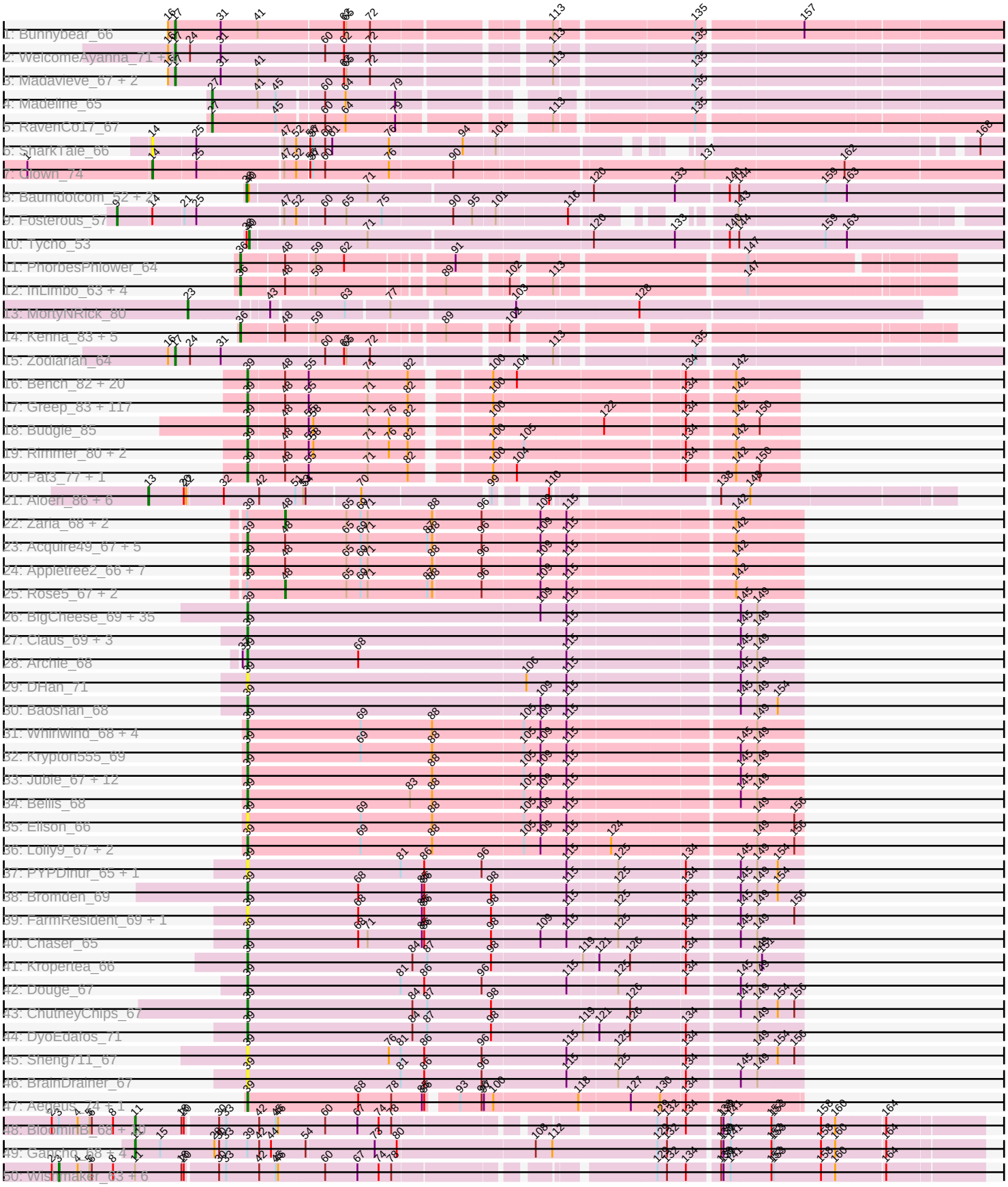
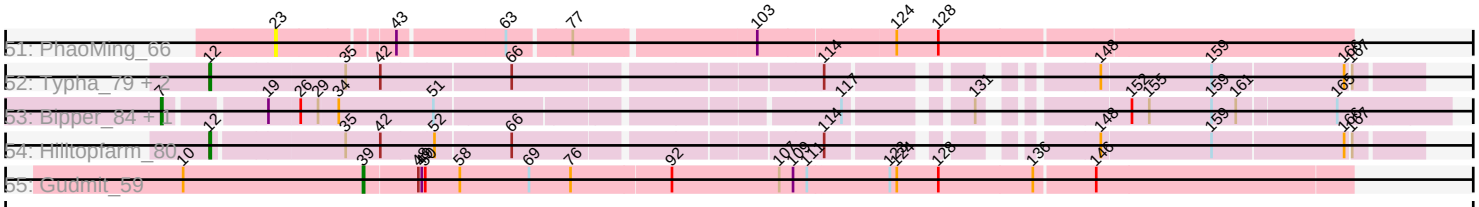
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1: Bunnybear_66
2: WelcomeAyanna_71 + 1
3: Madavieve_67 + 2
4: Madeline_65
5: RavenC017_67
6: SharkTale_66
7: Clown_74
8: Baumdotcom_52 + 2
9: Fosterous_57
10: Tycho_53
11: PhorbesPhlower_64
12: InLimbo_63 + 4
13: MortyNRick_80
14: Kenna_83 + 5
15: Zodiarian_64
16: Bench_82 + 20
17: Greep_83 + 117
18: Budgie_85
19: Rimmer_80 + 2
20: Pat3_77 + 1
21: Aloen_86 + 6
22: Zaria_68 + 2
23: Acquire49_67 + 5
24: Appletree2_66 + 7
25: Rose5_67 + 2
26: BigCheese_69 + 35
27: Claus_69 + 3
28: Archie_68
29: DHan_71
30: Baoshan_68
31: Whirlwind_68 + 4
32: Krypton555_69
33: Jubie_67 + 12
34: Bellis_68
35: Ellson_66
36: Lolly9_67 + 2
37: PYPDinur_65 + 1
38: Bromden_69
39: FarmResident_69 + 1
40: Chaser_65
41: Kropertea_66
42: Douge_67
43: ChutneyChips_67
44: DyoEdalos_71
45: Sheng711_67
46: BrainDrainer_67
47: Aequus_74 + 1
48: BloominBit_68 + 10
49: Gaiyang_83 + 4
50: Wishmaker_63 + 6

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51: PhaoMing_66
52: Typha_79 +2
53: Bipper_84 +1
54: Hilltopfarm_80
55: Gudmit_59

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 347161 Report

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

Pham number 347161 has 313 members, 40 are drafts.

Phages represented in each track:
• Track 1 : Bunnybear_66
• Track 2 : WelcomeAyanna_71, ThankyouJordi_71
• Track 3 : Madavieve_67, SushiChef_71, Maridalia_71
• Track 4 : Madeline_65
• Track 5 : RavenCo17_67
• Track 6 : SharkTale_66
• Track 7 : Clown_74
• Track 8 : Baumdotcom_52, StorminNorm_53, LilHam_51
• Track 9 : Fosterous_57
• Track 10 : Tycho_53
• Track 11 : PhorbesPhlower_64
• Track 12 : InLimbo_63, OneDirection_60, Kuwabara_84, Morkie_66, Lton_63
• Track 13 : MortyNRick_80
• Track 14 : Kenna_83, Lutum_89, BENtherdunthat_88, Phabuloso_95, Getalong_91, BotCity_90
• Track 15 : Zodiariah_64
• Track 16 : Bench_82, Thimble_80, Amao_79, Miniwave_74, Pumpkin_82, TeardropMSU_75, Cookies_76, ChotaBhai_79, SirDuracell_78, JeTaime_79, Tarkin_78, Lilizi_80, Pharsalus_76, PhatBacter_83, Phaja_77, Bask21_79, DoctorDiddles_78, StormChicken_81, Xandras_78, Paperbeatsrock_78, YassJohnny_76
• Track 17 : Greep_83, Marshmallow_77, HufflyPuff_82, Icee_80, Barbarian_78, Dumbo_79, MISSy_80, AmericanBeauty_83, Filch_80, PaddyBaddy_79, Kimchi_83, ShereKhan_77, Traaww1_75, Bogg_79, Ukulele_74, FairyPath_80, Czyszczon1_80, Kostya_79, 244_80, Petra64142_83, Maxxinista_81, Porky_78, SophKB_76, Misfit_80, Highbury_78, NelitzaMV_77, FoghornLeghorn_73, FireRed_83, Thresher_81, Eureka_77, Myrale_79, TBrady12_82, Flypotenuse_75, Mosby_75, RiverMonster_79, Quallification_80, Hoonter_82, BilboSwaggins_77, Murica_82, BigBubba_79, IHOP_77, Hopey_79, Sassay_74, Elph10_79, Harella_79, Policronamos_82, Toto_77, Murphy_79, Youngblood_82, Stark_80, Balomoji_79, Inca_76, Sotrice96_80, Dusk_76, NonchalantPear_79, Glexan_78, Manda_80, Easy2Say_80, Brewer_75, Gator_77, Kanye_76, Teaspoon_80, Nimrod_80, Saints25_78, Livelaughbron_81, Phrux_76, Cactus_82, Elite2014_78, Buck_80, Cjw1_79, BugsBunny_79, Palpatine_81, Emmina_79, Daikon_81, Willez_74, NoSleep_80, Wiggin_81, Stank_82, Nala_81, Goku_77, Henry_77, Moldemort_82, Command613_81, BadStone_76, Argent26_83, Asriel_78, GooberAzure_82, BaboJay_76, MadamMonkfish_79, Contagion_75, Terminus_82, xkcd_82, ABCat_76,

Lilpickle_78, Phaux_81, Bruin_76, Holt_84, Gemini_84, HanKaySha_79, Ptowny_76, Mindy_78, Gage_81, Lilac_81, OrionPax_78, Becksu_78, DrDrey_79, ChosenOne_79, Goldilocks_82, Adnama_83, Tuco_80, StolenFromERC_82, MPhalcon_80, ShamWow_79, StellaBean_77, CrystalP_78, Simpliphy_78, GoldenSpark_83, Rakim_80
• Track 18 : Budgie_85
• Track 19 : Rimmer_80, MollyToe_74, TeamEdward_81
• Track 20 : Pat3_77, Tomaszewski_74
• Track 21 : Aloeri_86, TootsiePop_84, Awesomesauce_85, Misha28_84, LilSpotty_80, ChickenDinner_85, DocMcStuffins_82
• Track 22 : Zaria_68, Wyatt2_68, DirkDirk_64
• Track 23 : Acquire49_67, JoeDirt_67, Silverleaf_67, Poochiewood_66, Wamburgrxpress_67, CicholasNage_65
• Track 24 : Appletree2_66, OhShagHennessy_65, UPIE_66, Enceladus_64, Halena_65, LeBron_66, Calm_68, MAckerman_65
• Track 25 : Rose5_67, AvadaKedavra_67, Tyson_68
• Track 26 : BigCheese_69, ChengKai98_70, Faith1_69, SoJulia_70, Wigglewiggle_69, Gabriela_66, Soap141_69, DrSeegs_69, Zakai_70, Finemlucis_69, GuuelaD_67, BobsGarage_69, Gardann_70, Nicholasp3_69, Lewan_70, Hiraya_70, Sarshaun_70, Breezona_69, Crossroads_69, Underpass_60, Rumpelstiltskin_68, Itos_68, LilDestine_69, Molivier_61, Vetrix_69, Miley16_69, OverPar_70, Wilder_70, MkaliMitinis3_70, Loadrie_68, Hafay_71, Lynnae_71, Rossetti_71, Netyap_70, Kahlid_69, Winky_69
• Track 27 : Claus_69, ZhongYanYuan_68, DanBing_70, Tourach_68
• Track 28 : Archie_68
• Track 29 : DHan_71
• Track 30 : Baoshan_68
• Track 31 : Whirlwind_68, DuncansLeg_68, KirDoubleO7_66, BourbonZero_69, LiyuLake_67
• Track 32 : Krypton555_69
• Track 33 : Jubie_67, Moostard_66, Snenia_67, Clautastrophe_67, Jobypre_68, Kingsolomon_66, TriFive_69, Lumos_69, Red305_69, MsGreen_68, Nicholas_66, Samty_68, Finnry_68
• Track 34 : Bellis_68
• Track 35 : Ellson_66
• Track 36 : Lolly9_67, MiniMac_71, MiniLon_71
• Track 37 : PYPDinur_65, Douzhi_67
• Track 38 : Bromden_69
• Track 39 : FarmResident_69, Quby_67
• Track 40 : Chaser_65
• Track 41 : Kropertea_66
• Track 42 : Douge_67
• Track 43 : ChutneyChips_67
• Track 44 : DyoEdafos_71
• Track 45 : Sheng711_67
• Track 46 : BrainDrainer_67
• Track 47 : Aegeus_74, Baudelaire_74
• Track 48 : BloominB_68, Ein37_69, HH92_68, Ubuntu_69, Kinbote_67, Luna22_63, DeepSoil15_69, Webster2_69, LilHazelnut_69, Amymech_69, Evanesce_68
• Track 49 : Gancho_68, OBUpride_68, Daegal_72, Gravaillia_64, Amochick_70
• Track 50 : Wishmaker_63, Giles_63, Luke_67, Dewey_63, Hail_63, Hadrien_67, Forge_63
• Track 51 : PhaoMing_66

• Track 52 : Typha_79, AuntGwenStacy_80, Faiyaz_81
• Track 53 : Bipper_84, Cracklewink_84
• Track 54 : Hilltopfarm_80
• Track 55 : Gudmit_59

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

The start number called the most often in the published annotations is 39, it was called in 206 of the 273 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 244_80, ABCat_76, Acquire49_67, Adnama_83, Aegeus_74, Amao_79, AmericanBeauty_83, Appletree2_66, Archie_68, Argent26_83, Asriel_78, BaboJay_76, BadStone_76, Balomoji_79, Baoshan_68, Barbarian_78, Bask21_79, Baudelaire_74, Becksu_78, Bellis_68, Bench_82, BigBubba_79, BigCheese_69, BilboSwaggins_77, BobsGarage_69, Bogg_79, BourbonZero_69, BrainDrainer_67, Breezona_69, Brewer_75, Bromden_69, Bruin_76, Buck_80, Budgie_85, BugsBunny_79, Cactus_82, Calm_68, Chaser_65, ChengKai98_70, ChosenOne_79, ChotaBhai_79, ChutneyChips_67, CicholasNage_65, Cjw1_79, Claus_69, Clautastrophe_67, Command613_81, Contagion_75, Cookies_76, Crossroads_69, CrystalP_78, Czyszczon1_80, DHan_71, Daikon_81, DanBing_70, DoctorDiddles_78, Douge_67, Douzhi_67, DrDrey_79, DrSeegs_69, Dumbo_79, DuncansLeg_68, Dusk_76, DyoEdafos_71, Easy2Say_80, Elite2014_78, Ellson_66, Elph10_79, Emmina_79, Enceladus_64, Eureka_77, FairyPath_80, Faith1_69, FarmResident_69, Filch_80, Finemlucis_69, Finnry_68, FireRed_83, Flypotenuse_75, FoghornLeghorn_73, Gabriela_66, Gage_81, Gardann_70, Gator_77, Gemini_84, Glexan_78, Goku_77, GoldenSpark_83, Goldilocks_82, GooberAzure_82, Greep_83, Gudmit_59, GuuelaD_67, Hafay_71, Halena_65, HanKaySha_79, Harella_79, Henry_77, Highbury_78, Hiraya_70, Holt_84, Hoonter_82, Hopey_79, HufflyPuff_82, IHOP_77, Icee_80, Inca_76, Itos_68, JeTaime_79, Jobypre_68, JoeDirt_67, Jubie_67, Kahlid_69, Kanye_76, Kimchi_83, Kingsolomon_66, KirDoubleO7_66, Kostya_79, Kropertea_66, Krypton555_69, LeBron_66, Lewan_70, LilDestine_69, Lilac_81, Lilizi_80, Lilpickle_78, Livelaughbron_81, LiyuLake_67, Loadrie_68, Lolly9_67, Lumos_69, Lynnae_71, MAckerman_65, MISSy_80, MPhalcon_80, MadamMonkfish_79, Manda_80, Marshmallow_77, Maxxinista_81, Miley16_69, Mindy_78, MiniLon_71, MiniMac_71, Miniwave_74, Misfit_80, MkaliMitinis3_70, Moldemort_82, Molivier_61, MollyToe_74, Moostard_66, Mosby_75, MsGreen_68, Murica_82, Murphy_79, Myrale_79, Nala_81, NelitzaMV_77, Netyap_70, Nicholas_66, Nicholasp3_69, Nimrod_80, NoSleep_80, NonchalantPear_79, OhShagHennessy_65, OrionPax_78, OverPar_70, PYPDinur_65, PaddyBaddy_79, Palpatine_81, Paperbeatsrock_78, Pat3_77, Petra64142_83, Phaja_77, Pharsalus_76, PhatBacter_83, Phaux_81, Phrux_76, Policronamos_82, Poochiewood_66, Porky_78, Ptowny_76, Pumpkin_82, Quallification_80, Quby_67, Rakim_80, Red305_69, Rimmer_80, RiverMonster_79, Rossetti_71, Rumpelstiltskin_68, Saints25_78, Samty_68, Sarshaun_70, Sassay_74, ShamWow_79, Sheng711_67, ShereKhan_77, Silverleaf_67, Simpliphy_78, SirDuracell_78, Snenia_67, SoJulia_70, Soap141_69, SophKB_76, Sotrice96_80, Stank_82, Stark_80, StellaBean_77, StolenFromERC_82, StormChicken_81, TBrady12_82, Tarkin_78, TeamEdward_81, TeardropMSU_75, Teaspoon_80, Terminus_82, Thimble_80, Thresher_81, Tomaszewski_74, Toto_77, Tourach_68,

Traaww1_75, TriFive_69, Tuco_80, UPIE_66, Ukulele_74, Underpass_60, Vetrix_69, Wamburgrxpress_67, Whirlwind_68, Wiggin_81, Wigglewiggle_69, Wilder_70, Willez_74, Winky_69, Xandras_78, YassJohnny_76, Youngblood_82, Zakai_70, ZhongYanYuan_68, xkcd_82,

Genes that have the "Most Annotated" start but do not call it:
• Amochick_70, AvadaKedavra_67, Daegal_72, DirkDirk_64, Gancho_68, Gravaillia_64, OBUpride_68, Rose5_67, Tyson_68, Wyatt2_68, Zaria_68,

Genes that do not have the "Most Annotated" start:
• Aloeri_86, Amymech_69, AuntGwenStacy_80, Awesomesauce_85, BENtherdunthat_88, Baumdotcom_52, Bipper_84, BloominB_68, BotCity_90, Bunnybear_66, ChickenDinner_85, Clown_74, Cracklewink_84, DeepSoil15_69, Dewey_63, DocMcStuffins_82, Ein37_69, Evanesce_68, Faiyaz_81, Forge_63, Fosterous_57, Getalong_91, Giles_63, HH92_68, Hadrien_67, Hail_63, Hilltopfarm_80, InLimbo_63, Kenna_83, Kinbote_67, Kuwabara_84, LilHam_51, LilHazelnut_69, LilSpotty_80, Lton_63, Luke_67, Luna22_63, Lutum_89, Madavieve_67, Madeline_65, Maridalia_71, Misha28_84, Morkie_66, MortyNRick_80, OneDirection_60, Phabuloso_95, PhaoMing_66, PhorbesPhlower_64, RavenCo17_67, SharkTale_66, StorminNorm_53, SushiChef_71, ThankyouJordi_71, TootsiePop_84, Tycho_53, Typha_79, Ubuntu_69, Webster2_69, WelcomeAyanna_71, Wishmaker_63, Zodiariah_64,

Summary by start number:

Start 3:
• Found in 18 of 313 (5.8%) of genes in pham
• Manual Annotations of this start: 7 of 273
• Called 38.9% of time when present
• Phage (with cluster) where this start called: Dewey_63 (Q), Forge_63 (Q), Giles_63 (Q), Hadrien_67 (Q), Hail_63 (Q), Luke_67 (Q), Wishmaker_63 (Q),

Start 7:
• Found in 2 of 313 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_84 (Y), Cracklewink_84 (Y),

Start 9:
• Found in 1 of 313 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fosterous_57 (DE1),

Start 11:
• Found in 23 of 313 (7.3%) of genes in pham
• Manual Annotations of this start: 16 of 273
• Called 69.6% of time when present
• Phage (with cluster) where this start called: Amochick_70 (Q), Amymech_69 (Q), BloominB_68 (Q), Daegal_72 (Q), DeepSoil15_69 (Q), Ein37_69 (Q), Evanesce_68 (Q), Gancho_68 (Q), Gravaillia_64 (Q), HH92_68 (Q), Kinbote_67 (Q), LilHazelnut_69 (Q), Luna22_63 (Q), OBUpride_68 (Q), Ubuntu_69 (Q), Webster2_69 (Q),

Start 12:
• Found in 4 of 313 (1.3%) of genes in pham
• Manual Annotations of this start: 4 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AuntGwenStacy_80 (Y), Faiyaz_81 (Y), Hilltopfarm_80 (Y), Typha_79 (Y),

Start 13:
• Found in 7 of 313 (2.2%) of genes in pham
• Manual Annotations of this start: 7 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aloeri_86 (F1), Awesomesauce_85 (F1), ChickenDinner_85 (F1), DocMcStuffins_82 (F1), LilSpotty_80 (singleton), Misha28_84 (F1), TootsiePop_84 (F1),

Start 14:
• Found in 3 of 313 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 273
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Clown_74 (DC2), SharkTale_66 (DC1),

Start 17:
• Found in 7 of 313 (2.2%) of genes in pham
• Manual Annotations of this start: 5 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bunnybear_66 (CZ), Madavieve_67 (CZ1), Maridalia_71 (CZ1), SushiChef_71 (CZ), ThankyouJordi_71 (CZ1), WelcomeAyanna_71 (CZ1), Zodiariah_64 (DW),

Start 23:
• Found in 2 of 313 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MortyNRick_80 (DN), PhaoMing_66 (UNK),

Start 27:
• Found in 2 of 313 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madeline_65 (CZ1), RavenCo17_67 (CZ8),

Start 36:
• Found in 12 of 313 (3.8%) of genes in pham
• Manual Annotations of this start: 11 of 273
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BENtherdunthat_88 (DN1), BotCity_90 (DN), Getalong_91 (DN1), InLimbo_63 (DH), Kenna_83 (DN1), Kuwabara_84 (DN4), Lton_63 (CZ), Lutum_89 (DN1), Morkie_66 (DH), OneDirection_60 (CZ6), Phabuloso_95 (DN1), PhorbesPhlower_64 (DH),

Start 38:

• Found in 4 of 313 (1.3%) of genes in pham
• Manual Annotations of this start: 3 of 273
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Baumdotcom_52 (DE1), LilHam_51 (DE1), StorminNorm_53 (DE1),

Start 39:
• Found in 252 of 313 (80.5%) of genes in pham
• Manual Annotations of this start: 206 of 273
• Called 95.6% of time when present
• Phage (with cluster) where this start called: 244_80 (E), ABCat_76 (E), Acquire49_67 (L1), Adnama_83 (E), Aegeus_74 (L5), Amao_79 (E), AmericanBeauty_83 (E), Appletree2_66 (L1), Archie_68 (L2), Argent26_83 (E), Asriel_78 (E), BaboJay_76 (E), BadStone_76 (E), Balomoji_79 (E), Baoshan_68 (L2), Barbarian_78 (E), Bask21_79 (E), Baudelaire_74 (L5), Becksu_78 (E), Bellis_68 (L3), Bench_82 (E), BigBubba_79 (E), BigCheese_69 (L2), BilboSwaggins_77 (E), BobsGarage_69 (L2), Bogg_79 (E), BourbonZero_69 (L3), BrainDrainer_67 (L4), Breezona_69 (L2), Brewer_75 (E), Bromden_69 (L4), Bruin_76 (E), Buck_80 (E), Budgie_85 (E), BugsBunny_79 (E), Cactus_82 (E), Calm_68 (L1), Chaser_65 (L4), ChengKai98_70 (L2), ChosenOne_79 (E), ChotaBhai_79 (E), ChutneyChips_67 (L4), CicholasNage_65 (L1), Cjw1_79 (E), Claus_69 (L2), Clautastrophe_67 (L3), Command613_81 (E), Contagion_75 (E), Cookies_76 (E), Crossroads_69 (L2), CrystalP_78 (E), Czyszczon1_80 (E), DHan_71 (L2), Daikon_81 (E), DanBing_70 (L2), DoctorDiddles_78 (E), Douge_67 (L4), Douzhi_67 (L4), DrDrey_79 (E), DrSeegs_69 (L2), Dumbo_79 (E), DuncansLeg_68 (L3), Dusk_76 (E), DyoEdafos_71 (L4), Easy2Say_80 (E), Elite2014_78 (E), Ellson_66 (L3), Elph10_79 (E), Emmina_79 (E), Enceladus_64 (L1), Eureka_77 (E), FairyPath_80 (E), Faith1_69 (L2), FarmResident_69 (L4), Filch_80 (E), Finemlucis_69 (L2), Finnry_68 (L3), FireRed_83 (E), Flypotenuse_75 (E), FoghornLeghorn_73 (E), Gabriela_66 (L2), Gage_81 (E), Gardann_70 (L2), Gator_77 (E), Gemini_84 (E), Glexan_78 (E), Goku_77 (E), GoldenSpark_83 (E), Goldilocks_82 (E), GooberAzure_82 (E), Greep_83 (E), Gudmit_59 (singleton), GuuelaD_67 (L2), Hafay_71 (L2), Halena_65 (L1), HanKaySha_79 (E), Harella_79 (E), Henry_77 (E), Highbury_78 (E), Hiraya_70 (L2), Holt_84 (E), Hoonter_82 (E), Hopey_79 (E), HufflyPuff_82 (E), IHOP_77 (E), Icee_80 (E), Inca_76 (E), Itos_68 (L2), JeTaime_79 (E), Jobypre_68 (L3), JoeDirt_67 (L1), Jubie_67 (L3), Kahlid_69 (L2), Kanye_76 (E), Kimchi_83 (E), Kingsolomon_66 (L3), KirDoubleO7_66 (L3), Kostya_79 (E), Kropertea_66 (L4), Krypton555_69 (L3), LeBron_66 (L1), Lewan_70 (L2), LilDestine_69 (L2), Lilac_81 (E), Lilizi_80 (E), Lilpickle_78 (E), Livelaughbron_81 (E), LiyuLake_67 (L3), Loadrie_68 (L2), Lolly9_67 (L3), Lumos_69 (L3), Lynnae_71 (L2), MAckerman_65 (L1), MISSy_80 (E), MPhalcon_80 (E), MadamMonkfish_79 (E), Manda_80 (E), Marshmallow_77 (E), Maxxinista_81 (E), Miley16_69 (L2), Mindy_78 (E), MiniLon_71 (L3), MiniMac_71 (L3), Miniwave_74 (E), Misfit_80 (E), MkaliMitinis3_70 (L2), Moldemort_82 (E), Molivier_61 (L2), MollyToe_74 (E), Moostard_66 (L3), Mosby_75 (E), MsGreen_68 (L3), Murica_82 (E), Murphy_79 (E), Myrale_79 (E), Nala_81 (E), NelitzaMV_77 (E), Netyap_70 (L2), Nicholas_66 (L3), Nicholasp3_69 (L2), Nimrod_80 (E), NoSleep_80 (E), NonchalantPear_79 (E), OhShagHennessy_65 (L1), OrionPax_78 (E), OverPar_70 (L2), PYPDinur_65 (L4), PaddyBaddy_79 (E), Palpatine_81 (E), Paperbeatsrock_78 (E), Pat3_77 (E), Petra64142_83 (E), Phaja_77 (E), Pharsalus_76 (E), PhatBacter_83 (E), Phaux_81 (E), Phrux_76 (E), Policronamos_82 (E), Poochiewood_66 (L1), Porky_78 (E), Ptowny_76 (E), Pumpkin_82 (E), Quallification_80 (E), Quby_67 (L4), Rakim_80 (E), Red305_69 (L3), Rimmer_80 (E), RiverMonster_79 (E), Rossetti_71 (L2), Rumpelstiltskin_68 (L2), Saints25_78 (E),

Samty_68 (L3), Sarshaun_70 (L2), Sassay_74 (E), ShamWow_79 (E), Sheng711_67 (L4), ShereKhan_77 (E), Silverleaf_67 (L1), Simpliphy_78 (E), SirDuracell_78 (E), Snenia_67 (L3), SoJulia_70 (L2), Soap141_69 (L2), SophKB_76 (E), Sotrice96_80 (E), Stank_82 (E), Stark_80 (E), StellaBean_77 (E), StolenFromERC_82 (E), StormChicken_81 (E), TBrady12_82 (E), Tarkin_78 (E), TeamEdward_81 (E), TeardropMSU_75 (E), Teaspoon_80 (E), Terminus_82 (E), Thimble_80 (E), Thresher_81 (E), Tomaszewski_74 (E), Toto_77 (E), Tourach_68 (L2), Traaww1_75 (E), TriFive_69 (L3), Tuco_80 (E), UPIE_66 (L1), Ukulele_74 (E), Underpass_60 (L2), Vetrix_69 (L2), Wamburgrxpress_67 (L1), Whirlwind_68 (L3), Wiggin_81 (E), Wigglewiggle_69 (L2), Wilder_70 (L2), Willez_74 (E), Winky_69 (L2), Xandras_78 (E), YassJohnny_76 (E), Youngblood_82 (E), Zakai_70 (L2), ZhongYanYuan_68 (L2), xkcd_82 (E),

Start 40:
• Found in 4 of 313 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 273
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Tycho_53 (DE1),

Start 48:
• Found in 178 of 313 (56.9%) of genes in pham
• Manual Annotations of this start: 6 of 273
• Called 3.4% of time when present
• Phage (with cluster) where this start called: AvadaKedavra_67 (L1), DirkDirk_64 (L1), Rose5_67 (L1), Tyson_68 (L1), Wyatt2_68 (L1), Zaria_68 (L1),

Summary by clusters:

There are 23 clusters represented in this pham: DN, singleton, DH, CZ1, CZ6, CZ8, DW, DN4, DN1, E, Q, CZ, L4, L5, L2, L3, L1, Y, UNK, DC2, DC1, F1, DE1,

Info for manual annotations of cluster CZ:
•Start number 17 was manually annotated 1 time for cluster CZ.
•Start number 36 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 17 was manually annotated 3 times for cluster CZ1.
•Start number 27 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ6:
•Start number 36 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ8:
•Start number 27 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DC2:
•Start number 14 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:
•Start number 9 was manually annotated 1 time for cluster DE1.
•Start number 38 was manually annotated 3 times for cluster DE1.
•Start number 40 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DH:
•Start number 36 was manually annotated 2 times for cluster DH.

Info for manual annotations of cluster DN:
•Start number 23 was manually annotated 1 time for cluster DN.
•Start number 36 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 36 was manually annotated 5 times for cluster DN1.

Info for manual annotations of cluster DN4:
•Start number 36 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DW:
•Start number 17 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster E:
•Start number 39 was manually annotated 134 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 13 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster L1:
•Start number 39 was manually annotated 13 times for cluster L1.
•Start number 48 was manually annotated 6 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 39 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:
•Start number 39 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 39 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 39 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster Q:
•Start number 3 was manually annotated 7 times for cluster Q.
•Start number 11 was manually annotated 16 times for cluster Q.

Info for manual annotations of cluster Y:
•Start number 7 was manually annotated 2 times for cluster Y.
•Start number 12 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: 244_80 Start: 49149, Stop: 49799, Start Num: 39

Candidate Starts for 244_80:
(Start: 39 @49149 has 206 MA's), (Start: 48 @49194 has 6 MA's), (55, 49224), (71, 49299), (82, 49350), (100, 49437), (134, 49665), (142, 49722),

Gene: ABCat_76 Start: 49502, Stop: 50152, Start Num: 39
Candidate Starts for ABCat_76:
(Start: 39 @49502 has 206 MA's), (Start: 48 @49547 has 6 MA's), (55, 49577), (71, 49652), (82, 49703), (100, 49790), (134, 50018), (142, 50075),

Gene: Acquire49_67 Start: 45384, Stop: 46061, Start Num: 39
Candidate Starts for Acquire49_67:
(Start: 39 @45384 has 206 MA's), (Start: 48 @45432 has 6 MA's), (65, 45510), (69, 45528), (71, 45537), (87, 45612), (88, 45618), (96, 45678), (109, 45750), (115, 45780), (142, 45978),

Gene: Adnama_83 Start: 49528, Stop: 50178, Start Num: 39
Candidate Starts for Adnama_83:
(Start: 39 @49528 has 206 MA's), (Start: 48 @49573 has 6 MA's), (55, 49603), (71, 49678), (82, 49729), (100, 49816), (134, 50044), (142, 50101),

Gene: Aegeus_74 Start: 47464, Stop: 48126, Start Num: 39
Candidate Starts for Aegeus_74:
(Start: 39 @47464 has 206 MA's), (68, 47605), (78, 47647), (85, 47686), (86, 47689), (93, 47719), (96, 47746), (97, 47749), (100, 47761), (118, 47863), (127, 47923), (130, 47959), (134, 47989),

Gene: Aloeri_86 Start: 50555, Stop: 51472, Start Num: 13
Candidate Starts for Aloeri_86:
(Start: 13 @50555 has 7 MA's), (20, 50600), (22, 50603), (32, 50648), (42, 50693), (51, 50738), (53, 50747), (54, 50750), (70, 50813), (99, 50963), (110, 51011), (138, 51194), (148, 51230),

Gene: Amao_79 Start: 48922, Stop: 49572, Start Num: 39
Candidate Starts for Amao_79:
(Start: 39 @48922 has 206 MA's), (Start: 48 @48967 has 6 MA's), (55, 48997), (71, 49072), (82, 49123), (100, 49210), (104, 49237), (134, 49438), (142, 49495),

Gene: AmericanBeauty_83 Start: 49671, Stop: 50321, Start Num: 39
Candidate Starts for AmericanBeauty_83:
(Start: 39 @49671 has 206 MA's), (Start: 48 @49716 has 6 MA's), (55, 49746), (71, 49821), (82, 49872), (100, 49959), (134, 50187), (142, 50244),

Gene: Amochick_70 Start: 46259, Stop: 47293, Start Num: 11
Candidate Starts for Amochick_70:
(Start: 11 @46259 has 16 MA's), (15, 46289), (28, 46355), (30, 46361), (33, 46370), (Start: 39 @46397 has 206 MA's), (42, 46412), (44, 46427), (54, 46469), (73, 46550), (80, 46577), (108, 46745), (112, 46766), (129, 46898), (132, 46910), (138, 46970), (139, 46973), (141, 46982), (152, 47033), (153, 47036), (158, 47096), (160, 47114), (164, 47174),

Gene: Amymech_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Amymech_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Appletree2_66 Start: 44999, Stop: 45676, Start Num: 39
Candidate Starts for Appletree2_66:
(Start: 39 @44999 has 206 MA's), (Start: 48 @45047 has 6 MA's), (65, 45125), (69, 45143), (71, 45152), (88, 45233), (96, 45293), (109, 45365), (115, 45395), (142, 45593),

Gene: Archie_68 Start: 46864, Stop: 47544, Start Num: 39
Candidate Starts for Archie_68:
(37, 46858), (Start: 39 @46864 has 206 MA's), (68, 47005), (115, 47263), (145, 47467), (149, 47488),

Gene: Argent26_83 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for Argent26_83:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: Asriel_78 Start: 47865, Stop: 48515, Start Num: 39
Candidate Starts for Asriel_78:
(Start: 39 @47865 has 206 MA's), (Start: 48 @47910 has 6 MA's), (55, 47940), (71, 48015), (82, 48066), (100, 48153), (134, 48381), (142, 48438),

Gene: AuntGwenStacy_80 Start: 52711, Stop: 53646, Start Num: 12
Candidate Starts for AuntGwenStacy_80:
(Start: 12 @52711 has 4 MA's), (35, 52825), (42, 52855), (66, 52963), (114, 53206), (148, 53383), (159, 53476), (166, 53587), (167, 53590),

Gene: AvadaKedavra_67 Start: 45505, Stop: 46134, Start Num: 48
Candidate Starts for AvadaKedavra_67:
(Start: 39 @45457 has 206 MA's), (Start: 48 @45505 has 6 MA's), (65, 45583), (69, 45601), (71, 45610), (87, 45685), (88, 45691), (96, 45751), (109, 45823), (115, 45853), (142, 46051),

Gene: Awesomesauce_85 Start: 50791, Stop: 51708, Start Num: 13
Candidate Starts for Awesomesauce_85:
(Start: 13 @50791 has 7 MA's), (20, 50836), (22, 50839), (32, 50884), (42, 50929), (51, 50974), (53, 50983), (54, 50986), (70, 51049), (99, 51199), (110, 51247), (138, 51430), (148, 51466),

Gene: BENtherdunthat_88 Start: 48114, Stop: 48911, Start Num: 36
Candidate Starts for BENtherdunthat_88:
(Start: 36 @48114 has 11 MA's), (Start: 48 @48165 has 6 MA's), (59, 48198), (89, 48345), (102, 48411),

Gene: BaboJay_76 Start: 48702, Stop: 49352, Start Num: 39
Candidate Starts for BaboJay_76:
(Start: 39 @48702 has 206 MA's), (Start: 48 @48747 has 6 MA's), (55, 48777), (71, 48852), (82, 48903), (100, 48990), (134, 49218), (142, 49275),

Gene: BadStone_76 Start: 49071, Stop: 49721, Start Num: 39
Candidate Starts for BadStone_76:
(Start: 39 @49071 has 206 MA's), (Start: 48 @49116 has 6 MA's), (55, 49146), (71, 49221), (82, 49272), (100, 49359), (134, 49587), (142, 49644),

Gene: Balomoji_79 Start: 49632, Stop: 50282, Start Num: 39
Candidate Starts for Balomoji_79:

(Start: 39 @49632 has 206 MA's), (Start: 48 @49677 has 6 MA's), (55, 49707), (71, 49782), (82, 49833), (100, 49920), (134, 50148), (142, 50205),

Gene: Baoshan_68 Start: 46846, Stop: 47526, Start Num: 39
Candidate Starts for Baoshan_68:
(Start: 39 @46846 has 206 MA's), (109, 47215), (115, 47245), (145, 47449), (149, 47470), (154, 47494),

Gene: Barbarian_78 Start: 47865, Stop: 48515, Start Num: 39
Candidate Starts for Barbarian_78:
(Start: 39 @47865 has 206 MA's), (Start: 48 @47910 has 6 MA's), (55, 47940), (71, 48015), (82, 48066), (100, 48153), (134, 48381), (142, 48438),

Gene: Bask21_79 Start: 48485, Stop: 49135, Start Num: 39
Candidate Starts for Bask21_79:
(Start: 39 @48485 has 206 MA's), (Start: 48 @48530 has 6 MA's), (55, 48560), (71, 48635), (82, 48686), (100, 48773), (104, 48800), (134, 49001), (142, 49058),

Gene: Baudelaire_74 Start: 47464, Stop: 48126, Start Num: 39
Candidate Starts for Baudelaire_74:
(Start: 39 @47464 has 206 MA's), (68, 47605), (78, 47647), (85, 47686), (86, 47689), (93, 47719), (96, 47746), (97, 47749), (100, 47761), (118, 47863), (127, 47923), (130, 47959), (134, 47989),

Gene: Baumdotcom_52 Start: 43883, Stop: 44890, Start Num: 38
Candidate Starts for Baumdotcom_52:
(Start: 38 @43883 has 3 MA's), (Start: 40 @43886 has 1 MA's), (71, 44033), (120, 44306), (133, 44408), (140, 44471), (144, 44483), (159, 44591), (163, 44618),

Gene: Becksu_78 Start: 49701, Stop: 50351, Start Num: 39
Candidate Starts for Becksu_78:
(Start: 39 @49701 has 206 MA's), (Start: 48 @49746 has 6 MA's), (55, 49776), (71, 49851), (82, 49902), (100, 49989), (134, 50217), (142, 50274),

Gene: Bellis_68 Start: 47237, Stop: 47917, Start Num: 39
Candidate Starts for Bellis_68:
(Start: 39 @47237 has 206 MA's), (83, 47444), (88, 47471), (105, 47585), (109, 47606), (115, 47636), (145, 47840), (149, 47861),

Gene: Bench_82 Start: 49169, Stop: 49819, Start Num: 39
Candidate Starts for Bench_82:
(Start: 39 @49169 has 206 MA's), (Start: 48 @49214 has 6 MA's), (55, 49244), (71, 49319), (82, 49370), (100, 49457), (104, 49484), (134, 49685), (142, 49742),

Gene: BigBubba_79 Start: 48881, Stop: 49531, Start Num: 39
Candidate Starts for BigBubba_79:
(Start: 39 @48881 has 206 MA's), (Start: 48 @48926 has 6 MA's), (55, 48956), (71, 49031), (82, 49082), (100, 49169), (134, 49397), (142, 49454),

Gene: BigCheese_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for BigCheese_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: BilboSwaggins_77 Start: 49510, Stop: 50160, Start Num: 39

Candidate Starts for BilboSwaggins_77:
(Start: 39 @49510 has 206 MA's), (Start: 48 @49555 has 6 MA's), (55, 49585), (71, 49660), (82, 49711), (100, 49798), (134, 50026), (142, 50083),

Gene: Bipper_84 Start: 54628, Stop: 55608, Start Num: 7
Candidate Starts for Bipper_84:
(Start: 7 @54628 has 2 MA's), (19, 54706), (26, 54730), (29, 54745), (34, 54760), (51, 54841), (117, 55156), (131, 55243), (152, 55342), (155, 55357), (159, 55411), (161, 55432), (165, 55513),

Gene: BloominB_68 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for BloominB_68:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: BobsGarage_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for BobsGarage_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Bogg_79 Start: 48448, Stop: 49098, Start Num: 39
Candidate Starts for Bogg_79:
(Start: 39 @48448 has 206 MA's), (Start: 48 @48493 has 6 MA's), (55, 48523), (71, 48598), (82, 48649), (100, 48736), (134, 48964), (142, 49021),

Gene: BotCity_90 Start: 49643, Stop: 50440, Start Num: 36
Candidate Starts for BotCity_90:
(Start: 36 @49643 has 11 MA's), (Start: 48 @49694 has 6 MA's), (59, 49727), (89, 49874), (102, 49940),

Gene: BourbonZero_69 Start: 47282, Stop: 47962, Start Num: 39
Candidate Starts for BourbonZero_69:
(Start: 39 @47282 has 206 MA's), (69, 47426), (88, 47516), (105, 47630), (109, 47651), (115, 47681), (149, 47906),

Gene: BrainDrainer_67 Start: 45805, Stop: 46485, Start Num: 39
Candidate Starts for BrainDrainer_67:
(Start: 39 @45805 has 206 MA's), (81, 46000), (86, 46030), (96, 46102), (115, 46204), (125, 46264), (134, 46345), (145, 46408), (149, 46429),

Gene: Breezona_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for Breezona_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Brewer_75 Start: 47971, Stop: 48621, Start Num: 39
Candidate Starts for Brewer_75:
(Start: 39 @47971 has 206 MA's), (Start: 48 @48016 has 6 MA's), (55, 48046), (71, 48121), (82, 48172), (100, 48259), (134, 48487), (142, 48544),

Gene: Bromden_69 Start: 46838, Stop: 47518, Start Num: 39
Candidate Starts for Bromden_69:

(Start: 39 @46838 has 206 MA's), (68, 46979), (85, 47060), (86, 47063), (98, 47147), (115, 47237), (125, 47297), (134, 47378), (145, 47441), (149, 47462), (154, 47486),

Gene: Bruin_76 Start: 48045, Stop: 48695, Start Num: 39
Candidate Starts for Bruin_76:
(Start: 39 @48045 has 206 MA's), (Start: 48 @48090 has 6 MA's), (55, 48120), (71, 48195), (82, 48246), (100, 48333), (134, 48561), (142, 48618),

Gene: Buck_80 Start: 49750, Stop: 50400, Start Num: 39
Candidate Starts for Buck_80:
(Start: 39 @49750 has 206 MA's), (Start: 48 @49795 has 6 MA's), (55, 49825), (71, 49900), (82, 49951), (100, 50038), (134, 50266), (142, 50323),

Gene: Budgie_85 Start: 49540, Stop: 50190, Start Num: 39
Candidate Starts for Budgie_85:
(Start: 39 @49540 has 206 MA's), (Start: 48 @49585 has 6 MA's), (55, 49615), (58, 49621), (71, 49690), (76, 49717), (82, 49741), (100, 49828), (122, 49960), (134, 50056), (142, 50113), (150, 50143),

Gene: BugsBunny_79 Start: 49577, Stop: 50227, Start Num: 39
Candidate Starts for BugsBunny_79:
(Start: 39 @49577 has 206 MA's), (Start: 48 @49622 has 6 MA's), (55, 49652), (71, 49727), (82, 49778), (100, 49865), (134, 50093), (142, 50150),

Gene: Bunnybear_66 Start: 46245, Stop: 47213, Start Num: 17
Candidate Starts for Bunnybear_66:
(16, 46236), (Start: 17 @46245 has 5 MA's), (31, 46302), (41, 46347), (62, 46452), (65, 46455), (72, 46485), (113, 46683), (135, 46848), (157, 46974),

Gene: Cactus_82 Start: 48526, Stop: 49176, Start Num: 39
Candidate Starts for Cactus_82:
(Start: 39 @48526 has 206 MA's), (Start: 48 @48571 has 6 MA's), (55, 48601), (71, 48676), (82, 48727), (100, 48814), (134, 49042), (142, 49099),

Gene: Calm_68 Start: 45175, Stop: 45852, Start Num: 39
Candidate Starts for Calm_68:
(Start: 39 @45175 has 206 MA's), (Start: 48 @45223 has 6 MA's), (65, 45301), (69, 45319), (71, 45328), (88, 45409), (96, 45469), (109, 45541), (115, 45571), (142, 45769),

Gene: Chaser_65 Start: 45574, Stop: 46254, Start Num: 39
Candidate Starts for Chaser_65:
(Start: 39 @45574 has 206 MA's), (68, 45715), (71, 45727), (85, 45796), (86, 45799), (98, 45883), (109, 45943), (115, 45973), (125, 46033), (134, 46114), (145, 46177), (149, 46198),

Gene: ChengKai98_70 Start: 46938, Stop: 47618, Start Num: 39
Candidate Starts for ChengKai98_70:
(Start: 39 @46938 has 206 MA's), (109, 47307), (115, 47337), (145, 47541), (149, 47562),

Gene: ChickenDinner_85 Start: 50555, Stop: 51472, Start Num: 13
Candidate Starts for ChickenDinner_85:
(Start: 13 @50555 has 7 MA's), (20, 50600), (22, 50603), (32, 50648), (42, 50693), (51, 50738), (53, 50747), (54, 50750), (70, 50813), (99, 50963), (110, 51011), (138, 51194), (148, 51230),

Gene: ChosenOne_79 Start: 48526, Stop: 49176, Start Num: 39
Candidate Starts for ChosenOne_79:
(Start: 39 @48526 has 206 MA's), (Start: 48 @48571 has 6 MA's), (55, 48601), (71, 48676), (82, 48727), (100, 48814), (134, 49042), (142, 49099),

Gene: ChotaBhai_79 Start: 48850, Stop: 49500, Start Num: 39
Candidate Starts for ChotaBhai_79:
(Start: 39 @48850 has 206 MA's), (Start: 48 @48895 has 6 MA's), (55, 48925), (71, 49000), (82, 49051), (100, 49138), (104, 49165), (134, 49366), (142, 49423),

Gene: ChutneyChips_67 Start: 45833, Stop: 46513, Start Num: 39
Candidate Starts for ChutneyChips_67:
(Start: 39 @45833 has 206 MA's), (84, 46043), (87, 46061), (98, 46142), (126, 46307), (145, 46436), (149, 46457), (154, 46481), (156, 46502),

Gene: CicholasNage_65 Start: 45214, Stop: 45891, Start Num: 39
Candidate Starts for CicholasNage_65:
(Start: 39 @45214 has 206 MA's), (Start: 48 @45262 has 6 MA's), (65, 45340), (69, 45358), (71, 45367), (87, 45442), (88, 45448), (96, 45508), (109, 45580), (115, 45610), (142, 45808),

Gene: Cjw1_79 Start: 50223, Stop: 50873, Start Num: 39
Candidate Starts for Cjw1_79:
(Start: 39 @50223 has 206 MA's), (Start: 48 @50268 has 6 MA's), (55, 50298), (71, 50373), (82, 50424), (100, 50511), (134, 50739), (142, 50796),

Gene: Claus_69 Start: 46984, Stop: 47664, Start Num: 39
Candidate Starts for Claus_69:
(Start: 39 @46984 has 206 MA's), (115, 47383), (145, 47587), (149, 47608),

Gene: Clautastrophe_67 Start: 47234, Stop: 47914, Start Num: 39
Candidate Starts for Clautastrophe_67:
(Start: 39 @47234 has 206 MA's), (88, 47468), (105, 47582), (109, 47603), (115, 47633), (145, 47837), (149, 47858),

Gene: Clown_74 Start: 49636, Stop: 50688, Start Num: 14
Candidate Starts for Clown_74:
(1, 49480), (Start: 14 @49636 has 1 MA's), (25, 49687), (47, 49792), (52, 49807), (56, 49819), (57, 49822), (60, 49837), (76, 49918), (90, 49996), (137, 50293), (162, 50467),

Gene: Command613_81 Start: 49565, Stop: 50215, Start Num: 39
Candidate Starts for Command613_81:
(Start: 39 @49565 has 206 MA's), (Start: 48 @49610 has 6 MA's), (55, 49640), (71, 49715), (82, 49766), (100, 49853), (134, 50081), (142, 50138),

Gene: Contagion_75 Start: 48326, Stop: 48976, Start Num: 39
Candidate Starts for Contagion_75:
(Start: 39 @48326 has 206 MA's), (Start: 48 @48371 has 6 MA's), (55, 48401), (71, 48476), (82, 48527), (100, 48614), (134, 48842), (142, 48899),

Gene: Cookies_76 Start: 48707, Stop: 49357, Start Num: 39
Candidate Starts for Cookies_76:
(Start: 39 @48707 has 206 MA's), (Start: 48 @48752 has 6 MA's), (55, 48782), (71, 48857), (82, 48908), (100, 48995), (104, 49022), (134, 49223), (142, 49280),

Gene: Cracklewink_84 Start: 53668, Stop: 54648, Start Num: 7
Candidate Starts for Cracklewink_84:
(Start: 7 @53668 has 2 MA's), (19, 53746), (26, 53770), (29, 53785), (34, 53800), (51, 53881), (117, 54196), (131, 54283), (152, 54382), (155, 54397), (159, 54451), (161, 54472), (165, 54553),

Gene: Crossroads_69 Start: 46978, Stop: 47658, Start Num: 39
Candidate Starts for Crossroads_69:
(Start: 39 @46978 has 206 MA's), (109, 47347), (115, 47377), (145, 47581), (149, 47602),

Gene: CrystalP_78 Start: 49510, Stop: 50160, Start Num: 39
Candidate Starts for CrystalP_78:
(Start: 39 @49510 has 206 MA's), (Start: 48 @49555 has 6 MA's), (55, 49585), (71, 49660), (82, 49711), (100, 49798), (134, 50026), (142, 50083),

Gene: Czyszczon1_80 Start: 49032, Stop: 49682, Start Num: 39
Candidate Starts for Czyszczon1_80:
(Start: 39 @49032 has 206 MA's), (Start: 48 @49077 has 6 MA's), (55, 49107), (71, 49182), (82, 49233), (100, 49320), (134, 49548), (142, 49605),

Gene: DHan_71 Start: 46884, Stop: 47564, Start Num: 39
Candidate Starts for DHan_71:
(Start: 39 @46884 has 206 MA's), (106, 47235), (115, 47283), (145, 47487), (149, 47508),

Gene: Daegal_72 Start: 46821, Stop: 47852, Start Num: 11
Candidate Starts for Daegal_72:
(Start: 11 @46821 has 16 MA's), (15, 46851), (28, 46917), (30, 46923), (33, 46932), (Start: 39 @46959 has 206 MA's), (42, 46974), (44, 46989), (54, 47031), (73, 47112), (80, 47139), (108, 47307), (112, 47328), (129, 47460), (132, 47472), (138, 47532), (139, 47535), (141, 47544), (152, 47595), (153, 47598), (158, 47658), (160, 47676), (164, 47736),

Gene: Daikon_81 Start: 49653, Stop: 50303, Start Num: 39
Candidate Starts for Daikon_81:
(Start: 39 @49653 has 206 MA's), (Start: 48 @49698 has 6 MA's), (55, 49728), (71, 49803), (82, 49854), (100, 49941), (134, 50169), (142, 50226),

Gene: DanBing_70 Start: 46853, Stop: 47533, Start Num: 39
Candidate Starts for DanBing_70:
(Start: 39 @46853 has 206 MA's), (115, 47252), (145, 47456), (149, 47477),

Gene: DeepSoil15_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for DeepSoil15_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Dewey_63 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Dewey_63:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134,

46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: DirkDirk_64 Start: 44633, Stop: 45262, Start Num: 48
Candidate Starts for DirkDirk_64:
(Start: 39 @44585 has 206 MA's), (Start: 48 @44633 has 6 MA's), (65, 44711), (69, 44729), (71, 44738), (88, 44819), (96, 44879), (109, 44951), (115, 44981), (142, 45179),

Gene: DocMcStuffins_82 Start: 52185, Stop: 53102, Start Num: 13
Candidate Starts for DocMcStuffins_82:
(Start: 13 @52185 has 7 MA's), (20, 52230), (22, 52233), (32, 52278), (42, 52323), (51, 52368), (53, 52377), (54, 52380), (70, 52443), (99, 52593), (110, 52641), (138, 52824), (148, 52860),

Gene: DoctorDiddles_78 Start: 48894, Stop: 49544, Start Num: 39
Candidate Starts for DoctorDiddles_78:
(Start: 39 @48894 has 206 MA's), (Start: 48 @48939 has 6 MA's), (55, 48969), (71, 49044), (82, 49095), (100, 49182), (104, 49209), (134, 49410), (142, 49467),

Gene: Douge_67 Start: 45574, Stop: 46254, Start Num: 39
Candidate Starts for Douge_67:
(Start: 39 @45574 has 206 MA's), (81, 45769), (86, 45799), (96, 45871), (115, 45973), (125, 46033), (134, 46114), (145, 46177), (149, 46198),

Gene: Douzhi_67 Start: 45624, Stop: 46304, Start Num: 39
Candidate Starts for Douzhi_67:
(Start: 39 @45624 has 206 MA's), (81, 45819), (86, 45849), (96, 45921), (115, 46023), (125, 46083), (134, 46164), (145, 46227), (149, 46248), (154, 46272),

Gene: DrDrey_79 Start: 49951, Stop: 50601, Start Num: 39
Candidate Starts for DrDrey_79:
(Start: 39 @49951 has 206 MA's), (Start: 48 @49996 has 6 MA's), (55, 50026), (71, 50101), (82, 50152), (100, 50239), (134, 50467), (142, 50524),

Gene: DrSeegs_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for DrSeegs_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Dumbo_79 Start: 48431, Stop: 49081, Start Num: 39
Candidate Starts for Dumbo_79:
(Start: 39 @48431 has 206 MA's), (Start: 48 @48476 has 6 MA's), (55, 48506), (71, 48581), (82, 48632), (100, 48719), (134, 48947), (142, 49004),

Gene: DuncansLeg_68 Start: 47270, Stop: 47950, Start Num: 39
Candidate Starts for DuncansLeg_68:
(Start: 39 @47270 has 206 MA's), (69, 47414), (88, 47504), (105, 47618), (109, 47639), (115, 47669), (149, 47894),

Gene: Dusk_76 Start: 48731, Stop: 49381, Start Num: 39
Candidate Starts for Dusk_76:
(Start: 39 @48731 has 206 MA's), (Start: 48 @48776 has 6 MA's), (55, 48806), (71, 48881), (82, 48932), (100, 49019), (134, 49247), (142, 49304),

Gene: DyoEdafos_71 Start: 46066, Stop: 46746, Start Num: 39

Candidate Starts for DyoEdafos_71:
(Start: 39 @46066 has 206 MA's), (84, 46276), (87, 46294), (98, 46375), (119, 46483), (121, 46501), (126, 46540), (134, 46606), (149, 46690),

Gene: Easy2Say_80 Start: 49975, Stop: 50625, Start Num: 39
Candidate Starts for Easy2Say_80:
(Start: 39 @49975 has 206 MA's), (Start: 48 @50020 has 6 MA's), (55, 50050), (71, 50125), (82, 50176), (100, 50263), (134, 50491), (142, 50548),

Gene: Ein37_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Ein37_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Elite2014_78 Start: 48525, Stop: 49175, Start Num: 39
Candidate Starts for Elite2014_78:
(Start: 39 @48525 has 206 MA's), (Start: 48 @48570 has 6 MA's), (55, 48600), (71, 48675), (82, 48726), (100, 48813), (134, 49041), (142, 49098),

Gene: Ellson_66 Start: 47298, Stop: 47978, Start Num: 39
Candidate Starts for Ellson_66:
(Start: 39 @47298 has 206 MA's), (69, 47442), (88, 47532), (105, 47646), (109, 47667), (115, 47697), (149, 47922), (156, 47967),

Gene: Elph10_79 Start: 48530, Stop: 49180, Start Num: 39
Candidate Starts for Elph10_79:
(Start: 39 @48530 has 206 MA's), (Start: 48 @48575 has 6 MA's), (55, 48605), (71, 48680), (82, 48731), (100, 48818), (134, 49046), (142, 49103),

Gene: Emmina_79 Start: 48432, Stop: 49082, Start Num: 39
Candidate Starts for Emmina_79:
(Start: 39 @48432 has 206 MA's), (Start: 48 @48477 has 6 MA's), (55, 48507), (71, 48582), (82, 48633), (100, 48720), (134, 48948), (142, 49005),

Gene: Enceladus_64 Start: 45342, Stop: 46019, Start Num: 39
Candidate Starts for Enceladus_64:
(Start: 39 @45342 has 206 MA's), (Start: 48 @45390 has 6 MA's), (65, 45468), (69, 45486), (71, 45495), (88, 45576), (96, 45636), (109, 45708), (115, 45738), (142, 45936),

Gene: Eureka_77 Start: 48996, Stop: 49646, Start Num: 39
Candidate Starts for Eureka_77:
(Start: 39 @48996 has 206 MA's), (Start: 48 @49041 has 6 MA's), (55, 49071), (71, 49146), (82, 49197), (100, 49284), (134, 49512), (142, 49569),

Gene: Evanesce_68 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Evanesce_68:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160,

46570), (164, 46630),

Gene: FairyPath_80 Start: 49644, Stop: 50294, Start Num: 39
Candidate Starts for FairyPath_80:
(Start: 39 @49644 has 206 MA's), (Start: 48 @49689 has 6 MA's), (55, 49719), (71, 49794), (82, 49845), (100, 49932), (134, 50160), (142, 50217),

Gene: Faith1_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for Faith1_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Faiyaz_81 Start: 52717, Stop: 53652, Start Num: 12
Candidate Starts for Faiyaz_81:
(Start: 12 @52717 has 4 MA's), (35, 52831), (42, 52861), (66, 52969), (114, 53212), (148, 53389), (159, 53482), (166, 53593), (167, 53596),

Gene: FarmResident_69 Start: 45580, Stop: 46260, Start Num: 39
Candidate Starts for FarmResident_69:
(Start: 39 @45580 has 206 MA's), (68, 45721), (85, 45802), (86, 45805), (98, 45889), (115, 45979), (125, 46039), (134, 46120), (145, 46183), (149, 46204), (156, 46249),

Gene: Filch_80 Start: 48457, Stop: 49107, Start Num: 39
Candidate Starts for Filch_80:
(Start: 39 @48457 has 206 MA's), (Start: 48 @48502 has 6 MA's), (55, 48532), (71, 48607), (82, 48658), (100, 48745), (134, 48973), (142, 49030),

Gene: Finemlucis_69 Start: 47224, Stop: 47904, Start Num: 39
Candidate Starts for Finemlucis_69:
(Start: 39 @47224 has 206 MA's), (109, 47593), (115, 47623), (145, 47827), (149, 47848),

Gene: Finnry_68 Start: 47498, Stop: 48178, Start Num: 39
Candidate Starts for Finnry_68:
(Start: 39 @47498 has 206 MA's), (88, 47732), (105, 47846), (109, 47867), (115, 47897), (145, 48101), (149, 48122),

Gene: FireRed_83 Start: 50019, Stop: 50669, Start Num: 39
Candidate Starts for FireRed_83:
(Start: 39 @50019 has 206 MA's), (Start: 48 @50064 has 6 MA's), (55, 50094), (71, 50169), (82, 50220), (100, 50307), (134, 50535), (142, 50592),

Gene: Flypotenuse_75 Start: 48516, Stop: 49166, Start Num: 39
Candidate Starts for Flypotenuse_75:
(Start: 39 @48516 has 206 MA's), (Start: 48 @48561 has 6 MA's), (55, 48591), (71, 48666), (82, 48717), (100, 48804), (134, 49032), (142, 49089),

Gene: FoghornLeghorn_73 Start: 47529, Stop: 48179, Start Num: 39
Candidate Starts for FoghornLeghorn_73:
(Start: 39 @47529 has 206 MA's), (Start: 48 @47574 has 6 MA's), (55, 47604), (71, 47679), (82, 47730), (100, 47817), (134, 48045), (142, 48102),

Gene: Forge_63 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Forge_63:

(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Fosterous_57 Start: 45597, Stop: 46586, Start Num: 9
Candidate Starts for Fosterous_57:
(Start: 9 @45597 has 1 MA's), (Start: 14 @45639 has 1 MA's), (21, 45675), (25, 45690), (47, 45795), (52, 45810), (60, 45840), (65, 45867), (75, 45912), (90, 45999), (95, 46023), (101, 46050), (116, 46131), (143, 46254),

Gene: Gabriela_66 Start: 45350, Stop: 46030, Start Num: 39
Candidate Starts for Gabriela_66:
(Start: 39 @45350 has 206 MA's), (109, 45719), (115, 45749), (145, 45953), (149, 45974),

Gene: Gage_81 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for Gage_81:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: Gancho_68 Start: 45490, Stop: 46521, Start Num: 11
Candidate Starts for Gancho_68:
(Start: 11 @45490 has 16 MA's), (15, 45520), (28, 45586), (30, 45592), (33, 45601), (Start: 39 @45628 has 206 MA's), (42, 45643), (44, 45658), (54, 45700), (73, 45781), (80, 45808), (108, 45976), (112, 45997), (129, 46129), (132, 46141), (138, 46201), (139, 46204), (141, 46213), (152, 46264), (153, 46267), (158, 46327), (160, 46345), (164, 46405),

Gene: Gardann_70 Start: 46936, Stop: 47616, Start Num: 39
Candidate Starts for Gardann_70:
(Start: 39 @46936 has 206 MA's), (109, 47305), (115, 47335), (145, 47539), (149, 47560),

Gene: Gator_77 Start: 49362, Stop: 50012, Start Num: 39
Candidate Starts for Gator_77:
(Start: 39 @49362 has 206 MA's), (Start: 48 @49407 has 6 MA's), (55, 49437), (71, 49512), (82, 49563), (100, 49650), (134, 49878), (142, 49935),

Gene: Gemini_84 Start: 49826, Stop: 50476, Start Num: 39
Candidate Starts for Gemini_84:
(Start: 39 @49826 has 206 MA's), (Start: 48 @49871 has 6 MA's), (55, 49901), (71, 49976), (82, 50027), (100, 50114), (134, 50342), (142, 50399),

Gene: Getalong_91 Start: 50569, Stop: 51366, Start Num: 36
Candidate Starts for Getalong_91:
(Start: 36 @50569 has 11 MA's), (Start: 48 @50620 has 6 MA's), (59, 50653), (89, 50800), (102, 50866),

Gene: Giles_63 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Giles_63:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160,

46570), (164, 46630),

Gene: Glexan_78 Start: 49646, Stop: 50296, Start Num: 39
Candidate Starts for Glexan_78:
(Start: 39 @49646 has 206 MA's), (Start: 48 @49691 has 6 MA's), (55, 49721), (71, 49796), (82, 49847), (100, 49934), (134, 50162), (142, 50219),

Gene: Goku_77 Start: 48725, Stop: 49375, Start Num: 39
Candidate Starts for Goku_77:
(Start: 39 @48725 has 206 MA's), (Start: 48 @48770 has 6 MA's), (55, 48800), (71, 48875), (82, 48926), (100, 49013), (134, 49241), (142, 49298),

Gene: GoldenSpark_83 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for GoldenSpark_83:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: Goldilocks_82 Start: 48807, Stop: 49457, Start Num: 39
Candidate Starts for Goldilocks_82:
(Start: 39 @48807 has 206 MA's), (Start: 48 @48852 has 6 MA's), (55, 48882), (71, 48957), (82, 49008), (100, 49095), (134, 49323), (142, 49380),

Gene: GooberAzure_82 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for GooberAzure_82:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: Gravaillia_64 Start: 45771, Stop: 46802, Start Num: 11
Candidate Starts for Gravaillia_64:
(Start: 11 @45771 has 16 MA's), (15, 45801), (28, 45867), (30, 45873), (33, 45882), (Start: 39 @45909 has 206 MA's), (42, 45924), (44, 45939), (54, 45981), (73, 46062), (80, 46089), (108, 46257), (112, 46278), (129, 46410), (132, 46422), (138, 46482), (139, 46485), (141, 46494), (152, 46545), (153, 46548), (158, 46608), (160, 46626), (164, 46686),

Gene: Greep_83 Start: 50308, Stop: 50958, Start Num: 39
Candidate Starts for Greep_83:
(Start: 39 @50308 has 206 MA's), (Start: 48 @50353 has 6 MA's), (55, 50383), (71, 50458), (82, 50509), (100, 50596), (134, 50824), (142, 50881),

Gene: Gudmit_59 Start: 35917, Stop: 36753, Start Num: 39
Candidate Starts for Gudmit_59:
(10, 35761), (Start: 39 @35917 has 206 MA's), (Start: 48 @35962 has 6 MA's), (49, 35965), (50, 35968), (58, 35998), (69, 36058), (76, 36094), (92, 36178), (107, 36271), (109, 36283), (111, 36295), (123, 36364), (124, 36370), (128, 36406), (136, 36487), (146, 36535),

Gene: GuuelaD_67 Start: 47018, Stop: 47698, Start Num: 39
Candidate Starts for GuuelaD_67:
(Start: 39 @47018 has 206 MA's), (109, 47387), (115, 47417), (145, 47621), (149, 47642),

Gene: HH92_68 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for HH92_68:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931),

(46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Hadrien_67 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Hadrien_67:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Hafay_71 Start: 47007, Stop: 47687, Start Num: 39
Candidate Starts for Hafay_71:
(Start: 39 @47007 has 206 MA's), (109, 47376), (115, 47406), (145, 47610), (149, 47631),

Gene: Hail_63 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Hail_63:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Halena_65 Start: 44622, Stop: 45299, Start Num: 39
Candidate Starts for Halena_65:
(Start: 39 @44622 has 206 MA's), (Start: 48 @44670 has 6 MA's), (65, 44748), (69, 44766), (71, 44775), (88, 44856), (96, 44916), (109, 44988), (115, 45018), (142, 45216),

Gene: HanKaySha_79 Start: 48610, Stop: 49260, Start Num: 39
Candidate Starts for HanKaySha_79:
(Start: 39 @48610 has 206 MA's), (Start: 48 @48655 has 6 MA's), (55, 48685), (71, 48760), (82, 48811), (100, 48898), (134, 49126), (142, 49183),

Gene: Harella_79 Start: 50162, Stop: 50812, Start Num: 39
Candidate Starts for Harella_79:
(Start: 39 @50162 has 206 MA's), (Start: 48 @50207 has 6 MA's), (55, 50237), (71, 50312), (82, 50363), (100, 50450), (134, 50678), (142, 50735),

Gene: Henry_77 Start: 48950, Stop: 49600, Start Num: 39
Candidate Starts for Henry_77:
(Start: 39 @48950 has 206 MA's), (Start: 48 @48995 has 6 MA's), (55, 49025), (71, 49100), (82, 49151), (100, 49238), (134, 49466), (142, 49523),

Gene: Highbury_78 Start: 48598, Stop: 49248, Start Num: 39
Candidate Starts for Highbury_78:
(Start: 39 @48598 has 206 MA's), (Start: 48 @48643 has 6 MA's), (55, 48673), (71, 48748), (82, 48799), (100, 48886), (134, 49114), (142, 49171),

Gene: Hilltopfarm_80 Start: 52417, Stop: 53346, Start Num: 12
Candidate Starts for Hilltopfarm_80:
(Start: 12 @52417 has 4 MA's), (35, 52525), (42, 52555), (52, 52600), (66, 52663), (114, 52906), (148, 53083), (159, 53176), (166, 53287), (167, 53290),

Gene: Hiraya_70 Start: 46973, Stop: 47653, Start Num: 39
Candidate Starts for Hiraya_70:
(Start: 39 @46973 has 206 MA's), (109, 47342), (115, 47372), (145, 47576), (149, 47597),

Gene: Holt_84 Start: 49723, Stop: 50373, Start Num: 39
Candidate Starts for Holt_84:
(Start: 39 @49723 has 206 MA's), (Start: 48 @49768 has 6 MA's), (55, 49798), (71, 49873), (82, 49924), (100, 50011), (134, 50239), (142, 50296),

Gene: Hoonter_82 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for Hoonter_82:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: Hopey_79 Start: 49142, Stop: 49792, Start Num: 39
Candidate Starts for Hopey_79:
(Start: 39 @49142 has 206 MA's), (Start: 48 @49187 has 6 MA's), (55, 49217), (71, 49292), (82, 49343), (100, 49430), (134, 49658), (142, 49715),

Gene: HufflyPuff_82 Start: 49975, Stop: 50625, Start Num: 39
Candidate Starts for HufflyPuff_82:
(Start: 39 @49975 has 206 MA's), (Start: 48 @50020 has 6 MA's), (55, 50050), (71, 50125), (82, 50176), (100, 50263), (134, 50491), (142, 50548),

Gene: IHOP_77 Start: 49074, Stop: 49724, Start Num: 39
Candidate Starts for IHOP_77:
(Start: 39 @49074 has 206 MA's), (Start: 48 @49119 has 6 MA's), (55, 49149), (71, 49224), (82, 49275), (100, 49362), (134, 49590), (142, 49647),

Gene: Icee_80 Start: 48973, Stop: 49623, Start Num: 39
Candidate Starts for Icee_80:
(Start: 39 @48973 has 206 MA's), (Start: 48 @49018 has 6 MA's), (55, 49048), (71, 49123), (82, 49174), (100, 49261), (134, 49489), (142, 49546),

Gene: InLimbo_63 Start: 37783, Stop: 38589, Start Num: 36
Candidate Starts for InLimbo_63:
(Start: 36 @37783 has 11 MA's), (Start: 48 @37834 has 6 MA's), (59, 37867), (89, 38014), (102, 38080), (113, 38125), (147, 38350),

Gene: Inca_76 Start: 47599, Stop: 48249, Start Num: 39
Candidate Starts for Inca_76:
(Start: 39 @47599 has 206 MA's), (Start: 48 @47644 has 6 MA's), (55, 47674), (71, 47749), (82, 47800), (100, 47887), (134, 48115), (142, 48172),

Gene: Itos_68 Start: 45809, Stop: 46489, Start Num: 39
Candidate Starts for Itos_68:
(Start: 39 @45809 has 206 MA's), (109, 46178), (115, 46208), (145, 46412), (149, 46433),

Gene: JeTaime_79 Start: 49791, Stop: 50441, Start Num: 39
Candidate Starts for JeTaime_79:
(Start: 39 @49791 has 206 MA's), (Start: 48 @49836 has 6 MA's), (55, 49866), (71, 49941), (82, 49992), (100, 50079), (104, 50106), (134, 50307), (142, 50364),

Gene: Jobypre_68 Start: 47234, Stop: 47914, Start Num: 39
Candidate Starts for Jobypre_68:
(Start: 39 @47234 has 206 MA's), (88, 47468), (105, 47582), (109, 47603), (115, 47633), (145, 47837), (149, 47858),

Gene: JoeDirt_67 Start: 45775, Stop: 46452, Start Num: 39
Candidate Starts for JoeDirt_67:
(Start: 39 @45775 has 206 MA's), (Start: 48 @45823 has 6 MA's), (65, 45901), (69, 45919), (71, 45928), (87, 46003), (88, 46009), (96, 46069), (109, 46141), (115, 46171), (142, 46369),

Gene: Jubie_67 Start: 47369, Stop: 48049, Start Num: 39
Candidate Starts for Jubie_67:
(Start: 39 @47369 has 206 MA's), (88, 47603), (105, 47717), (109, 47738), (115, 47768), (145, 47972), (149, 47993),

Gene: Kahlid_69 Start: 46909, Stop: 47589, Start Num: 39
Candidate Starts for Kahlid_69:
(Start: 39 @46909 has 206 MA's), (109, 47278), (115, 47308), (145, 47512), (149, 47533),

Gene: Kanye_76 Start: 48655, Stop: 49305, Start Num: 39
Candidate Starts for Kanye_76:
(Start: 39 @48655 has 206 MA's), (Start: 48 @48700 has 6 MA's), (55, 48730), (71, 48805), (82, 48856), (100, 48943), (134, 49171), (142, 49228),

Gene: Kenna_83 Start: 47387, Stop: 48184, Start Num: 36
Candidate Starts for Kenna_83:
(Start: 36 @47387 has 11 MA's), (Start: 48 @47438 has 6 MA's), (59, 47471), (89, 47618), (102, 47684),

Gene: Kimchi_83 Start: 49312, Stop: 49962, Start Num: 39
Candidate Starts for Kimchi_83:
(Start: 39 @49312 has 206 MA's), (Start: 48 @49357 has 6 MA's), (55, 49387), (71, 49462), (82, 49513), (100, 49600), (134, 49828), (142, 49885),

Gene: Kinbote_67 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Kinbote_67:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Kingsolomon_66 Start: 47241, Stop: 47921, Start Num: 39
Candidate Starts for Kingsolomon_66:
(Start: 39 @47241 has 206 MA's), (88, 47475), (105, 47589), (109, 47610), (115, 47640), (145, 47844), (149, 47865),

Gene: KirDoubleO7_66 Start: 47272, Stop: 47952, Start Num: 39
Candidate Starts for KirDoubleO7_66:
(Start: 39 @47272 has 206 MA's), (69, 47416), (88, 47506), (105, 47620), (109, 47641), (115, 47671), (149, 47896),

Gene: Kostya_79 Start: 49173, Stop: 49823, Start Num: 39
Candidate Starts for Kostya_79:
(Start: 39 @49173 has 206 MA's), (Start: 48 @49218 has 6 MA's), (55, 49248), (71, 49323), (82, 49374), (100, 49461), (134, 49689), (142, 49746),

Gene: Kropertea_66 Start: 45728, Stop: 46408, Start Num: 39
Candidate Starts for Kropertea_66:
(Start: 39 @45728 has 206 MA's), (84, 45938), (87, 45956), (98, 46037), (119, 46145), (121, 46163), (126, 46202), (134, 46268), (149, 46352), (151, 46358),

Gene: Krypton555_69 Start: 47460, Stop: 48140, Start Num: 39
Candidate Starts for Krypton555_69:
(Start: 39 @47460 has 206 MA's), (69, 47604), (88, 47694), (105, 47808), (109, 47829), (115, 47859), (145, 48063), (149, 48084),

Gene: Kuwabara_84 Start: 49956, Stop: 50762, Start Num: 36
Candidate Starts for Kuwabara_84:
(Start: 36 @49956 has 11 MA's), (Start: 48 @50007 has 6 MA's), (59, 50040), (89, 50187), (102, 50253), (113, 50298), (147, 50523),

Gene: LeBron_66 Start: 44626, Stop: 45303, Start Num: 39
Candidate Starts for LeBron_66:
(Start: 39 @44626 has 206 MA's), (Start: 48 @44674 has 6 MA's), (65, 44752), (69, 44770), (71, 44779), (88, 44860), (96, 44920), (109, 44992), (115, 45022), (142, 45220),

Gene: Lewan_70 Start: 46960, Stop: 47640, Start Num: 39
Candidate Starts for Lewan_70:
(Start: 39 @46960 has 206 MA's), (109, 47329), (115, 47359), (145, 47563), (149, 47584),

Gene: LilDestine_69 Start: 46936, Stop: 47616, Start Num: 39
Candidate Starts for LilDestine_69:
(Start: 39 @46936 has 206 MA's), (109, 47305), (115, 47335), (145, 47539), (149, 47560),

Gene: LilHam_51 Start: 43282, Stop: 44289, Start Num: 38
Candidate Starts for LilHam_51:
(Start: 38 @43282 has 3 MA's), (Start: 40 @43285 has 1 MA's), (71, 43432), (120, 43705), (133, 43807), (140, 43870), (144, 43882), (159, 43990), (163, 44017),

Gene: LilHazelnut_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for LilHazelnut_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: LilSpotty_80 Start: 46231, Stop: 47148, Start Num: 13
Candidate Starts for LilSpotty_80:
(Start: 13 @46231 has 7 MA's), (20, 46276), (22, 46279), (32, 46324), (42, 46369), (51, 46414), (53, 46423), (54, 46426), (70, 46489), (99, 46639), (110, 46687), (138, 46870), (148, 46906),

Gene: Lilac_81 Start: 48927, Stop: 49577, Start Num: 39
Candidate Starts for Lilac_81:

(Start: 39 @48927 has 206 MA's), (Start: 48 @48972 has 6 MA's), (55, 49002), (71, 49077), (82, 49128), (100, 49215), (134, 49443), (142, 49500),

Gene: Lilizi_80 Start: 48640, Stop: 49290, Start Num: 39
Candidate Starts for Lilizi_80:
(Start: 39 @48640 has 206 MA's), (Start: 48 @48685 has 6 MA's), (55, 48715), (71, 48790), (82, 48841), (100, 48928), (104, 48955), (134, 49156), (142, 49213),

Gene: Lilpickle_78 Start: 48525, Stop: 49175, Start Num: 39
Candidate Starts for Lilpickle_78:
(Start: 39 @48525 has 206 MA's), (Start: 48 @48570 has 6 MA's), (55, 48600), (71, 48675), (82, 48726), (100, 48813), (134, 49041), (142, 49098),

Gene: Livelaughbron_81 Start: 50103, Stop: 50753, Start Num: 39
Candidate Starts for Livelaughbron_81:
(Start: 39 @50103 has 206 MA's), (Start: 48 @50148 has 6 MA's), (55, 50178), (71, 50253), (82, 50304), (100, 50391), (134, 50619), (142, 50676),

Gene: LiyuLake_67 Start: 47288, Stop: 47968, Start Num: 39
Candidate Starts for LiyuLake_67:
(Start: 39 @47288 has 206 MA's), (69, 47432), (88, 47522), (105, 47636), (109, 47657), (115, 47687), (149, 47912),

Gene: Loadrie_68 Start: 46988, Stop: 47668, Start Num: 39
Candidate Starts for Loadrie_68:
(Start: 39 @46988 has 206 MA's), (109, 47357), (115, 47387), (145, 47591), (149, 47612),

Gene: Lolly9_67 Start: 47057, Stop: 47737, Start Num: 39
Candidate Starts for Lolly9_67:
(Start: 39 @47057 has 206 MA's), (69, 47201), (88, 47291), (105, 47405), (109, 47426), (115, 47456), (124, 47507), (149, 47681), (156, 47726),

Gene: Lton_63 Start: 37109, Stop: 37915, Start Num: 36
Candidate Starts for Lton_63:
(Start: 36 @37109 has 11 MA's), (Start: 48 @37160 has 6 MA's), (59, 37193), (89, 37340), (102, 37406), (113, 37451), (147, 37676),

Gene: Luke_67 Start: 45622, Stop: 46701, Start Num: 3
Candidate Starts for Luke_67:
(2, 45613), (Start: 3 @45622 has 7 MA's), (4, 45646), (5, 45661), (6, 45664), (8, 45691), (Start: 11 @45718 has 16 MA's), (18, 45772), (20, 45775), (30, 45814), (33, 45823), (42, 45865), (45, 45886), (46, 45889), (60, 45946), (67, 45985), (74, 46012), (78, 46027), (129, 46309), (132, 46321), (134, 46345), (138, 46381), (139, 46384), (141, 46393), (152, 46444), (153, 46447), (158, 46507), (160, 46525), (164, 46585),

Gene: Lumos_69 Start: 47231, Stop: 47911, Start Num: 39
Candidate Starts for Lumos_69:
(Start: 39 @47231 has 206 MA's), (88, 47465), (105, 47579), (109, 47600), (115, 47630), (145, 47834), (149, 47855),

Gene: Luna22_63 Start: 45747, Stop: 46730, Start Num: 11
Candidate Starts for Luna22_63:

(2, 45642), (Start: 3 @45651 has 7 MA's), (4, 45675), (5, 45690), (6, 45693), (8, 45720), (Start: 11 @45747 has 16 MA's), (18, 45801), (20, 45804), (30, 45843), (33, 45852), (42, 45894), (45, 45915), (46, 45918), (60, 45975), (67, 46014), (74, 46041), (78, 46056), (129, 46338), (132, 46350), (134, 46374), (138, 46410), (139, 46413), (141, 46422), (152, 46473), (153, 46476), (158, 46536), (160, 46554), (164, 46614),

Gene: Lutum_89 Start: 48549, Stop: 49346, Start Num: 36
Candidate Starts for Lutum_89:
(Start: 36 @48549 has 11 MA's), (Start: 48 @48600 has 6 MA's), (59, 48633), (89, 48780), (102, 48846),

Gene: Lynnae_71 Start: 46934, Stop: 47614, Start Num: 39
Candidate Starts for Lynnae_71:
(Start: 39 @46934 has 206 MA's), (109, 47303), (115, 47333), (145, 47537), (149, 47558),

Gene: MAckerman_65 Start: 44615, Stop: 45292, Start Num: 39
Candidate Starts for MAckerman_65:
(Start: 39 @44615 has 206 MA's), (Start: 48 @44663 has 6 MA's), (65, 44741), (69, 44759), (71, 44768), (88, 44849), (96, 44909), (109, 44981), (115, 45011), (142, 45209),

Gene: MISSy_80 Start: 49031, Stop: 49681, Start Num: 39
Candidate Starts for MISSy_80:
(Start: 39 @49031 has 206 MA's), (Start: 48 @49076 has 6 MA's), (55, 49106), (71, 49181), (82, 49232), (100, 49319), (134, 49547), (142, 49604),

Gene: MPhalcon_80 Start: 49024, Stop: 49674, Start Num: 39
Candidate Starts for MPhalcon_80:
(Start: 39 @49024 has 206 MA's), (Start: 48 @49069 has 6 MA's), (55, 49099), (71, 49174), (82, 49225), (100, 49312), (134, 49540), (142, 49597),

Gene: MadamMonkfish_79 Start: 48249, Stop: 48899, Start Num: 39
Candidate Starts for MadamMonkfish_79:
(Start: 39 @48249 has 206 MA's), (Start: 48 @48294 has 6 MA's), (55, 48324), (71, 48399), (82, 48450), (100, 48537), (134, 48765), (142, 48822),

Gene: Madavieve_67 Start: 46377, Stop: 47345, Start Num: 17
Candidate Starts for Madavieve_67:
(16, 46368), (Start: 17 @46377 has 5 MA's), (31, 46434), (41, 46479), (62, 46584), (65, 46587), (72, 46617), (113, 46815), (135, 46980),

Gene: Madeline_65 Start: 47024, Stop: 47905, Start Num: 27
Candidate Starts for Madeline_65:
(Start: 27 @47024 has 2 MA's), (41, 47078), (45, 47099), (60, 47150), (64, 47174), (79, 47234), (135, 47540),

Gene: Manda_80 Start: 50111, Stop: 50761, Start Num: 39
Candidate Starts for Manda_80:
(Start: 39 @50111 has 206 MA's), (Start: 48 @50156 has 6 MA's), (55, 50186), (71, 50261), (82, 50312), (100, 50399), (134, 50627), (142, 50684),

Gene: Maridalia_71 Start: 46257, Stop: 47225, Start Num: 17
Candidate Starts for Maridalia_71:

(16, 46248), (Start: 17 @46257 has 5 MA's), (31, 46314), (41, 46359), (62, 46464), (65, 46467), (72, 46497), (113, 46695), (135, 46860),

Gene: Marshmallow_77 Start: 49804, Stop: 50454, Start Num: 39
Candidate Starts for Marshmallow_77:
(Start: 39 @49804 has 206 MA's), (Start: 48 @49849 has 6 MA's), (55, 49879), (71, 49954), (82, 50005), (100, 50092), (134, 50320), (142, 50377),

Gene: Maxxinista_81 Start: 48900, Stop: 49550, Start Num: 39
Candidate Starts for Maxxinista_81:
(Start: 39 @48900 has 206 MA's), (Start: 48 @48945 has 6 MA's), (55, 48975), (71, 49050), (82, 49101), (100, 49188), (134, 49416), (142, 49473),

Gene: Miley16_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for Miley16_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Mindy_78 Start: 48116, Stop: 48766, Start Num: 39
Candidate Starts for Mindy_78:
(Start: 39 @48116 has 206 MA's), (Start: 48 @48161 has 6 MA's), (55, 48191), (71, 48266), (82, 48317), (100, 48404), (134, 48632), (142, 48689),

Gene: MiniLon_71 Start: 47058, Stop: 47738, Start Num: 39
Candidate Starts for MiniLon_71:
(Start: 39 @47058 has 206 MA's), (69, 47202), (88, 47292), (105, 47406), (109, 47427), (115, 47457), (124, 47508), (149, 47682), (156, 47727),

Gene: MiniMac_71 Start: 47056, Stop: 47736, Start Num: 39
Candidate Starts for MiniMac_71:
(Start: 39 @47056 has 206 MA's), (69, 47200), (88, 47290), (105, 47404), (109, 47425), (115, 47455), (124, 47506), (149, 47680), (156, 47725),

Gene: Miniwave_74 Start: 48569, Stop: 49219, Start Num: 39
Candidate Starts for Miniwave_74:
(Start: 39 @48569 has 206 MA's), (Start: 48 @48614 has 6 MA's), (55, 48644), (71, 48719), (82, 48770), (100, 48857), (104, 48884), (134, 49085), (142, 49142),

Gene: Misfit_80 Start: 50043, Stop: 50693, Start Num: 39
Candidate Starts for Misfit_80:
(Start: 39 @50043 has 206 MA's), (Start: 48 @50088 has 6 MA's), (55, 50118), (71, 50193), (82, 50244), (100, 50331), (134, 50559), (142, 50616),

Gene: Misha28_84 Start: 51490, Stop: 52407, Start Num: 13
Candidate Starts for Misha28_84:
(Start: 13 @51490 has 7 MA's), (20, 51535), (22, 51538), (32, 51583), (42, 51628), (51, 51673), (53, 51682), (54, 51685), (70, 51748), (99, 51898), (110, 51946), (138, 52129), (148, 52165),

Gene: MkaliMitinis3_70 Start: 46972, Stop: 47652, Start Num: 39
Candidate Starts for MkaliMitinis3_70:
(Start: 39 @46972 has 206 MA's), (109, 47341), (115, 47371), (145, 47575), (149, 47596),

Gene: Moldemort_82 Start: 49128, Stop: 49778, Start Num: 39
Candidate Starts for Moldemort_82:

(Start: 39 @49128 has 206 MA's), (Start: 48 @49173 has 6 MA's), (55, 49203), (71, 49278), (82, 49329), (100, 49416), (134, 49644), (142, 49701),

Gene: Molivier_61 Start: 41962, Stop: 42642, Start Num: 39
Candidate Starts for Molivier_61:
(Start: 39 @41962 has 206 MA's), (109, 42331), (115, 42361), (145, 42565), (149, 42586),

Gene: MollyToe_74 Start: 47870, Stop: 48520, Start Num: 39
Candidate Starts for MollyToe_74:
(Start: 39 @47870 has 206 MA's), (Start: 48 @47915 has 6 MA's), (55, 47945), (58, 47951), (71, 48020), (76, 48047), (82, 48071), (100, 48158), (105, 48194), (134, 48386), (142, 48443),

Gene: Moostard_66 Start: 47237, Stop: 47917, Start Num: 39
Candidate Starts for Moostard_66:
(Start: 39 @47237 has 206 MA's), (88, 47471), (105, 47585), (109, 47606), (115, 47636), (145, 47840), (149, 47861),

Gene: Morkie_66 Start: 38257, Stop: 39063, Start Num: 36
Candidate Starts for Morkie_66:
(Start: 36 @38257 has 11 MA's), (Start: 48 @38308 has 6 MA's), (59, 38341), (89, 38488), (102, 38554), (113, 38599), (147, 38824),

Gene: MortyNRick_80 Start: 47532, Stop: 48401, Start Num: 23
Candidate Starts for MortyNRick_80:
(Start: 23 @47532 has 1 MA's), (43, 47622), (63, 47709), (77, 47760), (103, 47907), (128, 48054),

Gene: Mosby_75 Start: 48326, Stop: 48976, Start Num: 39
Candidate Starts for Mosby_75:
(Start: 39 @48326 has 206 MA's), (Start: 48 @48371 has 6 MA's), (55, 48401), (71, 48476), (82, 48527), (100, 48614), (134, 48842), (142, 48899),

Gene: MsGreen_68 Start: 47234, Stop: 47914, Start Num: 39
Candidate Starts for MsGreen_68:
(Start: 39 @47234 has 206 MA's), (88, 47468), (105, 47582), (109, 47603), (115, 47633), (145, 47837), (149, 47858),

Gene: Murica_82 Start: 49975, Stop: 50625, Start Num: 39
Candidate Starts for Murica_82:
(Start: 39 @49975 has 206 MA's), (Start: 48 @50020 has 6 MA's), (55, 50050), (71, 50125), (82, 50176), (100, 50263), (134, 50491), (142, 50548),

Gene: Murphy_79 Start: 49412, Stop: 50062, Start Num: 39
Candidate Starts for Murphy_79:
(Start: 39 @49412 has 206 MA's), (Start: 48 @49457 has 6 MA's), (55, 49487), (71, 49562), (82, 49613), (100, 49700), (134, 49928), (142, 49985),

Gene: Myrale_79 Start: 49669, Stop: 50319, Start Num: 39
Candidate Starts for Myrale_79:
(Start: 39 @49669 has 206 MA's), (Start: 48 @49714 has 6 MA's), (55, 49744), (71, 49819), (82, 49870), (100, 49957), (134, 50185), (142, 50242),

Gene: Nala_81 Start: 49533, Stop: 50183, Start Num: 39
Candidate Starts for Nala_81:

(Start: 39 @49533 has 206 MA's), (Start: 48 @49578 has 6 MA's), (55, 49608), (71, 49683), (82, 49734), (100, 49821), (134, 50049), (142, 50106),

Gene: NelitzaMV_77 Start: 48615, Stop: 49265, Start Num: 39
Candidate Starts for NelitzaMV_77:
(Start: 39 @48615 has 206 MA's), (Start: 48 @48660 has 6 MA's), (55, 48690), (71, 48765), (82, 48816), (100, 48903), (134, 49131), (142, 49188),

Gene: Netyap_70 Start: 46904, Stop: 47584, Start Num: 39
Candidate Starts for Netyap_70:
(Start: 39 @46904 has 206 MA's), (109, 47273), (115, 47303), (145, 47507), (149, 47528),

Gene: Nicholas_66 Start: 47241, Stop: 47921, Start Num: 39
Candidate Starts for Nicholas_66:
(Start: 39 @47241 has 206 MA's), (88, 47475), (105, 47589), (109, 47610), (115, 47640), (145, 47844), (149, 47865),

Gene: Nicholasp3_69 Start: 46936, Stop: 47616, Start Num: 39
Candidate Starts for Nicholasp3_69:
(Start: 39 @46936 has 206 MA's), (109, 47305), (115, 47335), (145, 47539), (149, 47560),

Gene: Nimrod_80 Start: 50236, Stop: 50886, Start Num: 39
Candidate Starts for Nimrod_80:
(Start: 39 @50236 has 206 MA's), (Start: 48 @50281 has 6 MA's), (55, 50311), (71, 50386), (82, 50437), (100, 50524), (134, 50752), (142, 50809),

Gene: NoSleep_80 Start: 48870, Stop: 49520, Start Num: 39
Candidate Starts for NoSleep_80:
(Start: 39 @48870 has 206 MA's), (Start: 48 @48915 has 6 MA's), (55, 48945), (71, 49020), (82, 49071), (100, 49158), (134, 49386), (142, 49443),

Gene: NonchalantPear_79 Start: 48723, Stop: 49373, Start Num: 39
Candidate Starts for NonchalantPear_79:
(Start: 39 @48723 has 206 MA's), (Start: 48 @48768 has 6 MA's), (55, 48798), (71, 48873), (82, 48924), (100, 49011), (134, 49239), (142, 49296),

Gene: OBUpride_68 Start: 45759, Stop: 46790, Start Num: 11
Candidate Starts for OBUpride_68:
(Start: 11 @45759 has 16 MA's), (15, 45789), (28, 45855), (30, 45861), (33, 45870), (Start: 39 @45897 has 206 MA's), (42, 45912), (44, 45927), (54, 45969), (73, 46050), (80, 46077), (108, 46245), (112, 46266), (129, 46398), (132, 46410), (138, 46470), (139, 46473), (141, 46482), (152, 46533), (153, 46536), (158, 46596), (160, 46614), (164, 46674),

Gene: OhShagHennessy_65 Start: 44491, Stop: 45168, Start Num: 39
Candidate Starts for OhShagHennessy_65:
(Start: 39 @44491 has 206 MA's), (Start: 48 @44539 has 6 MA's), (65, 44617), (69, 44635), (71, 44644), (88, 44725), (96, 44785), (109, 44857), (115, 44887), (142, 45085),

Gene: OneDirection_60 Start: 35671, Stop: 36477, Start Num: 36
Candidate Starts for OneDirection_60:
(Start: 36 @35671 has 11 MA's), (Start: 48 @35722 has 6 MA's), (59, 35755), (89, 35902), (102, 35968), (113, 36013), (147, 36238),

Gene: OrionPax_78 Start: 48621, Stop: 49271, Start Num: 39
Candidate Starts for OrionPax_78:
(Start: 39 @48621 has 206 MA's), (Start: 48 @48666 has 6 MA's), (55, 48696), (71, 48771), (82, 48822), (100, 48909), (134, 49137), (142, 49194),

Gene: OverPar_70 Start: 46988, Stop: 47668, Start Num: 39
Candidate Starts for OverPar_70:
(Start: 39 @46988 has 206 MA's), (109, 47357), (115, 47387), (145, 47591), (149, 47612),

Gene: PYPDinur_65 Start: 45654, Stop: 46334, Start Num: 39
Candidate Starts for PYPDinur_65:
(Start: 39 @45654 has 206 MA's), (81, 45849), (86, 45879), (96, 45951), (115, 46053), (125, 46113), (134, 46194), (145, 46257), (149, 46278), (154, 46302),

Gene: PaddyBaddy_79 Start: 48624, Stop: 49274, Start Num: 39
Candidate Starts for PaddyBaddy_79:
(Start: 39 @48624 has 206 MA's), (Start: 48 @48669 has 6 MA's), (55, 48699), (71, 48774), (82, 48825), (100, 48912), (134, 49140), (142, 49197),

Gene: Palpatine_81 Start: 50002, Stop: 50652, Start Num: 39
Candidate Starts for Palpatine_81:
(Start: 39 @50002 has 206 MA's), (Start: 48 @50047 has 6 MA's), (55, 50077), (71, 50152), (82, 50203), (100, 50290), (134, 50518), (142, 50575),

Gene: Paperbeatsrock_78 Start: 49247, Stop: 49897, Start Num: 39
Candidate Starts for Paperbeatsrock_78:
(Start: 39 @49247 has 206 MA's), (Start: 48 @49292 has 6 MA's), (55, 49322), (71, 49397), (82, 49448), (100, 49535), (104, 49562), (134, 49763), (142, 49820),

Gene: Pat3_77 Start: 47779, Stop: 48429, Start Num: 39
Candidate Starts for Pat3_77:
(Start: 39 @47779 has 206 MA's), (Start: 48 @47824 has 6 MA's), (55, 47854), (71, 47929), (82, 47980), (100, 48067), (104, 48094), (134, 48295), (142, 48352), (150, 48382),

Gene: Petra64142_83 Start: 50466, Stop: 51116, Start Num: 39
Candidate Starts for Petra64142_83:
(Start: 39 @50466 has 206 MA's), (Start: 48 @50511 has 6 MA's), (55, 50541), (71, 50616), (82, 50667), (100, 50754), (134, 50982), (142, 51039),

Gene: Phabuloso_95 Start: 50041, Stop: 50838, Start Num: 36
Candidate Starts for Phabuloso_95:
(Start: 36 @50041 has 11 MA's), (Start: 48 @50092 has 6 MA's), (59, 50125), (89, 50272), (102, 50338),

Gene: Phaja_77 Start: 49073, Stop: 49723, Start Num: 39
Candidate Starts for Phaja_77:
(Start: 39 @49073 has 206 MA's), (Start: 48 @49118 has 6 MA's), (55, 49148), (71, 49223), (82, 49274), (100, 49361), (104, 49388), (134, 49589), (142, 49646),

Gene: PhaoMing_66 Start: 42075, Stop: 42944, Start Num: 23
Candidate Starts for PhaoMing_66:
(Start: 23 @42075 has 1 MA's), (43, 42165), (63, 42252), (77, 42303), (103, 42450), (124, 42561), (128, 42597),

Gene: Pharsalus_76 Start: 49047, Stop: 49697, Start Num: 39
Candidate Starts for Pharsalus_76:
(Start: 39 @49047 has 206 MA's), (Start: 48 @49092 has 6 MA's), (55, 49122), (71, 49197), (82, 49248), (100, 49335), (104, 49362), (134, 49563), (142, 49620),

Gene: PhatBacter_83 Start: 50019, Stop: 50669, Start Num: 39
Candidate Starts for PhatBacter_83:
(Start: 39 @50019 has 206 MA's), (Start: 48 @50064 has 6 MA's), (55, 50094), (71, 50169), (82, 50220), (100, 50307), (104, 50334), (134, 50535), (142, 50592),

Gene: Phaux_81 Start: 50014, Stop: 50664, Start Num: 39
Candidate Starts for Phaux_81:
(Start: 39 @50014 has 206 MA's), (Start: 48 @50059 has 6 MA's), (55, 50089), (71, 50164), (82, 50215), (100, 50302), (134, 50530), (142, 50587),

Gene: PhorbesPhlower_64 Start: 37661, Stop: 38458, Start Num: 36
Candidate Starts for PhorbesPhlower_64:
(Start: 36 @37661 has 11 MA's), (Start: 48 @37712 has 6 MA's), (59, 37745), (62, 37781), (91, 37904), (147, 38228),

Gene: Phrux_76 Start: 48610, Stop: 49260, Start Num: 39
Candidate Starts for Phrux_76:
(Start: 39 @48610 has 206 MA's), (Start: 48 @48655 has 6 MA's), (55, 48685), (71, 48760), (82, 48811), (100, 48898), (134, 49126), (142, 49183),

Gene: Policronamos_82 Start: 50014, Stop: 50664, Start Num: 39
Candidate Starts for Policronamos_82:
(Start: 39 @50014 has 206 MA's), (Start: 48 @50059 has 6 MA's), (55, 50089), (71, 50164), (82, 50215), (100, 50302), (134, 50530), (142, 50587),

Gene: Poochiewood_66 Start: 45783, Stop: 46460, Start Num: 39
Candidate Starts for Poochiewood_66:
(Start: 39 @45783 has 206 MA's), (Start: 48 @45831 has 6 MA's), (65, 45909), (69, 45927), (71, 45936), (87, 46011), (88, 46017), (96, 46077), (109, 46149), (115, 46179), (142, 46377),

Gene: Porky_78 Start: 48440, Stop: 49090, Start Num: 39
Candidate Starts for Porky_78:
(Start: 39 @48440 has 206 MA's), (Start: 48 @48485 has 6 MA's), (55, 48515), (71, 48590), (82, 48641), (100, 48728), (134, 48956), (142, 49013),

Gene: Ptowny_76 Start: 47909, Stop: 48559, Start Num: 39
Candidate Starts for Ptowny_76:
(Start: 39 @47909 has 206 MA's), (Start: 48 @47954 has 6 MA's), (55, 47984), (71, 48059), (82, 48110), (100, 48197), (134, 48425), (142, 48482),

Gene: Pumpkin_82 Start: 49668, Stop: 50318, Start Num: 39
Candidate Starts for Pumpkin_82:
(Start: 39 @49668 has 206 MA's), (Start: 48 @49713 has 6 MA's), (55, 49743), (71, 49818), (82, 49869), (100, 49956), (104, 49983), (134, 50184), (142, 50241),

Gene: Quallification_80 Start: 49655, Stop: 50305, Start Num: 39
Candidate Starts for Quallification_80:

(Start: 39 @49655 has 206 MA's), (Start: 48 @49700 has 6 MA's), (55, 49730), (71, 49805), (82, 49856), (100, 49943), (134, 50171), (142, 50228),

Gene: Quby_67 Start: 45546, Stop: 46226, Start Num: 39
Candidate Starts for Quby_67:
(Start: 39 @45546 has 206 MA's), (68, 45687), (85, 45768), (86, 45771), (98, 45855), (115, 45945), (125, 46005), (134, 46086), (145, 46149), (149, 46170), (156, 46215),

Gene: Rakim_80 Start: 49124, Stop: 49774, Start Num: 39
Candidate Starts for Rakim_80:
(Start: 39 @49124 has 206 MA's), (Start: 48 @49169 has 6 MA's), (55, 49199), (71, 49274), (82, 49325), (100, 49412), (134, 49640), (142, 49697),

Gene: RavenCo17_67 Start: 46154, Stop: 47035, Start Num: 27
Candidate Starts for RavenCo17_67:
(Start: 27 @46154 has 2 MA's), (45, 46229), (60, 46280), (64, 46304), (79, 46364), (113, 46514), (135, 46670),

Gene: Red305_69 Start: 47234, Stop: 47914, Start Num: 39
Candidate Starts for Red305_69:
(Start: 39 @47234 has 206 MA's), (88, 47468), (105, 47582), (109, 47603), (115, 47633), (145, 47837), (149, 47858),

Gene: Rimmer_80 Start: 49360, Stop: 50010, Start Num: 39
Candidate Starts for Rimmer_80:
(Start: 39 @49360 has 206 MA's), (Start: 48 @49405 has 6 MA's), (55, 49435), (58, 49441), (71, 49510), (76, 49537), (82, 49561), (100, 49648), (105, 49684), (134, 49876), (142, 49933),

Gene: RiverMonster_79 Start: 49188, Stop: 49838, Start Num: 39
Candidate Starts for RiverMonster_79:
(Start: 39 @49188 has 206 MA's), (Start: 48 @49233 has 6 MA's), (55, 49263), (71, 49338), (82, 49389), (100, 49476), (134, 49704), (142, 49761),

Gene: Rose5_67 Start: 45843, Stop: 46472, Start Num: 48
Candidate Starts for Rose5_67:
(Start: 39 @45795 has 206 MA's), (Start: 48 @45843 has 6 MA's), (65, 45921), (69, 45939), (71, 45948), (87, 46023), (88, 46029), (96, 46089), (109, 46161), (115, 46191), (142, 46389),

Gene: Rossetti_71 Start: 47482, Stop: 48162, Start Num: 39
Candidate Starts for Rossetti_71:
(Start: 39 @47482 has 206 MA's), (109, 47851), (115, 47881), (145, 48085), (149, 48106),

Gene: Rumpelstiltskin_68 Start: 46329, Stop: 47009, Start Num: 39
Candidate Starts for Rumpelstiltskin_68:
(Start: 39 @46329 has 206 MA's), (109, 46698), (115, 46728), (145, 46932), (149, 46953),

Gene: Saints25_78 Start: 48598, Stop: 49248, Start Num: 39
Candidate Starts for Saints25_78:
(Start: 39 @48598 has 206 MA's), (Start: 48 @48643 has 6 MA's), (55, 48673), (71, 48748), (82, 48799), (100, 48886), (134, 49114), (142, 49171),

Gene: Samty_68 Start: 47242, Stop: 47922, Start Num: 39
Candidate Starts for Samty_68:

(Start: 39 @47242 has 206 MA's), (88, 47476), (105, 47590), (109, 47611), (115, 47641), (145, 47845), (149, 47866),

Gene: Sarshaun_70 Start: 46996, Stop: 47676, Start Num: 39
Candidate Starts for Sarshaun_70:
(Start: 39 @46996 has 206 MA's), (109, 47365), (115, 47395), (145, 47599), (149, 47620),

Gene: Sassay_74 Start: 47288, Stop: 47938, Start Num: 39
Candidate Starts for Sassay_74:
(Start: 39 @47288 has 206 MA's), (Start: 48 @47333 has 6 MA's), (55, 47363), (71, 47438), (82, 47489), (100, 47576), (134, 47804), (142, 47861),

Gene: ShamWow_79 Start: 49510, Stop: 50160, Start Num: 39
Candidate Starts for ShamWow_79:
(Start: 39 @49510 has 206 MA's), (Start: 48 @49555 has 6 MA's), (55, 49585), (71, 49660), (82, 49711), (100, 49798), (134, 50026), (142, 50083),

Gene: SharkTale_66 Start: 48294, Stop: 49244, Start Num: 14
Candidate Starts for SharkTale_66:
(Start: 14 @48294 has 1 MA's), (25, 48345), (47, 48450), (52, 48465), (56, 48477), (57, 48480), (60, 48495), (61, 48504), (76, 48576), (94, 48666), (101, 48705), (168, 49197),

Gene: Sheng711_67 Start: 45638, Stop: 46318, Start Num: 39
Candidate Starts for Sheng711_67:
(Start: 39 @45638 has 206 MA's), (76, 45818), (81, 45833), (86, 45863), (96, 45935), (115, 46037), (125, 46097), (134, 46178), (149, 46262), (154, 46286), (156, 46307),

Gene: ShereKhan_77 Start: 49580, Stop: 50230, Start Num: 39
Candidate Starts for ShereKhan_77:
(Start: 39 @49580 has 206 MA's), (Start: 48 @49625 has 6 MA's), (55, 49655), (71, 49730), (82, 49781), (100, 49868), (134, 50096), (142, 50153),

Gene: Silverleaf_67 Start: 45245, Stop: 45922, Start Num: 39
Candidate Starts for Silverleaf_67:
(Start: 39 @45245 has 206 MA's), (Start: 48 @45293 has 6 MA's), (65, 45371), (69, 45389), (71, 45398), (87, 45473), (88, 45479), (96, 45539), (109, 45611), (115, 45641), (142, 45839),

Gene: Simpliphy_78 Start: 48588, Stop: 49238, Start Num: 39
Candidate Starts for Simpliphy_78:
(Start: 39 @48588 has 206 MA's), (Start: 48 @48633 has 6 MA's), (55, 48663), (71, 48738), (82, 48789), (100, 48876), (134, 49104), (142, 49161),

Gene: SirDuracell_78 Start: 47874, Stop: 48524, Start Num: 39
Candidate Starts for SirDuracell_78:
(Start: 39 @47874 has 206 MA's), (Start: 48 @47919 has 6 MA's), (55, 47949), (71, 48024), (82, 48075), (100, 48162), (104, 48189), (134, 48390), (142, 48447),

Gene: Snenia_67 Start: 47235, Stop: 47915, Start Num: 39
Candidate Starts for Snenia_67:
(Start: 39 @47235 has 206 MA's), (88, 47469), (105, 47583), (109, 47604), (115, 47634), (145, 47838), (149, 47859),

Gene: SoJulia_70 Start: 47165, Stop: 47845, Start Num: 39

Candidate Starts for SoJulia_70:
(Start: 39 @47165 has 206 MA's), (109, 47534), (115, 47564), (145, 47768), (149, 47789),

Gene: Soap141_69 Start: 46996, Stop: 47676, Start Num: 39
Candidate Starts for Soap141_69:
(Start: 39 @46996 has 206 MA's), (109, 47365), (115, 47395), (145, 47599), (149, 47620),

Gene: SophKB_76 Start: 48266, Stop: 48916, Start Num: 39
Candidate Starts for SophKB_76:
(Start: 39 @48266 has 206 MA's), (Start: 48 @48311 has 6 MA's), (55, 48341), (71, 48416), (82, 48467), (100, 48554), (134, 48782), (142, 48839),

Gene: Sotrice96_80 Start: 49269, Stop: 49919, Start Num: 39
Candidate Starts for Sotrice96_80:
(Start: 39 @49269 has 206 MA's), (Start: 48 @49314 has 6 MA's), (55, 49344), (71, 49419), (82, 49470), (100, 49557), (134, 49785), (142, 49842),

Gene: Stank_82 Start: 49527, Stop: 50177, Start Num: 39
Candidate Starts for Stank_82:
(Start: 39 @49527 has 206 MA's), (Start: 48 @49572 has 6 MA's), (55, 49602), (71, 49677), (82, 49728), (100, 49815), (134, 50043), (142, 50100),

Gene: Stark_80 Start: 49071, Stop: 49721, Start Num: 39
Candidate Starts for Stark_80:
(Start: 39 @49071 has 206 MA's), (Start: 48 @49116 has 6 MA's), (55, 49146), (71, 49221), (82, 49272), (100, 49359), (134, 49587), (142, 49644),

Gene: StellaBean_77 Start: 48834, Stop: 49484, Start Num: 39
Candidate Starts for StellaBean_77:
(Start: 39 @48834 has 206 MA's), (Start: 48 @48879 has 6 MA's), (55, 48909), (71, 48984), (82, 49035), (100, 49122), (134, 49350), (142, 49407),

Gene: StolenFromERC_82 Start: 49309, Stop: 49959, Start Num: 39
Candidate Starts for StolenFromERC_82:
(Start: 39 @49309 has 206 MA's), (Start: 48 @49354 has 6 MA's), (55, 49384), (71, 49459), (82, 49510), (100, 49597), (134, 49825), (142, 49882),

Gene: StormChicken_81 Start: 49967, Stop: 50617, Start Num: 39
Candidate Starts for StormChicken_81:
(Start: 39 @49967 has 206 MA's), (Start: 48 @50012 has 6 MA's), (55, 50042), (71, 50117), (82, 50168), (100, 50255), (104, 50282), (134, 50483), (142, 50540),

Gene: StorminNorm_53 Start: 44022, Stop: 45029, Start Num: 38
Candidate Starts for StorminNorm_53:
(Start: 38 @44022 has 3 MA's), (Start: 40 @44025 has 1 MA's), (71, 44172), (120, 44445), (133, 44547), (140, 44610), (144, 44622), (159, 44730), (163, 44757),

Gene: SushiChef_71 Start: 48144, Stop: 49112, Start Num: 17
Candidate Starts for SushiChef_71:
(16, 48135), (Start: 17 @48144 has 5 MA's), (31, 48201), (41, 48246), (62, 48351), (65, 48354), (72, 48384), (113, 48582), (135, 48747),

Gene: TBrady12_82 Start: 49008, Stop: 49658, Start Num: 39

Candidate Starts for TBrady12_82:
(Start: 39 @49008 has 206 MA's), (Start: 48 @49053 has 6 MA's), (55, 49083), (71, 49158), (82, 49209), (100, 49296), (134, 49524), (142, 49581),

Gene: Tarkin_78 Start: 49256, Stop: 49906, Start Num: 39
Candidate Starts for Tarkin_78:
(Start: 39 @49256 has 206 MA's), (Start: 48 @49301 has 6 MA's), (55, 49331), (71, 49406), (82, 49457), (100, 49544), (104, 49571), (134, 49772), (142, 49829),

Gene: TeamEdward_81 Start: 49961, Stop: 50611, Start Num: 39
Candidate Starts for TeamEdward_81:
(Start: 39 @49961 has 206 MA's), (Start: 48 @50006 has 6 MA's), (55, 50036), (58, 50042), (71, 50111), (76, 50138), (82, 50162), (100, 50249), (105, 50285), (134, 50477), (142, 50534),

Gene: TeardropMSU_75 Start: 48256, Stop: 48906, Start Num: 39
Candidate Starts for TeardropMSU_75:
(Start: 39 @48256 has 206 MA's), (Start: 48 @48301 has 6 MA's), (55, 48331), (71, 48406), (82, 48457), (100, 48544), (104, 48571), (134, 48772), (142, 48829),

Gene: Teaspoon_80 Start: 49150, Stop: 49800, Start Num: 39
Candidate Starts for Teaspoon_80:
(Start: 39 @49150 has 206 MA's), (Start: 48 @49195 has 6 MA's), (55, 49225), (71, 49300), (82, 49351), (100, 49438), (134, 49666), (142, 49723),

Gene: Terminus_82 Start: 50043, Stop: 50693, Start Num: 39
Candidate Starts for Terminus_82:
(Start: 39 @50043 has 206 MA's), (Start: 48 @50088 has 6 MA's), (55, 50118), (71, 50193), (82, 50244), (100, 50331), (134, 50559), (142, 50616),

Gene: ThankyouJordi_71 Start: 48385, Stop: 49353, Start Num: 17
Candidate Starts for ThankyouJordi_71:
(16, 48376), (Start: 17 @48385 has 5 MA's), (24, 48403), (31, 48442), (60, 48568), (62, 48592), (72, 48625), (113, 48823), (135, 48988),

Gene: Thimble_80 Start: 48491, Stop: 49141, Start Num: 39
Candidate Starts for Thimble_80:
(Start: 39 @48491 has 206 MA's), (Start: 48 @48536 has 6 MA's), (55, 48566), (71, 48641), (82, 48692), (100, 48779), (104, 48806), (134, 49007), (142, 49064),

Gene: Thresher_81 Start: 50130, Stop: 50780, Start Num: 39
Candidate Starts for Thresher_81:
(Start: 39 @50130 has 206 MA's), (Start: 48 @50175 has 6 MA's), (55, 50205), (71, 50280), (82, 50331), (100, 50418), (134, 50646), (142, 50703),

Gene: Tomaszewski_74 Start: 48419, Stop: 49069, Start Num: 39
Candidate Starts for Tomaszewski_74:
(Start: 39 @48419 has 206 MA's), (Start: 48 @48464 has 6 MA's), (55, 48494), (71, 48569), (82, 48620), (100, 48707), (104, 48734), (134, 48935), (142, 48992), (150, 49022),

Gene: TootsiePop_84 Start: 51490, Stop: 52407, Start Num: 13
Candidate Starts for TootsiePop_84:
(Start: 13 @51490 has 7 MA's), (20, 51535), (22, 51538), (32, 51583), (42, 51628), (51, 51673), (53, 51682), (54, 51685), (70, 51748), (99, 51898), (110, 51946), (138, 52129), (148, 52165),

Gene: Toto_77 Start: 49510, Stop: 50160, Start Num: 39
Candidate Starts for Toto_77:
(Start: 39 @49510 has 206 MA's), (Start: 48 @49555 has 6 MA's), (55, 49585), (71, 49660), (82, 49711), (100, 49798), (134, 50026), (142, 50083),

Gene: Tourach_68 Start: 46985, Stop: 47665, Start Num: 39
Candidate Starts for Tourach_68:
(Start: 39 @46985 has 206 MA's), (115, 47384), (145, 47588), (149, 47609),

Gene: Traaww1_75 Start: 48694, Stop: 49344, Start Num: 39
Candidate Starts for Traaww1_75:
(Start: 39 @48694 has 206 MA's), (Start: 48 @48739 has 6 MA's), (55, 48769), (71, 48844), (82, 48895), (100, 48982), (134, 49210), (142, 49267),

Gene: TriFive_69 Start: 47234, Stop: 47914, Start Num: 39
Candidate Starts for TriFive_69:
(Start: 39 @47234 has 206 MA's), (88, 47468), (105, 47582), (109, 47603), (115, 47633), (145, 47837), (149, 47858),

Gene: Tuco_80 Start: 50018, Stop: 50668, Start Num: 39
Candidate Starts for Tuco_80:
(Start: 39 @50018 has 206 MA's), (Start: 48 @50063 has 6 MA's), (55, 50093), (71, 50168), (82, 50219), (100, 50306), (134, 50534), (142, 50591),

Gene: Tycho_53 Start: 43893, Stop: 44897, Start Num: 40
Candidate Starts for Tycho_53:
(Start: 38 @43890 has 3 MA's), (Start: 40 @43893 has 1 MA's), (71, 44040), (120, 44313), (133, 44415), (140, 44478), (144, 44490), (159, 44598), (163, 44625),

Gene: Typha_79 Start: 52711, Stop: 53646, Start Num: 12
Candidate Starts for Typha_79:
(Start: 12 @52711 has 4 MA's), (35, 52825), (42, 52855), (66, 52963), (114, 53206), (148, 53383), (159, 53476), (166, 53587), (167, 53590),

Gene: Tyson_68 Start: 45769, Stop: 46398, Start Num: 48
Candidate Starts for Tyson_68:
(Start: 39 @45721 has 206 MA's), (Start: 48 @45769 has 6 MA's), (65, 45847), (69, 45865), (71, 45874), (87, 45949), (88, 45955), (96, 46015), (109, 46087), (115, 46117), (142, 46315),

Gene: UPIE_66 Start: 45321, Stop: 45998, Start Num: 39
Candidate Starts for UPIE_66:
(Start: 39 @45321 has 206 MA's), (Start: 48 @45369 has 6 MA's), (65, 45447), (69, 45465), (71, 45474), (88, 45555), (96, 45615), (109, 45687), (115, 45717), (142, 45915),

Gene: Ubuntu_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Ubuntu_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Ukulele_74 Start: 48401, Stop: 49051, Start Num: 39
Candidate Starts for Ukulele_74:
(Start: 39 @48401 has 206 MA's), (Start: 48 @48446 has 6 MA's), (55, 48476), (71, 48551), (82, 48602), (100, 48689), (134, 48917), (142, 48974),

Gene: Underpass_60 Start: 41972, Stop: 42652, Start Num: 39
Candidate Starts for Underpass_60:
(Start: 39 @41972 has 206 MA's), (109, 42341), (115, 42371), (145, 42575), (149, 42596),

Gene: Vetrix_69 Start: 46943, Stop: 47623, Start Num: 39
Candidate Starts for Vetrix_69:
(Start: 39 @46943 has 206 MA's), (109, 47312), (115, 47342), (145, 47546), (149, 47567),

Gene: Wamburgrxpress_67 Start: 45351, Stop: 46028, Start Num: 39
Candidate Starts for Wamburgrxpress_67:
(Start: 39 @45351 has 206 MA's), (Start: 48 @45399 has 6 MA's), (65, 45477), (69, 45495), (71, 45504), (87, 45579), (88, 45585), (96, 45645), (109, 45717), (115, 45747), (142, 45945),

Gene: Webster2_69 Start: 45763, Stop: 46746, Start Num: 11
Candidate Starts for Webster2_69:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: WelcomeAyanna_71 Start: 48532, Stop: 49500, Start Num: 17
Candidate Starts for WelcomeAyanna_71:
(16, 48523), (Start: 17 @48532 has 5 MA's), (24, 48550), (31, 48589), (60, 48715), (62, 48739), (72, 48772), (113, 48970), (135, 49135),

Gene: Whirlwind_68 Start: 47050, Stop: 47730, Start Num: 39
Candidate Starts for Whirlwind_68:
(Start: 39 @47050 has 206 MA's), (69, 47194), (88, 47284), (105, 47398), (109, 47419), (115, 47449), (149, 47674),

Gene: Wiggin_81 Start: 49095, Stop: 49745, Start Num: 39
Candidate Starts for Wiggin_81:
(Start: 39 @49095 has 206 MA's), (Start: 48 @49140 has 6 MA's), (55, 49170), (71, 49245), (82, 49296), (100, 49383), (134, 49611), (142, 49668),

Gene: Wigglewiggle_69 Start: 46960, Stop: 47640, Start Num: 39
Candidate Starts for Wigglewiggle_69:
(Start: 39 @46960 has 206 MA's), (109, 47329), (115, 47359), (145, 47563), (149, 47584),

Gene: Wilder_70 Start: 46909, Stop: 47589, Start Num: 39
Candidate Starts for Wilder_70:
(Start: 39 @46909 has 206 MA's), (109, 47278), (115, 47308), (145, 47512), (149, 47533),

Gene: Willez_74 Start: 47288, Stop: 47938, Start Num: 39
Candidate Starts for Willez_74:
(Start: 39 @47288 has 206 MA's), (Start: 48 @47333 has 6 MA's), (55, 47363), (71, 47438), (82, 47489), (100, 47576), (134, 47804), (142, 47861),

Gene: Winky_69 Start: 46903, Stop: 47583, Start Num: 39
Candidate Starts for Winky_69:
(Start: 39 @46903 has 206 MA's), (109, 47272), (115, 47302), (145, 47506), (149, 47527),

Gene: Wishmaker_63 Start: 45667, Stop: 46746, Start Num: 3
Candidate Starts for Wishmaker_63:
(2, 45658), (Start: 3 @45667 has 7 MA's), (4, 45691), (5, 45706), (6, 45709), (8, 45736), (Start: 11 @45763 has 16 MA's), (18, 45817), (20, 45820), (30, 45859), (33, 45868), (42, 45910), (45, 45931), (46, 45934), (60, 45991), (67, 46030), (74, 46057), (78, 46072), (129, 46354), (132, 46366), (134, 46390), (138, 46426), (139, 46429), (141, 46438), (152, 46489), (153, 46492), (158, 46552), (160, 46570), (164, 46630),

Gene: Wyatt2_68 Start: 45767, Stop: 46396, Start Num: 48
Candidate Starts for Wyatt2_68:
(Start: 39 @45719 has 206 MA's), (Start: 48 @45767 has 6 MA's), (65, 45845), (69, 45863), (71, 45872), (88, 45953), (96, 46013), (109, 46085), (115, 46115), (142, 46313),

Gene: Xandras_78 Start: 48503, Stop: 49153, Start Num: 39
Candidate Starts for Xandras_78:
(Start: 39 @48503 has 206 MA's), (Start: 48 @48548 has 6 MA's), (55, 48578), (71, 48653), (82, 48704), (100, 48791), (104, 48818), (134, 49019), (142, 49076),

Gene: YassJohnny_76 Start: 48458, Stop: 49108, Start Num: 39
Candidate Starts for YassJohnny_76:
(Start: 39 @48458 has 206 MA's), (Start: 48 @48503 has 6 MA's), (55, 48533), (71, 48608), (82, 48659), (100, 48746), (104, 48773), (134, 48974), (142, 49031),

Gene: Youngblood_82 Start: 49970, Stop: 50620, Start Num: 39
Candidate Starts for Youngblood_82:
(Start: 39 @49970 has 206 MA's), (Start: 48 @50015 has 6 MA's), (55, 50045), (71, 50120), (82, 50171), (100, 50258), (134, 50486), (142, 50543),

Gene: Zakai_70 Start: 47229, Stop: 47909, Start Num: 39
Candidate Starts for Zakai_70:
(Start: 39 @47229 has 206 MA's), (109, 47598), (115, 47628), (145, 47832), (149, 47853),

Gene: Zaria_68 Start: 45223, Stop: 45852, Start Num: 48
Candidate Starts for Zaria_68:
(Start: 39 @45175 has 206 MA's), (Start: 48 @45223 has 6 MA's), (65, 45301), (69, 45319), (71, 45328), (88, 45409), (96, 45469), (109, 45541), (115, 45571), (142, 45769),

Gene: ZhongYanYuan_68 Start: 46798, Stop: 47478, Start Num: 39
Candidate Starts for ZhongYanYuan_68:
(Start: 39 @46798 has 206 MA's), (115, 47197), (145, 47401), (149, 47422),

Gene: Zodiariah_64 Start: 47543, Stop: 48511, Start Num: 17
Candidate Starts for Zodiariah_64:
(16, 47534), (Start: 17 @47543 has 5 MA's), (24, 47561), (31, 47600), (60, 47726), (62, 47750), (65, 47753), (72, 47783), (113, 47981), (135, 48146),

Gene: xkcd_82 Start: 50160, Stop: 50810, Start Num: 39
Candidate Starts for xkcd_82:

(Start: 39 @50160 has 206 MA's), (Start: 48 @50205 has 6 MA's), (55, 50235), (71, 50310), (82, 50361), (100, 50448), (134, 50676), (142, 50733),