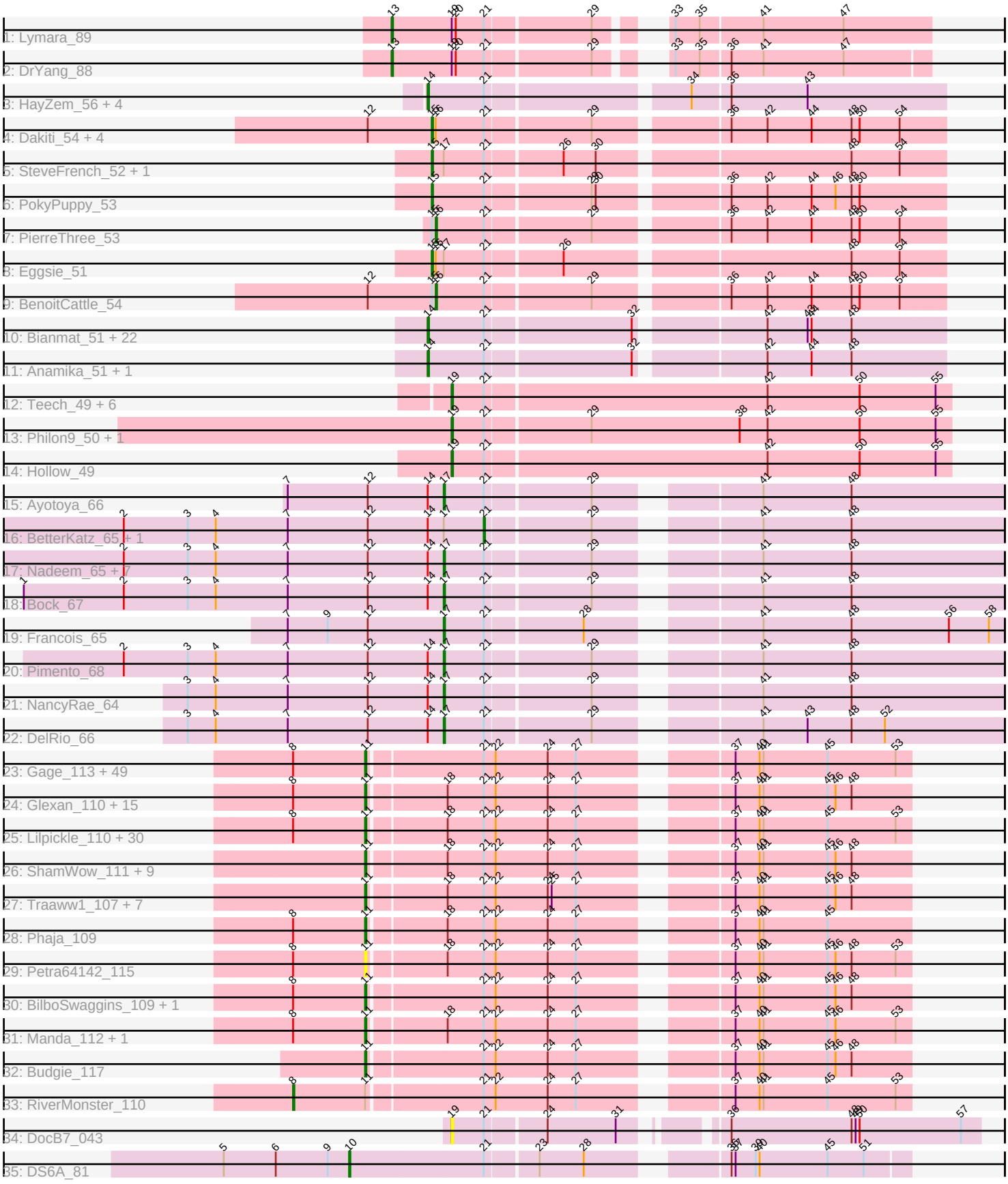
Pham 347283


1: Lymara_89
2: DrYang_88
3: HayZem_56 + 4
4: Dakiti_54 + 4
5: SteveFrench_52 + 1
6: PokyPuppy_53
7: PierreThree_53
8: Eggsie_51
9: BenoitCattle_54
10: Bianmat_51 + 22
11: Anamika_51 + 1
12: Teech_49 + 6
13: Philon9_50 + 1
14: Hollow_49
15: Ayotoya_66
16: BetterKatz_65 + 1
17: Nadeem_65 + 7
18: Bock_67
19: Francois_65
20: Pimento_68
21: NancyRae_64
22: DelRio_66
23: Gage_113 + 49
24: Glexan_110 + 15
25: Lilpickle_110 + 30
26: ShamWow_111 + 9
27: Traaww1_107 + 7
28: Phaja_109
29: Petra64142_115
30: BilboSwaggins_109 + 1
31: Manda_112 + 1
32: Budgie_117
33: RiverMonster_110
34: DocB7_043
35: DS6A_81

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 347283 Report

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

Pham number 347283 has 194 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Lymara_89
• Track 2 : DrYang_88
• Track 3 : HayZem_56, GMA7_46, Austin_56, GTE7_45, Amore2_57
• Track 4 : Dakiti_54, Crete_55, BigShaq_54, Chelms_53, Linetti_54
• Track 5 : SteveFrench_52, RoyalG_53
• Track 6 : PokyPuppy_53
• Track 7 : PierreThree_53
• Track 8 : Eggsie_51
• Track 9 : BenoitCattle_54
• Track 10 : Bianmat_51, Jormungandr_51, GalacticEye_51, Luker_52, Jams_51, Charianelly_51, Sticker17_51, Shelley_51, MrWormie_51, Harambe_51, Newt_52, Lahirium_51, Neoevie_51, Lidong_51, Damp_51, Teal_51, Berries_51, Hello_51, Guillaume_51, Minos_52, Woes_51, Nimi13_51, Kaseim_51
• Track 11 : Anamika_51, Hail2Pitt_50
• Track 12 : Teech_49, Katyusha_48, Benczkowski14_48, Kvothe_48, Niagara_48, Teatealatte_49, Tredge_49
• Track 13 : Philon9_50, Vitaenoii_50
• Track 14 : Hollow_49
• Track 15 : Ayotoya_66
• Track 16 : BetterKatz_65, Brylie_65
• Track 17 : Nadeem_65, GrandSlam_67, SussRoloMann_65, Hamood_67, Mulch_65, Chop_67, Parada_65, WheatThin_64
• Track 18 : Bock_67
• Track 19 : Francois_65
• Track 20 : Pimento_68
• Track 21 : NancyRae_64
• Track 22 : DelRio_66
• Track 23 : Gage_113, Lilizi_111, Misfit_112, Stark_111, Paperbeatsrock_110, NonchalantPear_111, Contagion_108, Greep_115, Murica_115, Pumpkin_112, Bruin_108, Tarkin_110, Bench_113, Sassay_106, Hopey_111, Miniwave_106, Argent26_115, StolenFromERC_113, Dumbo_111, FairyPath_112, MPhalcon_112, Quallification_112, YassJohnny_108, Becksu_109, Hoonter_114, Youngblood_115, AmericanBeauty_114, Cjw1_111, Gemini_116, Policronamos_114, Thresher_112, Ptowny_107, Adnama_115, xkcd_115, Pharsalus_108, Terminus_114, BugsBunny_110, Czyszczon1_111, Elph10_110, ShereKhan_109, GooberAzure_114, Mosby_108, HufflyPuff_113, Livelaughbron_112, MISSy_112, Willez_106, Phrux_107, Tomaszewski_106, Kanye_108, GoldenSpark_115

• Track 24 : Glexan_110, DrDrey_111, Rakim_112, Kostya_111, Mindy_110, Harella_112, Sotrice96_112, ABCat_108, Cactus_115, SophKB_109, Dusk_108, Daikon_112, Tuco_112, TeardropMSU_107, BadStone_108, IHOP_109
• Track 25 : Lilpickle_110, Emmina_111, PhatBacter_114, Phaux_113, Moldemort_113, HanKaySha_111, Elite2014_110, Brewer_107, NelitzaMV_108, ChosenOne_111, Maxxinista_113, Buck_112, Easy2Say_111, Bogg_112, Murphy_110, TeamEdward_111, MollyToe_106, FireRed_114, Lilac_112, Rimmer_109, PaddyBaddy_110, StellaBean_109, Palpatine_112, Highbury_107, Thimble_113, MadamMonkfish_110, OrionPax_109, NoSleep_111, Saints25_107, Nala_113, Simpliphy_109
• Track 26 : ShamWow_111, Henry_109, Cookies_108, SirDuracell_111, Bask21_111, Command613_113, Gator_109, Myrale_111, FoghornLeghorn_104, Toto_109
• Track 27 : Traaww1_107, Pat3_108, ChotaBhai_111, Barbarian_110, Flypotenuse_107, Asriel_109, Balomoji_111, Amao_111
• Track 28 : Phaja_109
• Track 29 : Petra64142_115
• Track 30 : BilboSwaggins_109, CrystalP_111
• Track 31 : Manda_112, Eureka_111
• Track 32 : Budgie_117
• Track 33 : RiverMonster_110
• Track 34 : DocB7_043
• Track 35 : DS6A_81

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

The start number called the most often in the published annotations is 11, it was called in 112 of the 180 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ABCat_108, Adnama_115, Amao_111, AmericanBeauty_114, Argent26_115, Asriel_109, BadStone_108, Balomoji_111, Barbarian_110, Bask21_111, Becksu_109, Bench_113, BilboSwaggins_109, Bogg_112, Brewer_107, Bruin_108, Buck_112, Budgie_117, BugsBunny_110, Cactus_115, ChosenOne_111, ChotaBhai_111, Cjw1_111, Command613_113, Contagion_108, Cookies_108, CrystalP_111, Czyszczon1_111, Daikon_112, DrDrey_111, Dumbo_111, Dusk_108, Easy2Say_111, Elite2014_110, Elph10_110, Emmina_111, Eureka_111, FairyPath_112, FireRed_114, Flypotenuse_107, FoghornLeghorn_104, Gage_113, Gator_109, Gemini_116, Glexan_110, GoldenSpark_115, GooberAzure_114, Greep_115, HanKaySha_111, Harella_112, Henry_109, Highbury_107, Hoonter_114, Hopey_111, HufflyPuff_113, IHOP_109, Kanye_108, Kostya_111, Lilac_112, Lilizi_111, Lilpickle_110, Livelaughbron_112, MISSy_112, MPhalcon_112, MadamMonkfish_110, Manda_112, Maxxinista_113, Mindy_110, Miniwave_106, Misfit_112, Moldemort_113, MollyToe_106, Mosby_108, Murica_115, Murphy_110, Myrale_111, Nala_113, NelitzaMV_108, NoSleep_111, NonchalantPear_111, OrionPax_109, PaddyBaddy_110, Palpatine_112, Paperbeatsrock_110, Pat3_108, Petra64142_115, Phaja_109, Pharsalus_108, PhatBacter_114, Phaux_113, Phrux_107, Policronamos_114, Ptowny_107, Pumpkin_112, Quallification_112, Rakim_112, Rimmer_109, Saints25_107, Sassay_106, ShamWow_111, ShereKhan_109, Simpliphy_109, SirDuracell_111, SophKB_109, Sotrice96_112,

Stark_111, StellaBean_109, StolenFromERC_113, Tarkin_110, TeamEdward_111, TeardropMSU_107, Terminus_114, Thimble_113, Thresher_112, Tomaszewski_106, Toto_109, Traaww1_107, Tuco_112, Willez_106, YassJohnny_108, Youngblood_115, xkcd_115,

Genes that have the "Most Annotated" start but do not call it:
• RiverMonster_110,

Genes that do not have the "Most Annotated" start:
• Amore2_57, Anamika_51, Austin_56, Ayotoya_66, Benczkowski14_48, BenoitCattle_54, Berries_51, BetterKatz_65, Bianmat_51, BigShaq_54, Bock_67, Brylie_65, Charianelly_51, Chelms_53, Chop_67, Crete_55, DS6A_81, Dakiti_54, Damp_51, DelRio_66, DocB7_043, DrYang_88, Eggsie_51, Francois_65, GMA7_46, GTE7_45, GalacticEye_51, GrandSlam_67, Guillaume_51, Hail2Pitt_50, Hamood_67, Harambe_51, HayZem_56, Hello_51, Hollow_49, Jams_51, Jormungandr_51, Kaseim_51, Katyusha_48, Kvothe_48, Lahirium_51, Lidong_51, Linetti_54, Luker_52, Lymara_89, Minos_52, MrWormie_51, Mulch_65, Nadeem_65, NancyRae_64, Neoevie_51, Newt_52, Niagara_48, Nimi13_51, Parada_65, Philon9_50, PierreThree_53, Pimento_68, PokyPuppy_53, RoyalG_53, Shelley_51, SteveFrench_52, Sticker17_51, SussRoloMann_65, Teal_51, Teatealatte_49, Teech_49, Tredge_49, Vitaenoii_50, WheatThin_64, Woes_51,

Summary by start number:

Start 8:
• Found in 104 of 194 (53.6%) of genes in pham
• Manual Annotations of this start: 1 of 180
• Called 1.0% of time when present
• Phage (with cluster) where this start called: RiverMonster_110 (E),

Start 10:
• Found in 1 of 194 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 180
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DS6A_81 (singleton),

Start 11:
• Found in 123 of 194 (63.4%) of genes in pham
• Manual Annotations of this start: 112 of 180
• Called 99.2% of time when present
• Phage (with cluster) where this start called: ABCat_108 (E), Adnama_115 (E), Amao_111 (E), AmericanBeauty_114 (E), Argent26_115 (E), Asriel_109 (E), BadStone_108 (E), Balomoji_111 (E), Barbarian_110 (E), Bask21_111 (E), Becksu_109 (E), Bench_113 (E), BilboSwaggins_109 (E), Bogg_112 (E), Brewer_107 (E), Bruin_108 (E), Buck_112 (E), Budgie_117 (E), BugsBunny_110 (E), Cactus_115 (E), ChosenOne_111 (E), ChotaBhai_111 (E), Cjw1_111 (E), Command613_113 (E), Contagion_108 (E), Cookies_108 (E), CrystalP_111 (E), Czyszczon1_111 (E), Daikon_112 (E), DrDrey_111 (E), Dumbo_111 (E), Dusk_108 (E), Easy2Say_111 (E), Elite2014_110 (E), Elph10_110 (E), Emmina_111 (E), Eureka_111 (E), FairyPath_112 (E), FireRed_114 (E), Flypotenuse_107 (E), FoghornLeghorn_104 (E), Gage_113 (E), Gator_109 (E), Gemini_116 (E), Glexan_110 (E), GoldenSpark_115 (E), GooberAzure_114 (E), Greep_115 (E), HanKaySha_111 (E), Harella_112 (E), Henry_109 (E), Highbury_107 (E), Hoonter_114 (E), Hopey_111 (E), HufflyPuff_113

(E), IHOP_109 (E), Kanye_108 (E), Kostya_111 (E), Lilac_112 (E), Lilizi_111 (E), Lilpickle_110 (E), Livelaughbron_112 (E), MISSy_112 (E), MPhalcon_112 (E), MadamMonkfish_110 (E), Manda_112 (E), Maxxinista_113 (E), Mindy_110 (E), Miniwave_106 (E), Misfit_112 (E), Moldemort_113 (E), MollyToe_106 (E), Mosby_108 (E), Murica_115 (E), Murphy_110 (E), Myrale_111 (E), Nala_113 (E), NelitzaMV_108 (E), NoSleep_111 (E), NonchalantPear_111 (E), OrionPax_109 (E), PaddyBaddy_110 (E), Palpatine_112 (E), Paperbeatsrock_110 (E), Pat3_108 (E), Petra64142_115 (E), Phaja_109 (E), Pharsalus_108 (E), PhatBacter_114 (E), Phaux_113 (E), Phrux_107 (E), Policronamos_114 (E), Ptowny_107 (E), Pumpkin_112 (E), Quallification_112 (E), Rakim_112 (E), Rimmer_109 (E), Saints25_107 (E), Sassay_106 (E), ShamWow_111 (E), ShereKhan_109 (E), Simpliphy_109 (E), SirDuracell_111 (E), SophKB_109 (E), Sotrice96_112 (E), Stark_111 (E), StellaBean_109 (E), StolenFromERC_113 (E), Tarkin_110 (E), TeamEdward_111 (E), TeardropMSU_107 (E), Terminus_114 (E), Thimble_113 (E), Thresher_112 (E), Tomaszewski_106 (E), Toto_109 (E), Traaww1_107 (E), Tuco_112 (E), Willez_106 (E), YassJohnny_108 (E), Youngblood_115 (E), xkcd_115 (E),

Start 13:
• Found in 2 of 194 (1.0%) of genes in pham
• Manual Annotations of this start: 2 of 180
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DrYang_88 (AR), Lymara_89 (AR),

Start 14:
• Found in 45 of 194 (23.2%) of genes in pham
• Manual Annotations of this start: 28 of 180
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Amore2_57 (CS1), Anamika_51 (CS3), Austin_56 (CS1), Berries_51 (CS3), Bianmat_51 (CS3), Charianelly_51 (CS3), Damp_51 (CS3), GMA7_46 (CS1), GTE7_45 (CS1), GalacticEye_51 (CS3), Guillaume_51 (CS3), Hail2Pitt_50 (CS3), Harambe_51 (CS3), HayZem_56 (CS1), Hello_51 (CS3), Jams_51 (CS3), Jormungandr_51 (CS3), Kaseim_51 (CS3), Lahirium_51 (CS3), Lidong_51 (CS3), Luker_52 (CS3), Minos_52 (CS3), MrWormie_51 (CS3), Neoevie_51 (CS3), Newt_52 (CS3), Nimi13_51 (CS3), Shelley_51 (CS3), Sticker17_51 (CS3), Teal_51 (CS3), Woes_51 (CS3),

Start 15:
• Found in 11 of 194 (5.7%) of genes in pham
• Manual Annotations of this start: 9 of 180
• Called 81.8% of time when present
• Phage (with cluster) where this start called: BigShaq_54 (CS2), Chelms_53 (CS2), Crete_55 (CS2), Dakiti_54 (CS2), Eggsie_51 (CS2), Linetti_54 (CS2), PokyPuppy_53 (CS2), RoyalG_53 (CS2), SteveFrench_52 (CS2),

Start 16:
• Found in 8 of 194 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 180
• Called 25.0% of time when present
• Phage (with cluster) where this start called: BenoitCattle_54 (CS2), PierreThree_53 (CS2),

Start 17:

• Found in 19 of 194 (9.8%) of genes in pham
• Manual Annotations of this start: 13 of 180
• Called 73.7% of time when present
• Phage (with cluster) where this start called: Ayotoya_66 (DI), Bock_67 (DI), Chop_67 (DI), DelRio_66 (DI), Francois_65 (DI), GrandSlam_67 (DI), Hamood_67 (DI), Mulch_65 (DI), Nadeem_65 (DI), NancyRae_64 (DI), Parada_65 (DI), Pimento_68 (DI), SussRoloMann_65 (DI), WheatThin_64 (DI),

Start 19:
• Found in 13 of 194 (6.7%) of genes in pham
• Manual Annotations of this start: 10 of 180
• Called 84.6% of time when present
• Phage (with cluster) where this start called: Benczkowski14_48 (CS4), DocB7_043 (singleton), Hollow_49 (CS4), Katyusha_48 (CS4), Kvothe_48 (CS4), Niagara_48 (CS4), Philon9_50 (CS4), Teatealatte_49 (CS4), Teech_49 (CS4), Tredge_49 (CS4), Vitaenoii_50 (CS4),

Start 21:
• Found in 194 of 194 (100.0%) of genes in pham
• Manual Annotations of this start: 2 of 180
• Called 1.0% of time when present
• Phage (with cluster) where this start called: BetterKatz_65 (DI), Brylie_65 (DI),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, E, DI, AR, CS4, CS1, CS3, CS2,

Info for manual annotations of cluster AR:
•Start number 13 was manually annotated 2 times for cluster AR.

Info for manual annotations of cluster CS1:
•Start number 14 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 15 was manually annotated 9 times for cluster CS2.
•Start number 16 was manually annotated 2 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 14 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 19 was manually annotated 10 times for cluster CS4.

Info for manual annotations of cluster DI:
•Start number 17 was manually annotated 13 times for cluster DI.
•Start number 21 was manually annotated 2 times for cluster DI.

Info for manual annotations of cluster E:
•Start number 8 was manually annotated 1 time for cluster E.
•Start number 11 was manually annotated 112 times for cluster E.

Gene Information:

Gene: ABCat_108 Start: 64031, Stop: 64405, Start Num: 11
Candidate Starts for ABCat_108:
(Start: 8 @63977 has 1 MA's), (Start: 11 @64031 has 112 MA's), (18, 64085), (Start: 21 @64112 has 2 MA's), (22, 64121), (24, 64160), (27, 64181), (37, 64274), (40, 64292), (41, 64295), (45, 64343), (46, 64349), (48, 64361),

Gene: Adnama_115 Start: 63320, Stop: 63694, Start Num: 11
Candidate Starts for Adnama_115:
(Start: 8 @63266 has 1 MA's), (Start: 11 @63320 has 112 MA's), (Start: 21 @63401 has 2 MA's), (22, 63410), (24, 63449), (27, 63470), (37, 63563), (40, 63581), (41, 63584), (45, 63632), (53, 63683),

Gene: Amao_111 Start: 63594, Stop: 63968, Start Num: 11
Candidate Starts for Amao_111:
(Start: 11 @63594 has 112 MA's), (18, 63648), (Start: 21 @63675 has 2 MA's), (22, 63684), (24, 63723), (25, 63726), (27, 63744), (37, 63837), (40, 63855), (41, 63858), (45, 63906), (46, 63912), (48, 63924),

Gene: AmericanBeauty_114 Start: 63362, Stop: 63736, Start Num: 11
Candidate Starts for AmericanBeauty_114:
(Start: 8 @63308 has 1 MA's), (Start: 11 @63362 has 112 MA's), (Start: 21 @63443 has 2 MA's), (22, 63452), (24, 63491), (27, 63512), (37, 63605), (40, 63623), (41, 63626), (45, 63674), (53, 63725),

Gene: Amore2_57 Start: 48420, Stop: 48055, Start Num: 14
Candidate Starts for Amore2_57:
(Start: 14 @48420 has 28 MA's), (Start: 21 @48378 has 2 MA's), (34, 48240), (36, 48213), (43, 48156),

Gene: Anamika_51 Start: 48759, Stop: 48394, Start Num: 14
Candidate Starts for Anamika_51:
(Start: 14 @48759 has 28 MA's), (Start: 21 @48717 has 2 MA's), (32, 48612), (42, 48525), (44, 48492), (48, 48462),

Gene: Argent26_115 Start: 63244, Stop: 63618, Start Num: 11
Candidate Starts for Argent26_115:
(Start: 8 @63190 has 1 MA's), (Start: 11 @63244 has 112 MA's), (Start: 21 @63325 has 2 MA's), (22, 63334), (24, 63373), (27, 63394), (37, 63487), (40, 63505), (41, 63508), (45, 63556), (53, 63607),

Gene: Asriel_109 Start: 61777, Stop: 62151, Start Num: 11
Candidate Starts for Asriel_109:
(Start: 11 @61777 has 112 MA's), (18, 61831), (Start: 21 @61858 has 2 MA's), (22, 61867), (24, 61906), (25, 61909), (27, 61927), (37, 62020), (40, 62038), (41, 62041), (45, 62089), (46, 62095), (48, 62107),

Gene: Austin_56 Start: 48418, Stop: 48053, Start Num: 14
Candidate Starts for Austin_56:
(Start: 14 @48418 has 28 MA's), (Start: 21 @48376 has 2 MA's), (34, 48238), (36, 48211), (43, 48154),

Gene: Ayotoya_66 Start: 43183, Stop: 43569, Start Num: 17
Candidate Starts for Ayotoya_66:
(7, 43066), (12, 43126), (Start: 14 @43171 has 28 MA's), (Start: 17 @43183 has 13 MA's), (Start: 21 @43213 has 2 MA's), (29, 43288), (41, 43390), (48, 43456),

Gene: BadStone_108 Start: 63579, Stop: 63953, Start Num: 11
Candidate Starts for BadStone_108:
(Start: 8 @63525 has 1 MA's), (Start: 11 @63579 has 112 MA's), (18, 63633), (Start: 21 @63660 has 2 MA's), (22, 63669), (24, 63708), (27, 63729), (37, 63822), (40, 63840), (41, 63843), (45, 63891), (46, 63897), (48, 63909),

Gene: Balomoji_111 Start: 63560, Stop: 63934, Start Num: 11
Candidate Starts for Balomoji_111:
(Start: 11 @63560 has 112 MA's), (18, 63614), (Start: 21 @63641 has 2 MA's), (22, 63650), (24, 63689), (25, 63692), (27, 63710), (37, 63803), (40, 63821), (41, 63824), (45, 63872), (46, 63878), (48, 63890),

Gene: Barbarian_110 Start: 61777, Stop: 62151, Start Num: 11
Candidate Starts for Barbarian_110:
(Start: 11 @61777 has 112 MA's), (18, 61831), (Start: 21 @61858 has 2 MA's), (22, 61867), (24, 61906), (25, 61909), (27, 61927), (37, 62020), (40, 62038), (41, 62041), (45, 62089), (46, 62095), (48, 62107),

Gene: Bask21_111 Start: 62396, Stop: 62770, Start Num: 11
Candidate Starts for Bask21_111:
(Start: 11 @62396 has 112 MA's), (18, 62450), (Start: 21 @62477 has 2 MA's), (22, 62486), (24, 62525), (27, 62546), (37, 62639), (40, 62657), (41, 62660), (45, 62708), (46, 62714), (48, 62726),

Gene: Becksu_109 Start: 63633, Stop: 64007, Start Num: 11
Candidate Starts for Becksu_109:
(Start: 8 @63579 has 1 MA's), (Start: 11 @63633 has 112 MA's), (Start: 21 @63714 has 2 MA's), (22, 63723), (24, 63762), (27, 63783), (37, 63876), (40, 63894), (41, 63897), (45, 63945), (53, 63996),

Gene: Bench_113 Start: 64001, Stop: 64375, Start Num: 11
Candidate Starts for Bench_113:
(Start: 8 @63947 has 1 MA's), (Start: 11 @64001 has 112 MA's), (Start: 21 @64082 has 2 MA's), (22, 64091), (24, 64130), (27, 64151), (37, 64244), (40, 64262), (41, 64265), (45, 64313), (53, 64364),

Gene: Benczkowski14_48 Start: 48592, Stop: 48224, Start Num: 19
Candidate Starts for Benczkowski14_48:
(Start: 19 @48592 has 10 MA's), (Start: 21 @48568 has 2 MA's), (42, 48361), (50, 48292), (55, 48235),

Gene: BenoitCattle_54 Start: 48067, Stop: 47708, Start Num: 16
Candidate Starts for BenoitCattle_54:
(12, 48118), (Start: 15 @48070 has 9 MA's), (Start: 16 @48067 has 2 MA's), (Start: 21 @48031 has 2 MA's), (29, 47956), (36, 47866), (42, 47839), (44, 47806), (48, 47776), (50, 47770), (54, 47740),

Gene: Berries_51 Start: 48731, Stop: 48366, Start Num: 14
Candidate Starts for Berries_51:
(Start: 14 @48731 has 28 MA's), (Start: 21 @48689 has 2 MA's), (32, 48584), (42, 48497), (43, 48467), (44, 48464), (48, 48434),

Gene: BetterKatz_65 Start: 42412, Stop: 42768, Start Num: 21
Candidate Starts for BetterKatz_65:
(2, 42142), (3, 42190), (4, 42211), (7, 42265), (12, 42325), (Start: 14 @42370 has 28 MA's), (Start: 17 @42382 has 13 MA's), (Start: 21 @42412 has 2 MA's), (29, 42487), (41, 42589), (48, 42655),

Gene: Bianmat_51 Start: 48771, Stop: 48406, Start Num: 14

Candidate Starts for Bianmat_51:
(Start: 14 @48771 has 28 MA's), (Start: 21 @48729 has 2 MA's), (32, 48624), (42, 48537), (43, 48507), (44, 48504), (48, 48474),

Gene: BigShaq_54 Start: 48075, Stop: 47713, Start Num: 15
Candidate Starts for BigShaq_54:
(12, 48123), (Start: 15 @48075 has 9 MA's), (Start: 16 @48072 has 2 MA's), (Start: 21 @48036 has 2 MA's), (29, 47961), (36, 47871), (42, 47844), (44, 47811), (48, 47781), (50, 47775), (54, 47745),

Gene: BilboSwaggins_109 Start: 64057, Stop: 64431, Start Num: 11
Candidate Starts for BilboSwaggins_109:
(Start: 8 @64003 has 1 MA's), (Start: 11 @64057 has 112 MA's), (Start: 21 @64138 has 2 MA's), (22, 64147), (24, 64186), (27, 64207), (37, 64300), (40, 64318), (41, 64321), (45, 64369), (46, 64375), (48, 64387),

Gene: Bock_67 Start: 42626, Stop: 43012, Start Num: 17
Candidate Starts for Bock_67:
(1, 42311), (2, 42386), (3, 42434), (4, 42455), (7, 42509), (12, 42569), (Start: 14 @42614 has 28 MA's), (Start: 17 @42626 has 13 MA's), (Start: 21 @42656 has 2 MA's), (29, 42731), (41, 42833), (48, 42899),

Gene: Bogg_112 Start: 63520, Stop: 63894, Start Num: 11
Candidate Starts for Bogg_112:
(Start: 8 @63466 has 1 MA's), (Start: 11 @63520 has 112 MA's), (18, 63574), (Start: 21 @63601 has 2 MA's), (22, 63610), (24, 63649), (27, 63670), (37, 63763), (40, 63781), (41, 63784), (45, 63832), (53, 63883),

Gene: Brewer_107 Start: 62157, Stop: 62531, Start Num: 11
Candidate Starts for Brewer_107:
(Start: 8 @62103 has 1 MA's), (Start: 11 @62157 has 112 MA's), (18, 62211), (Start: 21 @62238 has 2 MA's), (22, 62247), (24, 62286), (27, 62307), (37, 62400), (40, 62418), (41, 62421), (45, 62469), (53, 62520),

Gene: Bruin_108 Start: 62685, Stop: 63059, Start Num: 11
Candidate Starts for Bruin_108:
(Start: 8 @62631 has 1 MA's), (Start: 11 @62685 has 112 MA's), (Start: 21 @62766 has 2 MA's), (22, 62775), (24, 62814), (27, 62835), (37, 62928), (40, 62946), (41, 62949), (45, 62997), (53, 63048),

Gene: Brylie_65 Start: 42235, Stop: 42591, Start Num: 21
Candidate Starts for Brylie_65:
(2, 41965), (3, 42013), (4, 42034), (7, 42088), (12, 42148), (Start: 14 @42193 has 28 MA's), (Start: 17 @42205 has 13 MA's), (Start: 21 @42235 has 2 MA's), (29, 42310), (41, 42412), (48, 42478),

Gene: Buck_112 Start: 64501, Stop: 64875, Start Num: 11
Candidate Starts for Buck_112:
(Start: 8 @64447 has 1 MA's), (Start: 11 @64501 has 112 MA's), (18, 64555), (Start: 21 @64582 has 2 MA's), (22, 64591), (24, 64630), (27, 64651), (37, 64744), (40, 64762), (41, 64765), (45, 64813), (53, 64864),

Gene: Budgie_117 Start: 63980, Stop: 64354, Start Num: 11
Candidate Starts for Budgie_117:
(Start: 11 @63980 has 112 MA's), (Start: 21 @64061 has 2 MA's), (22, 64070), (24, 64109), (27, 64130), (37, 64223), (40, 64241), (41, 64244), (45, 64292), (46, 64298), (48, 64310),

Gene: BugsBunny_110 Start: 63999, Stop: 64373, Start Num: 11
Candidate Starts for BugsBunny_110:
(Start: 8 @63945 has 1 MA's), (Start: 11 @63999 has 112 MA's), (Start: 21 @64080 has 2 MA's), (22, 64089), (24, 64128), (27, 64149), (37, 64242), (40, 64260), (41, 64263), (45, 64311), (53, 64362),

Gene: Cactus_115 Start: 62939, Stop: 63313, Start Num: 11
Candidate Starts for Cactus_115:
(Start: 8 @62885 has 1 MA's), (Start: 11 @62939 has 112 MA's), (18, 62993), (Start: 21 @63020 has 2 MA's), (22, 63029), (24, 63068), (27, 63089), (37, 63182), (40, 63200), (41, 63203), (45, 63251), (46, 63257), (48, 63269),

Gene: Charianelly_51 Start: 48481, Stop: 48116, Start Num: 14
Candidate Starts for Charianelly_51:
(Start: 14 @48481 has 28 MA's), (Start: 21 @48439 has 2 MA's), (32, 48334), (42, 48247), (43, 48217), (44, 48214), (48, 48184),

Gene: Chelms_53 Start: 48063, Stop: 47701, Start Num: 15
Candidate Starts for Chelms_53:
(12, 48111), (Start: 15 @48063 has 9 MA's), (Start: 16 @48060 has 2 MA's), (Start: 21 @48024 has 2 MA's), (29, 47949), (36, 47859), (42, 47832), (44, 47799), (48, 47769), (50, 47763), (54, 47733),

Gene: Chop_67 Start: 43371, Stop: 43757, Start Num: 17
Candidate Starts for Chop_67:
(2, 43131), (3, 43179), (4, 43200), (7, 43254), (12, 43314), (Start: 14 @43359 has 28 MA's), (Start: 17 @43371 has 13 MA's), (Start: 21 @43401 has 2 MA's), (29, 43476), (41, 43578), (48, 43644),

Gene: ChosenOne_111 Start: 62885, Stop: 63259, Start Num: 11
Candidate Starts for ChosenOne_111:
(Start: 8 @62831 has 1 MA's), (Start: 11 @62885 has 112 MA's), (18, 62939), (Start: 21 @62966 has 2 MA's), (22, 62975), (24, 63014), (27, 63035), (37, 63128), (40, 63146), (41, 63149), (45, 63197), (53, 63248),

Gene: ChotaBhai_111 Start: 63338, Stop: 63712, Start Num: 11
Candidate Starts for ChotaBhai_111:
(Start: 11 @63338 has 112 MA's), (18, 63392), (Start: 21 @63419 has 2 MA's), (22, 63428), (24, 63467), (25, 63470), (27, 63488), (37, 63581), (40, 63599), (41, 63602), (45, 63650), (46, 63656), (48, 63668),

Gene: Cjw1_111 Start: 64694, Stop: 65068, Start Num: 11
Candidate Starts for Cjw1_111:
(Start: 8 @64640 has 1 MA's), (Start: 11 @64694 has 112 MA's), (Start: 21 @64775 has 2 MA's), (22, 64784), (24, 64823), (27, 64844), (37, 64937), (40, 64955), (41, 64958), (45, 65006), (53, 65057),

Gene: Command613_113 Start: 63553, Stop: 63927, Start Num: 11
Candidate Starts for Command613_113:
(Start: 11 @63553 has 112 MA's), (18, 63607), (Start: 21 @63634 has 2 MA's), (22, 63643), (24, 63682), (27, 63703), (37, 63796), (40, 63814), (41, 63817), (45, 63865), (46, 63871), (48, 63883),

Gene: Contagion_108 Start: 63047, Stop: 63421, Start Num: 11
Candidate Starts for Contagion_108:
(Start: 8 @62993 has 1 MA's), (Start: 11 @63047 has 112 MA's), (Start: 21 @63128 has 2 MA's), (22, 63137), (24, 63176), (27, 63197), (37, 63290), (40, 63308), (41, 63311), (45, 63359), (53, 63410),

Gene: Cookies_108 Start: 63324, Stop: 63698, Start Num: 11
Candidate Starts for Cookies_108:
(Start: 11 @63324 has 112 MA's), (18, 63378), (Start: 21 @63405 has 2 MA's), (22, 63414), (24, 63453), (27, 63474), (37, 63567), (40, 63585), (41, 63588), (45, 63636), (46, 63642), (48, 63654),

Gene: Crete_55 Start: 48341, Stop: 47979, Start Num: 15
Candidate Starts for Crete_55:
(12, 48389), (Start: 15 @48341 has 9 MA's), (Start: 16 @48338 has 2 MA's), (Start: 21 @48302 has 2 MA's), (29, 48227), (36, 48137), (42, 48110), (44, 48077), (48, 48047), (50, 48041), (54, 48011),

Gene: CrystalP_111 Start: 64057, Stop: 64431, Start Num: 11
Candidate Starts for CrystalP_111:
(Start: 8 @64003 has 1 MA's), (Start: 11 @64057 has 112 MA's), (Start: 21 @64138 has 2 MA's), (22, 64147), (24, 64186), (27, 64207), (37, 64300), (40, 64318), (41, 64321), (45, 64369), (46, 64375), (48, 64387),

Gene: Czyszczon1_111 Start: 63040, Stop: 63414, Start Num: 11
Candidate Starts for Czyszczon1_111:
(Start: 8 @62986 has 1 MA's), (Start: 11 @63040 has 112 MA's), (Start: 21 @63121 has 2 MA's), (22, 63130), (24, 63169), (27, 63190), (37, 63283), (40, 63301), (41, 63304), (45, 63352), (53, 63403),

Gene: DS6A_81 Start: 51791, Stop: 52174, Start Num: 10
Candidate Starts for DS6A_81:
(5, 51698), (6, 51737), (9, 51776), (Start: 10 @51791 has 1 MA's), (Start: 21 @51890 has 2 MA's), (23, 51926), (28, 51959), (36, 52043), (37, 52046), (39, 52061), (40, 52064), (45, 52115), (51, 52142),

Gene: Daikon_112 Start: 62856, Stop: 63230, Start Num: 11
Candidate Starts for Daikon_112:
(Start: 8 @62802 has 1 MA's), (Start: 11 @62856 has 112 MA's), (18, 62910), (Start: 21 @62937 has 2 MA's), (22, 62946), (24, 62985), (27, 63006), (37, 63099), (40, 63117), (41, 63120), (45, 63168), (46, 63174), (48, 63186),

Gene: Dakiti_54 Start: 48931, Stop: 48569, Start Num: 15
Candidate Starts for Dakiti_54:
(12, 48979), (Start: 15 @48931 has 9 MA's), (Start: 16 @48928 has 2 MA's), (Start: 21 @48892 has 2 MA's), (29, 48817), (36, 48727), (42, 48700), (44, 48667), (48, 48637), (50, 48631), (54, 48601),

Gene: Damp_51 Start: 47645, Stop: 47280, Start Num: 14
Candidate Starts for Damp_51:
(Start: 14 @47645 has 28 MA's), (Start: 21 @47603 has 2 MA's), (32, 47498), (42, 47411), (43, 47381), (44, 47378), (48, 47348),

Gene: DelRio_66 Start: 43392, Stop: 43778, Start Num: 17
Candidate Starts for DelRio_66:
(3, 43200), (4, 43221), (7, 43275), (12, 43335), (Start: 14 @43380 has 28 MA's), (Start: 17 @43392 has 13 MA's), (Start: 21 @43422 has 2 MA's), (29, 43497), (41, 43599), (43, 43632), (48, 43665), (52, 43689),

Gene: DocB7_043 Start: 40188, Stop: 39829, Start Num: 19
Candidate Starts for DocB7_043:
(Start: 19 @40188 has 10 MA's), (Start: 21 @40164 has 2 MA's), (24, 40122), (31, 40071), (36, 40014), (48, 39924), (49, 39921), (50, 39918), (57, 39843),

Gene: DrDrey_111 Start: 64717, Stop: 65091, Start Num: 11
Candidate Starts for DrDrey_111:
(Start: 8 @64663 has 1 MA's), (Start: 11 @64717 has 112 MA's), (18, 64771), (Start: 21 @64798 has 2 MA's), (22, 64807), (24, 64846), (27, 64867), (37, 64960), (40, 64978), (41, 64981), (45, 65029), (46, 65035), (48, 65047),

Gene: DrYang_88 Start: 60507, Stop: 60866, Start Num: 13
Candidate Starts for DrYang_88:
(Start: 13 @60507 has 2 MA's), (Start: 19 @60552 has 10 MA's), (20, 60555), (Start: 21 @60576 has 2 MA's), (29, 60651), (33, 60681), (35, 60699), (36, 60720), (41, 60744), (47, 60804),

Gene: Dumbo_111 Start: 63077, Stop: 63451, Start Num: 11
Candidate Starts for Dumbo_111:
(Start: 8 @63023 has 1 MA's), (Start: 11 @63077 has 112 MA's), (Start: 21 @63158 has 2 MA's), (22, 63167), (24, 63206), (27, 63227), (37, 63320), (40, 63338), (41, 63341), (45, 63389), (53, 63440),

Gene: Dusk_108 Start: 63239, Stop: 63613, Start Num: 11
Candidate Starts for Dusk_108:
(Start: 8 @63185 has 1 MA's), (Start: 11 @63239 has 112 MA's), (18, 63293), (Start: 21 @63320 has 2 MA's), (22, 63329), (24, 63368), (27, 63389), (37, 63482), (40, 63500), (41, 63503), (45, 63551), (46, 63557), (48, 63569),

Gene: Easy2Say_111 Start: 63711, Stop: 64085, Start Num: 11
Candidate Starts for Easy2Say_111:
(Start: 8 @63657 has 1 MA's), (Start: 11 @63711 has 112 MA's), (18, 63765), (Start: 21 @63792 has 2 MA's), (22, 63801), (24, 63840), (27, 63861), (37, 63954), (40, 63972), (41, 63975), (45, 64023), (53, 64074),

Gene: Eggsie_51 Start: 47363, Stop: 47001, Start Num: 15
Candidate Starts for Eggsie_51:
(Start: 15 @47363 has 9 MA's), (Start: 16 @47360 has 2 MA's), (Start: 17 @47354 has 13 MA's), (Start: 21 @47324 has 2 MA's), (26, 47270), (48, 47069), (54, 47033),

Gene: Elite2014_110 Start: 62884, Stop: 63258, Start Num: 11
Candidate Starts for Elite2014_110:
(Start: 8 @62830 has 1 MA's), (Start: 11 @62884 has 112 MA's), (18, 62938), (Start: 21 @62965 has 2 MA's), (22, 62974), (24, 63013), (27, 63034), (37, 63127), (40, 63145), (41, 63148), (45, 63196), (53, 63247),

Gene: Elph10_110 Start: 62723, Stop: 63097, Start Num: 11
Candidate Starts for Elph10_110:
(Start: 8 @62669 has 1 MA's), (Start: 11 @62723 has 112 MA's), (Start: 21 @62804 has 2 MA's), (22, 62813), (24, 62852), (27, 62873), (37, 62966), (40, 62984), (41, 62987), (45, 63035), (53, 63086),

Gene: Emmina_111 Start: 62662, Stop: 63036, Start Num: 11
Candidate Starts for Emmina_111:
(Start: 8 @62608 has 1 MA's), (Start: 11 @62662 has 112 MA's), (18, 62716), (Start: 21 @62743 has 2 MA's), (22, 62752), (24, 62791), (27, 62812), (37, 62905), (40, 62923), (41, 62926), (45, 62974), (53, 63025),

Gene: Eureka_111 Start: 63850, Stop: 64224, Start Num: 11
Candidate Starts for Eureka_111:

(Start: 8 @63796 has 1 MA's), (Start: 11 @63850 has 112 MA's), (18, 63904), (Start: 21 @63931 has 2 MA's), (22, 63940), (24, 63979), (27, 64000), (37, 64093), (40, 64111), (41, 64114), (45, 64162), (46, 64168), (53, 64213),

Gene: FairyPath_112 Start: 64155, Stop: 64529, Start Num: 11
Candidate Starts for FairyPath_112:
(Start: 8 @64101 has 1 MA's), (Start: 11 @64155 has 112 MA's), (Start: 21 @64236 has 2 MA's), (22, 64245), (24, 64284), (27, 64305), (37, 64398), (40, 64416), (41, 64419), (45, 64467), (53, 64518),

Gene: FireRed_114 Start: 64126, Stop: 64500, Start Num: 11
Candidate Starts for FireRed_114:
(Start: 8 @64072 has 1 MA's), (Start: 11 @64126 has 112 MA's), (18, 64180), (Start: 21 @64207 has 2 MA's), (22, 64216), (24, 64255), (27, 64276), (37, 64369), (40, 64387), (41, 64390), (45, 64438), (53, 64489),

Gene: Flypotenuse_107 Start: 62431, Stop: 62805, Start Num: 11
Candidate Starts for Flypotenuse_107:
(Start: 11 @62431 has 112 MA's), (18, 62485), (Start: 21 @62512 has 2 MA's), (22, 62521), (24, 62560), (25, 62563), (27, 62581), (37, 62674), (40, 62692), (41, 62695), (45, 62743), (46, 62749), (48, 62761),

Gene: FoghornLeghorn_104 Start: 61016, Stop: 61390, Start Num: 11
Candidate Starts for FoghornLeghorn_104:
(Start: 11 @61016 has 112 MA's), (18, 61070), (Start: 21 @61097 has 2 MA's), (22, 61106), (24, 61145), (27, 61166), (37, 61259), (40, 61277), (41, 61280), (45, 61328), (46, 61334), (48, 61346),

Gene: Francois_65 Start: 42391, Stop: 42777, Start Num: 17
Candidate Starts for Francois_65:
(7, 42274), (9, 42304), (12, 42334), (Start: 17 @42391 has 13 MA's), (Start: 21 @42421 has 2 MA's), (28, 42490), (41, 42598), (48, 42664), (56, 42736), (58, 42766),

Gene: GMA7_46 Start: 42634, Stop: 42269, Start Num: 14
Candidate Starts for GMA7_46:
(Start: 14 @42634 has 28 MA's), (Start: 21 @42592 has 2 MA's), (34, 42454), (36, 42427), (43, 42370),

Gene: GTE7_45 Start: 42665, Stop: 42300, Start Num: 14
Candidate Starts for GTE7_45:
(Start: 14 @42665 has 28 MA's), (Start: 21 @42623 has 2 MA's), (34, 42485), (36, 42458), (43, 42401),

Gene: Gage_113 Start: 63382, Stop: 63756, Start Num: 11
Candidate Starts for Gage_113:
(Start: 8 @63328 has 1 MA's), (Start: 11 @63382 has 112 MA's), (Start: 21 @63463 has 2 MA's), (22, 63472), (24, 63511), (27, 63532), (37, 63625), (40, 63643), (41, 63646), (45, 63694), (53, 63745),

Gene: GalacticEye_51 Start: 48442, Stop: 48077, Start Num: 14
Candidate Starts for GalacticEye_51:
(Start: 14 @48442 has 28 MA's), (Start: 21 @48400 has 2 MA's), (32, 48295), (42, 48208), (43, 48178), (44, 48175), (48, 48145),

Gene: Gator_109 Start: 63291, Stop: 63665, Start Num: 11
Candidate Starts for Gator_109:
(Start: 11 @63291 has 112 MA's), (18, 63345), (Start: 21 @63372 has 2 MA's), (22, 63381), (24, 63420), (27, 63441), (37, 63534), (40, 63552), (41, 63555), (45, 63603), (46, 63609), (48, 63621),

Gene: Gemini_116 Start: 63761, Stop: 64135, Start Num: 11
Candidate Starts for Gemini_116:
(Start: 8 @63707 has 1 MA's), (Start: 11 @63761 has 112 MA's), (Start: 21 @63842 has 2 MA's), (22, 63851), (24, 63890), (27, 63911), (37, 64004), (40, 64022), (41, 64025), (45, 64073), (53, 64124),

Gene: Glexan_110 Start: 63441, Stop: 63815, Start Num: 11
Candidate Starts for Glexan_110:
(Start: 8 @63387 has 1 MA's), (Start: 11 @63441 has 112 MA's), (18, 63495), (Start: 21 @63522 has 2 MA's), (22, 63531), (24, 63570), (27, 63591), (37, 63684), (40, 63702), (41, 63705), (45, 63753), (46, 63759), (48, 63771),

Gene: GoldenSpark_115 Start: 63244, Stop: 63618, Start Num: 11
Candidate Starts for GoldenSpark_115:
(Start: 8 @63190 has 1 MA's), (Start: 11 @63244 has 112 MA's), (Start: 21 @63325 has 2 MA's), (22, 63334), (24, 63373), (27, 63394), (37, 63487), (40, 63505), (41, 63508), (45, 63556), (53, 63607),

Gene: GooberAzure_114 Start: 63244, Stop: 63618, Start Num: 11
Candidate Starts for GooberAzure_114:
(Start: 8 @63190 has 1 MA's), (Start: 11 @63244 has 112 MA's), (Start: 21 @63325 has 2 MA's), (22, 63334), (24, 63373), (27, 63394), (37, 63487), (40, 63505), (41, 63508), (45, 63556), (53, 63607),

Gene: GrandSlam_67 Start: 43371, Stop: 43757, Start Num: 17
Candidate Starts for GrandSlam_67:
(2, 43131), (3, 43179), (4, 43200), (7, 43254), (12, 43314), (Start: 14 @43359 has 28 MA's), (Start: 17 @43371 has 13 MA's), (Start: 21 @43401 has 2 MA's), (29, 43476), (41, 43578), (48, 43644),

Gene: Greep_115 Start: 64816, Stop: 65190, Start Num: 11
Candidate Starts for Greep_115:
(Start: 8 @64762 has 1 MA's), (Start: 11 @64816 has 112 MA's), (Start: 21 @64897 has 2 MA's), (22, 64906), (24, 64945), (27, 64966), (37, 65059), (40, 65077), (41, 65080), (45, 65128), (53, 65179),

Gene: Guillaume_51 Start: 48492, Stop: 48127, Start Num: 14
Candidate Starts for Guillaume_51:
(Start: 14 @48492 has 28 MA's), (Start: 21 @48450 has 2 MA's), (32, 48345), (42, 48258), (43, 48228), (44, 48225), (48, 48195),

Gene: Hail2Pitt_50 Start: 48968, Stop: 48603, Start Num: 14
Candidate Starts for Hail2Pitt_50:
(Start: 14 @48968 has 28 MA's), (Start: 21 @48926 has 2 MA's), (32, 48821), (42, 48734), (44, 48701), (48, 48671),

Gene: Hamood_67 Start: 43371, Stop: 43757, Start Num: 17
Candidate Starts for Hamood_67:
(2, 43131), (3, 43179), (4, 43200), (7, 43254), (12, 43314), (Start: 14 @43359 has 28 MA's), (Start: 17 @43371 has 13 MA's), (Start: 21 @43401 has 2 MA's), (29, 43476), (41, 43578), (48, 43644),

Gene: HanKaySha_111 Start: 63432, Stop: 63806, Start Num: 11
Candidate Starts for HanKaySha_111:
(Start: 8 @63378 has 1 MA's), (Start: 11 @63432 has 112 MA's), (18, 63486), (Start: 21 @63513 has 2 MA's), (22, 63522), (24, 63561), (27, 63582), (37, 63675), (40, 63693), (41, 63696), (45, 63744), (53, 63795),

Gene: Harambe_51 Start: 48759, Stop: 48394, Start Num: 14
Candidate Starts for Harambe_51:
(Start: 14 @48759 has 28 MA's), (Start: 21 @48717 has 2 MA's), (32, 48612), (42, 48525), (43, 48495), (44, 48492), (48, 48462),

Gene: Harella_112 Start: 63957, Stop: 64331, Start Num: 11
Candidate Starts for Harella_112:
(Start: 8 @63903 has 1 MA's), (Start: 11 @63957 has 112 MA's), (18, 64011), (Start: 21 @64038 has 2 MA's), (22, 64047), (24, 64086), (27, 64107), (37, 64200), (40, 64218), (41, 64221), (45, 64269), (46, 64275), (48, 64287),

Gene: HayZem_56 Start: 48417, Stop: 48052, Start Num: 14
Candidate Starts for HayZem_56:
(Start: 14 @48417 has 28 MA's), (Start: 21 @48375 has 2 MA's), (34, 48237), (36, 48210), (43, 48153),

Gene: Hello_51 Start: 48721, Stop: 48356, Start Num: 14
Candidate Starts for Hello_51:
(Start: 14 @48721 has 28 MA's), (Start: 21 @48679 has 2 MA's), (32, 48574), (42, 48487), (43, 48457), (44, 48454), (48, 48424),

Gene: Henry_109 Start: 63242, Stop: 63616, Start Num: 11
Candidate Starts for Henry_109:
(Start: 11 @63242 has 112 MA's), (18, 63296), (Start: 21 @63323 has 2 MA's), (22, 63332), (24, 63371), (27, 63392), (37, 63485), (40, 63503), (41, 63506), (45, 63554), (46, 63560), (48, 63572),

Gene: Highbury_107 Start: 61589, Stop: 61963, Start Num: 11
Candidate Starts for Highbury_107:
(Start: 8 @61535 has 1 MA's), (Start: 11 @61589 has 112 MA's), (18, 61643), (Start: 21 @61670 has 2 MA's), (22, 61679), (24, 61718), (27, 61739), (37, 61832), (40, 61850), (41, 61853), (45, 61901), (53, 61952),

Gene: Hollow_49 Start: 48928, Stop: 48560, Start Num: 19
Candidate Starts for Hollow_49:
(Start: 19 @48928 has 10 MA's), (Start: 21 @48904 has 2 MA's), (42, 48697), (50, 48628), (55, 48571),

Gene: Hoonter_114 Start: 63737, Stop: 64111, Start Num: 11
Candidate Starts for Hoonter_114:
(Start: 8 @63683 has 1 MA's), (Start: 11 @63737 has 112 MA's), (Start: 21 @63818 has 2 MA's), (22, 63827), (24, 63866), (27, 63887), (37, 63980), (40, 63998), (41, 64001), (45, 64049), (53, 64100),

Gene: Hopey_111 Start: 64043, Stop: 64417, Start Num: 11
Candidate Starts for Hopey_111:
(Start: 8 @63989 has 1 MA's), (Start: 11 @64043 has 112 MA's), (Start: 21 @64124 has 2 MA's), (22, 64133), (24, 64172), (27, 64193), (37, 64286), (40, 64304), (41, 64307), (45, 64355), (53, 64406),

Gene: HufflyPuff_113 Start: 64352, Stop: 64726, Start Num: 11
Candidate Starts for HufflyPuff_113:
(Start: 8 @64298 has 1 MA's), (Start: 11 @64352 has 112 MA's), (Start: 21 @64433 has 2 MA's), (22, 64442), (24, 64481), (27, 64502), (37, 64595), (40, 64613), (41, 64616), (45, 64664), (53, 64715),

Gene: IHOP_109 Start: 62960, Stop: 63334, Start Num: 11
Candidate Starts for IHOP_109:

(Start: 8 @62906 has 1 MA's), (Start: 11 @62960 has 112 MA's), (18, 63014), (Start: 21 @63041 has 2 MA's), (22, 63050), (24, 63089), (27, 63110), (37, 63203), (40, 63221), (41, 63224), (45, 63272), (46, 63278), (48, 63290),

Gene: Jams_51 Start: 47931, Stop: 47566, Start Num: 14
Candidate Starts for Jams_51:
(Start: 14 @47931 has 28 MA's), (Start: 21 @47889 has 2 MA's), (32, 47784), (42, 47697), (43, 47667), (44, 47664), (48, 47634),

Gene: Jormungandr_51 Start: 48474, Stop: 48109, Start Num: 14
Candidate Starts for Jormungandr_51:
(Start: 14 @48474 has 28 MA's), (Start: 21 @48432 has 2 MA's), (32, 48327), (42, 48240), (43, 48210), (44, 48207), (48, 48177),

Gene: Kanye_108 Start: 63493, Stop: 63867, Start Num: 11
Candidate Starts for Kanye_108:
(Start: 8 @63439 has 1 MA's), (Start: 11 @63493 has 112 MA's), (Start: 21 @63574 has 2 MA's), (22, 63583), (24, 63622), (27, 63643), (37, 63736), (40, 63754), (41, 63757), (45, 63805), (53, 63856),

Gene: Kaseim_51 Start: 47916, Stop: 47551, Start Num: 14
Candidate Starts for Kaseim_51:
(Start: 14 @47916 has 28 MA's), (Start: 21 @47874 has 2 MA's), (32, 47769), (42, 47682), (43, 47652), (44, 47649), (48, 47619),

Gene: Katyusha_48 Start: 48592, Stop: 48224, Start Num: 19
Candidate Starts for Katyusha_48:
(Start: 19 @48592 has 10 MA's), (Start: 21 @48568 has 2 MA's), (42, 48361), (50, 48292), (55, 48235),

Gene: Kostya_111 Start: 63062, Stop: 63436, Start Num: 11
Candidate Starts for Kostya_111:
(Start: 8 @63008 has 1 MA's), (Start: 11 @63062 has 112 MA's), (18, 63116), (Start: 21 @63143 has 2 MA's), (22, 63152), (24, 63191), (27, 63212), (37, 63305), (40, 63323), (41, 63326), (45, 63374), (46, 63380), (48, 63392),

Gene: Kvothe_48 Start: 48491, Stop: 48123, Start Num: 19
Candidate Starts for Kvothe_48:
(Start: 19 @48491 has 10 MA's), (Start: 21 @48467 has 2 MA's), (42, 48260), (50, 48191), (55, 48134),

Gene: Lahirium_51 Start: 48996, Stop: 48631, Start Num: 14
Candidate Starts for Lahirium_51:
(Start: 14 @48996 has 28 MA's), (Start: 21 @48954 has 2 MA's), (32, 48849), (42, 48762), (43, 48732), (44, 48729), (48, 48699),

Gene: Lidong_51 Start: 48731, Stop: 48366, Start Num: 14
Candidate Starts for Lidong_51:
(Start: 14 @48731 has 28 MA's), (Start: 21 @48689 has 2 MA's), (32, 48584), (42, 48497), (43, 48467), (44, 48464), (48, 48434),

Gene: Lilac_112 Start: 64186, Stop: 64560, Start Num: 11
Candidate Starts for Lilac_112:
(Start: 8 @64132 has 1 MA's), (Start: 11 @64186 has 112 MA's), (18, 64240), (Start: 21 @64267 has 2 MA's), (22, 64276), (24, 64315), (27, 64336), (37, 64429), (40, 64447), (41, 64450), (45, 64498), (53, 64549),

Gene: Lilizi_111 Start: 63472, Stop: 63846, Start Num: 11
Candidate Starts for Lilizi_111:
(Start: 8 @63418 has 1 MA's), (Start: 11 @63472 has 112 MA's), (Start: 21 @63553 has 2 MA's), (22, 63562), (24, 63601), (27, 63622), (37, 63715), (40, 63733), (41, 63736), (45, 63784), (53, 63835),

Gene: Lilpickle_110 Start: 62884, Stop: 63258, Start Num: 11
Candidate Starts for Lilpickle_110:
(Start: 8 @62830 has 1 MA's), (Start: 11 @62884 has 112 MA's), (18, 62938), (Start: 21 @62965 has 2 MA's), (22, 62974), (24, 63013), (27, 63034), (37, 63127), (40, 63145), (41, 63148), (45, 63196), (53, 63247),

Gene: Linetti_54 Start: 49072, Stop: 48710, Start Num: 15
Candidate Starts for Linetti_54:
(12, 49120), (Start: 15 @49072 has 9 MA's), (Start: 16 @49069 has 2 MA's), (Start: 21 @49033 has 2 MA's), (29, 48958), (36, 48868), (42, 48841), (44, 48808), (48, 48778), (50, 48772), (54, 48742),

Gene: Livelaughbron_112 Start: 64485, Stop: 64859, Start Num: 11
Candidate Starts for Livelaughbron_112:
(Start: 8 @64431 has 1 MA's), (Start: 11 @64485 has 112 MA's), (Start: 21 @64566 has 2 MA's), (22, 64575), (24, 64614), (27, 64635), (37, 64728), (40, 64746), (41, 64749), (45, 64797), (53, 64848),

Gene: Luker_52 Start: 48949, Stop: 48584, Start Num: 14
Candidate Starts for Luker_52:
(Start: 14 @48949 has 28 MA's), (Start: 21 @48907 has 2 MA's), (32, 48802), (42, 48715), (43, 48685), (44, 48682), (48, 48652),

Gene: Lymara_89 Start: 59643, Stop: 60005, Start Num: 13
Candidate Starts for Lymara_89:
(Start: 13 @59643 has 2 MA's), (Start: 19 @59688 has 10 MA's), (20, 59691), (Start: 21 @59712 has 2 MA's), (29, 59787), (33, 59817), (35, 59835), (41, 59880), (47, 59940),

Gene: MISSy_112 Start: 64169, Stop: 64543, Start Num: 11
Candidate Starts for MISSy_112:
(Start: 8 @64115 has 1 MA's), (Start: 11 @64169 has 112 MA's), (Start: 21 @64250 has 2 MA's), (22, 64259), (24, 64298), (27, 64319), (37, 64412), (40, 64430), (41, 64433), (45, 64481), (53, 64532),

Gene: MPhalcon_112 Start: 63587, Stop: 63961, Start Num: 11
Candidate Starts for MPhalcon_112:
(Start: 8 @63533 has 1 MA's), (Start: 11 @63587 has 112 MA's), (Start: 21 @63668 has 2 MA's), (22, 63677), (24, 63716), (27, 63737), (37, 63830), (40, 63848), (41, 63851), (45, 63899), (53, 63950),

Gene: MadamMonkfish_110 Start: 62894, Stop: 63268, Start Num: 11
Candidate Starts for MadamMonkfish_110:
(Start: 8 @62840 has 1 MA's), (Start: 11 @62894 has 112 MA's), (18, 62948), (Start: 21 @62975 has 2 MA's), (22, 62984), (24, 63023), (27, 63044), (37, 63137), (40, 63155), (41, 63158), (45, 63206), (53, 63257),

Gene: Manda_112 Start: 63624, Stop: 63998, Start Num: 11
Candidate Starts for Manda_112:
(Start: 8 @63570 has 1 MA's), (Start: 11 @63624 has 112 MA's), (18, 63678), (Start: 21 @63705 has 2 MA's), (22, 63714), (24, 63753), (27, 63774), (37, 63867), (40, 63885), (41, 63888), (45, 63936), (46, 63942), (53, 63987),

Gene: Maxxinista_113 Start: 63371, Stop: 63745, Start Num: 11
Candidate Starts for Maxxinista_113:
(Start: 8 @63317 has 1 MA's), (Start: 11 @63371 has 112 MA's), (18, 63425), (Start: 21 @63452 has 2 MA's), (22, 63461), (24, 63500), (27, 63521), (37, 63614), (40, 63632), (41, 63635), (45, 63683), (53, 63734),

Gene: Mindy_110 Start: 62903, Stop: 63277, Start Num: 11
Candidate Starts for Mindy_110:
(Start: 8 @62849 has 1 MA's), (Start: 11 @62903 has 112 MA's), (18, 62957), (Start: 21 @62984 has 2 MA's), (22, 62993), (24, 63032), (27, 63053), (37, 63146), (40, 63164), (41, 63167), (45, 63215), (46, 63221), (48, 63233),

Gene: Miniwave_106 Start: 63080, Stop: 63454, Start Num: 11
Candidate Starts for Miniwave_106:
(Start: 8 @63026 has 1 MA's), (Start: 11 @63080 has 112 MA's), (Start: 21 @63161 has 2 MA's), (22, 63170), (24, 63209), (27, 63230), (37, 63323), (40, 63341), (41, 63344), (45, 63392), (53, 63443),

Gene: Minos_52 Start: 48473, Stop: 48108, Start Num: 14
Candidate Starts for Minos_52:
(Start: 14 @48473 has 28 MA's), (Start: 21 @48431 has 2 MA's), (32, 48326), (42, 48239), (43, 48209), (44, 48206), (48, 48176),

Gene: Misfit_112 Start: 64683, Stop: 65057, Start Num: 11
Candidate Starts for Misfit_112:
(Start: 8 @64629 has 1 MA's), (Start: 11 @64683 has 112 MA's), (Start: 21 @64764 has 2 MA's), (22, 64773), (24, 64812), (27, 64833), (37, 64926), (40, 64944), (41, 64947), (45, 64995), (53, 65046),

Gene: Moldemort_113 Start: 63352, Stop: 63726, Start Num: 11
Candidate Starts for Moldemort_113:
(Start: 8 @63298 has 1 MA's), (Start: 11 @63352 has 112 MA's), (18, 63406), (Start: 21 @63433 has 2 MA's), (22, 63442), (24, 63481), (27, 63502), (37, 63595), (40, 63613), (41, 63616), (45, 63664), (53, 63715),

Gene: MollyToe_106 Start: 61460, Stop: 61834, Start Num: 11
Candidate Starts for MollyToe_106:
(Start: 8 @61406 has 1 MA's), (Start: 11 @61460 has 112 MA's), (18, 61514), (Start: 21 @61541 has 2 MA's), (22, 61550), (24, 61589), (27, 61610), (37, 61703), (40, 61721), (41, 61724), (45, 61772), (53, 61823),

Gene: Mosby_108 Start: 63047, Stop: 63421, Start Num: 11
Candidate Starts for Mosby_108:
(Start: 8 @62993 has 1 MA's), (Start: 11 @63047 has 112 MA's), (Start: 21 @63128 has 2 MA's), (22, 63137), (24, 63176), (27, 63197), (37, 63290), (40, 63308), (41, 63311), (45, 63359), (53, 63410),

Gene: MrWormie_51 Start: 47634, Stop: 47269, Start Num: 14
Candidate Starts for MrWormie_51:
(Start: 14 @47634 has 28 MA's), (Start: 21 @47592 has 2 MA's), (32, 47487), (42, 47400), (43, 47370), (44, 47367), (48, 47337),

Gene: Mulch_65 Start: 42205, Stop: 42591, Start Num: 17
Candidate Starts for Mulch_65:

(2, 41965), (3, 42013), (4, 42034), (7, 42088), (12, 42148), (Start: 14 @42193 has 28 MA's), (Start: 17 @42205 has 13 MA's), (Start: 21 @42235 has 2 MA's), (29, 42310), (41, 42412), (48, 42478),

Gene: Murica_115 Start: 65386, Stop: 65760, Start Num: 11
Candidate Starts for Murica_115:
(Start: 8 @65332 has 1 MA's), (Start: 11 @65386 has 112 MA's), (Start: 21 @65467 has 2 MA's), (22, 65476), (24, 65515), (27, 65536), (37, 65629), (40, 65647), (41, 65650), (45, 65698), (53, 65749),

Gene: Murphy_110 Start: 63744, Stop: 64118, Start Num: 11
Candidate Starts for Murphy_110:
(Start: 8 @63690 has 1 MA's), (Start: 11 @63744 has 112 MA's), (18, 63798), (Start: 21 @63825 has 2 MA's), (22, 63834), (24, 63873), (27, 63894), (37, 63987), (40, 64005), (41, 64008), (45, 64056), (53, 64107),

Gene: Myrale_111 Start: 63841, Stop: 64215, Start Num: 11
Candidate Starts for Myrale_111:
(Start: 11 @63841 has 112 MA's), (18, 63895), (Start: 21 @63922 has 2 MA's), (22, 63931), (24, 63970), (27, 63991), (37, 64084), (40, 64102), (41, 64105), (45, 64153), (46, 64159), (48, 64171),

Gene: Nadeem_65 Start: 42193, Stop: 42579, Start Num: 17
Candidate Starts for Nadeem_65:
(2, 41953), (3, 42001), (4, 42022), (7, 42076), (12, 42136), (Start: 14 @42181 has 28 MA's), (Start: 17 @42193 has 13 MA's), (Start: 21 @42223 has 2 MA's), (29, 42298), (41, 42400), (48, 42466),

Gene: Nala_113 Start: 64096, Stop: 64470, Start Num: 11
Candidate Starts for Nala_113:
(Start: 8 @64042 has 1 MA's), (Start: 11 @64096 has 112 MA's), (18, 64150), (Start: 21 @64177 has 2 MA's), (22, 64186), (24, 64225), (27, 64246), (37, 64339), (40, 64357), (41, 64360), (45, 64408), (53, 64459),

Gene: NancyRae_64 Start: 42143, Stop: 42529, Start Num: 17
Candidate Starts for NancyRae_64:
(3, 41951), (4, 41972), (7, 42026), (12, 42086), (Start: 14 @42131 has 28 MA's), (Start: 17 @42143 has 13 MA's), (Start: 21 @42173 has 2 MA's), (29, 42248), (41, 42350), (48, 42416),

Gene: NelitzaMV_108 Start: 62069, Stop: 62443, Start Num: 11
Candidate Starts for NelitzaMV_108:
(Start: 8 @62015 has 1 MA's), (Start: 11 @62069 has 112 MA's), (18, 62123), (Start: 21 @62150 has 2 MA's), (22, 62159), (24, 62198), (27, 62219), (37, 62312), (40, 62330), (41, 62333), (45, 62381), (53, 62432),

Gene: Neoevie_51 Start: 48735, Stop: 48370, Start Num: 14
Candidate Starts for Neoevie_51:
(Start: 14 @48735 has 28 MA's), (Start: 21 @48693 has 2 MA's), (32, 48588), (42, 48501), (43, 48471), (44, 48468), (48, 48438),

Gene: Newt_52 Start: 48963, Stop: 48598, Start Num: 14
Candidate Starts for Newt_52:
(Start: 14 @48963 has 28 MA's), (Start: 21 @48921 has 2 MA's), (32, 48816), (42, 48729), (43, 48699), (44, 48696), (48, 48666),

Gene: Niagara_48 Start: 48582, Stop: 48214, Start Num: 19
Candidate Starts for Niagara_48:

(Start: 19 @48582 has 10 MA's), (Start: 21 @48558 has 2 MA's), (42, 48351), (50, 48282), (55, 48225),

Gene: Nimi13_51 Start: 48482, Stop: 48117, Start Num: 14
Candidate Starts for Nimi13_51:
(Start: 14 @48482 has 28 MA's), (Start: 21 @48440 has 2 MA's), (32, 48335), (42, 48248), (43, 48218), (44, 48215), (48, 48185),

Gene: NoSleep_111 Start: 62904, Stop: 63278, Start Num: 11
Candidate Starts for NoSleep_111:
(Start: 8 @62850 has 1 MA's), (Start: 11 @62904 has 112 MA's), (18, 62958), (Start: 21 @62985 has 2 MA's), (22, 62994), (24, 63033), (27, 63054), (37, 63147), (40, 63165), (41, 63168), (45, 63216), (53, 63267),

Gene: NonchalantPear_111 Start: 62337, Stop: 62711, Start Num: 11
Candidate Starts for NonchalantPear_111:
(Start: 8 @62283 has 1 MA's), (Start: 11 @62337 has 112 MA's), (Start: 21 @62418 has 2 MA's), (22, 62427), (24, 62466), (27, 62487), (37, 62580), (40, 62598), (41, 62601), (45, 62649), (53, 62700),

Gene: OrionPax_109 Start: 62977, Stop: 63351, Start Num: 11
Candidate Starts for OrionPax_109:
(Start: 8 @62923 has 1 MA's), (Start: 11 @62977 has 112 MA's), (18, 63031), (Start: 21 @63058 has 2 MA's), (22, 63067), (24, 63106), (27, 63127), (37, 63220), (40, 63238), (41, 63241), (45, 63289), (53, 63340),

Gene: PaddyBaddy_110 Start: 63095, Stop: 63469, Start Num: 11
Candidate Starts for PaddyBaddy_110:
(Start: 8 @63041 has 1 MA's), (Start: 11 @63095 has 112 MA's), (18, 63149), (Start: 21 @63176 has 2 MA's), (22, 63185), (24, 63224), (27, 63245), (37, 63338), (40, 63356), (41, 63359), (45, 63407), (53, 63458),

Gene: Palpatine_112 Start: 64381, Stop: 64755, Start Num: 11
Candidate Starts for Palpatine_112:
(Start: 8 @64327 has 1 MA's), (Start: 11 @64381 has 112 MA's), (18, 64435), (Start: 21 @64462 has 2 MA's), (22, 64471), (24, 64510), (27, 64531), (37, 64624), (40, 64642), (41, 64645), (45, 64693), (53, 64744),

Gene: Paperbeatsrock_110 Start: 63758, Stop: 64132, Start Num: 11
Candidate Starts for Paperbeatsrock_110:
(Start: 8 @63704 has 1 MA's), (Start: 11 @63758 has 112 MA's), (Start: 21 @63839 has 2 MA's), (22, 63848), (24, 63887), (27, 63908), (37, 64001), (40, 64019), (41, 64022), (45, 64070), (53, 64121),

Gene: Parada_65 Start: 42205, Stop: 42591, Start Num: 17
Candidate Starts for Parada_65:
(2, 41965), (3, 42013), (4, 42034), (7, 42088), (12, 42148), (Start: 14 @42193 has 28 MA's), (Start: 17 @42205 has 13 MA's), (Start: 21 @42235 has 2 MA's), (29, 42310), (41, 42412), (48, 42478),

Gene: Pat3_108 Start: 62397, Stop: 62771, Start Num: 11
Candidate Starts for Pat3_108:
(Start: 11 @62397 has 112 MA's), (18, 62451), (Start: 21 @62478 has 2 MA's), (22, 62487), (24, 62526), (25, 62529), (27, 62547), (37, 62640), (40, 62658), (41, 62661), (45, 62709), (46, 62715), (48, 62727),

Gene: Petra64142_115 Start: 64226, Stop: 64600, Start Num: 11

Candidate Starts for Petra64142_115:
(Start: 8 @64172 has 1 MA's), (Start: 11 @64226 has 112 MA's), (18, 64280), (Start: 21 @64307 has 2 MA's), (22, 64316), (24, 64355), (27, 64376), (37, 64469), (40, 64487), (41, 64490), (45, 64538), (46, 64544), (48, 64556), (53, 64589),

Gene: Phaja_109 Start: 62962, Stop: 63336, Start Num: 11
Candidate Starts for Phaja_109:
(Start: 8 @62908 has 1 MA's), (Start: 11 @62962 has 112 MA's), (18, 63016), (Start: 21 @63043 has 2 MA's), (22, 63052), (24, 63091), (27, 63112), (37, 63205), (40, 63223), (41, 63226), (45, 63274),

Gene: Pharsalus_108 Start: 63457, Stop: 63831, Start Num: 11
Candidate Starts for Pharsalus_108:
(Start: 8 @63403 has 1 MA's), (Start: 11 @63457 has 112 MA's), (Start: 21 @63538 has 2 MA's), (22, 63547), (24, 63586), (27, 63607), (37, 63700), (40, 63718), (41, 63721), (45, 63769), (53, 63820),

Gene: PhatBacter_114 Start: 64126, Stop: 64500, Start Num: 11
Candidate Starts for PhatBacter_114:
(Start: 8 @64072 has 1 MA's), (Start: 11 @64126 has 112 MA's), (18, 64180), (Start: 21 @64207 has 2 MA's), (22, 64216), (24, 64255), (27, 64276), (37, 64369), (40, 64387), (41, 64390), (45, 64438), (53, 64489),

Gene: Phaux_113 Start: 64686, Stop: 65060, Start Num: 11
Candidate Starts for Phaux_113:
(Start: 8 @64632 has 1 MA's), (Start: 11 @64686 has 112 MA's), (18, 64740), (Start: 21 @64767 has 2 MA's), (22, 64776), (24, 64815), (27, 64836), (37, 64929), (40, 64947), (41, 64950), (45, 64998), (53, 65049),

Gene: Philon9_50 Start: 49613, Stop: 49245, Start Num: 19
Candidate Starts for Philon9_50:
(Start: 19 @49613 has 10 MA's), (Start: 21 @49589 has 2 MA's), (29, 49514), (38, 49403), (42, 49382), (50, 49313), (55, 49256),

Gene: Phrux_107 Start: 62764, Stop: 63138, Start Num: 11
Candidate Starts for Phrux_107:
(Start: 8 @62710 has 1 MA's), (Start: 11 @62764 has 112 MA's), (Start: 21 @62845 has 2 MA's), (22, 62854), (24, 62893), (27, 62914), (37, 63007), (40, 63025), (41, 63028), (45, 63076), (53, 63127),

Gene: PierreThree_53 Start: 48715, Stop: 48356, Start Num: 16
Candidate Starts for PierreThree_53:
(Start: 15 @48718 has 9 MA's), (Start: 16 @48715 has 2 MA's), (Start: 21 @48679 has 2 MA's), (29, 48604), (36, 48514), (42, 48487), (44, 48454), (48, 48424), (50, 48418), (54, 48388),

Gene: Pimento_68 Start: 42324, Stop: 42710, Start Num: 17
Candidate Starts for Pimento_68:
(2, 42084), (3, 42132), (4, 42153), (7, 42207), (12, 42267), (Start: 14 @42312 has 28 MA's), (Start: 17 @42324 has 13 MA's), (Start: 21 @42354 has 2 MA's), (29, 42429), (41, 42531), (48, 42597),

Gene: PokyPuppy_53 Start: 48755, Stop: 48393, Start Num: 15
Candidate Starts for PokyPuppy_53:
(Start: 15 @48755 has 9 MA's), (Start: 21 @48716 has 2 MA's), (29, 48641), (30, 48638), (36, 48551), (42, 48524), (44, 48491), (46, 48473), (48, 48461), (50, 48455),

Gene: Policronamos_114 Start: 64390, Stop: 64764, Start Num: 11

Candidate Starts for Policronamos_114:
(Start: 8 @64336 has 1 MA's), (Start: 11 @64390 has 112 MA's), (Start: 21 @64471 has 2 MA's), (22, 64480), (24, 64519), (27, 64540), (37, 64633), (40, 64651), (41, 64654), (45, 64702), (53, 64753),

Gene: Ptowny_107 Start: 61798, Stop: 62172, Start Num: 11
Candidate Starts for Ptowny_107:
(Start: 8 @61744 has 1 MA's), (Start: 11 @61798 has 112 MA's), (Start: 21 @61879 has 2 MA's), (22, 61888), (24, 61927), (27, 61948), (37, 62041), (40, 62059), (41, 62062), (45, 62110), (53, 62161),

Gene: Pumpkin_112 Start: 63104, Stop: 63478, Start Num: 11
Candidate Starts for Pumpkin_112:
(Start: 8 @63050 has 1 MA's), (Start: 11 @63104 has 112 MA's), (Start: 21 @63185 has 2 MA's), (22, 63194), (24, 63233), (27, 63254), (37, 63347), (40, 63365), (41, 63368), (45, 63416), (53, 63467),

Gene: Quallification_112 Start: 64172, Stop: 64546, Start Num: 11
Candidate Starts for Quallification_112:
(Start: 8 @64118 has 1 MA's), (Start: 11 @64172 has 112 MA's), (Start: 21 @64253 has 2 MA's), (22, 64262), (24, 64301), (27, 64322), (37, 64415), (40, 64433), (41, 64436), (45, 64484), (53, 64535),

Gene: Rakim_112 Start: 63174, Stop: 63548, Start Num: 11
Candidate Starts for Rakim_112:
(Start: 8 @63120 has 1 MA's), (Start: 11 @63174 has 112 MA's), (18, 63228), (Start: 21 @63255 has 2 MA's), (22, 63264), (24, 63303), (27, 63324), (37, 63417), (40, 63435), (41, 63438), (45, 63486), (46, 63492), (48, 63504),

Gene: Rimmer_109 Start: 63563, Stop: 63937, Start Num: 11
Candidate Starts for Rimmer_109:
(Start: 8 @63509 has 1 MA's), (Start: 11 @63563 has 112 MA's), (18, 63617), (Start: 21 @63644 has 2 MA's), (22, 63653), (24, 63692), (27, 63713), (37, 63806), (40, 63824), (41, 63827), (45, 63875), (53, 63926),

Gene: RiverMonster_110 Start: 63605, Stop: 64033, Start Num: 8
Candidate Starts for RiverMonster_110:
(Start: 8 @63605 has 1 MA's), (Start: 11 @63659 has 112 MA's), (Start: 21 @63740 has 2 MA's), (22, 63749), (24, 63788), (27, 63809), (37, 63902), (40, 63920), (41, 63923), (45, 63971), (53, 64022),

Gene: RoyalG_53 Start: 48012, Stop: 47650, Start Num: 15
Candidate Starts for RoyalG_53:
(Start: 15 @48012 has 9 MA's), (Start: 17 @48003 has 13 MA's), (Start: 21 @47973 has 2 MA's), (26, 47919), (30, 47895), (48, 47718), (54, 47682),

Gene: Saints25_107 Start: 61589, Stop: 61963, Start Num: 11
Candidate Starts for Saints25_107:
(Start: 8 @61535 has 1 MA's), (Start: 11 @61589 has 112 MA's), (18, 61643), (Start: 21 @61670 has 2 MA's), (22, 61679), (24, 61718), (27, 61739), (37, 61832), (40, 61850), (41, 61853), (45, 61901), (53, 61952),

Gene: Sassay_106 Start: 62009, Stop: 62383, Start Num: 11
Candidate Starts for Sassay_106:
(Start: 8 @61955 has 1 MA's), (Start: 11 @62009 has 112 MA's), (Start: 21 @62090 has 2 MA's), (22, 62099), (24, 62138), (27, 62159), (37, 62252), (40, 62270), (41, 62273), (45, 62321), (53, 62372),

Gene: ShamWow_111 Start: 64057, Stop: 64431, Start Num: 11

Candidate Starts for ShamWow_111:
(Start: 11 @64057 has 112 MA's), (18, 64111), (Start: 21 @64138 has 2 MA's), (22, 64147), (24, 64186), (27, 64207), (37, 64300), (40, 64318), (41, 64321), (45, 64369), (46, 64375), (48, 64387),

Gene: Shelley_51 Start: 47958, Stop: 47593, Start Num: 14
Candidate Starts for Shelley_51:
(Start: 14 @47958 has 28 MA's), (Start: 21 @47916 has 2 MA's), (32, 47811), (42, 47724), (43, 47694), (44, 47691), (48, 47661),

Gene: ShereKhan_109 Start: 64418, Stop: 64792, Start Num: 11
Candidate Starts for ShereKhan_109:
(Start: 8 @64364 has 1 MA's), (Start: 11 @64418 has 112 MA's), (Start: 21 @64499 has 2 MA's), (22, 64508), (24, 64547), (27, 64568), (37, 64661), (40, 64679), (41, 64682), (45, 64730), (53, 64781),

Gene: Simpliphy_109 Start: 63230, Stop: 63604, Start Num: 11
Candidate Starts for Simpliphy_109:
(Start: 8 @63176 has 1 MA's), (Start: 11 @63230 has 112 MA's), (18, 63284), (Start: 21 @63311 has 2 MA's), (22, 63320), (24, 63359), (27, 63380), (37, 63473), (40, 63491), (41, 63494), (45, 63542), (53, 63593),

Gene: SirDuracell_111 Start: 62896, Stop: 63270, Start Num: 11
Candidate Starts for SirDuracell_111:
(Start: 11 @62896 has 112 MA's), (18, 62950), (Start: 21 @62977 has 2 MA's), (22, 62986), (24, 63025), (27, 63046), (37, 63139), (40, 63157), (41, 63160), (45, 63208), (46, 63214), (48, 63226),

Gene: SophKB_109 Start: 63219, Stop: 63593, Start Num: 11
Candidate Starts for SophKB_109:
(Start: 8 @63165 has 1 MA's), (Start: 11 @63219 has 112 MA's), (18, 63273), (Start: 21 @63300 has 2 MA's), (22, 63309), (24, 63348), (27, 63369), (37, 63462), (40, 63480), (41, 63483), (45, 63531), (46, 63537), (48, 63549),

Gene: Sotrice96_112 Start: 63683, Stop: 64057, Start Num: 11
Candidate Starts for Sotrice96_112:
(Start: 8 @63629 has 1 MA's), (Start: 11 @63683 has 112 MA's), (18, 63737), (Start: 21 @63764 has 2 MA's), (22, 63773), (24, 63812), (27, 63833), (37, 63926), (40, 63944), (41, 63947), (45, 63995), (46, 64001), (48, 64013),

Gene: Stark_111 Start: 63543, Stop: 63917, Start Num: 11
Candidate Starts for Stark_111:
(Start: 8 @63489 has 1 MA's), (Start: 11 @63543 has 112 MA's), (Start: 21 @63624 has 2 MA's), (22, 63633), (24, 63672), (27, 63693), (37, 63786), (40, 63804), (41, 63807), (45, 63855), (53, 63906),

Gene: StellaBean_109 Start: 63840, Stop: 64214, Start Num: 11
Candidate Starts for StellaBean_109:
(Start: 8 @63786 has 1 MA's), (Start: 11 @63840 has 112 MA's), (18, 63894), (Start: 21 @63921 has 2 MA's), (22, 63930), (24, 63969), (27, 63990), (37, 64083), (40, 64101), (41, 64104), (45, 64152), (53, 64203),

Gene: SteveFrench_52 Start: 48252, Stop: 47890, Start Num: 15
Candidate Starts for SteveFrench_52:
(Start: 15 @48252 has 9 MA's), (Start: 17 @48243 has 13 MA's), (Start: 21 @48213 has 2 MA's), (26, 48159), (30, 48135), (48, 47958), (54, 47922),

Gene: Sticker17_51 Start: 48473, Stop: 48108, Start Num: 14
Candidate Starts for Sticker17_51:
(Start: 14 @48473 has 28 MA's), (Start: 21 @48431 has 2 MA's), (32, 48326), (42, 48239), (43, 48209), (44, 48206), (48, 48176),

Gene: StolenFromERC_113 Start: 63382, Stop: 63756, Start Num: 11
Candidate Starts for StolenFromERC_113:
(Start: 8 @63328 has 1 MA's), (Start: 11 @63382 has 112 MA's), (Start: 21 @63463 has 2 MA's), (22, 63472), (24, 63511), (27, 63532), (37, 63625), (40, 63643), (41, 63646), (45, 63694), (53, 63745),

Gene: SussRoloMann_65 Start: 42205, Stop: 42591, Start Num: 17
Candidate Starts for SussRoloMann_65:
(2, 41965), (3, 42013), (4, 42034), (7, 42088), (12, 42148), (Start: 14 @42193 has 28 MA's), (Start: 17 @42205 has 13 MA's), (Start: 21 @42235 has 2 MA's), (29, 42310), (41, 42412), (48, 42478),

Gene: Tarkin_110 Start: 64283, Stop: 64657, Start Num: 11
Candidate Starts for Tarkin_110:
(Start: 8 @64229 has 1 MA's), (Start: 11 @64283 has 112 MA's), (Start: 21 @64364 has 2 MA's), (22, 64373), (24, 64412), (27, 64433), (37, 64526), (40, 64544), (41, 64547), (45, 64595), (53, 64646),

Gene: Teal_51 Start: 48940, Stop: 48575, Start Num: 14
Candidate Starts for Teal_51:
(Start: 14 @48940 has 28 MA's), (Start: 21 @48898 has 2 MA's), (32, 48793), (42, 48706), (43, 48676), (44, 48673), (48, 48643),

Gene: TeamEdward_111 Start: 63924, Stop: 64298, Start Num: 11
Candidate Starts for TeamEdward_111:
(Start: 8 @63870 has 1 MA's), (Start: 11 @63924 has 112 MA's), (18, 63978), (Start: 21 @64005 has 2 MA's), (22, 64014), (24, 64053), (27, 64074), (37, 64167), (40, 64185), (41, 64188), (45, 64236), (53, 64287),

Gene: TeardropMSU_107 Start: 62785, Stop: 63159, Start Num: 11
Candidate Starts for TeardropMSU_107:
(Start: 8 @62731 has 1 MA's), (Start: 11 @62785 has 112 MA's), (18, 62839), (Start: 21 @62866 has 2 MA's), (22, 62875), (24, 62914), (27, 62935), (37, 63028), (40, 63046), (41, 63049), (45, 63097), (46, 63103), (48, 63115),

Gene: Teatealatte_49 Start: 48494, Stop: 48126, Start Num: 19
Candidate Starts for Teatealatte_49:
(Start: 19 @48494 has 10 MA's), (Start: 21 @48470 has 2 MA's), (42, 48263), (50, 48194), (55, 48137),

Gene: Teech_49 Start: 48295, Stop: 47927, Start Num: 19
Candidate Starts for Teech_49:
(Start: 19 @48295 has 10 MA's), (Start: 21 @48271 has 2 MA's), (42, 48064), (50, 47995), (55, 47938),

Gene: Terminus_114 Start: 64683, Stop: 65057, Start Num: 11
Candidate Starts for Terminus_114:
(Start: 8 @64629 has 1 MA's), (Start: 11 @64683 has 112 MA's), (Start: 21 @64764 has 2 MA's), (22, 64773), (24, 64812), (27, 64833), (37, 64926), (40, 64944), (41, 64947), (45, 64995), (53, 65046),

Gene: Thimble_113 Start: 62644, Stop: 63018, Start Num: 11
Candidate Starts for Thimble_113:

(Start: 8 @62590 has 1 MA's), (Start: 11 @62644 has 112 MA's), (18, 62698), (Start: 21 @62725 has 2 MA's), (22, 62734), (24, 62773), (27, 62794), (37, 62887), (40, 62905), (41, 62908), (45, 62956), (53, 63007),

Gene: Thresher_112 Start: 64323, Stop: 64697, Start Num: 11
Candidate Starts for Thresher_112:
(Start: 8 @64269 has 1 MA's), (Start: 11 @64323 has 112 MA's), (Start: 21 @64404 has 2 MA's), (22, 64413), (24, 64452), (27, 64473), (37, 64566), (40, 64584), (41, 64587), (45, 64635), (53, 64686),

Gene: Tomaszewski_106 Start: 63221, Stop: 63595, Start Num: 11
Candidate Starts for Tomaszewski_106:
(Start: 8 @63167 has 1 MA's), (Start: 11 @63221 has 112 MA's), (Start: 21 @63302 has 2 MA's), (22, 63311), (24, 63350), (27, 63371), (37, 63464), (40, 63482), (41, 63485), (45, 63533), (53, 63584),

Gene: Toto_109 Start: 64057, Stop: 64431, Start Num: 11
Candidate Starts for Toto_109:
(Start: 11 @64057 has 112 MA's), (18, 64111), (Start: 21 @64138 has 2 MA's), (22, 64147), (24, 64186), (27, 64207), (37, 64300), (40, 64318), (41, 64321), (45, 64369), (46, 64375), (48, 64387),

Gene: Traaww1_107 Start: 62606, Stop: 62980, Start Num: 11
Candidate Starts for Traaww1_107:
(Start: 11 @62606 has 112 MA's), (18, 62660), (Start: 21 @62687 has 2 MA's), (22, 62696), (24, 62735), (25, 62738), (27, 62756), (37, 62849), (40, 62867), (41, 62870), (45, 62918), (46, 62924), (48, 62936),

Gene: Tredge_49 Start: 48494, Stop: 48126, Start Num: 19
Candidate Starts for Tredge_49:
(Start: 19 @48494 has 10 MA's), (Start: 21 @48470 has 2 MA's), (42, 48263), (50, 48194), (55, 48137),

Gene: Tuco_112 Start: 64844, Stop: 65218, Start Num: 11
Candidate Starts for Tuco_112:
(Start: 8 @64790 has 1 MA's), (Start: 11 @64844 has 112 MA's), (18, 64898), (Start: 21 @64925 has 2 MA's), (22, 64934), (24, 64973), (27, 64994), (37, 65087), (40, 65105), (41, 65108), (45, 65156), (46, 65162), (48, 65174),

Gene: Vitaenoii_50 Start: 49612, Stop: 49244, Start Num: 19
Candidate Starts for Vitaenoii_50:
(Start: 19 @49612 has 10 MA's), (Start: 21 @49588 has 2 MA's), (29, 49513), (38, 49402), (42, 49381), (50, 49312), (55, 49255),

Gene: WheatThin_64 Start: 42193, Stop: 42579, Start Num: 17
Candidate Starts for WheatThin_64:
(2, 41953), (3, 42001), (4, 42022), (7, 42076), (12, 42136), (Start: 14 @42181 has 28 MA's), (Start: 17 @42193 has 13 MA's), (Start: 21 @42223 has 2 MA's), (29, 42298), (41, 42400), (48, 42466),

Gene: Willez_106 Start: 62009, Stop: 62383, Start Num: 11
Candidate Starts for Willez_106:
(Start: 8 @61955 has 1 MA's), (Start: 11 @62009 has 112 MA's), (Start: 21 @62090 has 2 MA's), (22, 62099), (24, 62138), (27, 62159), (37, 62252), (40, 62270), (41, 62273), (45, 62321), (53, 62372),

Gene: Woes_51 Start: 48991, Stop: 48626, Start Num: 14
Candidate Starts for Woes_51:

(Start: 14 @48991 has 28 MA's), (Start: 21 @48949 has 2 MA's), (32, 48844), (42, 48757), (43, 48727), (44, 48724), (48, 48694),

Gene: YassJohnny_108 Start: 62030, Stop: 62404, Start Num: 11
Candidate Starts for YassJohnny_108:
(Start: 8 @61976 has 1 MA's), (Start: 11 @62030 has 112 MA's), (Start: 21 @62111 has 2 MA's), (22, 62120), (24, 62159), (27, 62180), (37, 62273), (40, 62291), (41, 62294), (45, 62342), (53, 62393),

Gene: Youngblood_115 Start: 64179, Stop: 64553, Start Num: 11
Candidate Starts for Youngblood_115:
(Start: 8 @64125 has 1 MA's), (Start: 11 @64179 has 112 MA's), (Start: 21 @64260 has 2 MA's), (22, 64269), (24, 64308), (27, 64329), (37, 64422), (40, 64440), (41, 64443), (45, 64491), (53, 64542),

Gene: xkcd_115 Start: 64364, Stop: 64738, Start Num: 11
Candidate Starts for xkcd_115:
(Start: 8 @64310 has 1 MA's), (Start: 11 @64364 has 112 MA's), (Start: 21 @64445 has 2 MA's), (22, 64454), (24, 64493), (27, 64514), (37, 64607), (40, 64625), (41, 64628), (45, 64676), (53, 64727),