

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 163339 Report

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

Pham number 163339 has 220 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Catfish_49
- Track 2 : BritBrat_66
- Track 3 : ODay_78
- Track 4 : CheeseTouch_74, Kuwabara_72, Ecliptus_75
- Track 5 : LitninMcQueen_71
- Track 6 : Horus_72
- Track 7 : Squiddly_73, Spooky_68
- Track 8 : Keelan_96
- Track 9 : Trax_71
- Track 10 : Rabbitrun_72
- Track 11 : Barbarian_76, Bench_80, HufflyPuff_80, Mindy_76, Myrale_77, Flypotenuse_73, AmericanBeauty_84, Lilac_79, Daikon_79, Manda_78, Ukulele_72, Filch_78, NoSleep_78, Rimmer_78, Teaspoon_74, Porky_76, Kostya_77, Buck_78, Petra64142_81, Phaux_79, Highbury_76, SophKB_74, NelitzaMV_75, Glexan_76, Czyszczonek_78, Eureka_75, Miniwave_72, Pumpkin_80, TBrady12_80, TeardropMSU_73, Terminus_80, Lilizi_78, BigBubba_77, Stark_78, Mosby_73, Sotrice96_78, IHOP_75, Hopey_77, Dumbo_77, Thresher_79, Harella_77, Elph10_77, Icee_78, Sassay_72, MPhalcon_78, Youngblood_80, Toto_75, Murphy_77, Policronamos_81, Pharsalus_74, Inca_74, Balomoji_77, Dusk_74, Command613_79, Gator_75, Kanye_74, Saints25_76, CrystalP_76, 244_78, ABCat_74, Phrux_74, Cactus_80, Elite2014_76, BugsBunny_77, Cjw1_77, Hoonter_80, Misfit_78, Maxxinista_79, Easy2Say_78, ChosenOne_77, Willez_72, BaboJay_74, Emmina_77, Nimrod_78, GooberAzure_80, Stank_80, Simpliphy_76, Goku_75, Gage_79, Traaww1_73, Moldemort_80, BadStone_74, Asriel_76, Argent26_81, Kimchi_81, JeTaime_77, PhatBacter_81, Palpatine_79, xkcd_80, Phaja_75, Lilpickle_76, RiverMonster_77, Holt_82, Bruin_74, Henry_75, Xandras_76, ShamWow_77, MISSy_78, Murica_80, DrDrey_77, Rakim_78, Tuco_78, Paperbeatsrock_76, HanKaySha_77, Contagion_73, Qualification_78, Goldilocks_80, StolenFromERC_80, Adnama_81, Gemini_82, MadamMonkfish_77, StellaBean_73, Wiggin_79, BilboSwaggins_76, GoldenSpark_81, Tarkin_76
- Track 12 : Marshmallow_75, Tomaszewski_72, OrionPax_76, YassJohnny_74, Amao_77, SirDuracell_76, Pat3_75, Cookies_74, ChotaBhai_77, DoctorDiddles_76, Bask21_77
- Track 13 : FireRed_81, Nala_79
- Track 14 : Cinna_52
- Track 15 : Mutaforma13_71
- Track 16 : Wachhund_66

- Track 17 : Yorick_64
- Track 18 : DosHalletts_71, Eish_68
- Track 19 : Mozy_75, Fancypants_68
- Track 20 : Whouxphf_62
- Track 21 : Karhdo_64
- Track 22 : DillTech15_63
- Track 23 : Emma_67, Moonbeam_64
- Track 24 : DaWorst_65
- Track 25 : Estave1_70
- Track 26 : Demsculpinboyz_78
- Track 27 : Gonephishing_112, LittleE_122
- Track 28 : Lucky2013_115
- Track 29 : Thibault_106, Constella_107, JuicyJay_120, NihilNomen_125, Beem_125, Phoebus_124, Dallas_124
- Track 30 : Hughesyang_122, Zelink_117, Minerva_120, ThreeRngTarjay_118
- Track 31 : Ariel_118, Courthouse_113, Squint_116, Superphikiman_115
- Track 32 : Klein_119, Bobby_115
- Track 33 : Kalah2_114, Bagrid_123, DmpstrDiver_123
- Track 34 : EricMillard_114, BAKA_122, Optimus_113, Duke13_117
- Track 35 : Wanda_122
- Track 36 : Pound_112
- Track 37 : MiaZeal_118
- Track 38 : Redno2_116, Ejimix_117, Halley_125
- Track 39 : HokkenD_113
- Track 40 : Rose5_66, Wamburgrxpress_66
- Track 41 : AvadaKedavra_66, Tyson_67, Wyatt2_67
- Track 42 : Archie_67
- Track 43 : Krypton555_67, Jubie_65, Clautastrophe_65, Whirlwind_66, Lumos_67, Jobypre_66, MsGreen_66, Snenia_65
- Track 44 : DuncansLeg_66
- Track 45 : Lolly9_65, MiniLon_69
- Track 46 : MiniMac_69
- Track 47 : Finnry_66, Samty_66
- Track 48 : Aegeus_71, Baudelaire_71
- Track 49 : Nebkiss_84, Gaia_85
- Track 50 : Typha_64
- Track 51 : Hilltopfarm_64
- Track 52 : Cracklewink_62
- Track 53 : Bipper_62

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

The start number called the most often in the published annotations is 35, it was called in 142 of the 205 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_78, ABCat_74, Adnama_81, Aegeus_71, Amao_77, AmericanBeauty_84, Argent26_81, Asriel_76, AvadaKedavra_66, BaboJay_74, BadStone_74, Balomoji_77, Barbarian_76, Bask21_77, Baudelaire_71, Beem_125, Bench_80, BigBubba_77, BilboSwaggins_76, BritBrat_66, Bruin_74, Buck_78, BugsBunny_77,

Cactus_80, CheeseTouch_74, ChosenOne_77, ChotaBhai_77, Cjw1_77, Command613_79, Constella_107, Contagion_73, Cookies_74, CrystalP_76, Czyszczonek_78, Daikon_79, Dallas_124, DoctorDiddles_76, DrDrey_77, Dumbo_77, Dusk_74, Easy2Say_78, Ecliptus_75, Elite2014_76, Elph10_77, Emmina_77, Eureka_75, Filch_78, FireRed_81, Flypotenuse_73, Gage_79, Gator_75, Gemini_82, Glexan_76, Goku_75, GoldenSpark_81, Goldilocks_80, GooberAzure_80, HanKaySha_77, Harella_77, Henry_75, Highbury_76, Holt_82, Hoonter_80, Hopey_77, Horus_72, HufflyPuff_80, IHOP_75, Icee_78, Inca_74, JeTaime_77, JuicyJay_120, Kanye_74, Kimchi_81, Kostya_77, Kuwabara_72, Lilac_79, Lilizi_78, Lilpickle_76, LitninMcQueen_71, MISSy_78, MPhalcon_78, MadamMonkfish_77, Manda_78, Marshmallow_75, Maxxinista_79, MiaZeal_118, Mindy_76, Miniwave_72, Misfit_78, Moldemort_80, Mosby_73, Murica_80, Murphy_77, Myrale_77, Nala_79, NelitzaMV_75, NihilNomen_125, Nimrod_78, NoSleep_78, ODay_78, OrionPax_76, Palpatine_79, Paperbeatsrock_76, Pat3_75, Petra64142_81, Phaja_75, Pharsalus_74, PhatBacter_81, Phaux_79, Phoebus_124, Phrux_74, Policronamos_81, Porky_76, Pumpkin_80, Quallification_78, Rakim_78, Rimmer_78, RiverMonster_77, Rose5_66, Saints25_76, Sassay_72, ShamWow_77, Simpliphy_76, SirDuracell_76, SophKB_74, Sotrice96_78, Spooky_68, Squiddly_73, Stank_80, Stark_78, StellaBean_73, StolenFromERC_80, TBrady12_80, Tarkin_76, TeardropMSU_73, Teaspoon_74, Terminus_80, Thibault_106, Thresher_79, Tomaszewski_72, Toto_75, Traaww1_73, Tuco_78, Tyson_67, Ukulele_72, Wamburgxpress_66, Wiggin_79, Willez_72, Wyatt2_67, Xandras_76, YassJohnny_74, Youngblood_80, xkcd_80,

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

-

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

- Archie_67, Ariel_118, BAKA_122, Bagrid_123, Bipper_62, Bobby_115, Catfish_49, Cinna_52, Clautastrophe_65, Courthouse_113, Cracklewink_62, DaWorst_65, Demsculpinboyz_78, DillTech15_63, DmpstrDiver_123, DosHalletts_71, Duke13_117, DuncansLeg_66, Eish_68, Ejimix_117, Emma_67, EricMillard_114, Estave1_70, Fancypants_68, Finnry_66, Gaia_85, Gonephishing_112, Halley_125, Hilltopfarm_64, HokkenD_113, Hughesyang_122, Jobypre_66, Jubie_65, Kalah2_114, Karhdo_64, Keelan_96, Klein_119, Krypton555_67, LittleE_122, Lolly9_65, Lucky2013_115, Lumos_67, Minerva_120, MiniLon_69, MiniMac_69, Moonbeam_64, Mozy_75, MsGreen_66, Mutaforma13_71, Nebkiss_84, Optimus_113, Pound_112, Rabbitrun_72, Redno2_116, Samty_66, Snenia_65, Squint_116, Superphikiman_115, ThreeRngTarjay_118, Trax_71, Typha_64, Wachhund_66, Wanda_122, Whirlwind_66, Whouxphf_62, Yorick_64, Zelink_117,

Summary by start number:

Start 18:

- Found in 2 of 220 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lucky2013_115 (J),

Start 21:

- Found in 2 of 220 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 50.0% of time when present

- Phage (with cluster) where this start called: HokkenD_113 (J),

Start 22:

- Found in 4 of 220 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper_62 (Y), Cracklewink_62 (Y), Hilltopfarm_64 (Y), Typha_64 (Y),

Start 28:

- Found in 15 of 220 (6.8%) of genes in pham
- Manual Annotations of this start: 14 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DaWorst_65 (F1), Demsculpinboyz_78 (F2), DillTech15_63 (F1), DosHalletts_71 (F1), Eish_68 (F1), Emma_67 (F1), Estave1_70 (F1), Fancypants_68 (F1), Karhdo_64 (F1), Moonbeam_64 (F1), Mozy_75 (F1), Mutaforma13_71 (F1), Wachhund_66 (F1), Whouxphf_62 (F1), Yorick_64 (F1),

Start 29:

- Found in 1 of 220 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna_52 (EI),

Start 30:

- Found in 4 of 220 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish_49 (CU5), Keelan_96 (DP), Rabbitrun_72 (DU2), Trax_71 (DU2),

Start 32:

- Found in 15 of 220 (6.8%) of genes in pham
- Manual Annotations of this start: 13 of 205
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Archie_67 (L2), Clautastrophe_65 (L3), DuncansLeg_66 (L3), Finnry_66 (L3), Jobypre_66 (L3), Jubie_65 (L3), Krypton555_67 (L3), Lolly9_65 (L3), Lumos_67 (L3), MiniLon_69 (L3), MsGreen_66 (L3), Samty_66 (L3), Snenia_65 (L3), Whirlwind_66 (L3),

Start 34:

- Found in 26 of 220 (11.8%) of genes in pham
- Manual Annotations of this start: 24 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_118 (J), BAKA_122 (J), Bagrid_123 (J), Bobby_115 (J), Courthouse_113 (J), DmpstrDiver_123 (J), Duke13_117 (J), Ejimix_117 (J), EricMillard_114 (J), Gaia_85 (X), Gonephishing_112 (J), Halley_125 (J), Hughesyang_122 (J), Kalah2_114 (J), Klein_119 (J), LittleE_122 (J), Minerva_120 (J), Nebkiss_84 (X), Optimus_113 (J), Pound_112 (J), Redno2_116 (J), Squint_116 (J), Superphikiman_115 (J), ThreeRngTarjay_118 (J), Wanda_122 (J), Zelink_117 (J),

Start 35:

- Found in 153 of 220 (69.5%) of genes in pham
- Manual Annotations of this start: 142 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_78 (E), ABCat_74 (E), Adnama_81 (E), Aegeus_71 (L5), Amao_77 (E), AmericanBeauty_84 (E), Argent26_81 (E), Asriel_76 (E), AvadaKedavra_66 (L1), BaboJay_74 (E), BadStone_74 (E), Balomoji_77 (E), Barbarian_76 (E), Bask21_77 (E), Baudelaire_71 (L5), Beem_125 (J), Bench_80 (E), BigBubba_77 (E), BilboSwaggins_76 (E), BritBrat_66 (CY2), Bruin_74 (E), Buck_78 (E), BugsBunny_77 (E), Cactus_80 (E), CheeseTouch_74 (DN1), ChosenOne_77 (E), ChotaBhai_77 (E), Cjw1_77 (E), Command613_79 (E), Constella_107 (J), Contagion_73 (E), Cookies_74 (E), CrystalP_76 (E), Czystczon1_78 (E), Daikon_79 (E), Dallas_124 (J), DoctorDiddles_76 (E), DrDrey_77 (E), Dumbo_77 (E), Dusk_74 (E), Easy2Say_78 (E), Ecliptus_75 (DN), Elite2014_76 (E), Elph10_77 (E), Emmina_77 (E), Eureka_75 (E), Filch_78 (E), FireRed_81 (E), Flypotenuse_73 (E), Gage_79 (E), Gator_75 (E), Gemini_82 (E), Glexan_76 (E), Goku_75 (E), GoldenSpark_81 (E), Goldilocks_80 (E), GooberAzure_80 (E), HankaySha_77 (E), Harella_77 (E), Henry_75 (E), Highbury_76 (E), Holt_82 (E), Hoonter_80 (E), Hopey_77 (E), Horus_72 (DN1), HuffyPuff_80 (E), IHOP_75 (E), Icee_78 (E), Inca_74 (E), JeTaime_77 (E), JuicyJay_120 (J), Kanye_74 (E), Kimchi_81 (E), Kostya_77 (E), Kuwabara_72 (DN4), Lilac_79 (E), Lilizi_78 (E), Lilpickle_76 (E), LitninMcQueen_71 (DN1), MISSy_78 (E), MPhalcon_78 (E), MadamMonkfish_77 (E), Manda_78 (E), Marshmallow_75 (E), Maxxinista_79 (E), MiaZeal_118 (J), Mindy_76 (E), Miniwave_72 (E), Misfit_78 (E), Moldemort_80 (E), Mosby_73 (E), Murica_80 (E), Murphy_77 (E), Myrale_77 (E), Nala_79 (E), NelitzaMV_75 (E), NihilNomen_125 (J), Nimrod_78 (E), NoSleep_78 (E), ODay_78 (DN), OrionPax_76 (E), Palpatine_79 (E), Paperbeatsrock_76 (E), Pat3_75 (E), Petra64142_81 (E), Phaja_75 (E), Pharsalus_74 (E), PhatBacter_81 (E), Phaux_79 (E), Phoebus_124 (J), Phrux_74 (E), Policronamos_81 (E), Porky_76 (E), Pumpkin_80 (E), Quallification_78 (E), Rakim_78 (E), Rimmer_78 (E), RiverMonster_77 (E), Rose5_66 (L1), Saints25_76 (E), Sassay_72 (E), ShamWow_77 (E), Simpliphy_76 (E), SirDuracell_76 (E), SophKB_74 (E), Sotrice96_78 (E), Spooky_68 (DN2), Squiddly_73 (DN2), Stank_80 (E), Stark_78 (E), StellaBean_73 (E), StolenFromERC_80 (E), TBrady12_80 (E), Tarkin_76 (E), TeardropMSU_73 (E), Teaspoon_74 (E), Terminus_80 (E), Thibault_106 (J), Thresher_79 (E), Tomaszewski_72 (E), Toto_75 (E), Traaww1_73 (E), Tuco_78 (E), Tyson_67 (L1), Ukulele_72 (E), Wamburggrxpress_66 (L1), Wiggin_79 (E), Willez_72 (E), Wyatt2_67 (L1), Xandras_76 (E), YassJohnny_74 (E), Youngblood_80 (E), xkcd_80 (E),

Start 39:

- Found in 16 of 220 (7.3%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 6.2% of time when present
- Phage (with cluster) where this start called: MiniMac_69 (L3),

Summary by clusters:

There are 19 clusters represented in this pham: DN, F1, F2, E, L1, CY2, J, L2, CU5, DN4, L5, DN1, L3, EI, DN2, Y, X, DU2, DP,

Info for manual annotations of cluster CU5:

- Start number 30 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CY2:

- Start number 35 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:

- Start number 35 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 35 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 35 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN4:

- Start number 35 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 30 was manually annotated 1 time for cluster DP.

Info for manual annotations of cluster DU2:

- Start number 30 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster E:

- Start number 35 was manually annotated 118 times for cluster E.

Info for manual annotations of cluster EI:

- Start number 29 was manually annotated 1 time for cluster EI.

Info for manual annotations of cluster F1:

- Start number 28 was manually annotated 13 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 28 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster J:

- Start number 18 was manually annotated 1 time for cluster J.
- Start number 21 was manually annotated 1 time for cluster J.
- Start number 34 was manually annotated 22 times for cluster J.
- Start number 35 was manually annotated 8 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 35 was manually annotated 5 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 32 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 32 was manually annotated 12 times for cluster L3.
- Start number 39 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L5:

- Start number 35 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster X:

- Start number 34 was manually annotated 2 times for cluster X.

Info for manual annotations of cluster Y:

- Start number 22 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: 244_78 Start: 48609, Stop: 48926, Start Num: 35

Candidate Starts for 244_78:

(7, 48426), (Start: 35 @48609 has 142 MA's), (57, 48750),

Gene: ABCat_74 Start: 48962, Stop: 49279, Start Num: 35

Candidate Starts for ABCat_74:

(7, 48779), (Start: 35 @48962 has 142 MA's), (57, 49103),

Gene: Adnama_81 Start: 48988, Stop: 49305, Start Num: 35

Candidate Starts for Adnama_81:

(7, 48805), (Start: 35 @48988 has 142 MA's), (57, 49129),

Gene: Aegeus_71 Start: 46495, Stop: 46824, Start Num: 35

Candidate Starts for Aegeus_71:

(Start: 35 @46495 has 142 MA's), (49, 46579), (68, 46717), (71, 46744), (72, 46750), (75, 46774), (81, 46813),

Gene: Amao_77 Start: 48382, Stop: 48699, Start Num: 35

Candidate Starts for Amao_77:

(7, 48199), (Start: 35 @48382 has 142 MA's), (Start: 39 @48406 has 1 MA's), (57, 48523),

Gene: AmericanBeauty_84 Start: 49131, Stop: 49448, Start Num: 35

Candidate Starts for AmericanBeauty_84:

(7, 48948), (Start: 35 @49131 has 142 MA's), (57, 49272),

Gene: Archie_67 Start: 46551, Stop: 46892, Start Num: 32

Candidate Starts for Archie_67:

(Start: 32 @46551 has 13 MA's), (56, 46698),

Gene: Argent26_81 Start: 48769, Stop: 49086, Start Num: 35

Candidate Starts for Argent26_81:

(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Ariel_118 Start: 64179, Stop: 64499, Start Num: 34

Candidate Starts for Ariel_118:

(Start: 34 @64179 has 24 MA's), (44, 64248), (51, 64290), (68, 64407),

Gene: Asriel_76 Start: 47325, Stop: 47642, Start Num: 35

Candidate Starts for Asriel_76:

(7, 47142), (Start: 35 @47325 has 142 MA's), (57, 47466),

Gene: AvadaKedavra_66 Start: 45153, Stop: 45521, Start Num: 35

Candidate Starts for AvadaKedavra_66:

(Start: 35 @45153 has 142 MA's), (40, 45180), (50, 45249), (53, 45270), (57, 45294), (68, 45375), (77, 45438), (82, 45513),

Gene: BAKA_122 Start: 67774, Stop: 68106, Start Num: 34

Candidate Starts for BAKA_122:

(Start: 34 @67774 has 24 MA's), (44, 67843), (60, 67933), (61, 67936), (68, 68002),

Gene: BaboJay_74 Start: 48162, Stop: 48479, Start Num: 35

Candidate Starts for BaboJay_74:

(7, 47979), (Start: 35 @48162 has 142 MA's), (57, 48303),

Gene: BadStone_74 Start: 48531, Stop: 48848, Start Num: 35

Candidate Starts for BadStone_74:

(7, 48348), (Start: 35 @48531 has 142 MA's), (57, 48672),

Gene: Bagrid_123 Start: 67735, Stop: 68064, Start Num: 34

Candidate Starts for Bagrid_123:

(Start: 34 @67735 has 24 MA's), (44, 67804), (68, 67963), (79, 68047),

Gene: Balomoji_77 Start: 49092, Stop: 49409, Start Num: 35

Candidate Starts for Balomoji_77:

(7, 48909), (Start: 35 @49092 has 142 MA's), (57, 49233),

Gene: Barbarian_76 Start: 47325, Stop: 47642, Start Num: 35

Candidate Starts for Barbarian_76:

(7, 47142), (Start: 35 @47325 has 142 MA's), (57, 47466),

Gene: Bask21_77 Start: 47945, Stop: 48262, Start Num: 35

Candidate Starts for Bask21_77:

(7, 47762), (Start: 35 @47945 has 142 MA's), (Start: 39 @47969 has 1 MA's), (57, 48086),

Gene: Baudelaire_71 Start: 46495, Stop: 46824, Start Num: 35

Candidate Starts for Baudelaire_71:

(Start: 35 @46495 has 142 MA's), (49, 46579), (68, 46717), (71, 46744), (72, 46750), (75, 46774), (81, 46813),

Gene: Beem_125 Start: 69590, Stop: 69922, Start Num: 35

Candidate Starts for Beem_125:

(Start: 35 @69590 has 142 MA's), (52, 69701), (54, 69725), (80, 69905),

Gene: Bench_80 Start: 48629, Stop: 48946, Start Num: 35

Candidate Starts for Bench_80:

(7, 48446), (Start: 35 @48629 has 142 MA's), (57, 48770),

Gene: BigBubba_77 Start: 48341, Stop: 48658, Start Num: 35

Candidate Starts for BigBubba_77:

(7, 48158), (Start: 35 @48341 has 142 MA's), (57, 48482),

Gene: BilboSwaggins_76 Start: 48970, Stop: 49287, Start Num: 35

Candidate Starts for BilboSwaggins_76:

(7, 48787), (Start: 35 @48970 has 142 MA's), (57, 49111),

Gene: Bipper_62 Start: 43632, Stop: 43982, Start Num: 22

Candidate Starts for Bipper_62:

(1, 43371), (6, 43479), (7, 43488), (12, 43560), (16, 43590), (Start: 22 @43632 has 4 MA's), (26, 43647), (31, 43662), (36, 43680), (41, 43713), (48, 43755), (65, 43869), (75, 43935),

Gene: Bobby_115 Start: 69193, Stop: 69522, Start Num: 34

Candidate Starts for Bobby_115:

(Start: 34 @69193 has 24 MA's), (44, 69262), (60, 69352), (61, 69355), (68, 69421), (79, 69505),

Gene: BritBrat_66 Start: 43849, Stop: 44178, Start Num: 35

Candidate Starts for BritBrat_66:

(11, 43735), (25, 43825), (Start: 35 @43849 has 142 MA's), (53, 43963), (56, 43984), (68, 44068), (70, 44092), (80, 44158), (81, 44170),

Gene: Bruin_74 Start: 47505, Stop: 47822, Start Num: 35

Candidate Starts for Bruin_74:

(7, 47322), (Start: 35 @47505 has 142 MA's), (57, 47646),

Gene: Buck_78 Start: 49210, Stop: 49527, Start Num: 35

Candidate Starts for Buck_78:

(7, 49027), (Start: 35 @49210 has 142 MA's), (57, 49351),

Gene: BugsBunny_77 Start: 49037, Stop: 49354, Start Num: 35

Candidate Starts for BugsBunny_77:

(7, 48854), (Start: 35 @49037 has 142 MA's), (57, 49178),

Gene: Cactus_80 Start: 47986, Stop: 48303, Start Num: 35

Candidate Starts for Cactus_80:

(7, 47803), (Start: 35 @47986 has 142 MA's), (57, 48127),

Gene: Catfish_49 Start: 34051, Stop: 34401, Start Num: 30

Candidate Starts for Catfish_49:

(Start: 30 @34051 has 4 MA's), (38, 34084), (51, 34174), (55, 34198), (71, 34324), (80, 34384),

Gene: CheeseTouch_74 Start: 39429, Stop: 39758, Start Num: 35

Candidate Starts for CheeseTouch_74:

(Start: 35 @39429 has 142 MA's), (53, 39543), (56, 39564), (68, 39648), (70, 39672), (77, 39711), (80, 39738), (81, 39750),

Gene: ChosenOne_77 Start: 47986, Stop: 48303, Start Num: 35

Candidate Starts for ChosenOne_77:

(7, 47803), (Start: 35 @47986 has 142 MA's), (57, 48127),

Gene: ChotaBhai_77 Start: 48310, Stop: 48627, Start Num: 35

Candidate Starts for ChotaBhai_77:

(7, 48127), (Start: 35 @48310 has 142 MA's), (Start: 39 @48334 has 1 MA's), (57, 48451),

Gene: Cinna_52 Start: 36948, Stop: 37283, Start Num: 29

Candidate Starts for Cinna_52:

(17, 36891), (24, 36936), (25, 36939), (Start: 29 @36948 has 1 MA's), (37, 36975), (53, 37083), (64, 37158), (68, 37188), (69, 37209), (77, 37248),

Gene: Cjw1_77 Start: 49683, Stop: 50000, Start Num: 35

Candidate Starts for Cjw1_77:

(7, 49500), (Start: 35 @49683 has 142 MA's), (57, 49824),

Gene: Clautastrophe_65 Start: 46467, Stop: 46799, Start Num: 32

Candidate Starts for Clautastrophe_65:

(2, 46191), (3, 46203), (4, 46212), (5, 46236), (8, 46314), (10, 46362), (Start: 32 @46467 has 13 MA's), (56, 46611), (68, 46695), (72, 46728),

Gene: Command613_79 Start: 49025, Stop: 49342, Start Num: 35

Candidate Starts for Command613_79:

(7, 48842), (Start: 35 @49025 has 142 MA's), (57, 49166),

Gene: Constella_107 Start: 63055, Stop: 63387, Start Num: 35

Candidate Starts for Constella_107:

(Start: 35 @63055 has 142 MA's), (52, 63166), (54, 63190), (80, 63370),

Gene: Contagion_73 Start: 47786, Stop: 48103, Start Num: 35

Candidate Starts for Contagion_73:

(7, 47603), (Start: 35 @47786 has 142 MA's), (57, 47927),

Gene: Cookies_74 Start: 48167, Stop: 48484, Start Num: 35

Candidate Starts for Cookies_74:

(7, 47984), (Start: 35 @48167 has 142 MA's), (Start: 39 @48191 has 1 MA's), (57, 48308),

Gene: Courthouse_113 Start: 63779, Stop: 64099, Start Num: 34

Candidate Starts for Courthouse_113:

(Start: 34 @63779 has 24 MA's), (44, 63848), (51, 63890), (68, 64007),

Gene: Cracklewink_62 Start: 43613, Stop: 43963, Start Num: 22

Candidate Starts for Cracklewink_62:

(1, 43352), (6, 43460), (7, 43469), (12, 43541), (16, 43571), (Start: 22 @43613 has 4 MA's), (26, 43628), (36, 43661), (41, 43694), (48, 43736), (65, 43850), (75, 43916),

Gene: CrystalP_76 Start: 48970, Stop: 49287, Start Num: 35

Candidate Starts for CrystalP_76:

(7, 48787), (Start: 35 @48970 has 142 MA's), (57, 49111),

Gene: Czyszczone1_78 Start: 48492, Stop: 48809, Start Num: 35

Candidate Starts for Czyszczone1_78:

(7, 48309), (Start: 35 @48492 has 142 MA's), (57, 48633),

Gene: DaWorst_65 Start: 42022, Stop: 42384, Start Num: 28

Candidate Starts for DaWorst_65:

(Start: 28 @42022 has 14 MA's), (56, 42181), (75, 42322), (81, 42367),

Gene: Daikon_79 Start: 49113, Stop: 49430, Start Num: 35

Candidate Starts for Daikon_79:

(7, 48930), (Start: 35 @49113 has 142 MA's), (57, 49254),

Gene: Dallas_124 Start: 69105, Stop: 69437, Start Num: 35

Candidate Starts for Dallas_124:

(Start: 35 @69105 has 142 MA's), (52, 69216), (54, 69240), (80, 69420),

Gene: Demsculpinboyz_78 Start: 42611, Stop: 42973, Start Num: 28

Candidate Starts for Demsculpinboyz_78:
(Start: 28 @42611 has 14 MA's), (62, 42815), (75, 42911), (81, 42956),

Gene: DillTech15_63 Start: 40922, Stop: 41284, Start Num: 28
Candidate Starts for DillTech15_63:
(23, 40907), (Start: 28 @40922 has 14 MA's), (75, 41222), (81, 41267),

Gene: DmpstrDiver_123 Start: 68024, Stop: 68353, Start Num: 34
Candidate Starts for DmpstrDiver_123:
(Start: 34 @68024 has 24 MA's), (44, 68093), (68, 68252), (79, 68336),

Gene: DoctorDiddles_76 Start: 48354, Stop: 48671, Start Num: 35
Candidate Starts for DoctorDiddles_76:
(7, 48171), (Start: 35 @48354 has 142 MA's), (Start: 39 @48378 has 1 MA's), (57, 48495),

Gene: DosHalletts_71 Start: 43303, Stop: 43665, Start Num: 28
Candidate Starts for DosHalletts_71:
(Start: 28 @43303 has 14 MA's), (56, 43462), (75, 43603), (76, 43606), (81, 43648),

Gene: DrDrey_77 Start: 49411, Stop: 49728, Start Num: 35
Candidate Starts for DrDrey_77:
(7, 49228), (Start: 35 @49411 has 142 MA's), (57, 49552),

Gene: Duke13_117 Start: 65442, Stop: 65774, Start Num: 34
Candidate Starts for Duke13_117:
(Start: 34 @65442 has 24 MA's), (44, 65511), (60, 65601), (61, 65604), (68, 65670),

Gene: Dumbo_77 Start: 47891, Stop: 48208, Start Num: 35
Candidate Starts for Dumbo_77:
(7, 47708), (Start: 35 @47891 has 142 MA's), (57, 48032),

Gene: DuncansLeg_66 Start: 46503, Stop: 46835, Start Num: 32
Candidate Starts for DuncansLeg_66:
(10, 46398), (20, 46464), (Start: 32 @46503 has 13 MA's), (53, 46626), (58, 46653), (68, 46731), (73, 46767), (78, 46812),

Gene: Dusk_74 Start: 48191, Stop: 48508, Start Num: 35
Candidate Starts for Dusk_74:
(7, 48008), (Start: 35 @48191 has 142 MA's), (57, 48332),

Gene: Easy2Say_78 Start: 49435, Stop: 49752, Start Num: 35
Candidate Starts for Easy2Say_78:
(7, 49252), (Start: 35 @49435 has 142 MA's), (57, 49576),

Gene: Ecliptus_75 Start: 44750, Stop: 45079, Start Num: 35
Candidate Starts for Ecliptus_75:
(Start: 35 @44750 has 142 MA's), (53, 44864), (56, 44885), (68, 44969), (70, 44993), (77, 45032), (80, 45059), (81, 45071),

Gene: Eish_68 Start: 42537, Stop: 42899, Start Num: 28
Candidate Starts for Eish_68:
(Start: 28 @42537 has 14 MA's), (56, 42696), (75, 42837), (76, 42840), (81, 42882),

Gene: Ejimix_117 Start: 69176, Stop: 69505, Start Num: 34
Candidate Starts for Ejimix_117:
(Start: 34 @69176 has 24 MA's), (44, 69245), (60, 69335), (61, 69338), (68, 69404), (79, 69488),

Gene: Elite2014_76 Start: 47985, Stop: 48302, Start Num: 35
Candidate Starts for Elite2014_76:
(7, 47802), (Start: 35 @47985 has 142 MA's), (57, 48126),

Gene: Elph10_77 Start: 47990, Stop: 48307, Start Num: 35
Candidate Starts for Elph10_77:
(7, 47807), (Start: 35 @47990 has 142 MA's), (57, 48131),

Gene: Emma_67 Start: 42045, Stop: 42407, Start Num: 28
Candidate Starts for Emma_67:
(Start: 28 @42045 has 14 MA's), (Start: 39 @42087 has 1 MA's), (56, 42204), (75, 42345), (81, 42390),

Gene: Emmina_77 Start: 47892, Stop: 48209, Start Num: 35
Candidate Starts for Emmina_77:
(7, 47709), (Start: 35 @47892 has 142 MA's), (57, 48033),

Gene: EricMillard_114 Start: 67411, Stop: 67743, Start Num: 34
Candidate Starts for EricMillard_114:
(Start: 34 @67411 has 24 MA's), (44, 67480), (60, 67570), (61, 67573), (68, 67639),

Gene: Estave1_70 Start: 44873, Stop: 45235, Start Num: 28
Candidate Starts for Estave1_70:
(Start: 28 @44873 has 14 MA's), (56, 45032), (59, 45047), (75, 45173), (76, 45176), (81, 45218),

Gene: Eureka_75 Start: 48456, Stop: 48773, Start Num: 35
Candidate Starts for Eureka_75:
(7, 48273), (Start: 35 @48456 has 142 MA's), (57, 48597),

Gene: Fancypants_68 Start: 43057, Stop: 43419, Start Num: 28
Candidate Starts for Fancypants_68:
(23, 43042), (Start: 28 @43057 has 14 MA's), (56, 43216), (75, 43357), (81, 43402),

Gene: Filch_78 Start: 47917, Stop: 48234, Start Num: 35
Candidate Starts for Filch_78:
(7, 47734), (Start: 35 @47917 has 142 MA's), (57, 48058),

Gene: Finnry_66 Start: 46731, Stop: 47063, Start Num: 32
Candidate Starts for Finnry_66:
(3, 46467), (4, 46476), (5, 46500), (8, 46578), (10, 46626), (Start: 32 @46731 has 13 MA's), (56, 46875), (68, 46959), (72, 46992),

Gene: FireRed_81 Start: 49479, Stop: 49796, Start Num: 35
Candidate Starts for FireRed_81:
(7, 49296), (Start: 35 @49479 has 142 MA's), (57, 49620),

Gene: Flypotenuse_73 Start: 47976, Stop: 48293, Start Num: 35
Candidate Starts for Flypotenuse_73:
(7, 47793), (Start: 35 @47976 has 142 MA's), (57, 48117),

Gene: Gage_79 Start: 48769, Stop: 49086, Start Num: 35
Candidate Starts for Gage_79:
(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Gaia_85 Start: 50308, Stop: 50631, Start Num: 34
Candidate Starts for Gaia_85:
(Start: 34 @50308 has 24 MA's), (43, 50371), (76, 50596), (77, 50599),

Gene: Gator_75 Start: 48822, Stop: 49139, Start Num: 35
Candidate Starts for Gator_75:
(7, 48639), (Start: 35 @48822 has 142 MA's), (57, 48963),

Gene: Gemini_82 Start: 49286, Stop: 49603, Start Num: 35
Candidate Starts for Gemini_82:
(7, 49103), (Start: 35 @49286 has 142 MA's), (57, 49427),

Gene: Glexan_76 Start: 49106, Stop: 49423, Start Num: 35
Candidate Starts for Glexan_76:
(7, 48923), (Start: 35 @49106 has 142 MA's), (57, 49247),

Gene: Goku_75 Start: 48185, Stop: 48502, Start Num: 35
Candidate Starts for Goku_75:
(7, 48002), (Start: 35 @48185 has 142 MA's), (57, 48326),

Gene: GoldenSpark_81 Start: 48769, Stop: 49086, Start Num: 35
Candidate Starts for GoldenSpark_81:
(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Goldilocks_80 Start: 48267, Stop: 48584, Start Num: 35
Candidate Starts for Goldilocks_80:
(7, 48084), (Start: 35 @48267 has 142 MA's), (57, 48408),

Gene: Gonephishing_112 Start: 63185, Stop: 63505, Start Num: 34
Candidate Starts for Gonephishing_112:
(Start: 34 @63185 has 24 MA's), (44, 63254), (51, 63296), (68, 63413),

Gene: GooberAzure_80 Start: 48769, Stop: 49086, Start Num: 35
Candidate Starts for GooberAzure_80:
(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Halley_125 Start: 69492, Stop: 69821, Start Num: 34
Candidate Starts for Halley_125:
(Start: 34 @69492 has 24 MA's), (44, 69561), (60, 69651), (61, 69654), (68, 69720), (79, 69804),

Gene: HanKaySha_77 Start: 48070, Stop: 48387, Start Num: 35
Candidate Starts for HanKaySha_77:
(7, 47887), (Start: 35 @48070 has 142 MA's), (57, 48211),

Gene: Harella_77 Start: 49622, Stop: 49939, Start Num: 35
Candidate Starts for Harella_77:
(7, 49439), (Start: 35 @49622 has 142 MA's), (57, 49763),

Gene: Henry_75 Start: 48410, Stop: 48727, Start Num: 35
Candidate Starts for Henry_75:
(7, 48227), (Start: 35 @48410 has 142 MA's), (57, 48551),

Gene: Highbury_76 Start: 48058, Stop: 48375, Start Num: 35
Candidate Starts for Highbury_76:
(7, 47875), (Start: 35 @48058 has 142 MA's), (57, 48199),

Gene: Hilltopfarm_64 Start: 44853, Stop: 45203, Start Num: 22
Candidate Starts for Hilltopfarm_64:
(12, 44781), (16, 44811), (Start: 22 @44853 has 4 MA's), (26, 44868), (33, 44886), (41, 44934), (42, 44940), (48, 44976), (68, 45102),

Gene: HokkenD_113 Start: 67777, Stop: 68151, Start Num: 21
Candidate Starts for HokkenD_113:
(Start: 18 @67768 has 1 MA's), (Start: 21 @67777 has 1 MA's), (45, 67885), (52, 67930), (80, 68134),

Gene: Holt_82 Start: 49183, Stop: 49500, Start Num: 35
Candidate Starts for Holt_82:
(7, 49000), (Start: 35 @49183 has 142 MA's), (57, 49324),

Gene: Hoonter_80 Start: 48769, Stop: 49086, Start Num: 35
Candidate Starts for Hoonter_80:
(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Hokey_77 Start: 48602, Stop: 48919, Start Num: 35
Candidate Starts for Hokey_77:
(7, 48419), (Start: 35 @48602 has 142 MA's), (57, 48743),

Gene: Horus_72 Start: 44321, Stop: 44650, Start Num: 35
Candidate Starts for Horus_72:
(11, 44207), (25, 44297), (Start: 35 @44321 has 142 MA's), (40, 44348), (53, 44435), (68, 44540), (70, 44564), (77, 44603), (80, 44630), (81, 44642),

Gene: HufflyPuff_80 Start: 49435, Stop: 49752, Start Num: 35
Candidate Starts for HufflyPuff_80:
(7, 49252), (Start: 35 @49435 has 142 MA's), (57, 49576),

Gene: Hughesyang_122 Start: 68948, Stop: 69280, Start Num: 34
Candidate Starts for Hughesyang_122:
(Start: 34 @68948 has 24 MA's), (44, 69017), (68, 69176),

Gene: IHOP_75 Start: 48534, Stop: 48851, Start Num: 35
Candidate Starts for IHOP_75:
(7, 48351), (Start: 35 @48534 has 142 MA's), (57, 48675),

Gene: Icee_78 Start: 48433, Stop: 48750, Start Num: 35
Candidate Starts for Icee_78:
(7, 48250), (Start: 35 @48433 has 142 MA's), (57, 48574),

Gene: Inca_74 Start: 47059, Stop: 47376, Start Num: 35
Candidate Starts for Inca_74:
(7, 46876), (Start: 35 @47059 has 142 MA's), (57, 47200),

Gene: JeTaime_77 Start: 49251, Stop: 49568, Start Num: 35

Candidate Starts for JeTaime_77:

(7, 49068), (Start: 35 @49251 has 142 MA's), (57, 49392),

Gene: Jobypre_66 Start: 46467, Stop: 46799, Start Num: 32

Candidate Starts for Jobypre_66:

(2, 46191), (3, 46203), (4, 46212), (5, 46236), (8, 46314), (10, 46362), (Start: 32 @46467 has 13 MA's), (56, 46611), (68, 46695), (72, 46728),

Gene: Jubie_65 Start: 46602, Stop: 46934, Start Num: 32

Candidate Starts for Jubie_65:

(2, 46326), (3, 46338), (4, 46347), (5, 46371), (8, 46449), (10, 46497), (Start: 32 @46602 has 13 MA's), (56, 46746), (68, 46830), (72, 46863),

Gene: JuicyJay_120 Start: 70726, Stop: 71058, Start Num: 35

Candidate Starts for JuicyJay_120:

(Start: 35 @70726 has 142 MA's), (52, 70837), (54, 70861), (80, 71041),

Gene: Kalah2_114 Start: 67637, Stop: 67966, Start Num: 34

Candidate Starts for Kalah2_114:

(Start: 34 @67637 has 24 MA's), (44, 67706), (68, 67865), (79, 67949),

Gene: Kanye_74 Start: 48115, Stop: 48432, Start Num: 35

Candidate Starts for Kanye_74:

(7, 47932), (Start: 35 @48115 has 142 MA's), (57, 48256),

Gene: Karhdo_64 Start: 43305, Stop: 43667, Start Num: 28

Candidate Starts for Karhdo_64:

(Start: 28 @43305 has 14 MA's), (56, 43464), (75, 43605), (81, 43650),

Gene: Keelan_96 Start: 49018, Stop: 49347, Start Num: 30

Candidate Starts for Keelan_96:

(Start: 30 @49018 has 4 MA's), (48, 49114), (62, 49198), (67, 49237),

Gene: Kimchi_81 Start: 48772, Stop: 49089, Start Num: 35

Candidate Starts for Kimchi_81:

(7, 48589), (Start: 35 @48772 has 142 MA's), (57, 48913),

Gene: Klein_119 Start: 65994, Stop: 66323, Start Num: 34

Candidate Starts for Klein_119:

(Start: 34 @65994 has 24 MA's), (44, 66063), (60, 66153), (61, 66156), (68, 66222), (79, 66306),

Gene: Kostya_77 Start: 48633, Stop: 48950, Start Num: 35

Candidate Starts for Kostya_77:

(7, 48450), (Start: 35 @48633 has 142 MA's), (57, 48774),

Gene: Krypton555_67 Start: 46693, Stop: 47025, Start Num: 32

Candidate Starts for Krypton555_67:

(2, 46417), (3, 46429), (4, 46438), (5, 46462), (8, 46540), (10, 46588), (Start: 32 @46693 has 13 MA's), (56, 46837), (68, 46921), (72, 46954),

Gene: Kuwabara_72 Start: 44078, Stop: 44407, Start Num: 35

Candidate Starts for Kuwabara_72:

(Start: 35 @44078 has 142 MA's), (53, 44192), (56, 44213), (68, 44297), (70, 44321), (77, 44360), (80, 44387), (81, 44399),

Gene: Lilac_79 Start: 48387, Stop: 48704, Start Num: 35

Candidate Starts for Lilac_79:

(7, 48204), (Start: 35 @48387 has 142 MA's), (57, 48528),

Gene: Lilizi_78 Start: 48100, Stop: 48417, Start Num: 35

Candidate Starts for Lilizi_78:

(7, 47917), (Start: 35 @48100 has 142 MA's), (57, 48241),

Gene: Lilpickle_76 Start: 47985, Stop: 48302, Start Num: 35

Candidate Starts for Lilpickle_76:

(7, 47802), (Start: 35 @47985 has 142 MA's), (57, 48126),

Gene: LitninMcQueen_71 Start: 42944, Stop: 43273, Start Num: 35

Candidate Starts for LitninMcQueen_71:

(Start: 35 @42944 has 142 MA's), (68, 43163), (80, 43253), (81, 43265),

Gene: LittleE_122 Start: 67384, Stop: 67704, Start Num: 34

Candidate Starts for LittleE_122:

(Start: 34 @67384 has 24 MA's), (44, 67453), (51, 67495), (68, 67612),

Gene: Lolly9_65 Start: 46290, Stop: 46622, Start Num: 32

Candidate Starts for Lolly9_65:

(Start: 32 @46290 has 13 MA's), (Start: 39 @46320 has 1 MA's), (53, 46413), (58, 46440), (68, 46518), (72, 46551), (78, 46599),

Gene: Lucky2013_115 Start: 64045, Stop: 64419, Start Num: 18

Candidate Starts for Lucky2013_115:

(Start: 18 @64045 has 1 MA's), (Start: 21 @64054 has 1 MA's), (45, 64162), (52, 64207), (68, 64327),

Gene: Lumos_67 Start: 46464, Stop: 46796, Start Num: 32

Candidate Starts for Lumos_67:

(2, 46188), (3, 46200), (4, 46209), (5, 46233), (8, 46311), (10, 46359), (Start: 32 @46464 has 13 MA's), (56, 46608), (68, 46692), (72, 46725),

Gene: MISSy_78 Start: 48491, Stop: 48808, Start Num: 35

Candidate Starts for MISSy_78:

(7, 48308), (Start: 35 @48491 has 142 MA's), (57, 48632),

Gene: MPhalcon_78 Start: 48484, Stop: 48801, Start Num: 35

Candidate Starts for MPhalcon_78:

(7, 48301), (Start: 35 @48484 has 142 MA's), (57, 48625),

Gene: MadamMonkfish_77 Start: 47709, Stop: 48026, Start Num: 35

Candidate Starts for MadamMonkfish_77:

(7, 47526), (Start: 35 @47709 has 142 MA's), (57, 47850),

Gene: Manda_78 Start: 49571, Stop: 49888, Start Num: 35

Candidate Starts for Manda_78:

(7, 49388), (Start: 35 @49571 has 142 MA's), (57, 49712),

Gene: Marshmallow_75 Start: 49264, Stop: 49581, Start Num: 35

Candidate Starts for Marshmallow_75:

(7, 49081), (Start: 35 @49264 has 142 MA's), (Start: 39 @49288 has 1 MA's), (57, 49405),

Gene: Maxxinista_79 Start: 48360, Stop: 48677, Start Num: 35

Candidate Starts for Maxxinista_79:

(7, 48177), (Start: 35 @48360 has 142 MA's), (57, 48501),

Gene: MiaZeal_118 Start: 64854, Stop: 65177, Start Num: 35

Candidate Starts for MiaZeal_118:

(Start: 35 @64854 has 142 MA's), (52, 64965), (68, 65085),

Gene: Mindy_76 Start: 47576, Stop: 47893, Start Num: 35

Candidate Starts for Mindy_76:

(7, 47393), (Start: 35 @47576 has 142 MA's), (57, 47717),

Gene: Minerva_120 Start: 67549, Stop: 67881, Start Num: 34

Candidate Starts for Minerva_120:

(Start: 34 @67549 has 24 MA's), (44, 67618), (68, 67777),

Gene: MiniLon_69 Start: 46291, Stop: 46623, Start Num: 32

Candidate Starts for MiniLon_69:

(Start: 32 @46291 has 13 MA's), (Start: 39 @46321 has 1 MA's), (53, 46414), (58, 46441), (68, 46519), (72, 46552), (78, 46600),

Gene: MiniMac_69 Start: 46319, Stop: 46621, Start Num: 39

Candidate Starts for MiniMac_69:

(Start: 32 @46289 has 13 MA's), (Start: 39 @46319 has 1 MA's), (53, 46412), (58, 46439), (68, 46517), (72, 46550), (78, 46598),

Gene: Miniwave_72 Start: 48029, Stop: 48346, Start Num: 35

Candidate Starts for Miniwave_72:

(7, 47846), (Start: 35 @48029 has 142 MA's), (57, 48170),

Gene: Misfit_78 Start: 49503, Stop: 49820, Start Num: 35

Candidate Starts for Misfit_78:

(7, 49320), (Start: 35 @49503 has 142 MA's), (57, 49644),

Gene: Moldemort_80 Start: 48588, Stop: 48905, Start Num: 35

Candidate Starts for Moldemort_80:

(7, 48405), (Start: 35 @48588 has 142 MA's), (57, 48729),

Gene: Moonbeam_64 Start: 41974, Stop: 42336, Start Num: 28

Candidate Starts for Moonbeam_64:

(Start: 28 @41974 has 14 MA's), (Start: 39 @42016 has 1 MA's), (56, 42133), (75, 42274), (81, 42319),

Gene: Mosby_73 Start: 47786, Stop: 48103, Start Num: 35

Candidate Starts for Mosby_73:

(7, 47603), (Start: 35 @47786 has 142 MA's), (57, 47927),

Gene: Mozy_75 Start: 44841, Stop: 45203, Start Num: 28

Candidate Starts for Mozy_75:

(23, 44826), (Start: 28 @44841 has 14 MA's), (56, 45000), (75, 45141), (81, 45186),

Gene: MsGreen_66 Start: 46467, Stop: 46799, Start Num: 32

Candidate Starts for MsGreen_66:

(2, 46191), (3, 46203), (4, 46212), (5, 46236), (8, 46314), (10, 46362), (Start: 32 @46467 has 13 MA's), (56, 46611), (68, 46695), (72, 46728),

Gene: Murica_80 Start: 49435, Stop: 49752, Start Num: 35

Candidate Starts for Murica_80:

(7, 49252), (Start: 35 @49435 has 142 MA's), (57, 49576),

Gene: Murphy_77 Start: 48872, Stop: 49189, Start Num: 35

Candidate Starts for Murphy_77:

(7, 48689), (Start: 35 @48872 has 142 MA's), (57, 49013),

Gene: Mutaforma13_71 Start: 45673, Stop: 46035, Start Num: 28

Candidate Starts for Mutaforma13_71:

(Start: 28 @45673 has 14 MA's), (75, 45973), (81, 46018),

Gene: Myrale_77 Start: 49129, Stop: 49446, Start Num: 35

Candidate Starts for Myrale_77:

(7, 48946), (Start: 35 @49129 has 142 MA's), (57, 49270),

Gene: Nala_79 Start: 48993, Stop: 49310, Start Num: 35

Candidate Starts for Nala_79:

(7, 48810), (Start: 35 @48993 has 142 MA's), (57, 49134),

Gene: Nebkiss_84 Start: 48920, Stop: 49243, Start Num: 34

Candidate Starts for Nebkiss_84:

(Start: 34 @48920 has 24 MA's), (43, 48983), (76, 49208), (77, 49211),

Gene: NelitzaMV_75 Start: 48075, Stop: 48392, Start Num: 35

Candidate Starts for NelitzaMV_75:

(7, 47892), (Start: 35 @48075 has 142 MA's), (57, 48216),

Gene: NihilNomen_125 Start: 68678, Stop: 69010, Start Num: 35

Candidate Starts for NihilNomen_125:

(Start: 35 @68678 has 142 MA's), (52, 68789), (54, 68813), (80, 68993),

Gene: Nimrod_78 Start: 49696, Stop: 50013, Start Num: 35

Candidate Starts for Nimrod_78:

(7, 49513), (Start: 35 @49696 has 142 MA's), (57, 49837),

Gene: NoSleep_78 Start: 48330, Stop: 48647, Start Num: 35

Candidate Starts for NoSleep_78:

(7, 48147), (Start: 35 @48330 has 142 MA's), (57, 48471),

Gene: ODay_78 Start: 45557, Stop: 45886, Start Num: 35

Candidate Starts for ODay_78:

(11, 45443), (25, 45533), (Start: 35 @45557 has 142 MA's), (40, 45584), (68, 45776), (80, 45866), (81, 45878),

Gene: Optimus_113 Start: 65945, Stop: 66277, Start Num: 34
Candidate Starts for Optimus_113:
(Start: 34 @65945 has 24 MA's), (44, 66014), (60, 66104), (61, 66107), (68, 66173),

Gene: OrionPax_76 Start: 48081, Stop: 48398, Start Num: 35
Candidate Starts for OrionPax_76:
(7, 47898), (Start: 35 @48081 has 142 MA's), (Start: 39 @48105 has 1 MA's), (57, 48222),

Gene: Palpatine_79 Start: 49462, Stop: 49779, Start Num: 35
Candidate Starts for Palpatine_79:
(7, 49279), (Start: 35 @49462 has 142 MA's), (57, 49603),

Gene: Paperbeatsrock_76 Start: 48707, Stop: 49024, Start Num: 35
Candidate Starts for Paperbeatsrock_76:
(7, 48524), (Start: 35 @48707 has 142 MA's), (57, 48848),

Gene: Pat3_75 Start: 47239, Stop: 47556, Start Num: 35
Candidate Starts for Pat3_75:
(7, 47056), (Start: 35 @47239 has 142 MA's), (Start: 39 @47263 has 1 MA's), (57, 47380),

Gene: Petra64142_81 Start: 49926, Stop: 50243, Start Num: 35
Candidate Starts for Petra64142_81:
(7, 49743), (Start: 35 @49926 has 142 MA's), (57, 50067),

Gene: Phaja_75 Start: 48533, Stop: 48850, Start Num: 35
Candidate Starts for Phaja_75:
(7, 48350), (Start: 35 @48533 has 142 MA's), (57, 48674),

Gene: Pharsalus_74 Start: 48507, Stop: 48824, Start Num: 35
Candidate Starts for Pharsalus_74:
(7, 48324), (Start: 35 @48507 has 142 MA's), (57, 48648),

Gene: PhatBacter_81 Start: 49479, Stop: 49796, Start Num: 35
Candidate Starts for PhatBacter_81:
(7, 49296), (Start: 35 @49479 has 142 MA's), (57, 49620),

Gene: Phaux_79 Start: 49474, Stop: 49791, Start Num: 35
Candidate Starts for Phaux_79:
(7, 49291), (Start: 35 @49474 has 142 MA's), (57, 49615),

Gene: Phoebus_124 Start: 70535, Stop: 70867, Start Num: 35
Candidate Starts for Phoebus_124:
(Start: 35 @70535 has 142 MA's), (52, 70646), (54, 70670), (80, 70850),

Gene: Phrux_74 Start: 48070, Stop: 48387, Start Num: 35
Candidate Starts for Phrux_74:
(7, 47887), (Start: 35 @48070 has 142 MA's), (57, 48211),

Gene: Policronamos_81 Start: 49474, Stop: 49791, Start Num: 35
Candidate Starts for Policronamos_81:
(7, 49291), (Start: 35 @49474 has 142 MA's), (57, 49615),

Gene: Porky_76 Start: 47900, Stop: 48217, Start Num: 35

Candidate Starts for Porky_76:
(7, 47717), (Start: 35 @47900 has 142 MA's), (57, 48041),

Gene: Pound_112 Start: 66568, Stop: 66897, Start Num: 34
Candidate Starts for Pound_112:
(Start: 34 @66568 has 24 MA's), (44, 66637), (68, 66796), (79, 66880),

Gene: Pumpkin_80 Start: 49128, Stop: 49445, Start Num: 35
Candidate Starts for Pumpkin_80:
(7, 48945), (Start: 35 @49128 has 142 MA's), (57, 49269),

Gene: Quallification_78 Start: 49115, Stop: 49432, Start Num: 35
Candidate Starts for Quallification_78:
(7, 48932), (Start: 35 @49115 has 142 MA's), (57, 49256),

Gene: Rabbitrun_72 Start: 44571, Stop: 44918, Start Num: 30
Candidate Starts for Rabbitrun_72:
(9, 44460), (13, 44490), (14, 44493), (15, 44496), (19, 44538), (27, 44562), (Start: 30 @44571 has 4 MA's), (45, 44652), (68, 44808), (71, 44835), (74, 44847), (75, 44862), (76, 44865),

Gene: Rakim_78 Start: 48584, Stop: 48901, Start Num: 35
Candidate Starts for Rakim_78:
(7, 48401), (Start: 35 @48584 has 142 MA's), (57, 48725),

Gene: Redno2_116 Start: 66004, Stop: 66333, Start Num: 34
Candidate Starts for Redno2_116:
(Start: 34 @66004 has 24 MA's), (44, 66073), (60, 66163), (61, 66166), (68, 66232), (79, 66316),

Gene: Rimmer_78 Start: 48820, Stop: 49137, Start Num: 35
Candidate Starts for Rimmer_78:
(7, 48637), (Start: 35 @48820 has 142 MA's), (57, 48961),

Gene: RiverMonster_77 Start: 48648, Stop: 48965, Start Num: 35
Candidate Starts for RiverMonster_77:
(7, 48465), (Start: 35 @48648 has 142 MA's), (57, 48789),

Gene: Rose5_66 Start: 45488, Stop: 45859, Start Num: 35
Candidate Starts for Rose5_66:
(Start: 35 @45488 has 142 MA's), (46, 45566), (68, 45713), (77, 45776), (82, 45851),

Gene: Saints25_76 Start: 48058, Stop: 48375, Start Num: 35
Candidate Starts for Saints25_76:
(7, 47875), (Start: 35 @48058 has 142 MA's), (57, 48199),

Gene: Samty_66 Start: 46475, Stop: 46807, Start Num: 32
Candidate Starts for Samty_66:
(3, 46211), (4, 46220), (5, 46244), (8, 46322), (10, 46370), (Start: 32 @46475 has 13 MA's), (56, 46619), (68, 46703), (72, 46736),

Gene: Sassay_72 Start: 46748, Stop: 47065, Start Num: 35
Candidate Starts for Sassay_72:
(7, 46565), (Start: 35 @46748 has 142 MA's), (57, 46889),

Gene: ShamWow_77 Start: 48970, Stop: 49287, Start Num: 35
Candidate Starts for ShamWow_77:
(7, 48787), (Start: 35 @48970 has 142 MA's), (57, 49111),

Gene: Simpliphy_76 Start: 48048, Stop: 48365, Start Num: 35
Candidate Starts for Simpliphy_76:
(7, 47865), (Start: 35 @48048 has 142 MA's), (57, 48189),

Gene: SirDuracell_76 Start: 47334, Stop: 47651, Start Num: 35
Candidate Starts for SirDuracell_76:
(7, 47151), (Start: 35 @47334 has 142 MA's), (Start: 39 @47358 has 1 MA's), (57, 47475),

Gene: Snenia_65 Start: 46468, Stop: 46800, Start Num: 32
Candidate Starts for Snenia_65:
(2, 46192), (3, 46204), (4, 46213), (5, 46237), (8, 46315), (10, 46363), (Start: 32 @46468 has 13 MA's), (56, 46612), (68, 46696), (72, 46729),

Gene: SophKB_74 Start: 47726, Stop: 48043, Start Num: 35
Candidate Starts for SophKB_74:
(7, 47543), (Start: 35 @47726 has 142 MA's), (57, 47867),

Gene: Sotrice96_78 Start: 48729, Stop: 49046, Start Num: 35
Candidate Starts for Sotrice96_78:
(7, 48546), (Start: 35 @48729 has 142 MA's), (57, 48870),

Gene: Spooky_68 Start: 42098, Stop: 42427, Start Num: 35
Candidate Starts for Spooky_68:
(Start: 35 @42098 has 142 MA's), (76, 42377), (80, 42407), (81, 42419),

Gene: Squiddly_73 Start: 46416, Stop: 46745, Start Num: 35
Candidate Starts for Squiddly_73:
(Start: 35 @46416 has 142 MA's), (76, 46695), (80, 46725), (81, 46737),

Gene: Squint_116 Start: 64970, Stop: 65290, Start Num: 34
Candidate Starts for Squint_116:
(Start: 34 @64970 has 24 MA's), (44, 65039), (51, 65081), (68, 65198),

Gene: Stank_80 Start: 48987, Stop: 49304, Start Num: 35
Candidate Starts for Stank_80:
(7, 48804), (Start: 35 @48987 has 142 MA's), (57, 49128),

Gene: Stark_78 Start: 48531, Stop: 48848, Start Num: 35
Candidate Starts for Stark_78:
(7, 48348), (Start: 35 @48531 has 142 MA's), (57, 48672),

Gene: StellaBean_73 Start: 48294, Stop: 48611, Start Num: 35
Candidate Starts for StellaBean_73:
(7, 48111), (Start: 35 @48294 has 142 MA's), (57, 48435),

Gene: StolenFromERC_80 Start: 48769, Stop: 49086, Start Num: 35
Candidate Starts for StolenFromERC_80:
(7, 48586), (Start: 35 @48769 has 142 MA's), (57, 48910),

Gene: Superphikiman_115 Start: 64061, Stop: 64381, Start Num: 34
Candidate Starts for Superphikiman_115:
(Start: 34 @64061 has 24 MA's), (44, 64130), (51, 64172), (68, 64289),

Gene: TBrady12_80 Start: 48468, Stop: 48785, Start Num: 35
Candidate Starts for TBrady12_80:
(7, 48285), (Start: 35 @48468 has 142 MA's), (57, 48609),

Gene: Tarkin_76 Start: 48716, Stop: 49033, Start Num: 35
Candidate Starts for Tarkin_76:
(7, 48533), (Start: 35 @48716 has 142 MA's), (57, 48857),

Gene: TeardropMSU_73 Start: 47716, Stop: 48033, Start Num: 35
Candidate Starts for TeardropMSU_73:
(7, 47533), (Start: 35 @47716 has 142 MA's), (57, 47857),

Gene: Teaspoon_74 Start: 48610, Stop: 48927, Start Num: 35
Candidate Starts for Teaspoon_74:
(7, 48427), (Start: 35 @48610 has 142 MA's), (57, 48751),

Gene: Terminus_80 Start: 49503, Stop: 49820, Start Num: 35
Candidate Starts for Terminus_80:
(7, 49320), (Start: 35 @49503 has 142 MA's), (57, 49644),

Gene: Thibault_106 Start: 63336, Stop: 63668, Start Num: 35
Candidate Starts for Thibault_106:
(Start: 35 @63336 has 142 MA's), (52, 63447), (54, 63471), (80, 63651),

Gene: ThreeRngTarjay_118 Start: 68893, Stop: 69225, Start Num: 34
Candidate Starts for ThreeRngTarjay_118:
(Start: 34 @68893 has 24 MA's), (44, 68962), (68, 69121),

Gene: Thresher_79 Start: 49590, Stop: 49907, Start Num: 35
Candidate Starts for Thresher_79:
(7, 49407), (Start: 35 @49590 has 142 MA's), (57, 49731),

Gene: Tomaszewski_72 Start: 47879, Stop: 48196, Start Num: 35
Candidate Starts for Tomaszewski_72:
(7, 47696), (Start: 35 @47879 has 142 MA's), (Start: 39 @47903 has 1 MA's), (57, 48020),

Gene: Toto_75 Start: 48970, Stop: 49287, Start Num: 35
Candidate Starts for Toto_75:
(7, 48787), (Start: 35 @48970 has 142 MA's), (57, 49111),

Gene: Traaww1_73 Start: 48154, Stop: 48471, Start Num: 35
Candidate Starts for Traaww1_73:
(7, 47971), (Start: 35 @48154 has 142 MA's), (57, 48295),

Gene: Trax_71 Start: 44944, Stop: 45291, Start Num: 30
Candidate Starts for Trax_71:
(Start: 30 @44944 has 4 MA's), (45, 45025), (68, 45181), (71, 45208), (75, 45235), (76, 45238),

Gene: Tuco_78 Start: 49478, Stop: 49795, Start Num: 35

Candidate Starts for Tuco_78:
(7, 49295), (Start: 35 @49478 has 142 MA's), (57, 49619),

Gene: Typha_64 Start: 45161, Stop: 45511, Start Num: 22
Candidate Starts for Typha_64:
(12, 45089), (16, 45119), (Start: 22 @45161 has 4 MA's), (26, 45176), (33, 45194), (41, 45242), (42, 45248), (48, 45284), (62, 45368), (63, 45374), (66, 45404), (71, 45437),

Gene: Tyson_67 Start: 45417, Stop: 45785, Start Num: 35
Candidate Starts for Tyson_67:
(Start: 35 @45417 has 142 MA's), (40, 45444), (50, 45513), (53, 45534), (57, 45558), (68, 45639), (77, 45702), (82, 45777),

Gene: Ukulele_72 Start: 47861, Stop: 48178, Start Num: 35
Candidate Starts for Ukulele_72:
(7, 47678), (Start: 35 @47861 has 142 MA's), (57, 48002),

Gene: Wachhund_66 Start: 42028, Stop: 42390, Start Num: 28
Candidate Starts for Wachhund_66:
(Start: 28 @42028 has 14 MA's), (75, 42328), (81, 42373),

Gene: Wamburgexpress_66 Start: 45044, Stop: 45415, Start Num: 35
Candidate Starts for Wamburgexpress_66:
(Start: 35 @45044 has 142 MA's), (46, 45122), (68, 45269), (77, 45332), (82, 45407),

Gene: Wanda_122 Start: 66271, Stop: 66600, Start Num: 34
Candidate Starts for Wanda_122:
(Start: 34 @66271 has 24 MA's), (44, 66340), (47, 66358), (60, 66430), (61, 66433), (68, 66499), (79, 66583),

Gene: Whirlwind_66 Start: 46283, Stop: 46615, Start Num: 32
Candidate Starts for Whirlwind_66:
(2, 46007), (3, 46019), (4, 46028), (5, 46052), (8, 46130), (10, 46178), (Start: 32 @46283 has 13 MA's), (56, 46427), (68, 46511), (72, 46544),

Gene: Whouxphf_62 Start: 42311, Stop: 42673, Start Num: 28
Candidate Starts for Whouxphf_62:
(Start: 28 @42311 has 14 MA's), (75, 42611), (81, 42656),

Gene: Wiggin_79 Start: 48555, Stop: 48872, Start Num: 35
Candidate Starts for Wiggin_79:
(7, 48372), (Start: 35 @48555 has 142 MA's), (57, 48696),

Gene: Willez_72 Start: 46748, Stop: 47065, Start Num: 35
Candidate Starts for Willez_72:
(7, 46565), (Start: 35 @46748 has 142 MA's), (57, 46889),

Gene: Wyatt2_67 Start: 45415, Stop: 45783, Start Num: 35
Candidate Starts for Wyatt2_67:
(Start: 35 @45415 has 142 MA's), (40, 45442), (50, 45511), (53, 45532), (57, 45556), (68, 45637), (77, 45700), (82, 45775),

Gene: Xandras_76 Start: 47963, Stop: 48280, Start Num: 35

Candidate Starts for Xandras_76:

(7, 47780), (Start: 35 @47963 has 142 MA's), (57, 48104),

Gene: YassJohnny_74 Start: 47918, Stop: 48235, Start Num: 35

Candidate Starts for YassJohnny_74:

(7, 47735), (Start: 35 @47918 has 142 MA's), (Start: 39 @47942 has 1 MA's), (57, 48059),

Gene: Yorick_64 Start: 42551, Stop: 42913, Start Num: 28

Candidate Starts for Yorick_64:

(Start: 28 @42551 has 14 MA's), (56, 42710), (75, 42851), (81, 42896),

Gene: Youngblood_80 Start: 49430, Stop: 49747, Start Num: 35

Candidate Starts for Youngblood_80:

(7, 49247), (Start: 35 @49430 has 142 MA's), (57, 49571),

Gene: Zelink_117 Start: 68840, Stop: 69172, Start Num: 34

Candidate Starts for Zelink_117:

(Start: 34 @68840 has 24 MA's), (44, 68909), (68, 69068),

Gene: xkcd_80 Start: 49620, Stop: 49937, Start Num: 35

Candidate Starts for xkcd_80:

(7, 49437), (Start: 35 @49620 has 142 MA's), (57, 49761),