (E), OrionPax_104 (E), Paperbeatsrock_105 (E), Pat3_103 (E), Phaja_104 (E), Pharsalus_103 (E), PhatBacter_109 (E), Phaux_108 (E), Phrux_102 (E), Porky_104 (E), Pumpkin_107 (E), Rakim_107 (E), Rimmer_104 (E), RiverMonster_105 (E), Saints25_102 (E), Sassay_101 (E), ShamWow_106 (E), ShereKhan_104 (E), Simpliphy_104 (E), SirDuracell_106 (E), SophKB_104 (E), Sotrice96_107 (E), Stank_108 (E), Stark_106 (E), StellaBean_105 (E), StolenFromERC_108 (E), TBrady12_109 (E), Tarkin_105 (E), TeardropMSU_102 (E), Teaspoon_106 (E), Terminus_109 (E), Thresher_107 (E), Tomaszewski_101 (E), Toto_104 (E), Traaww1_102 (E), Tuco_107 (E), Ukulele_100 (E), Wiggin_108 (E), Willez_101 (E), YassJohnny_103 (E), Youngblood_109 (E), xkcd_109 (E),

Summary by clusters:

There are 14 clusters represented in this pham: EL, singleton, E, M3, L1, DL, O, DG1, M1, DX, M2, AZ1, AZ4, JA,

Info for manual annotations of cluster AZ4:
•Start number 29 was manually annotated 2 times for cluster AZ4.

Info for manual annotations of cluster DG1:
•Start number 21 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DL:
•Start number 24 was manually annotated 1 time for cluster DL.
•Start number 25 was manually annotated 2 times for cluster DL.
•Start number 29 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DX:
•Start number 29 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster E:
•Start number 40 was manually annotated 120 times for cluster E.

Info for manual annotations of cluster EL:
•Start number 24 was manually annotated 1 time for cluster EL.
•Start number 36 was manually annotated 1 time for cluster EL.

•Start number 37 was manually annotated 2 times for cluster EL.

Info for manual annotations of cluster L1:
•Start number 27 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster M1:
•Start number 15 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 15 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 15 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster O:
•Start number 28 was manually annotated 1 time for cluster O.

Gene Information:

Gene: 244_106 Start: 61588, Stop: 61878, Start Num: 40
Candidate Starts for 244_106:
(Start: 40 @61588 has 120 MA's), (68, 61717), (75, 61741), (85, 61801), (91, 61849),

Gene: ABCat_103 Start: 62792, Stop: 63082, Start Num: 40
Candidate Starts for ABCat_103:
(Start: 40 @62792 has 120 MA's), (68, 62921), (75, 62945), (85, 63005), (91, 63053),

Gene: Adnama_110 Start: 62081, Stop: 62371, Start Num: 40
Candidate Starts for Adnama_110:
(Start: 40 @62081 has 120 MA's), (68, 62210), (75, 62234), (85, 62294), (91, 62342),

Gene: Argent26_110 Start: 62005, Stop: 62295, Start Num: 40
Candidate Starts for Argent26_110:
(Start: 40 @62005 has 120 MA's), (68, 62134), (75, 62158), (85, 62218), (91, 62266),

Gene: Asriel_104 Start: 60418, Stop: 60708, Start Num: 40
Candidate Starts for Asriel_104:
(Start: 40 @60418 has 120 MA's), (68, 60547), (75, 60571), (85, 60631), (91, 60679),

Gene: Auspice_82 Start: 51592, Stop: 52134, Start Num: 15
Candidate Starts for Auspice_82:
(1, 51349), (6, 51484), (13, 51586), (Start: 15 @51592 has 20 MA's), (46, 51724), (54, 51778), (60, 51796), (92, 51970),

Gene: Aziz_92 Start: 53866, Stop: 54384, Start Num: 15
Candidate Starts for Aziz_92:
(Start: 15 @53866 has 20 MA's), (18, 53893), (57, 54058), (73, 54112), (105, 54331),

Gene: BaboJay_105 Start: 62761, Stop: 63051, Start Num: 40
Candidate Starts for BaboJay_105:

(Start: 40 @62761 has 120 MA's), (75, 62914), (85, 62974), (91, 63022),

Gene: BadStone_103 Start: 62340, Stop: 62630, Start Num: 40
Candidate Starts for BadStone_103:
(Start: 40 @62340 has 120 MA's), (68, 62469), (75, 62493), (85, 62553), (91, 62601),

Gene: Balomoji_106 Start: 62201, Stop: 62491, Start Num: 40
Candidate Starts for Balomoji_106:
(Start: 40 @62201 has 120 MA's), (68, 62330), (75, 62354), (85, 62414), (91, 62462),

Gene: Bantam_109 Start: 70339, Stop: 70695, Start Num: 25
Candidate Starts for Bantam_109:
(14, 70279), (Start: 25 @70339 has 2 MA's), (65, 70510), (75, 70546), (92, 70657), (93, 70666),

Gene: Barbarian_105 Start: 60418, Stop: 60708, Start Num: 40
Candidate Starts for Barbarian_105:
(Start: 40 @60418 has 120 MA's), (68, 60547), (75, 60571), (85, 60631), (91, 60679),

Gene: Bask21_106 Start: 61036, Stop: 61323, Start Num: 40
Candidate Starts for Bask21_106:
(Start: 40 @61036 has 120 MA's), (68, 61165), (75, 61189), (85, 61249), (91, 61297),

Gene: Bench_108 Start: 62762, Stop: 63052, Start Num: 40
Candidate Starts for Bench_108:
(Start: 40 @62762 has 120 MA's), (68, 62891), (75, 62915), (85, 62975), (91, 63023),

Gene: BigBubba_106 Start: 61114, Stop: 61404, Start Num: 40
Candidate Starts for BigBubba_106:
(Start: 40 @61114 has 120 MA's), (68, 61243), (75, 61267), (85, 61327), (91, 61375),

Gene: Blessica_13 Start: 5453, Stop: 5890, Start Num: 28
Candidate Starts for Blessica_13:
(Start: 28 @5453 has 1 MA's), (35, 5477), (41, 5501), (58, 5594), (78, 5681), (94, 5795), (96, 5804), (100, 5837), (101, 5840), (103, 5855),

Gene: Bongo_82 Start: 51596, Stop: 52138, Start Num: 15
Candidate Starts for Bongo_82:
(1, 51353), (6, 51488), (13, 51590), (Start: 15 @51596 has 20 MA's), (46, 51728), (54, 51782), (60, 51800), (92, 51974),

Gene: Bricole_81 Start: 51360, Stop: 51902, Start Num: 15
Candidate Starts for Bricole_81:
(1, 51117), (6, 51252), (13, 51354), (Start: 15 @51360 has 20 MA's), (46, 51492), (54, 51546), (60, 51564), (92, 51738),

Gene: Bruin_103 Start: 61446, Stop: 61736, Start Num: 40
Candidate Starts for Bruin_103:
(Start: 40 @61446 has 120 MA's), (68, 61575), (75, 61599), (85, 61659), (91, 61707),

Gene: Buck_107 Start: 63262, Stop: 63552, Start Num: 40
Candidate Starts for Buck_107:
(Start: 40 @63262 has 120 MA's), (68, 63391), (75, 63415), (85, 63475), (91, 63523),

Gene: Cactus_110 Start: 61700, Stop: 61990, Start Num: 40
Candidate Starts for Cactus_110:
(Start: 40 @61700 has 120 MA's), (68, 61829), (75, 61853), (85, 61913), (91, 61961),

Gene: Camille_58 Start: 41232, Stop: 41567, Start Num: 24
Candidate Starts for Camille_58:
(Start: 24 @41232 has 2 MA's), (31, 41253), (32, 41256), (62, 41376), (89, 41511), (90, 41520), (98, 41562),

Gene: ChosenOne_106 Start: 61646, Stop: 61936, Start Num: 40
Candidate Starts for ChosenOne_106:
(Start: 40 @61646 has 120 MA's), (68, 61775), (75, 61799), (85, 61859), (91, 61907),

Gene: ChotaBhai_106 Start: 62098, Stop: 62385, Start Num: 40
Candidate Starts for ChotaBhai_106:
(Start: 40 @62098 has 120 MA's), (68, 62227), (75, 62251), (85, 62311), (91, 62359),

Gene: Cjw1_106 Start: 63455, Stop: 63745, Start Num: 40
Candidate Starts for Cjw1_106:
(Start: 40 @63455 has 120 MA's), (68, 63584), (75, 63608), (85, 63668), (91, 63716),

Gene: Command613_108 Start: 62194, Stop: 62484, Start Num: 40
Candidate Starts for Command613_108:
(Start: 40 @62194 has 120 MA's), (68, 62323), (75, 62347), (85, 62407), (91, 62455),

Gene: Contagion_102 Start: 61808, Stop: 62098, Start Num: 40
Candidate Starts for Contagion_102:
(Start: 40 @61808 has 120 MA's), (68, 61937), (75, 61961), (85, 62021), (91, 62069),

Gene: Cookies_103 Start: 61964, Stop: 62251, Start Num: 40
Candidate Starts for Cookies_103:
(Start: 40 @61964 has 120 MA's), (68, 62093), (75, 62117), (85, 62177), (91, 62225),

Gene: Count_91 Start: 59562, Stop: 59873, Start Num: 36
Candidate Starts for Count_91:
(Start: 36 @59562 has 1 MA's), (49, 59631), (66, 59697), (77, 59745), (81, 59766),

Gene: CrystalP_105 Start: 62698, Stop: 62988, Start Num: 40
Candidate Starts for CrystalP_105:
(Start: 40 @62698 has 120 MA's), (68, 62827), (75, 62851), (85, 62911), (91, 62959),

Gene: Czyszczon1_106 Start: 61801, Stop: 62091, Start Num: 40
Candidate Starts for Czyszczon1_106:
(Start: 40 @61801 has 120 MA's), (68, 61930), (75, 61954), (85, 62014), (91, 62062),

Gene: Damascus_59 Start: 42669, Stop: 42986, Start Num: 37
Candidate Starts for Damascus_59:
(17, 42585), (19, 42612), (Start: 36 @42666 has 1 MA's), (Start: 37 @42669 has 2 MA's), (62, 42795), (71, 42822), (85, 42894), (89, 42930),

Gene: Daredevil_104 Start: 67182, Stop: 67538, Start Num: 24
Candidate Starts for Daredevil_104:
(Start: 24 @67182 has 2 MA's), (34, 67206), (59, 67329), (75, 67389), (92, 67500),

Gene: DatBoi_107 Start: 69816, Stop: 70166, Start Num: 29
Candidate Starts for DatBoi_107:
(9, 69714), (11, 69726), (Start: 29 @69816 has 5 MA's), (65, 69981), (75, 70017), (77, 70029), (86, 70077), (92, 70128), (93, 70137),

Gene: Diminimus_83 Start: 51591, Stop: 52133, Start Num: 15
Candidate Starts for Diminimus_83:
(1, 51348), (6, 51483), (13, 51585), (Start: 15 @51591 has 20 MA's), (46, 51723), (54, 51777), (60, 51795), (92, 51969),

Gene: DizzyRudy_63 Start: 42556, Stop: 42873, Start Num: 37
Candidate Starts for DizzyRudy_63:
(17, 42472), (19, 42499), (Start: 36 @42553 has 1 MA's), (Start: 37 @42556 has 2 MA's), (62, 42682), (74, 42721), (85, 42781), (89, 42817),

Gene: DoctorDiddles_105 Start: 61466, Stop: 61753, Start Num: 40
Candidate Starts for DoctorDiddles_105:
(Start: 40 @61466 has 120 MA's), (68, 61595), (75, 61619), (85, 61679), (91, 61727),

Gene: DrDrey_106 Start: 63478, Stop: 63768, Start Num: 40
Candidate Starts for DrDrey_106:
(Start: 40 @63478 has 120 MA's), (68, 63607), (75, 63631), (85, 63691), (91, 63739),

Gene: Dulcita_83 Start: 51592, Stop: 52134, Start Num: 15
Candidate Starts for Dulcita_83:
(1, 51349), (6, 51484), (13, 51586), (Start: 15 @51592 has 20 MA's), (46, 51724), (54, 51778), (60, 51796), (92, 51970),

Gene: Dumbo_105 Start: 61838, Stop: 62128, Start Num: 40
Candidate Starts for Dumbo_105:
(Start: 40 @61838 has 120 MA's), (68, 61967), (75, 61991), (85, 62051), (91, 62099),

Gene: Dusk_103 Start: 62000, Stop: 62290, Start Num: 40
Candidate Starts for Dusk_103:
(Start: 40 @62000 has 120 MA's), (68, 62129), (75, 62153), (85, 62213), (91, 62261),

Gene: Easy2Say_106 Start: 62472, Stop: 62762, Start Num: 40
Candidate Starts for Easy2Say_106:
(Start: 40 @62472 has 120 MA's), (68, 62601), (75, 62625), (85, 62685), (91, 62733),

Gene: Eevee_71 Start: 47508, Stop: 47876, Start Num: 27
Candidate Starts for Eevee_71:
(14, 47439), (Start: 20 @47490 has 1 MA's), (Start: 27 @47508 has 2 MA's), (33, 47529), (39, 47547), (43, 47562), (65, 47673), (72, 47700), (77, 47721), (80, 47739), (89, 47802), (99, 47868),

Gene: Elite2014_105 Start: 61645, Stop: 61935, Start Num: 40
Candidate Starts for Elite2014_105:
(Start: 40 @61645 has 120 MA's), (68, 61774), (75, 61798), (85, 61858), (91, 61906),

Gene: Elph10_105 Start: 61484, Stop: 61774, Start Num: 40
Candidate Starts for Elph10_105:
(Start: 40 @61484 has 120 MA's), (68, 61613), (75, 61637), (85, 61697), (91, 61745),

Gene: Emmina_106 Start: 61423, Stop: 61713, Start Num: 40
Candidate Starts for Emmina_106:
(Start: 40 @61423 has 120 MA's), (68, 61552), (75, 61576), (85, 61636), (91, 61684),

Gene: Estes_93 Start: 53965, Stop: 54483, Start Num: 15
Candidate Starts for Estes_93:
(4, 53845), (Start: 15 @53965 has 20 MA's), (18, 53992), (73, 54211), (105, 54430),

Gene: Eureka_105 Start: 62611, Stop: 62901, Start Num: 40
Candidate Starts for Eureka_105:
(Start: 40 @62611 has 120 MA's), (68, 62740), (75, 62764), (85, 62824), (91, 62872),

Gene: Filch_107 Start: 61797, Stop: 62087, Start Num: 40
Candidate Starts for Filch_107:
(Start: 40 @61797 has 120 MA's), (68, 61926), (75, 61950), (85, 62010), (91, 62058),

Gene: FireRed_109 Start: 62887, Stop: 63177, Start Num: 40
Candidate Starts for FireRed_109:
(Start: 40 @62887 has 120 MA's), (68, 63016), (75, 63040), (85, 63100), (91, 63148),

Gene: Flypotenuse_102 Start: 61072, Stop: 61362, Start Num: 40
Candidate Starts for Flypotenuse_102:
(Start: 40 @61072 has 120 MA's), (68, 61201), (75, 61225), (85, 61285), (91, 61333),

Gene: Gage_108 Start: 62143, Stop: 62433, Start Num: 40
Candidate Starts for Gage_108:
(Start: 40 @62143 has 120 MA's), (68, 62272), (75, 62296), (85, 62356), (91, 62404),

Gene: GardenSalsa_94 Start: 54325, Stop: 54843, Start Num: 15
Candidate Starts for GardenSalsa_94:
(4, 54205), (Start: 15 @54325 has 20 MA's), (18, 54352), (48, 54466), (73, 54571), (104, 54781), (105, 54790),

Gene: Gator_104 Start: 61931, Stop: 62218, Start Num: 40
Candidate Starts for Gator_104:
(Start: 40 @61931 has 120 MA's), (68, 62060), (75, 62084), (85, 62144), (91, 62192),

Gene: Gemini_111 Start: 62522, Stop: 62812, Start Num: 40
Candidate Starts for Gemini_111:
(Start: 40 @62522 has 120 MA's), (68, 62651), (75, 62675), (85, 62735), (91, 62783),

Gene: GenevaB15_94 Start: 53866, Stop: 54384, Start Num: 15
Candidate Starts for GenevaB15_94:
(Start: 15 @53866 has 20 MA's), (18, 53893), (57, 54058), (73, 54112), (105, 54331),

Gene: Glaske16_83 Start: 51656, Stop: 52198, Start Num: 15
Candidate Starts for Glaske16_83:
(1, 51413), (6, 51548), (13, 51650), (Start: 15 @51656 has 20 MA's), (46, 51788), (54, 51842), (60, 51860), (92, 52034),

Gene: Glexan_105 Start: 62202, Stop: 62492, Start Num: 40
Candidate Starts for Glexan_105:

(Start: 40 @62202 has 120 MA's), (68, 62331), (75, 62355), (85, 62415), (91, 62463),

Gene: Goku_105 Start: 62340, Stop: 62630, Start Num: 40
Candidate Starts for Goku_105:
(Start: 40 @62340 has 120 MA's), (68, 62469), (75, 62493), (85, 62553), (91, 62601),

Gene: GoldenSpark_110 Start: 62005, Stop: 62295, Start Num: 40
Candidate Starts for GoldenSpark_110:
(Start: 40 @62005 has 120 MA's), (68, 62134), (75, 62158), (85, 62218), (91, 62266),

Gene: Goldilocks_109 Start: 61901, Stop: 62191, Start Num: 40
Candidate Starts for Goldilocks_109:
(Start: 40 @61901 has 120 MA's), (68, 62030), (75, 62054), (85, 62114), (91, 62162),

Gene: GooberAzure_109 Start: 62005, Stop: 62295, Start Num: 40
Candidate Starts for GooberAzure_109:
(Start: 40 @62005 has 120 MA's), (68, 62134), (75, 62158), (85, 62218), (91, 62266),

Gene: HanKaySha_106 Start: 62193, Stop: 62483, Start Num: 40
Candidate Starts for HanKaySha_106:
(Start: 40 @62193 has 120 MA's), (68, 62322), (75, 62346), (85, 62406), (91, 62454),

Gene: Harella_106 Start: 62718, Stop: 63008, Start Num: 40
Candidate Starts for Harella_106:
(Start: 40 @62718 has 120 MA's), (68, 62847), (75, 62871), (85, 62931), (91, 62979),

Gene: Henry_103 Start: 62003, Stop: 62293, Start Num: 40
Candidate Starts for Henry_103:
(Start: 40 @62003 has 120 MA's), (68, 62132), (75, 62156), (85, 62216), (91, 62264),

Gene: Highbury_102 Start: 60350, Stop: 60640, Start Num: 40
Candidate Starts for Highbury_102:
(Start: 40 @60350 has 120 MA's), (68, 60479), (75, 60503), (85, 60563), (91, 60611),

Gene: Holt_111 Start: 62419, Stop: 62709, Start Num: 40
Candidate Starts for Holt_111:
(Start: 40 @62419 has 120 MA's), (68, 62548), (75, 62572), (85, 62632), (91, 62680),

Gene: Hoonter_109 Start: 62498, Stop: 62788, Start Num: 40
Candidate Starts for Hoonter_109:
(Start: 40 @62498 has 120 MA's), (68, 62627), (75, 62651), (85, 62711), (91, 62759),

Gene: Hopey_106 Start: 62804, Stop: 63094, Start Num: 40
Candidate Starts for Hopey_106:
(Start: 40 @62804 has 120 MA's), (68, 62933), (75, 62957), (85, 63017), (91, 63065),

Gene: HufflyPuff_108 Start: 63113, Stop: 63403, Start Num: 40
Candidate Starts for HufflyPuff_108:
(Start: 40 @63113 has 120 MA's), (68, 63242), (75, 63266), (85, 63326), (91, 63374),

Gene: IHOP_104 Start: 61721, Stop: 62011, Start Num: 40
Candidate Starts for IHOP_104:
(Start: 40 @61721 has 120 MA's), (68, 61850), (75, 61874), (85, 61934), (91, 61982),

Gene: IPhane7_81 Start: 51596, Stop: 52138, Start Num: 15
Candidate Starts for IPhane7_81:
(1, 51353), (6, 51488), (13, 51590), (Start: 15 @51596 has 20 MA's), (46, 51728), (54, 51782), (60, 51800), (92, 51974),

Gene: Icee_107 Start: 61529, Stop: 61819, Start Num: 40
Candidate Starts for Icee_107:
(Start: 40 @61529 has 120 MA's), (68, 61658), (75, 61682), (85, 61742), (91, 61790),

Gene: Inca_103 Start: 60210, Stop: 60500, Start Num: 40
Candidate Starts for Inca_103:
(Start: 40 @60210 has 120 MA's), (68, 60339), (75, 60363), (85, 60423), (91, 60471),

Gene: IttyBittyPiggy_27 Start: 22317, Stop: 22682, Start Num: 30
Candidate Starts for IttyBittyPiggy_27:
(8, 22149), (30, 22317), (65, 22482), (76, 22521), (78, 22533),

Gene: JasmineDragon_30 Start: 22617, Stop: 23000, Start Num: 29
Candidate Starts for JasmineDragon_30:
(5, 22437), (Start: 29 @22617 has 5 MA's), (67, 22791), (80, 22851),

Gene: JeTaime_104 Start: 61629, Stop: 61919, Start Num: 40
Candidate Starts for JeTaime_104:
(Start: 40 @61629 has 120 MA's), (68, 61758), (75, 61782), (85, 61842), (91, 61890),

Gene: JoeDirt_76 Start: 51825, Stop: 52229, Start Num: 27
Candidate Starts for JoeDirt_76:
(12, 51750), (23, 51816), (Start: 27 @51825 has 2 MA's), (41, 51876), (45, 51894), (52, 51951), (53, 51954), (64, 52011), (76, 52053), (77, 52062), (78, 52065), (85, 52110), (86, 52113),

Gene: JoyLin_71 Start: 47628, Stop: 47996, Start Num: 27
Candidate Starts for JoyLin_71:
(14, 47559), (Start: 20 @47610 has 1 MA's), (Start: 27 @47628 has 2 MA's), (33, 47649), (39, 47667), (43, 47682), (65, 47793), (72, 47820), (77, 47841), (80, 47859), (89, 47922), (99, 47988),

Gene: Kanye_103 Start: 62254, Stop: 62544, Start Num: 40
Candidate Starts for Kanye_103:
(Start: 40 @62254 has 120 MA's), (68, 62383), (75, 62407), (85, 62467), (91, 62515),

Gene: Kimchi_110 Start: 62146, Stop: 62436, Start Num: 40
Candidate Starts for Kimchi_110:
(Start: 40 @62146 has 120 MA's), (68, 62275), (75, 62299), (85, 62359), (91, 62407),

Gene: Kostya_106 Start: 61823, Stop: 62113, Start Num: 40
Candidate Starts for Kostya_106:
(Start: 40 @61823 has 120 MA's), (68, 61952), (75, 61976), (85, 62036), (91, 62084),

Gene: Kumao_77 Start: 51889, Stop: 52464, Start Num: 10
Candidate Starts for Kumao_77:
(Start: 10 @51889 has 1 MA's), (16, 51937), (Start: 27 @51991 has 2 MA's), (33, 52012), (34, 52015), (41, 52042), (42, 52045), (69, 52165), (104, 52402), (105, 52411), (109, 52435),

Gene: Lilac_107 Start: 62947, Stop: 63237, Start Num: 40
Candidate Starts for Lilac_107:
(Start: 40 @62947 has 120 MA's), (68, 63076), (75, 63100), (85, 63160), (91, 63208),

Gene: LilhomieP_82 Start: 52075, Stop: 52617, Start Num: 15
Candidate Starts for LilhomieP_82:
(1, 51832), (6, 51967), (13, 52069), (Start: 15 @52075 has 20 MA's), (46, 52207), (54, 52261), (60, 52279), (92, 52453),

Gene: Lilizi_106 Start: 62233, Stop: 62523, Start Num: 40
Candidate Starts for Lilizi_106:
(Start: 40 @62233 has 120 MA's), (68, 62362), (75, 62386), (85, 62446), (91, 62494),

Gene: Lilpickle_105 Start: 61645, Stop: 61935, Start Num: 40
Candidate Starts for Lilpickle_105:
(Start: 40 @61645 has 120 MA's), (68, 61774), (75, 61798), (85, 61858), (91, 61906),

Gene: LilyPad_61 Start: 44847, Stop: 45245, Start Num: 21
Candidate Starts for LilyPad_61:
(Start: 21 @44847 has 1 MA's), (22, 44853), (47, 44955), (63, 45030), (79, 45090), (84, 45123), (87, 45150), (89, 45165), (94, 45201),

Gene: MISSy_107 Start: 62930, Stop: 63220, Start Num: 40
Candidate Starts for MISSy_107:
(Start: 40 @62930 has 120 MA's), (68, 63059), (75, 63083), (85, 63143), (91, 63191),

Gene: MPhalcon_107 Start: 62348, Stop: 62638, Start Num: 40
Candidate Starts for MPhalcon_107:
(Start: 40 @62348 has 120 MA's), (68, 62477), (75, 62501), (85, 62561), (91, 62609),

Gene: MadamMonkfish_105 Start: 61655, Stop: 61945, Start Num: 40
Candidate Starts for MadamMonkfish_105:
(Start: 40 @61655 has 120 MA's), (68, 61784), (75, 61808), (85, 61868), (91, 61916),

Gene: Manda_107 Start: 62385, Stop: 62675, Start Num: 40
Candidate Starts for Manda_107:
(Start: 40 @62385 has 120 MA's), (68, 62514), (75, 62538), (85, 62598), (91, 62646),

Gene: Marshmallow_103 Start: 62343, Stop: 62633, Start Num: 40
Candidate Starts for Marshmallow_103:
(Start: 40 @62343 has 120 MA's), (68, 62472), (75, 62496), (85, 62556), (91, 62604),

Gene: Maxxinista_107 Start: 62132, Stop: 62422, Start Num: 40
Candidate Starts for Maxxinista_107:
(Start: 40 @62132 has 120 MA's), (68, 62261), (75, 62285), (85, 62345), (91, 62393),

Gene: Mindy_105 Start: 61664, Stop: 61954, Start Num: 40
Candidate Starts for Mindy_105:
(Start: 40 @61664 has 120 MA's), (68, 61793), (75, 61817), (85, 61877), (91, 61925),

Gene: MiniMommy_31 Start: 22618, Stop: 23001, Start Num: 29
Candidate Starts for MiniMommy_31:
(5, 22438), (Start: 29 @22618 has 5 MA's), (67, 22792), (80, 22852),

Gene: Miniwave_101 Start: 61841, Stop: 62131, Start Num: 40
Candidate Starts for Miniwave_101:
(Start: 40 @61841 has 120 MA's), (68, 61970), (75, 61994), (85, 62054), (91, 62102),

Gene: Misfit_107 Start: 63444, Stop: 63734, Start Num: 40
Candidate Starts for Misfit_107:
(Start: 40 @63444 has 120 MA's), (68, 63573), (75, 63597), (85, 63657), (91, 63705),

Gene: Moldemort_108 Start: 62113, Stop: 62403, Start Num: 40
Candidate Starts for Moldemort_108:
(Start: 40 @62113 has 120 MA's), (68, 62242), (75, 62266), (85, 62326), (91, 62374),

Gene: Mollymur_109 Start: 70923, Stop: 71270, Start Num: 29
Candidate Starts for Mollymur_109:
(9, 70821), (11, 70833), (Start: 29 @70923 has 5 MA's), (65, 71088), (79, 71142), (86, 71184), (92, 71235),

Gene: Mosby_102 Start: 61808, Stop: 62098, Start Num: 40
Candidate Starts for Mosby_102:
(Start: 40 @61808 has 120 MA's), (68, 61937), (75, 61961), (85, 62021), (91, 62069),

Gene: MrMagoo_95 Start: 54325, Stop: 54843, Start Num: 15
Candidate Starts for MrMagoo_95:
(4, 54205), (Start: 15 @54325 has 20 MA's), (18, 54352), (48, 54466), (73, 54571), (104, 54781), (105, 54790),

Gene: Murica_109 Start: 64147, Stop: 64437, Start Num: 40
Candidate Starts for Murica_109:
(Start: 40 @64147 has 120 MA's), (68, 64276), (75, 64300), (85, 64360), (91, 64408),

Gene: Murphy_105 Start: 62505, Stop: 62795, Start Num: 40
Candidate Starts for Murphy_105:
(Start: 40 @62505 has 120 MA's), (68, 62634), (75, 62658), (85, 62718), (91, 62766),

Gene: Myrale_106 Start: 62482, Stop: 62772, Start Num: 40
Candidate Starts for Myrale_106:
(Start: 40 @62482 has 120 MA's), (68, 62611), (75, 62635), (85, 62695), (91, 62743),

Gene: Nala_108 Start: 62857, Stop: 63147, Start Num: 40
Candidate Starts for Nala_108:
(Start: 40 @62857 has 120 MA's), (68, 62986), (75, 63010), (85, 63070), (91, 63118),

Gene: Nanosmite_88 Start: 53290, Stop: 53850, Start Num: 15
Candidate Starts for Nanosmite_88:
(7, 53185), (Start: 15 @53290 has 20 MA's), (Start: 40 @53392 has 120 MA's), (44, 53410), (55, 53482), (57, 53485), (61, 53503), (73, 53563), (83, 53614), (92, 53683), (106, 53800), (108, 53809), (110, 53836),

Gene: NelitzaMV_103 Start: 60830, Stop: 61120, Start Num: 40
Candidate Starts for NelitzaMV_103:
(Start: 40 @60830 has 120 MA's), (68, 60959), (75, 60983), (85, 61043), (91, 61091),

Gene: Nimrod_106 Start: 62491, Stop: 62781, Start Num: 40
Candidate Starts for Nimrod_106:
(Start: 40 @62491 has 120 MA's), (68, 62620), (75, 62644), (85, 62704), (91, 62752),

Gene: NoSleep_106 Start: 61665, Stop: 61955, Start Num: 40
Candidate Starts for NoSleep_106:
(Start: 40 @61665 has 120 MA's), (68, 61794), (75, 61818), (85, 61878), (91, 61926),

Gene: OhShagHennessy_74 Start: 50528, Stop: 50932, Start Num: 27
Candidate Starts for OhShagHennessy_74:
(12, 50453), (23, 50519), (Start: 27 @50528 has 2 MA's), (41, 50579), (45, 50597), (52, 50654), (53, 50657), (64, 50714), (76, 50756), (77, 50765), (78, 50768), (85, 50813), (86, 50816),

Gene: OrionPax_104 Start: 61738, Stop: 62028, Start Num: 40
Candidate Starts for OrionPax_104:
(Start: 40 @61738 has 120 MA's), (68, 61867), (75, 61891), (85, 61951), (91, 61999),

Gene: Paperbeatsrock_105 Start: 62519, Stop: 62809, Start Num: 40
Candidate Starts for Paperbeatsrock_105:
(Start: 40 @62519 has 120 MA's), (68, 62648), (75, 62672), (85, 62732), (91, 62780),

Gene: Pat3_103 Start: 61036, Stop: 61323, Start Num: 40
Candidate Starts for Pat3_103:
(Start: 40 @61036 has 120 MA's), (68, 61165), (75, 61189), (85, 61249), (91, 61297),

Gene: PegLeg_81 Start: 51336, Stop: 51878, Start Num: 15
Candidate Starts for PegLeg_81:
(1, 51093), (6, 51228), (13, 51330), (Start: 15 @51336 has 20 MA's), (46, 51468), (54, 51522), (60, 51540), (92, 51714),

Gene: Phaja_104 Start: 61723, Stop: 62013, Start Num: 40
Candidate Starts for Phaja_104:
(Start: 40 @61723 has 120 MA's), (68, 61852), (75, 61876), (85, 61936), (91, 61984),

Gene: Pharsalus_103 Start: 62218, Stop: 62508, Start Num: 40
Candidate Starts for Pharsalus_103:
(Start: 40 @62218 has 120 MA's), (68, 62347), (75, 62371), (85, 62431), (91, 62479),

Gene: PhatBacter_109 Start: 62887, Stop: 63177, Start Num: 40
Candidate Starts for PhatBacter_109:
(Start: 40 @62887 has 120 MA's), (68, 63016), (75, 63040), (85, 63100), (91, 63148),

Gene: Phaux_108 Start: 63447, Stop: 63737, Start Num: 40
Candidate Starts for Phaux_108:
(Start: 40 @63447 has 120 MA's), (68, 63576), (75, 63600), (85, 63660), (91, 63708),

Gene: Phrux_102 Start: 61525, Stop: 61815, Start Num: 40
Candidate Starts for Phrux_102:
(Start: 40 @61525 has 120 MA's), (68, 61654), (75, 61678), (85, 61738), (91, 61786),

Gene: Pippin15_70 Start: 44587, Stop: 44967, Start Num: 26
Candidate Starts for Pippin15_70:

(26, 44587), (32, 44605), (33, 44608), (38, 44626), (39, 44629), (54, 44716), (72, 44782), (77, 44803), (78, 44806), (80, 44821), (82, 44833), (89, 44884), (97, 44932), (99, 44950),

Gene: Porky_104 Start: 61269, Stop: 61559, Start Num: 40
Candidate Starts for Porky_104:
(Start: 40 @61269 has 120 MA's), (68, 61398), (75, 61422), (85, 61482), (91, 61530),

Gene: Pumpkin_107 Start: 61865, Stop: 62155, Start Num: 40
Candidate Starts for Pumpkin_107:
(Start: 40 @61865 has 120 MA's), (68, 61994), (75, 62018), (85, 62078), (91, 62126),

Gene: Rakim_107 Start: 61934, Stop: 62221, Start Num: 40
Candidate Starts for Rakim_107:
(Start: 40 @61934 has 120 MA's), (68, 62063), (75, 62087), (85, 62147), (91, 62195),

Gene: RedWattleHog_18 Start: 21845, Stop: 22282, Start Num: 29
Candidate Starts for RedWattleHog_18:
(Start: 29 @21845 has 5 MA's), (45, 21908), (50, 21947), (51, 21950), (56, 21968), (90, 22148), (102, 22226), (107, 22271),

Gene: Reindeer_83 Start: 52390, Stop: 52929, Start Num: 15
Candidate Starts for Reindeer_83:
(2, 52147), (3, 52237), (7, 52285), (Start: 15 @52390 has 20 MA's), (55, 52582), (70, 52633), (72, 52642), (88, 52735), (92, 52765), (95, 52789), (102, 52837),

Gene: Rey_93 Start: 53635, Stop: 54153, Start Num: 15
Candidate Starts for Rey_93:
(Start: 15 @53635 has 20 MA's), (18, 53662), (43, 53746), (47, 53773), (73, 53881), (104, 54091), (105, 54100),

Gene: Rimmer_104 Start: 62324, Stop: 62614, Start Num: 40
Candidate Starts for Rimmer_104:
(Start: 40 @62324 has 120 MA's), (68, 62453), (75, 62477), (85, 62537), (91, 62585),

Gene: RiverMonster_105 Start: 62420, Stop: 62710, Start Num: 40
Candidate Starts for RiverMonster_105:
(Start: 40 @62420 has 120 MA's), (68, 62549), (75, 62573), (85, 62633), (91, 62681),

Gene: Saints25_102 Start: 60350, Stop: 60640, Start Num: 40
Candidate Starts for Saints25_102:
(Start: 40 @60350 has 120 MA's), (68, 60479), (75, 60503), (85, 60563), (91, 60611),

Gene: Sassay_101 Start: 60770, Stop: 61060, Start Num: 40
Candidate Starts for Sassay_101:
(Start: 40 @60770 has 120 MA's), (68, 60899), (75, 60923), (85, 60983), (91, 61031),

Gene: ShakeItOph_31 Start: 22617, Stop: 23000, Start Num: 29
Candidate Starts for ShakeItOph_31:
(5, 22437), (Start: 29 @22617 has 5 MA's), (67, 22791), (80, 22851),

Gene: ShamWow_106 Start: 62698, Stop: 62988, Start Num: 40
Candidate Starts for ShamWow_106:
(Start: 40 @62698 has 120 MA's), (68, 62827), (75, 62851), (85, 62911), (91, 62959),

Gene: ShereKhan_104 Start: 63179, Stop: 63469, Start Num: 40
Candidate Starts for ShereKhan_104:
(Start: 40 @63179 has 120 MA's), (68, 63308), (75, 63332), (85, 63392), (91, 63440),

Gene: Simpliphy_104 Start: 61991, Stop: 62281, Start Num: 40
Candidate Starts for Simpliphy_104:
(Start: 40 @61991 has 120 MA's), (68, 62120), (75, 62144), (85, 62204), (91, 62252),

Gene: SirDuracell_106 Start: 61536, Stop: 61823, Start Num: 40
Candidate Starts for SirDuracell_106:
(Start: 40 @61536 has 120 MA's), (68, 61665), (75, 61689), (85, 61749), (91, 61797),

Gene: Skinny_86 Start: 52504, Stop: 53046, Start Num: 15
Candidate Starts for Skinny_86:
(1, 52261), (6, 52396), (13, 52498), (Start: 15 @52504 has 20 MA's), (46, 52636), (54, 52690), (60, 52708), (92, 52882),

Gene: Sleepyhead_60 Start: 39674, Stop: 40021, Start Num: 20
Candidate Starts for Sleepyhead_60:
(Start: 20 @39674 has 1 MA's), (77, 39896), (84, 39935), (93, 40004),

Gene: SlimJimmy_81 Start: 51933, Stop: 52475, Start Num: 15
Candidate Starts for SlimJimmy_81:
(1, 51690), (6, 51825), (13, 51927), (Start: 15 @51933 has 20 MA's), (46, 52065), (54, 52119), (60, 52137), (92, 52311),

Gene: SophKB_104 Start: 61980, Stop: 62270, Start Num: 40
Candidate Starts for SophKB_104:
(Start: 40 @61980 has 120 MA's), (68, 62109), (75, 62133), (85, 62193), (91, 62241),

Gene: Sotrice96_107 Start: 62444, Stop: 62734, Start Num: 40
Candidate Starts for Sotrice96_107:
(Start: 40 @62444 has 120 MA's), (68, 62573), (75, 62597), (85, 62657), (91, 62705),

Gene: SpeedDemon_1110 Start: 72859, Stop: 73215, Start Num: 25
Candidate Starts for SpeedDemon_1110:
(14, 72799), (Start: 25 @72859 has 2 MA's), (65, 73030), (75, 73066), (92, 73177), (93, 73186),

Gene: Stank_108 Start: 62218, Stop: 62508, Start Num: 40
Candidate Starts for Stank_108:
(Start: 40 @62218 has 120 MA's), (68, 62347), (75, 62371), (85, 62431), (91, 62479),

Gene: Stark_106 Start: 62304, Stop: 62594, Start Num: 40
Candidate Starts for Stark_106:
(Start: 40 @62304 has 120 MA's), (68, 62433), (75, 62457), (85, 62517), (91, 62565),

Gene: StellaBean_105 Start: 62601, Stop: 62891, Start Num: 40
Candidate Starts for StellaBean_105:
(Start: 40 @62601 has 120 MA's), (68, 62730), (75, 62754), (85, 62814), (91, 62862),

Gene: StolenFromERC_108 Start: 62143, Stop: 62433, Start Num: 40
Candidate Starts for StolenFromERC_108:

(Start: 40 @62143 has 120 MA's), (68, 62272), (75, 62296), (85, 62356), (91, 62404),

Gene: TBrady12_109 Start: 61655, Stop: 61945, Start Num: 40
Candidate Starts for TBrady12_109:
(Start: 40 @61655 has 120 MA's), (68, 61784), (75, 61808), (85, 61868), (91, 61916),

Gene: Tarkin_105 Start: 63044, Stop: 63334, Start Num: 40
Candidate Starts for Tarkin_105:
(Start: 40 @63044 has 120 MA's), (68, 63173), (75, 63197), (85, 63257), (91, 63305),

Gene: TeardropMSU_102 Start: 61546, Stop: 61836, Start Num: 40
Candidate Starts for TeardropMSU_102:
(Start: 40 @61546 has 120 MA's), (68, 61675), (75, 61699), (85, 61759), (91, 61807),

Gene: Teaspoon_106 Start: 62203, Stop: 62493, Start Num: 40
Candidate Starts for Teaspoon_106:
(Start: 40 @62203 has 120 MA's), (68, 62332), (75, 62356), (85, 62416), (91, 62464),

Gene: Terminus_109 Start: 63444, Stop: 63734, Start Num: 40
Candidate Starts for Terminus_109:
(Start: 40 @63444 has 120 MA's), (68, 63573), (75, 63597), (85, 63657), (91, 63705),

Gene: Thresher_107 Start: 63084, Stop: 63374, Start Num: 40
Candidate Starts for Thresher_107:
(Start: 40 @63084 has 120 MA's), (68, 63213), (75, 63237), (85, 63297), (91, 63345),

Gene: Tomaszewski_101 Start: 61982, Stop: 62272, Start Num: 40
Candidate Starts for Tomaszewski_101:
(Start: 40 @61982 has 120 MA's), (68, 62111), (75, 62135), (85, 62195), (91, 62243),

Gene: Toto_104 Start: 62698, Stop: 62988, Start Num: 40
Candidate Starts for Toto_104:
(Start: 40 @62698 has 120 MA's), (68, 62827), (75, 62851), (85, 62911), (91, 62959),

Gene: Traaww1_102 Start: 61247, Stop: 61537, Start Num: 40
Candidate Starts for Traaww1_102:
(Start: 40 @61247 has 120 MA's), (68, 61376), (75, 61400), (85, 61460), (91, 61508),

Gene: Tuco_107 Start: 63605, Stop: 63895, Start Num: 40
Candidate Starts for Tuco_107:
(Start: 40 @63605 has 120 MA's), (68, 63734), (75, 63758), (85, 63818), (91, 63866),

Gene: TyDawg_82 Start: 51599, Stop: 52141, Start Num: 15
Candidate Starts for TyDawg_82:
(1, 51353), (6, 51488), (13, 51593), (Start: 15 @51599 has 20 MA's), (46, 51731), (54, 51785), (60, 51803), (92, 51977),

Gene: Ukulele_100 Start: 61803, Stop: 62093, Start Num: 40
Candidate Starts for Ukulele_100:
(Start: 40 @61803 has 120 MA's), (68, 61932), (75, 61956), (85, 62016), (91, 62064),

Gene: VroomVroom_30 Start: 22712, Stop: 23095, Start Num: 29
Candidate Starts for VroomVroom_30:

(5, 22532), (Start: 29 @22712 has 5 MA's), (80, 22946),

Gene: Wiggin_108 Start: 61648, Stop: 61938, Start Num: 40
Candidate Starts for Wiggin_108:
(Start: 40 @61648 has 120 MA's), (68, 61777), (75, 61801), (85, 61861), (91, 61909),

Gene: Willez_101 Start: 60770, Stop: 61060, Start Num: 40
Candidate Starts for Willez_101:
(Start: 40 @60770 has 120 MA's), (68, 60899), (75, 60923), (85, 60983), (91, 61031),

Gene: YassJohnny_103 Start: 60791, Stop: 61081, Start Num: 40
Candidate Starts for YassJohnny_103:
(Start: 40 @60791 has 120 MA's), (68, 60920), (75, 60944), (85, 61004), (91, 61052),

Gene: Yotsuba_70 Start: 47646, Stop: 48014, Start Num: 27
Candidate Starts for Yotsuba_70:
(14, 47577), (Start: 20 @47628 has 1 MA's), (Start: 27 @47646 has 2 MA's), (33, 47667), (39, 47685), (43, 47700), (65, 47811), (72, 47838), (77, 47859), (80, 47877), (89, 47940), (99, 48006),

Gene: Youngblood_109 Start: 62940, Stop: 63230, Start Num: 40
Candidate Starts for Youngblood_109:
(Start: 40 @62940 has 120 MA's), (68, 63069), (75, 63093), (85, 63153), (91, 63201),

Gene: xkcd_109 Start: 63125, Stop: 63415, Start Num: 40
Candidate Starts for xkcd_109:
(Start: 40 @63125 has 120 MA's), (68, 63254), (75, 63278), (85, 63338), (91, 63386),