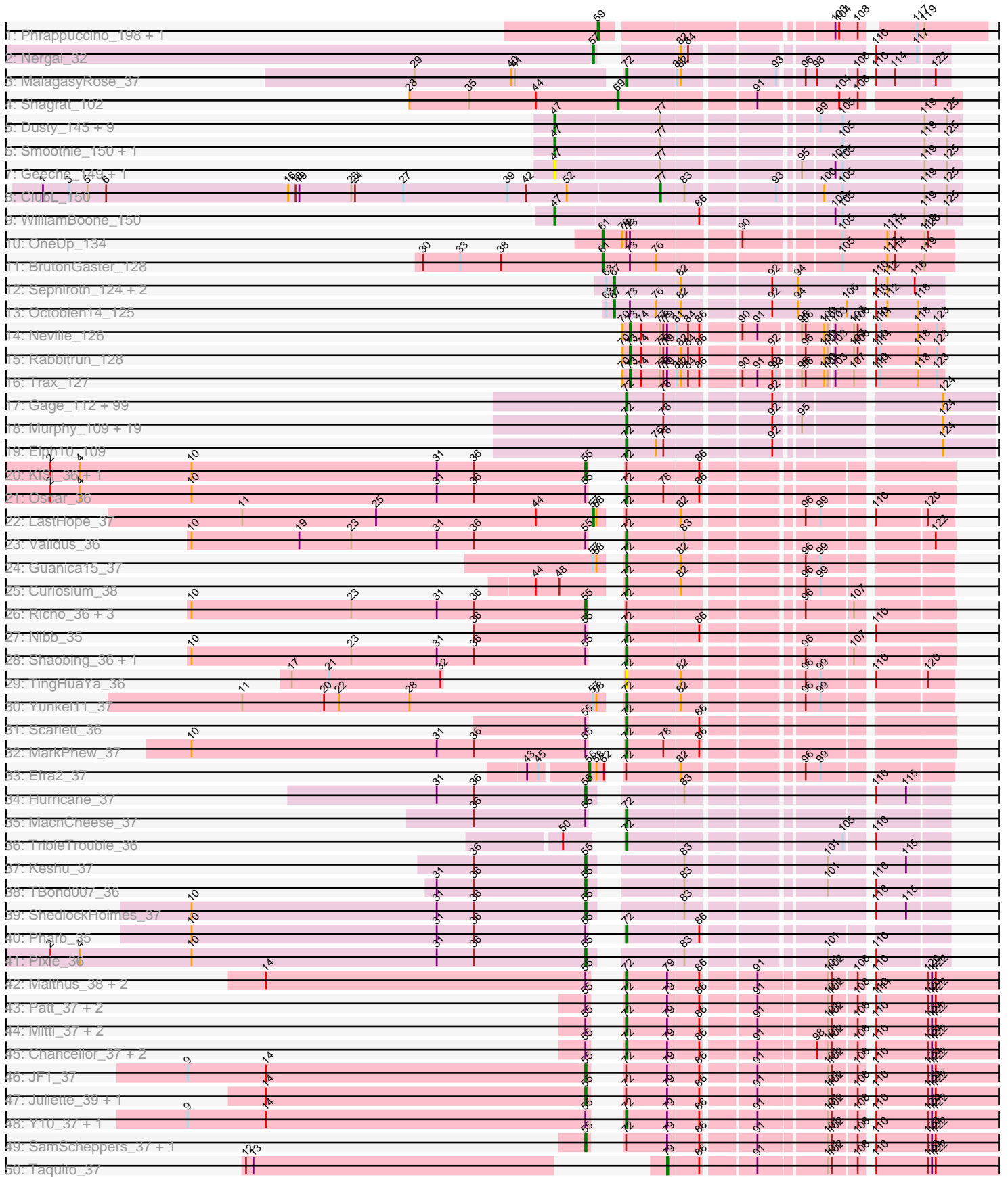
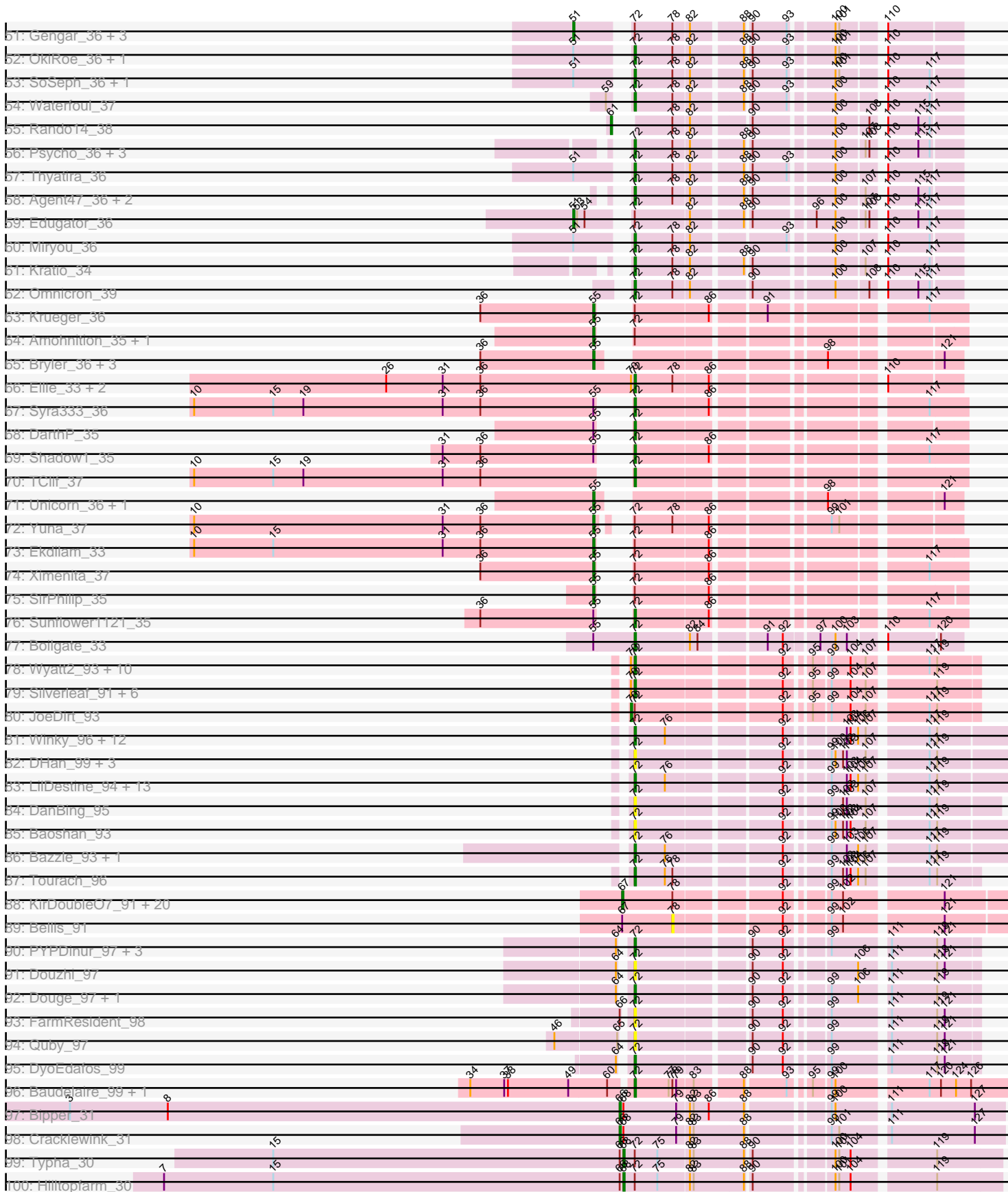


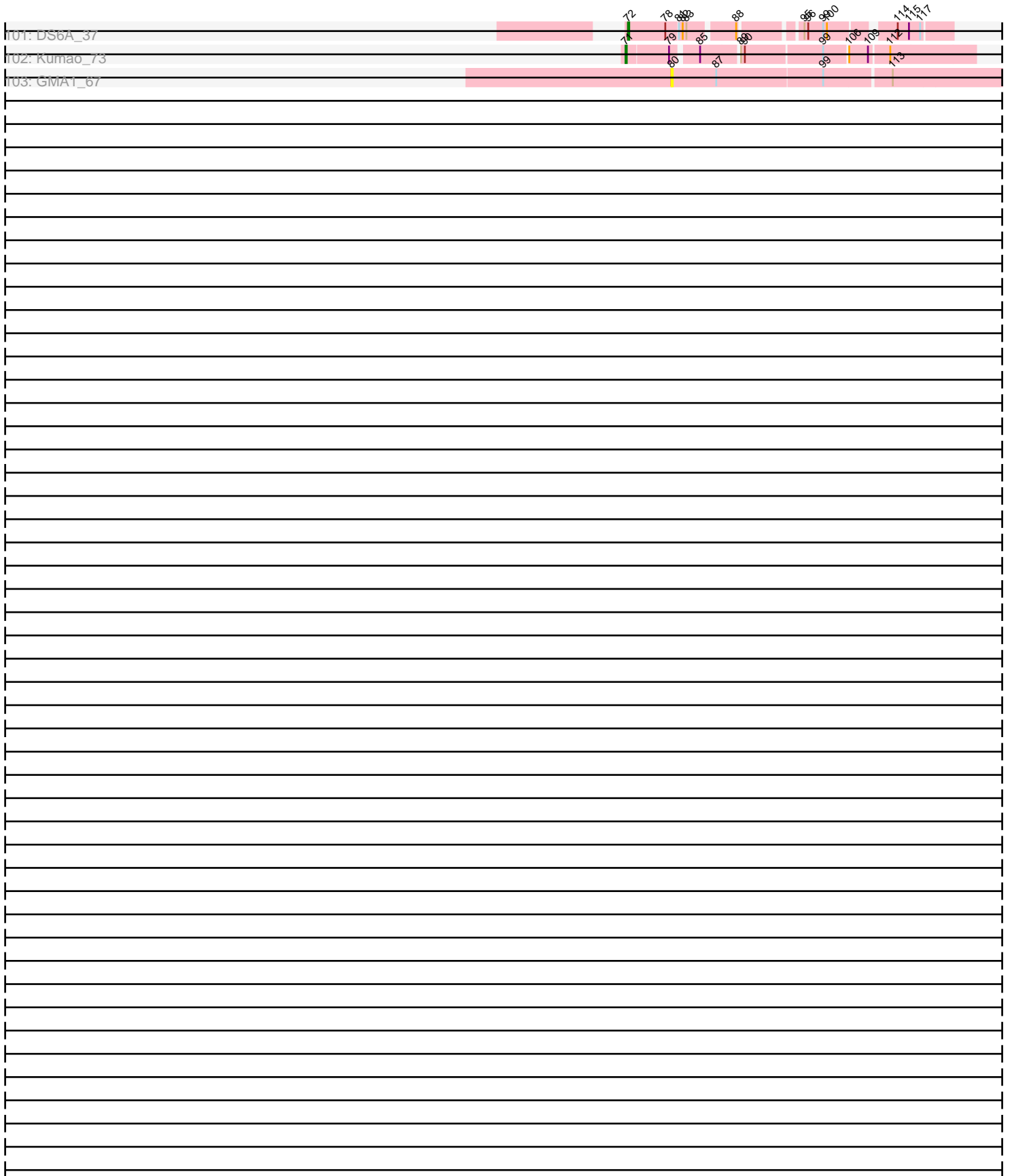
Pham 196220



Pham 196220



Pham 196220



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 196220 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196220 has 338 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino_198, Settecandela_223
- Track 2 : Nergal_32
- Track 3 : MalagasyRose_37
- Track 4 : Shagrat_102
- Track 5 : Dusty_145, Lozinak_149, Miskis_147, Toniann_149, Bachita_152, Aphelion_148, Norvs_147, PhinkBoden_147, Cucurbita_148, Engineer_151
- Track 6 : Smoothie_150, Culver_149
- Track 7 : Geeche_149, Abscondus_148
- Track 8 : ClubL_150
- Track 9 : WilliamBoone_150
- Track 10 : OneUp_134
- Track 11 : BrutonGaster_128
- Track 12 : Sephiroth_124, Kudefre_129, Syleon_129
- Track 13 : Octobien14_125
- Track 14 : Neville_126
- Track 15 : Rabbitrun_128
- Track 16 : Trax_127
- Track 17 : Gage_112, Glexan_109, Lilizi_110, JeTaime_108, Lilpickle_109, Hopey_110, Nimrod_110, IHOP_108, Paperbeatsrock_109, Traaww1_106, Stark_110, DrDrey_110, Kimchi_114, PhatBacter_113, RiverMonster_109, Balomoji_110, Adnama_114, Contagion_107, Murica_114, Pat3_107, Cjw1_110, Misfit_111, Inca_107, Filch_112, Teaspoon_110, Cookies_107, Pumpkin_111, SirDuracell_110, Mosby_107, Bruin_107, Bask21_110, Elite2014_109, Buck_111, xkcd_114, Miniwave_105, Kostya_110, Harella_111, NelitzaMV_107, ChosenOne_110, TBrady12_113, StolenFromERC_112, Daikon_111, Mindy_109, ShamWow_110, ChotaBhai_110, Thresher_111, Gator_108, CrystalP_110, Maxxinista_112, Quallification_111, Stank_112, Ukulele_104, TeardropMSU_106, ABCat_107, Barbarian_109, Lilac_111, Wiggin_112, Cactus_114, YassJohnny_107, Sotrice96_111, DoctorDiddles_109, Hoonter_113, Youngblood_114, AmericanBeauty_113, FireRed_113, Icee_111, Phaja_108, Dusk_107, BadStone_107, Bench_112, MPhalcon_111, Rimmer_108, Argent26_114, StellaBean_108, Tarkin_109, Terminus_113, Pharsalus_107, Goldilocks_113, Czyszczon1_110, BugsBunny_109, Dumbo_110, Willez_105, Kanye_107, Myrale_110, BigBubba_111, HufflyPuff_112, Xandras_109, Tuco_111, ShereKhan_108, NoSleep_110, Holt_115, Rakim_111, Toto_108, Tomaszewski_105, Flypotenuse_106, Nala_112, Phrux_106, Asriel_108, GooberAzure_113, Gemini_115

- Track 18 : Murphy_109, Emmina_110, Henry_108, HanKaySha_110, BaboJay_109, 244_111, Marshmallow_108, Easy2Say_110, Saints25_106, SophKB_108, Moldemort_112, Manda_111, Porky_108, Highbury_106, Goku_109, MadamMonkfish_109, Eureka_110, OrionPax_108, Simpliphy_108, Phaux_112
- Track 19 : Elph10_109
- Track 20 : KiSi_36, LeMond_36
- Track 21 : Oscar_36
- Track 22 : LastHope_37
- Track 23 : Validus_36
- Track 24 : Guanica15_37
- Track 25 : Curiosium_38
- Track 26 : Richo_36, Peanam_36, Dartin_36, McMater_36
- Track 27 : Nibb_35
- Track 28 : Shaobing_36, Niklas_36
- Track 29 : TingHuaYa_36
- Track 30 : Yunkel11_37
- Track 31 : Scarlett_36
- Track 32 : MarkPhew_37
- Track 33 : Efra2_37
- Track 34 : Hurricane_37
- Track 35 : MacnCheese_37
- Track 36 : TribbleTrouble_36
- Track 37 : Keshu_37
- Track 38 : TBond007_36
- Track 39 : ShedlockHolmes_37
- Track 40 : Pharb_35
- Track 41 : Pixie_36
- Track 42 : Malthus_38, Kraw_38, Fionnbharth_37
- Track 43 : Patt_37, MissDaisy_37, Reptar3000_37
- Track 44 : Mitti_37, Wintermute_37, Eponine_39
- Track 45 : Chancellor_37, Slarp_37, Cheetobro_37
- Track 46 : JF1_37
- Track 47 : Juliette_39, Ruthiejr_38
- Track 48 : Y10_37, Y2_37
- Track 49 : SamScheppers_37, OmniCritical_37
- Track 50 : Taquito_37
- Track 51 : Gengar_36, Paola_36, Guillsminger_36, Leston_36
- Track 52 : OkiRoe_36, Feyre_36
- Track 53 : SoSeph_36, Heftyboy_36
- Track 54 : Waterfoul_37
- Track 55 : Rando14_38
- Track 56 : Psycho_36, Dadosky_36, AlleyCat_36, Larva_36
- Track 57 : Thyatira_36
- Track 58 : Agent47_36, InvictusManeo_35, Collard_35
- Track 59 : Edugator_36
- Track 60 : Miryou_36
- Track 61 : Kratio_34
- Track 62 : Omnicron_39
- Track 63 : Krueger_36
- Track 64 : Amohnition_35, Hammy_35
- Track 65 : Bryler_36, Phrank_36, Cain_36, Tierra_36
- Track 66 : Ellie_33, Amgine_34, Fefferhead_35
- Track 67 : Syra333_36

- Track 68 : DARTH_P_35
- Track 69 : Shadow1_35
- Track 70 : TClif_37
- Track 71 : Unicorn_36, PhelpsODU_36
- Track 72 : Yuna_37
- Track 73 : Ekdilam_33
- Track 74 : Ximenita_37
- Track 75 : SirPhilip_35
- Track 76 : Sunflower1121_35
- Track 77 : Boilgate_33
- Track 78 : Wyatt2_93, Appletree2_91, Rose5_93, UPIE_91, OhShagHennessy_88, Halena_89, DirkDirk_89, Enceladus_89, CicholasNage_89, MAckerman_90, Wamburgxpress_91
- Track 79 : Silverleaf_91, AvadaKedavra_92, Calm_93, Tyson_93, Acquire49_92, LeBron_91, Zaria_92
- Track 80 : JoeDirt_93
- Track 81 : Winky_96, DrSeegs_95, Breezona_96, Faith1_96, Miley16_96, MkaliMitinis3_98, Itos_96, Wigglewiggle_96, Gabriela_96, Sarshaun_97, Netyap_95, Lewan_97, Soap141_96
- Track 82 : DHan_99, Hafay_97, ZhongYanYuan_93, Claus_95
- Track 83 : LilDestine_94, Loadrie_95, Crossroads_96, Rumpelstiltskin_92, BigCheese_96, Gardann_96, GuuelaD_93, Kahlid_95, Zakai_97, Vetrix_94, Nicholasp3_96, Wilder_97, BobsGarage_95, Finemlucis_97
- Track 84 : DanBing_95
- Track 85 : Baoshan_93
- Track 86 : Bazzle_93, Archie_93
- Track 87 : Tourach_96
- Track 88 : KirDoubleO7_91, BourbonZero_94, Kingsolomon_91, Nicholas_91, Jubie_92, Krypton555_95, Ellson_92, Snenia_92, Lumos_93, DuncansLeg_93, MiniMac_97, Moostard_90, Lolly9_92, Finnry_93, Jobypre_94, MiniLon_97, Clautastrophe_91, MsGreen_93, LiyuLake_92, Samty_92, Whirlwind_94
- Track 89 : Bellis_91
- Track 90 : PYPDinur_97, Bromden_97, BrainDrainer_98, Chaser_96
- Track 91 : Douzhi_97
- Track 92 : Douge_97, Sheng711_98
- Track 93 : FarmResident_98
- Track 94 : Quby_97
- Track 95 : DyoEdafos_99
- Track 96 : Baudelaire_99, Aegeus_99
- Track 97 : Bipper_31
- Track 98 : Cracklewink_31
- Track 99 : Typha_30
- Track 100 : Hilltopfarm_30
- Track 101 : DS6A_37
- Track 102 : Kumao_73
- Track 103 : GMA1_67

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

The start number called the most often in the published annotations is 72, it was called in 224 of the 306 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_111, ABCat_107, Acquire49_92, Adnama_114, Aegeus_99, Agent47_36, AlleyCat_36, AmericanBeauty_113, Amgine_34, Appletree2_91, Archie_93, Argent26_114, Asriel_108, AvadaKedavra_92, BaboJay_109, BadStone_107, Balomoji_110, Baoshan_93, Barbarian_109, Bask21_110, Baudelaire_99, Bazzle_93, Bench_112, BigBubba_111, BigCheese_96, BobsGarage_95, Boilgate_33, BrainDrainer_98, Breezona_96, Bromden_97, Bruin_107, Buck_111, BugsBunny_109, Cactus_114, Calm_93, Chancellor_37, Chaser_96, Cheetobro_37, ChosenOne_110, ChotaBhai_110, CicholasNage_89, Cjw1_110, Claus_95, Collard_35, Contagion_107, Cookies_107, Crossroads_96, CrystalP_110, Curiosium_38, Czyszczonek_110, DHan_99, DS6A_37, Dadosky_36, Daikon_111, DanBing_95, DarthP_35, DirkDirk_89, DoctorDiddles_109, Douge_97, Douzhi_97, DrDrey_110, DrSeegs_95, Dumbo_110, Dusk_107, DyoEdafos_99, Easy2Say_110, Elite2014_109, Ellie_33, Elph10_109, Emmina_110, Enceladus_89, Eponine_39, Eureka_110, Faith1_96, FarmResident_98, Fefferhead_35, Feyre_36, Filch_112, Finemlucis_97, Fionnbharth_37, FireRed_113, Flypotenuse_106, Gabriela_96, Gage_112, Gardann_96, Gator_108, Gemini_115, Glexan_109, Goku_109, Goldilocks_113, GooberAzure_113, Guanica15_37, GuuelaD_93, Hafay_97, Halena_89, HanKaySha_110, Harella_111, Heftyboy_36, Henry_108, Highbury_106, Holt_115, Hoonter_113, Hopey_110, HuffyPuff_112, IHOP_108, Icee_111, Inca_107, InvictusManeo_35, Itos_96, JeTaime_108, Kahlid_95, Kanye_107, Kimchi_114, Kostya_110, Kratio_34, Kraw_38, Larva_36, LeBron_91, Lewan_97, LilDestine_94, Lilac_111, Lilizi_110, Lilpickle_109, Loadrie_95, MAckerman_90, MPhalcon_111, MacnCheese_37, MadamMonkfish_109, MalagasyRose_37, Malthus_38, Manda_111, MarkPhew_37, Marshmallow_108, Maxxinista_112, Miley16_96, Mindy_109, Miniwave_105, Miryou_36, Misfit_111, MissDaisy_37, Mitti_37, MkaliMinitis3_98, Moldemort_112, Mosby_107, Murica_114, Murphy_109, Myrale_110, Nala_112, NelitzaMV_107, Netyap_95, Nibb_35, Nicholasp3_96, Niklas_36, Nimrod_110, NoSleep_110, OhShagHennessy_88, OkiRoe_36, Omnicron_39, OrionPax_108, Oscar_36, PYPDinur_97, Paperbeatsrock_109, Pat3_107, Patt_37, Phaja_108, Pharb_35, Pharsalus_107, PhatBacter_113, Phaux_112, Phrux_106, Porky_108, Psycho_36, Pumpkin_111, Qualification_111, Quby_97, Rakim_111, Reptar3000_37, Rimmer_108, RiverMonster_109, Rose5_93, Rumpelstiltskin_92, Saints25_106, Sarshaun_97, Scarlett_36, Shadow1_35, ShamWow_110, Shaobing_36, Sheng711_98, ShereKhan_108, Silverleaf_91, Simpliphy_108, SirDuracell_110, Slarp_37, SoSeph_36, Soap141_96, SophKB_108, Sotrice96_111, Stank_112, Stark_110, StellaBean_108, StolenFromERC_112, Sunflower1121_35, Syra333_36, TBrady12_113, TClif_37, Tarkin_109, TeardropMSU_106, Teaspoon_110, Terminus_113, Thresher_111, Thyatira_36, TingHuaYa_36, Tomaszewski_105, Toto_108, Tourach_96, Traaww1_106, TripleTrouble_36, Tuco_111, Tyson_93, UPIE_91, Ukulele_104, Validus_36, Vetrux_94, Wamburgxpress_91, Waterfoul_37, Wiggin_112, Wigglewiggle_96, Wilder_97, Willez_105, Winky_96, Wintermute_37, Wyatt2_93, Xandras_109, Y10_37, Y2_37, YassJohnny_107, Youngblood_114, Yunkel11_37, Zakai_97, Zaria_92, ZhongYanYuan_93, xkcd_114,

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

- Amohnition_35, Dartin_36, Edugator_36, Efra2_37, Ekdilam_33, Gengar_36, Guillsminger_36, Hammy_35, Hilltopfarm_30, JF1_37, JoeDirt_93, Juliette_39, KiSi_36, Krueger_36, LastHope_37, LeMond_36, Leston_36, McMater_36,

OmniCritical_37, OneUp_134, Paola_36, Peanam_36, Richo_36, Ruthiejr_38, SamScheppers_37, SirPhilip_35, Typha_30, Ximenita_37, Yuna_37,

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

• Abscondus_148, Aphelion_148, Bachita_152, Bellis_91, Bipper_31, BourbonZero_94, BrutonGaster_128, Bryler_36, Cain_36, Clautastrophe_91, ClubL_150, Cracklewink_31, Cucurbita_148, Culver_149, DuncansLeg_93, Dusty_145, Ellson_92, Engineer_151, Finnry_93, GMA1_67, Geeche_149, Hurricane_37, Jobypre_94, Jubie_92, Keshu_37, Kingsolomon_91, KirDoubleO7_91, Krypton555_95, Kudrefre_129, Kumao_73, LiyuLake_92, Lolly9_92, Lozinak_149, Lumos_93, MiniLon_97, MiniMac_97, Miskis_147, Moostard_90, MsGreen_93, Nergal_32, Neville_126, Nicholas_91, Norvs_147, Octobien14_125, PhelpsODU_36, PhinkBoden_147, Phrank_36, Phrappuccino_198, Pixie_36, Rabbitrun_128, Rando14_38, Samty_92, Sephiroth_124, Settecandela_223, Shagrat_102, ShedlockHolmes_37, Smoothie_150, Snenia_92, Syleon_129, TBond007_36, Taquito_37, Tierra_36, Toniann_149, Trax_127, Unicorn_36, Whirlwind_94, WilliamBoone_150,

Summary by start number:

Start 47:

- Found in 15 of 338 (4.4%) of genes in pham
- Manual Annotations of this start: 11 of 306
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_148 (CQ1), Aphelion_148 (CQ1), Bachita_152 (CQ1), Cucurbita_148 (CQ1), Culver_149 (CQ1), Dusty_145 (CQ1), Engineer_151 (CQ1), Geeche_149 (CQ1), Lozinak_149 (CQ1), Miskis_147 (CQ1), Norvs_147 (CQ1), PhinkBoden_147 (CQ1), Smoothie_150 (CQ1), Toniann_149 (CQ1), WilliamBoone_150 (CQ1),

Start 51:

- Found in 11 of 338 (3.3%) of genes in pham
- Manual Annotations of this start: 5 of 306
- Called 45.5% of time when present
- Phage (with cluster) where this start called: Edugator_36 (K5), Gengar_36 (K5), Guillsminger_36 (K5), Leston_36 (K5), Paola_36 (K5),

Start 55:

- Found in 57 of 338 (16.9%) of genes in pham
- Manual Annotations of this start: 26 of 306
- Called 50.9% of time when present
- Phage (with cluster) where this start called: Amohnition_35 (K6), Bryler_36 (K6), Cain_36 (K6), Dartin_36 (K1), Ekdilam_33 (K6), Hammy_35 (K6), Hurricane_37 (K3), JF1_37 (K4), Juliette_39 (K4), Keshu_37 (K3), KiSi_36 (K1), Krueger_36 (K6), LeMond_36 (K1), McMater_36 (K1), OmniCritical_37 (K4), Peanam_36 (K1), PhelpsODU_36 (K6), Phrank_36 (K6), Pixie_36 (K3), Richo_36 (K1), Ruthiejr_38 (K4), SamScheppers_37 (K4), ShedlockHolmes_37 (K3), SirPhilip_35 (K6), TBond007_36 (K3), Tierra_36 (K6), Unicorn_36 (K6), Ximenita_37 (K6), Yuna_37 (K6),

Start 56:

- Found in 1 of 338 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 306

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Efra2_37 (K1),

Start 57:

- Found in 4 of 338 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 306
- Called 50.0% of time when present
- Phage (with cluster) where this start called: LastHope_37 (K1), Nergal_32 (AG),

Start 59:

- Found in 3 of 338 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 306
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phrappuccino_198 (AA), Settecandela_223 (AA),

Start 61:

- Found in 3 of 338 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 306
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_128 (CQ2), OneUp_134 (CQ2), Rando14_38 (K5),

Start 66:

- Found in 5 of 338 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 306
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Bipper_31 (Y), Cracklewink_31 (Y),

Start 67:

- Found in 26 of 338 (7.7%) of genes in pham
- Manual Annotations of this start: 20 of 306
- Called 96.2% of time when present
- Phage (with cluster) where this start called: BourbonZero_94 (L3), Clautastrophe_91 (L3), DuncansLeg_93 (L3), Ellson_92 (L3), Finnry_93 (L3), Jobypre_94 (L3), Jubie_92 (L3), Kingsolomon_91 (L3), KirDoubleO7_91 (L3), Krypton555_95 (L3), Kudrefre_129 (DU1), LiyuLake_92 (L3), Lolly9_92 (L3), Lumos_93 (L3), MiniLon_97 (L3), MiniMac_97 (L3), Moostard_90 (L3), MsGreen_93 (L3), Nicholas_91 (L3), Octobien14_125 (DU1), Samty_92 (L3), Sephiroth_124 (DU1), Snenia_92 (L3), Syleon_129 (DU1), Whirlwind_94 (L3),

Start 68:

- Found in 4 of 338 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 306
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hilltopfarm_30 (Y), Typha_30 (Y),

Start 69:

- Found in 1 of 338 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 306
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_102 (CF),

Start 70:

- Found in 26 of 338 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 306
- Called 3.8% of time when present
- Phage (with cluster) where this start called: JoeDirt_93 (L1),

Start 71:

- Found in 1 of 338 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 306
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_73 (singleton),

Start 72:

- Found in 271 of 338 (80.2%) of genes in pham
- Manual Annotations of this start: 224 of 306
- Called 89.3% of time when present
- Phage (with cluster) where this start called: 244_111 (E), ABCat_107 (E), Acquire49_92 (L1), Adnama_114 (E), Aegeus_99 (L5), Agent47_36 (K5), AlleyCat_36 (K5), AmericanBeauty_113 (E), Amgine_34 (K6), Appletree2_91 (L1), Archie_93 (L2), Argent26_114 (E), Asriel_108 (E), AvadaKedavra_92 (L1), BaboJay_109 (E), BadStone_107 (E), Balomoji_110 (E), Baoshan_93 (L2), Barbarian_109 (E), Bask21_110 (E), Baudelaire_99 (L5), Bazzle_93 (L2), Bench_112 (E), BigBubba_111 (E), BigCheese_96 (L2), BobsGarage_95 (L2), Boilgate_33 (K8), BrainDrainer_98 (L4), Breezona_96 (L2), Bromden_97 (L4), Bruin_107 (E), Buck_111 (E), BugsBunny_109 (E), Cactus_114 (E), Calm_93 (L1), Chancellor_37 (K4), Chaser_96 (L4), Cheetobro_37 (K4), ChosenOne_110 (E), ChotaBhai_110 (E), CicholasNage_89 (L1), Cjw1_110 (E), Claus_95 (L2), Collard_35 (K5), Contagion_107 (E), Cookies_107 (E), Crossroads_96 (L2), CrystalP_110 (E), Curiosium_38 (K1), Czyszczonek_110 (E), DHan_99 (L2), DS6A_37 (singleton), Dadosky_36 (K5), Daikon_111 (E), DanBing_95 (L2), DarthP_35 (K6), DirkDirk_89 (L1), DoctorDiddles_109 (E), Douge_97 (L4), Douzhi_97 (L4), DrDrey_110 (E), DrSeegs_95 (L2), Dumbo_110 (E), Dusk_107 (E), DyoEdafos_99 (L4), Easy2Say_110 (E), Elite2014_109 (E), Ellie_33 (K6), Elph10_109 (E), Emmina_110 (E), Enceladus_89 (L1), Eponine_39 (K4), Eureka_110 (E), Faith1_96 (L2), FarmResident_98 (L4), Fefferhead_35 (K6), Feyre_36 (K5), Filch_112 (E), Finemlucis_97 (L2), Fionnbharth_37 (K4), FireRed_113 (E), Flypotenuse_106 (E), Gabriela_96 (L2), Gage_112 (E), Gardann_96 (L2), Gator_108 (E), Gemini_115 (E), Glexan_109 (E), Goku_109 (E), Goldilocks_113 (E), GooberAzure_113 (E), Guanica15_37 (K1), GuuelaD_93 (L2), Hafay_97 (L2), Halena_89 (L1), HanKaySha_110 (E), Harella_111 (E), Heftyboy_36 (K5), Henry_108 (E), Highbury_106 (E), Holt_115 (E), Hoonter_113 (E), Hopey_110 (E), HufflyPuff_112 (E), IHOP_108 (E), Icee_111 (E), Inca_107 (E), InvictusManeo_35 (K5), Itos_96 (L2), JeTaime_108 (E), Kahlid_95 (L2), Kanye_107 (E), Kimchi_114 (E), Kostya_110 (E), Kratio_34 (K5), Kraw_38 (K4), Larva_36 (K5), LeBron_91 (L1), Lewan_97 (L2), LilDestine_94 (L2), Lilac_111 (E), Lilizi_110 (E), Lilpickle_109 (E), Loadrie_95 (L2), MAckerman_90 (L1), MPhalcon_111 (E), MacnCheese_37 (K3), MadamMonkfish_109 (E), MalagasyRose_37 (AG), Malthus_38 (K4), Manda_111 (E), MarkPhew_37 (K1), Marshmallow_108 (E), Maxxinista_112 (E), Miley16_96 (L2), Mindy_109 (E), Miniwave_105 (E), Miryou_36 (K5), Misfit_111 (E), MissDaisy_37 (K4), Mitti_37 (K4), MkaliMitinis3_98 (L2), Moldemort_112 (E), Mosby_107 (E), Murica_114 (E), Murphy_109 (E), Myrale_110 (E), Nala_112 (E), NelitzaMV_107 (E), Netyap_95 (L2), Nibb_35 (K1), Nicholasp3_96 (L2), Niklas_36 (K1), Nimrod_110 (E), NoSleep_110 (E), OhShagHennessey_88 (L1), OkiRoe_36 (K5), Omnicron_39 (K5),

OrionPax_108 (E), Oscar_36 (K1), PYPDinur_97 (L4), Paperbeatsrock_109 (E), Pat3_107 (E), Patt_37 (K4), Phaja_108 (E), Pharb_35 (K3), Pharsalus_107 (E), PhatBacter_113 (E), Phaux_112 (E), Phrux_106 (E), Porky_108 (E), Psycho_36 (K5), Pumpkin_111 (E), Qualification_111 (E), Quby_97 (L4), Rakim_111 (E), Reptar3000_37 (K4), Rimmer_108 (E), RiverMonster_109 (E), Rose5_93 (L1), Rumpelstiltskin_92 (L2), Saints25_106 (E), Sarshaun_97 (L2), Scarlett_36 (K1), Shadow1_35 (K6), ShamWow_110 (E), Shaobing_36 (K1), Sheng711_98 (L4), ShereKhan_108 (E), Silverleaf_91 (L1), Simpliphy_108 (E), SirDuracell_110 (E), Slarp_37 (K4), SoSeph_36 (K5), Soap141_96 (L2), SophKB_108 (E), Sotrice96_111 (E), Stank_112 (E), Stark_110 (E), StellaBean_108 (E), StolenFromERC_112 (E), Sunflower1121_35 (K6), Syra333_36 (K6), TBrady12_113 (E), TClif_37 (K6), Tarkin_109 (E), TeardropMSU_106 (E), Teaspoon_110 (E), Terminus_113 (E), Thresher_111 (E), Thyatira_36 (K5), TingHuaYa_36 (K1), Tomaszewski_105 (E), Toto_108 (E), Tourach_96 (L2), Traaww1_106 (E), TribeTrouble_36 (K3), Tuco_111 (E), Tyson_93 (L1), UPIE_91 (L1), Ukulele_104 (E), Validus_36 (K1), Vetrrix_94 (L2), Wamburgexpress_91 (L1), Waterfoul_37 (K5), Wiggin_112 (E), Wigglewobble_96 (L2), Wilder_97 (L2), Willez_105 (E), Winky_96 (L2), Wintermute_37 (K4), Wyatt2_93 (L1), Xandras_109 (E), Y10_37 (K4), Y2_37 (K4), YassJohnny_107 (E), Youngblood_114 (E), Yunkel11_37 (K1), Zakai_97 (L2), Zaria_92 (L1), ZhongYanYuan_93 (L2), xkcd_114 (E),

Start 73:

- Found in 6 of 338 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 306
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Neville_126 (DU2), Rabbitrun_128 (DU2), Trax_127 (DU2),

Start 77:

- Found in 20 of 338 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 306
- Called 5.0% of time when present
- Phage (with cluster) where this start called: ClubL_150 (CQ1),

Start 78:

- Found in 177 of 338 (52.4%) of genes in pham
- No Manual Annotations of this start.
- Called 0.6% of time when present
- Phage (with cluster) where this start called: Bellis_91 (L3),

Start 79:

- Found in 28 of 338 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 306
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Taquito_37 (K4),

Start 80:

- Found in 1 of 338 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA1_67 (singleton),

Summary by clusters:

There are 21 clusters represented in this pham: AA, singleton, E, CQ2, AG, L1, L4, CF, K3, K1, L5, L2, K6, K5, K4, Y, DU1, DU2, K8, CQ1, L3,

Info for manual annotations of cluster AA:

- Start number 59 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:

- Start number 57 was manually annotated 1 time for cluster AG.
- Start number 72 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CF:

- Start number 69 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CQ1:

- Start number 47 was manually annotated 11 times for cluster CQ1.
- Start number 77 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 61 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DU1:

- Start number 67 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 73 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster E:

- Start number 72 was manually annotated 119 times for cluster E.

Info for manual annotations of cluster K1:

- Start number 55 was manually annotated 3 times for cluster K1.
- Start number 56 was manually annotated 1 time for cluster K1.
- Start number 57 was manually annotated 1 time for cluster K1.
- Start number 72 was manually annotated 10 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 55 was manually annotated 5 times for cluster K3.
- Start number 72 was manually annotated 3 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 55 was manually annotated 5 times for cluster K4.
- Start number 72 was manually annotated 13 times for cluster K4.
- Start number 79 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K5:

- Start number 51 was manually annotated 5 times for cluster K5.
- Start number 61 was manually annotated 1 time for cluster K5.
- Start number 72 was manually annotated 16 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 55 was manually annotated 13 times for cluster K6.
- Start number 72 was manually annotated 8 times for cluster K6.

Info for manual annotations of cluster K8:

- Start number 72 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L1:

- Start number 70 was manually annotated 1 time for cluster L1.
- Start number 72 was manually annotated 18 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 72 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 67 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 72 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 72 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster Y:

- Start number 66 was manually annotated 2 times for cluster Y.
- Start number 68 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: 244_111 Start: 62553, Stop: 62816, Start Num: 72

Candidate Starts for 244_111:

(Start: 72 @62553 has 224 MA's), (78, 62583), (92, 62658), (95, 62673), (124, 62775),

Gene: ABCat_107 Start: 63757, Stop: 64020, Start Num: 72

Candidate Starts for ABCat_107:

(Start: 72 @63757 has 224 MA's), (78, 63787), (92, 63862), (124, 63979),

Gene: Abscondus_148 Start: 80394, Stop: 80693, Start Num: 47

Candidate Starts for Abscondus_148:

(Start: 47 @80394 has 11 MA's), (Start: 77 @80475 has 1 MA's), (95, 80568), (103, 80592), (105, 80598), (119, 80664), (125, 80682),

Gene: Acquire49_92 Start: 57880, Stop: 58119, Start Num: 72

Candidate Starts for Acquire49_92:

(Start: 70 @57877 has 1 MA's), (Start: 72 @57880 has 224 MA's), (92, 57985), (95, 58000), (99, 58012), (104, 58027), (107, 58039), (119, 58087),

Gene: Adnama_114 Start: 63046, Stop: 63309, Start Num: 72

Candidate Starts for Adnama_114:

(Start: 72 @63046 has 224 MA's), (78, 63076), (92, 63151), (124, 63268),

Gene: Aegeus_99 Start: 60382, Stop: 60651, Start Num: 72

Candidate Starts for Aegeus_99:

(34, 60259), (37, 60286), (38, 60289), (49, 60337), (60, 60367), (Start: 72 @60382 has 224 MA's), (Start: 77 @60409 has 1 MA's), (78, 60412), (Start: 79 @60415 has 1 MA's), (83, 60427), (88, 60460), (93, 60490), (95, 60502), (99, 60514), (100, 60517), (117, 60583), (120, 60592), (124, 60604), (126, 60616),

Gene: Agent47_36 Start: 30297, Stop: 30521, Start Num: 72

Candidate Starts for Agent47_36:

(Start: 72 @30297 has 224 MA's), (78, 30327), (82, 30339), (88, 30375), (90, 30378), (100, 30435), (107, 30456), (110, 30465), (115, 30489), (117, 30498),

Gene: AlleyCat_36 Start: 30143, Stop: 30367, Start Num: 72

Candidate Starts for AlleyCat_36:

(Start: 72 @30143 has 224 MA's), (78, 30173), (82, 30185), (88, 30221), (90, 30224), (100, 30281), (107, 30302), (108, 30305), (110, 30311), (115, 30335), (117, 30344),

Gene: AmericanBeauty_113 Start: 63088, Stop: 63351, Start Num: 72

Candidate Starts for AmericanBeauty_113:

(Start: 72 @63088 has 224 MA's), (78, 63118), (92, 63193), (124, 63310),

Gene: Amgine_34 Start: 29490, Stop: 29714, Start Num: 72

Candidate Starts for Amgine_34:

(26, 29292), (31, 29337), (36, 29367), (Start: 70 @29487 has 1 MA's), (Start: 72 @29490 has 224 MA's), (78, 29520), (86, 29547), (110, 29658),

Gene: Amohndition_35 Start: 29885, Stop: 30115, Start Num: 55

Candidate Starts for Amohndition_35:

(Start: 55 @29885 has 26 MA's), (Start: 72 @29888 has 224 MA's),

Gene: Aphelion_148 Start: 81287, Stop: 81586, Start Num: 47

Candidate Starts for Aphelion_148:

(Start: 47 @81287 has 11 MA's), (Start: 77 @81368 has 1 MA's), (99, 81473), (105, 81491), (119, 81557), (125, 81575),

Gene: Appletree2_91 Start: 57640, Stop: 57879, Start Num: 72

Candidate Starts for Appletree2_91:

(Start: 70 @57637 has 1 MA's), (Start: 72 @57640 has 224 MA's), (92, 57745), (95, 57760), (99, 57772), (104, 57787), (107, 57799), (117, 57841), (119, 57847),

Gene: Archie_93 Start: 59561, Stop: 59821, Start Num: 72

Candidate Starts for Archie_93:

(Start: 72 @59561 has 224 MA's), (76, 59585), (92, 59666), (99, 59693), (103, 59705), (106, 59714), (107, 59720), (117, 59762), (119, 59768),

Gene: Argent26_114 Start: 62970, Stop: 63233, Start Num: 72

Candidate Starts for Argent26_114:

(Start: 72 @62970 has 224 MA's), (78, 63000), (92, 63075), (124, 63192),

Gene: Asriel_108 Start: 61503, Stop: 61766, Start Num: 72

Candidate Starts for Asriel_108:

(Start: 72 @61503 has 224 MA's), (78, 61533), (92, 61608), (124, 61725),

Gene: AvadaKedavra_92 Start: 57992, Stop: 58231, Start Num: 72

Candidate Starts for AvadaKedavra_92:

(Start: 70 @57989 has 1 MA's), (Start: 72 @57992 has 224 MA's), (92, 58097), (95, 58112), (99, 58124), (104, 58139), (107, 58151), (119, 58199),

Gene: BaboJay_109 Start: 63726, Stop: 63989, Start Num: 72

Candidate Starts for BaboJay_109:

(Start: 72 @63726 has 224 MA's), (78, 63756), (92, 63831), (95, 63846), (124, 63948),

Gene: Bachita_152 Start: 81434, Stop: 81733, Start Num: 47

Candidate Starts for Bachita_152:

(Start: 47 @81434 has 11 MA's), (Start: 77 @81515 has 1 MA's), (99, 81620), (105, 81638), (119, 81704), (125, 81722),

Gene: BadStone_107 Start: 63305, Stop: 63568, Start Num: 72

Candidate Starts for BadStone_107:

(Start: 72 @63305 has 224 MA's), (78, 63335), (92, 63410), (124, 63527),

Gene: Balomoji_110 Start: 63286, Stop: 63549, Start Num: 72

Candidate Starts for Balomoji_110:

(Start: 72 @63286 has 224 MA's), (78, 63316), (92, 63391), (124, 63508),

Gene: Baoshan_93 Start: 60216, Stop: 60476, Start Num: 72

Candidate Starts for Baoshan_93:

(Start: 72 @60216 has 224 MA's), (92, 60321), (99, 60348), (100, 60351), (102, 60357), (103, 60360), (104, 60363), (107, 60375), (117, 60417), (119, 60423),

Gene: Barbarian_109 Start: 61503, Stop: 61766, Start Num: 72

Candidate Starts for Barbarian_109:

(Start: 72 @61503 has 224 MA's), (78, 61533), (92, 61608), (124, 61725),

Gene: Bask21_110 Start: 62122, Stop: 62385, Start Num: 72

Candidate Starts for Bask21_110:

(Start: 72 @62122 has 224 MA's), (78, 62152), (92, 62227), (124, 62344),

Gene: Baudelaire_99 Start: 60382, Stop: 60651, Start Num: 72

Candidate Starts for Baudelaire_99:

(34, 60259), (37, 60286), (38, 60289), (49, 60337), (60, 60367), (Start: 72 @60382 has 224 MA's), (Start: 77 @60409 has 1 MA's), (78, 60412), (Start: 79 @60415 has 1 MA's), (83, 60427), (88, 60460), (93, 60490), (95, 60502), (99, 60514), (100, 60517), (117, 60583), (120, 60592), (124, 60604), (126, 60616),

Gene: Bazzle_93 Start: 60117, Stop: 60377, Start Num: 72

Candidate Starts for Bazzle_93:

(Start: 72 @60117 has 224 MA's), (76, 60141), (92, 60222), (99, 60249), (103, 60261), (106, 60270), (107, 60276), (117, 60318), (119, 60324),

Gene: Bellis_91 Start: 59773, Stop: 60003, Start Num: 78

Candidate Starts for Bellis_91:

(Start: 67 @59734 has 20 MA's), (78, 59773), (92, 59848), (99, 59875), (102, 59884), (121, 59956),

Gene: Bench_112 Start: 63727, Stop: 63990, Start Num: 72

Candidate Starts for Bench_112:

(Start: 72 @63727 has 224 MA's), (78, 63757), (92, 63832), (124, 63949),

Gene: BigBubba_111 Start: 62199, Stop: 62462, Start Num: 72
Candidate Starts for BigBubba_111:
(Start: 72 @62199 has 224 MA's), (78, 62229), (92, 62304), (124, 62421),

Gene: BigCheese_96 Start: 60326, Stop: 60586, Start Num: 72
Candidate Starts for BigCheese_96:
(Start: 72 @60326 has 224 MA's), (76, 60350), (92, 60431), (99, 60458), (103, 60470), (104, 60473),
(106, 60479), (107, 60485), (117, 60527), (119, 60533),

Gene: Bipper_31 Start: 28074, Stop: 28352, Start Num: 66
Candidate Starts for Bipper_31:
(3, 27636), (8, 27714), (Start: 66 @28074 has 2 MA's), (Start: 68 @28077 has 2 MA's), (Start: 79
@28119 has 1 MA's), (82, 28128), (83, 28131), (86, 28143), (88, 28170), (99, 28224), (100, 28227),
(111, 28263), (127, 28329),

Gene: BobsGarage_95 Start: 60326, Stop: 60586, Start Num: 72
Candidate Starts for BobsGarage_95:
(Start: 72 @60326 has 224 MA's), (76, 60350), (92, 60431), (99, 60458), (103, 60470), (104, 60473),
(106, 60479), (107, 60485), (117, 60527), (119, 60533),

Gene: Boilgate_33 Start: 31436, Stop: 31663, Start Num: 72
Candidate Starts for Boilgate_33:
(Start: 55 @31433 has 26 MA's), (Start: 72 @31436 has 224 MA's), (82, 31478), (84, 31484), (91,
31529), (92, 31541), (97, 31565), (100, 31577), (103, 31586), (110, 31607), (120, 31646),

Gene: BourbonZero_94 Start: 59760, Stop: 60029, Start Num: 67
Candidate Starts for BourbonZero_94:
(Start: 67 @59760 has 20 MA's), (78, 59799), (92, 59874), (99, 59901), (102, 59910), (121, 59982),

Gene: BrainDrainer_98 Start: 60036, Stop: 60275, Start Num: 72
Candidate Starts for BrainDrainer_98:
(64, 60030), (Start: 72 @60036 has 224 MA's), (90, 60117), (92, 60141), (99, 60168), (111, 60207),
(119, 60243), (121, 60249),

Gene: Breezona_96 Start: 60332, Stop: 60592, Start Num: 72
Candidate Starts for Breezona_96:
(Start: 72 @60332 has 224 MA's), (76, 60356), (92, 60437), (103, 60476), (104, 60479), (106, 60485),
(107, 60491), (117, 60533), (119, 60539),

Gene: Bromden_97 Start: 60914, Stop: 61153, Start Num: 72
Candidate Starts for Bromden_97:
(64, 60908), (Start: 72 @60914 has 224 MA's), (90, 60995), (92, 61019), (99, 61046), (111, 61085),
(119, 61121), (121, 61127),

Gene: Bruin_107 Start: 62411, Stop: 62674, Start Num: 72
Candidate Starts for Bruin_107:
(Start: 72 @62411 has 224 MA's), (78, 62441), (92, 62516), (124, 62633),

Gene: BrutonGaster_128 Start: 76649, Stop: 76906, Start Num: 61
Candidate Starts for BrutonGaster_128:
(30, 76505), (33, 76535), (38, 76568), (Start: 61 @76649 has 3 MA's), (Start: 73 @76670 has 3 MA's),
(76, 76691), (105, 76817), (112, 76853), (114, 76859), (119, 76883),

Gene: Bryler_36 Start: 28890, Stop: 29123, Start Num: 55
Candidate Starts for Bryler_36:
(36, 28800), (Start: 55 @28890 has 26 MA's), (98, 29031), (121, 29109),

Gene: Buck_111 Start: 64227, Stop: 64490, Start Num: 72
Candidate Starts for Buck_111:
(Start: 72 @64227 has 224 MA's), (78, 64257), (92, 64332), (124, 64449),

Gene: BugsBunny_109 Start: 63725, Stop: 63988, Start Num: 72
Candidate Starts for BugsBunny_109:
(Start: 72 @63725 has 224 MA's), (78, 63755), (92, 63830), (124, 63947),

Gene: Cactus_114 Start: 62665, Stop: 62928, Start Num: 72
Candidate Starts for Cactus_114:
(Start: 72 @62665 has 224 MA's), (78, 62695), (92, 62770), (124, 62887),

Gene: Cain_36 Start: 28878, Stop: 29111, Start Num: 55
Candidate Starts for Cain_36:
(36, 28788), (Start: 55 @28878 has 26 MA's), (98, 29019), (121, 29097),

Gene: Calm_93 Start: 57891, Stop: 58130, Start Num: 72
Candidate Starts for Calm_93:
(Start: 70 @57888 has 1 MA's), (Start: 72 @57891 has 224 MA's), (92, 57996), (95, 58011), (99, 58023), (104, 58038), (107, 58050), (119, 58098),

Gene: Chancellor_37 Start: 30638, Stop: 30919, Start Num: 72
Candidate Starts for Chancellor_37:
(Start: 55 @30632 has 26 MA's), (Start: 72 @30638 has 224 MA's), (Start: 79 @30671 has 1 MA's), (86, 30695), (91, 30731), (98, 30773), (101, 30782), (102, 30785), (108, 30803), (110, 30809), (120, 30851), (121, 30854), (122, 30857),

Gene: Chaser_96 Start: 59337, Stop: 59576, Start Num: 72
Candidate Starts for Chaser_96:
(64, 59331), (Start: 72 @59337 has 224 MA's), (90, 59418), (92, 59442), (99, 59469), (111, 59508), (119, 59544), (121, 59550),

Gene: Cheetobro_37 Start: 30635, Stop: 30916, Start Num: 72
Candidate Starts for Cheetobro_37:
(Start: 55 @30629 has 26 MA's), (Start: 72 @30635 has 224 MA's), (Start: 79 @30668 has 1 MA's), (86, 30692), (91, 30728), (98, 30770), (101, 30779), (102, 30782), (108, 30800), (110, 30806), (120, 30848), (121, 30851), (122, 30854),

Gene: ChosenOne_110 Start: 62611, Stop: 62874, Start Num: 72
Candidate Starts for ChosenOne_110:
(Start: 72 @62611 has 224 MA's), (78, 62641), (92, 62716), (124, 62833),

Gene: ChotaBhai_110 Start: 63064, Stop: 63327, Start Num: 72
Candidate Starts for ChotaBhai_110:
(Start: 72 @63064 has 224 MA's), (78, 63094), (92, 63169), (124, 63286),

Gene: CicholasNage_89 Start: 57544, Stop: 57783, Start Num: 72
Candidate Starts for CicholasNage_89:

(Start: 70 @57541 has 1 MA's), (Start: 72 @57544 has 224 MA's), (92, 57649), (95, 57664), (99, 57676), (104, 57691), (107, 57703), (117, 57745), (119, 57751),

Gene: Cjw1_110 Start: 64420, Stop: 64683, Start Num: 72

Candidate Starts for Cjw1_110:

(Start: 72 @64420 has 224 MA's), (78, 64450), (92, 64525), (124, 64642),

Gene: Claus_95 Start: 60040, Stop: 60279, Start Num: 72

Candidate Starts for Claus_95:

(Start: 72 @60040 has 224 MA's), (92, 60145), (99, 60172), (100, 60175), (102, 60181), (103, 60184), (107, 60199), (117, 60241), (119, 60247),

Gene: Clautastrophe_91 Start: 59729, Stop: 59998, Start Num: 67

Candidate Starts for Clautastrophe_91:

(Start: 67 @59729 has 20 MA's), (78, 59768), (92, 59843), (99, 59870), (102, 59879), (121, 59951),

Gene: ClubL_150 Start: 80767, Stop: 80985, Start Num: 77

Candidate Starts for ClubL_150:

(1, 80272), (3, 80293), (5, 80308), (6, 80323), (16, 80470), (18, 80476), (19, 80479), (23, 80521), (24, 80524), (27, 80563), (39, 80647), (42, 80662), (52, 80695), (Start: 77 @80767 has 1 MA's), (83, 80785), (93, 80848), (100, 80875), (105, 80890), (119, 80956), (125, 80974),

Gene: Collard_35 Start: 30258, Stop: 30482, Start Num: 72

Candidate Starts for Collard_35:

(Start: 72 @30258 has 224 MA's), (78, 30288), (82, 30300), (88, 30336), (90, 30339), (100, 30396), (107, 30417), (110, 30426), (115, 30450), (117, 30459),

Gene: Contagion_107 Start: 62773, Stop: 63036, Start Num: 72

Candidate Starts for Contagion_107:

(Start: 72 @62773 has 224 MA's), (78, 62803), (92, 62878), (124, 62995),

Gene: Cookies_107 Start: 63050, Stop: 63313, Start Num: 72

Candidate Starts for Cookies_107:

(Start: 72 @63050 has 224 MA's), (78, 63080), (92, 63155), (124, 63272),

Gene: Cracklewink_31 Start: 28074, Stop: 28352, Start Num: 66

Candidate Starts for Cracklewink_31:

(Start: 66 @28074 has 2 MA's), (Start: 68 @28077 has 2 MA's), (Start: 79 @28119 has 1 MA's), (82, 28128), (83, 28131), (88, 28170), (99, 28224), (101, 28230), (111, 28263), (127, 28329),

Gene: Crossroads_96 Start: 60044, Stop: 60304, Start Num: 72

Candidate Starts for Crossroads_96:

(Start: 72 @60044 has 224 MA's), (76, 60068), (92, 60149), (99, 60176), (103, 60188), (104, 60191), (106, 60197), (107, 60203), (117, 60245), (119, 60251),

Gene: CrystalP_110 Start: 63783, Stop: 64046, Start Num: 72

Candidate Starts for CrystalP_110:

(Start: 72 @63783 has 224 MA's), (78, 63813), (92, 63888), (124, 64005),

Gene: Cucurbita_148 Start: 81747, Stop: 82046, Start Num: 47

Candidate Starts for Cucurbita_148:

(Start: 47 @81747 has 11 MA's), (Start: 77 @81828 has 1 MA's), (99, 81933), (105, 81951), (119, 82017), (125, 82035),

Gene: Culver_149 Start: 80011, Stop: 80310, Start Num: 47
Candidate Starts for Culver_149:
(Start: 47 @80011 has 11 MA's), (Start: 77 @80092 has 1 MA's), (105, 80215), (119, 80281), (125, 80299),

Gene: Curiosium_38 Start: 29582, Stop: 29809, Start Num: 72
Candidate Starts for Curiosium_38:
(44, 29525), (48, 29543), (Start: 72 @29582 has 224 MA's), (82, 29624), (96, 29705), (99, 29717),

Gene: Czyszczone1_110 Start: 62766, Stop: 63029, Start Num: 72
Candidate Starts for Czyszczone1_110:
(Start: 72 @62766 has 224 MA's), (78, 62796), (92, 62871), (124, 62988),

Gene: DHan_99 Start: 60263, Stop: 60523, Start Num: 72
Candidate Starts for DHan_99:
(Start: 72 @60263 has 224 MA's), (92, 60368), (99, 60395), (100, 60398), (102, 60404), (103, 60407), (107, 60422), (117, 60464), (119, 60470),

Gene: DS6A_37 Start: 31428, Stop: 31652, Start Num: 72
Candidate Starts for DS6A_37:
(Start: 72 @31428 has 224 MA's), (78, 31458), (81, 31467), (82, 31470), (83, 31473), (88, 31506), (95, 31548), (96, 31551), (99, 31563), (100, 31566), (114, 31611), (115, 31620), (117, 31629),

Gene: Dadosky_36 Start: 30144, Stop: 30368, Start Num: 72
Candidate Starts for Dadosky_36:
(Start: 72 @30144 has 224 MA's), (78, 30174), (82, 30186), (88, 30222), (90, 30225), (100, 30282), (107, 30303), (108, 30306), (110, 30312), (115, 30336), (117, 30345),

Gene: Daikon_111 Start: 62582, Stop: 62845, Start Num: 72
Candidate Starts for Daikon_111:
(Start: 72 @62582 has 224 MA's), (78, 62612), (92, 62687), (124, 62804),

Gene: DanBing_95 Start: 59956, Stop: 60210, Start Num: 72
Candidate Starts for DanBing_95:
(Start: 72 @59956 has 224 MA's), (92, 60061), (99, 60088), (102, 60097), (103, 60100), (107, 60115), (117, 60157), (119, 60163),

Gene: DarthP_35 Start: 29810, Stop: 30037, Start Num: 72
Candidate Starts for DarthP_35:
(Start: 55 @29807 has 26 MA's), (Start: 72 @29810 has 224 MA's),

Gene: Dartin_36 Start: 28807, Stop: 29037, Start Num: 55
Candidate Starts for Dartin_36:
(10, 28489), (23, 28618), (31, 28687), (36, 28717), (Start: 55 @28807 has 26 MA's), (Start: 72 @28810 has 224 MA's), (96, 28933), (107, 28969),

Gene: DirkDirk_89 Start: 57220, Stop: 57459, Start Num: 72
Candidate Starts for DirkDirk_89:
(Start: 70 @57217 has 1 MA's), (Start: 72 @57220 has 224 MA's), (92, 57325), (95, 57340), (99, 57352), (104, 57367), (107, 57379), (117, 57421), (119, 57427),

Gene: DoctorDiddles_109 Start: 62552, Stop: 62815, Start Num: 72

Candidate Starts for DoctorDiddles_109:

(Start: 72 @62552 has 224 MA's), (78, 62582), (92, 62657), (124, 62774),

Gene: Douge_97 Start: 59456, Stop: 59695, Start Num: 72

Candidate Starts for Douge_97:

(64, 59450), (Start: 72 @59456 has 224 MA's), (90, 59537), (92, 59561), (99, 59588), (106, 59609), (111, 59627), (119, 59663),

Gene: Douzhi_97 Start: 59725, Stop: 59964, Start Num: 72

Candidate Starts for Douzhi_97:

(64, 59719), (Start: 72 @59725 has 224 MA's), (90, 59806), (92, 59830), (106, 59878), (111, 59896), (119, 59932), (121, 59938),

Gene: DrDrey_110 Start: 64443, Stop: 64706, Start Num: 72

Candidate Starts for DrDrey_110:

(Start: 72 @64443 has 224 MA's), (78, 64473), (92, 64548), (124, 64665),

Gene: DrSeegs_95 Start: 60332, Stop: 60592, Start Num: 72

Candidate Starts for DrSeegs_95:

(Start: 72 @60332 has 224 MA's), (76, 60356), (92, 60437), (103, 60476), (104, 60479), (106, 60485), (107, 60491), (117, 60533), (119, 60539),

Gene: Dumbo_110 Start: 62803, Stop: 63066, Start Num: 72

Candidate Starts for Dumbo_110:

(Start: 72 @62803 has 224 MA's), (78, 62833), (92, 62908), (124, 63025),

Gene: DuncansLeg_93 Start: 59748, Stop: 60017, Start Num: 67

Candidate Starts for DuncansLeg_93:

(Start: 67 @59748 has 20 MA's), (78, 59787), (92, 59862), (99, 59889), (102, 59898), (121, 59970),

Gene: Dusk_107 Start: 62965, Stop: 63228, Start Num: 72

Candidate Starts for Dusk_107:

(Start: 72 @62965 has 224 MA's), (78, 62995), (92, 63070), (124, 63187),

Gene: Dusty_145 Start: 80222, Stop: 80521, Start Num: 47

Candidate Starts for Dusty_145:

(Start: 47 @80222 has 11 MA's), (Start: 77 @80303 has 1 MA's), (99, 80408), (105, 80426), (119, 80492), (125, 80510),

Gene: DyoEdafos_99 Start: 60045, Stop: 60284, Start Num: 72

Candidate Starts for DyoEdafos_99:

(64, 60039), (Start: 72 @60045 has 224 MA's), (90, 60126), (92, 60150), (99, 60177), (111, 60216), (119, 60252), (121, 60258),

Gene: Easy2Say_110 Start: 63437, Stop: 63700, Start Num: 72

Candidate Starts for Easy2Say_110:

(Start: 72 @63437 has 224 MA's), (78, 63467), (92, 63542), (95, 63557), (124, 63659),

Gene: Edugator_36 Start: 30537, Stop: 30794, Start Num: 51

Candidate Starts for Edugator_36:

(Start: 51 @30537 has 5 MA's), (53, 30540), (54, 30546), (Start: 72 @30570 has 224 MA's), (82, 30612), (88, 30648), (90, 30651), (96, 30693), (100, 30708), (107, 30729), (108, 30732), (110, 30738), (115, 30762), (117, 30771),

Gene: Efra2_37 Start: 29012, Stop: 29254, Start Num: 56

Candidate Starts for Efra2_37:

(43, 28967), (45, 28976), (Start: 56 @29012 has 1 MA's), (58, 29018), (62, 29024), (Start: 72 @29027 has 224 MA's), (82, 29069), (96, 29150), (99, 29162),

Gene: Ekdilam_33 Start: 29562, Stop: 29792, Start Num: 55

Candidate Starts for Ekdilam_33:

(10, 29244), (15, 29307), (31, 29442), (36, 29472), (Start: 55 @29562 has 26 MA's), (Start: 72 @29565 has 224 MA's), (86, 29622),

Gene: Elite2014_109 Start: 62610, Stop: 62873, Start Num: 72

Candidate Starts for Elite2014_109:

(Start: 72 @62610 has 224 MA's), (78, 62640), (92, 62715), (124, 62832),

Gene: Ellie_33 Start: 29603, Stop: 29827, Start Num: 72

Candidate Starts for Ellie_33:

(26, 29405), (31, 29450), (36, 29480), (Start: 70 @29600 has 1 MA's), (Start: 72 @29603 has 224 MA's), (78, 29633), (86, 29660), (110, 29771),

Gene: Ellson_92 Start: 60063, Stop: 60332, Start Num: 67

Candidate Starts for Ellson_92:

(Start: 67 @60063 has 20 MA's), (78, 60102), (92, 60177), (99, 60204), (102, 60213), (121, 60285),

Gene: Elph10_109 Start: 62449, Stop: 62712, Start Num: 72

Candidate Starts for Elph10_109:

(Start: 72 @62449 has 224 MA's), (76, 62473), (78, 62479), (92, 62554), (124, 62671),

Gene: Emmina_110 Start: 62388, Stop: 62651, Start Num: 72

Candidate Starts for Emmina_110:

(Start: 72 @62388 has 224 MA's), (78, 62418), (92, 62493), (95, 62508), (124, 62610),

Gene: Enceladus_89 Start: 57921, Stop: 58160, Start Num: 72

Candidate Starts for Enceladus_89:

(Start: 70 @57918 has 1 MA's), (Start: 72 @57921 has 224 MA's), (92, 58026), (95, 58041), (99, 58053), (104, 58068), (107, 58080), (117, 58122), (119, 58128),

Gene: Engineer_151 Start: 81270, Stop: 81569, Start Num: 47

Candidate Starts for Engineer_151:

(Start: 47 @81270 has 11 MA's), (Start: 77 @81351 has 1 MA's), (99, 81456), (105, 81474), (119, 81540), (125, 81558),

Gene: Eponine_39 Start: 31391, Stop: 31672, Start Num: 72

Candidate Starts for Eponine_39:

(Start: 55 @31385 has 26 MA's), (Start: 72 @31391 has 224 MA's), (Start: 79 @31424 has 1 MA's), (86, 31448), (91, 31484), (101, 31535), (102, 31538), (108, 31556), (110, 31562), (120, 31604), (121, 31607), (122, 31610),

Gene: Eureka_110 Start: 63576, Stop: 63839, Start Num: 72

Candidate Starts for Eureka_110:

(Start: 72 @63576 has 224 MA's), (78, 63606), (92, 63681), (95, 63696), (124, 63798),

Gene: Faith1_96 Start: 59969, Stop: 60229, Start Num: 72

Candidate Starts for Faith1_96:

(Start: 72 @59969 has 224 MA's), (76, 59993), (92, 60074), (103, 60113), (104, 60116), (106, 60122), (107, 60128), (117, 60170), (119, 60176),

Gene: FarmResident_98 Start: 59612, Stop: 59851, Start Num: 72

Candidate Starts for FarmResident_98:

(Start: 66 @59606 has 2 MA's), (Start: 72 @59612 has 224 MA's), (90, 59693), (92, 59717), (99, 59744), (111, 59783), (119, 59819), (121, 59825),

Gene: Fefferhead_35 Start: 29803, Stop: 30027, Start Num: 72

Candidate Starts for Fefferhead_35:

(26, 29605), (31, 29650), (36, 29680), (Start: 70 @29800 has 1 MA's), (Start: 72 @29803 has 224 MA's), (78, 29833), (86, 29860), (110, 29971),

Gene: Feyre_36 Start: 30208, Stop: 30432, Start Num: 72

Candidate Starts for Feyre_36:

(Start: 51 @30175 has 5 MA's), (Start: 72 @30208 has 224 MA's), (78, 30238), (82, 30250), (88, 30286), (90, 30289), (93, 30316), (100, 30346), (101, 30349), (110, 30376),

Gene: Filch_112 Start: 62762, Stop: 63025, Start Num: 72

Candidate Starts for Filch_112:

(Start: 72 @62762 has 224 MA's), (78, 62792), (92, 62867), (124, 62984),

Gene: Finemlucis_97 Start: 61077, Stop: 61337, Start Num: 72

Candidate Starts for Finemlucis_97:

(Start: 72 @61077 has 224 MA's), (76, 61101), (92, 61182), (99, 61209), (103, 61221), (104, 61224), (106, 61230), (107, 61236), (117, 61278), (119, 61284),

Gene: Finnry_93 Start: 60082, Stop: 60351, Start Num: 67

Candidate Starts for Finnry_93:

(Start: 67 @60082 has 20 MA's), (78, 60121), (92, 60196), (99, 60223), (102, 60232), (121, 60304),

Gene: Fionnbharth_37 Start: 30626, Stop: 30907, Start Num: 72

Candidate Starts for Fionnbharth_37:

(14, 30362), (Start: 55 @30620 has 26 MA's), (Start: 72 @30626 has 224 MA's), (Start: 79 @30659 has 1 MA's), (86, 30683), (91, 30719), (101, 30770), (102, 30773), (108, 30791), (110, 30797), (120, 30839), (121, 30842), (122, 30845),

Gene: FireRed_113 Start: 63852, Stop: 64115, Start Num: 72

Candidate Starts for FireRed_113:

(Start: 72 @63852 has 224 MA's), (78, 63882), (92, 63957), (124, 64074),

Gene: Flypotenuse_106 Start: 62157, Stop: 62420, Start Num: 72

Candidate Starts for Flypotenuse_106:

(Start: 72 @62157 has 224 MA's), (78, 62187), (92, 62262), (124, 62379),

Gene: GMA1_67 Start: 40045, Stop: 40320, Start Num: 80

Candidate Starts for GMA1_67:

(80, 40045), (87, 40081), (99, 40165), (113, 40216),

Gene: Gabriela_96 Start: 59315, Stop: 59575, Start Num: 72

Candidate Starts for Gabriela_96:

(Start: 72 @59315 has 224 MA's), (76, 59339), (92, 59420), (103, 59459), (104, 59462), (106, 59468), (107, 59474), (117, 59516), (119, 59522),

Gene: Gage_112 Start: 63108, Stop: 63371, Start Num: 72

Candidate Starts for Gage_112:

(Start: 72 @63108 has 224 MA's), (78, 63138), (92, 63213), (124, 63330),

Gene: Gardann_96 Start: 59810, Stop: 60070, Start Num: 72

Candidate Starts for Gardann_96:

(Start: 72 @59810 has 224 MA's), (76, 59834), (92, 59915), (99, 59942), (103, 59954), (104, 59957), (106, 59963), (107, 59969), (117, 60011), (119, 60017),

Gene: Gator_108 Start: 63017, Stop: 63280, Start Num: 72

Candidate Starts for Gator_108:

(Start: 72 @63017 has 224 MA's), (78, 63047), (92, 63122), (124, 63239),

Gene: Geeche_149 Start: 80647, Stop: 80946, Start Num: 47

Candidate Starts for Geeche_149:

(Start: 47 @80647 has 11 MA's), (Start: 77 @80728 has 1 MA's), (95, 80821), (103, 80845), (105, 80851), (119, 80917), (125, 80935),

Gene: Gemini_115 Start: 63487, Stop: 63750, Start Num: 72

Candidate Starts for Gemini_115:

(Start: 72 @63487 has 224 MA's), (78, 63517), (92, 63592), (124, 63709),

Gene: Gengar_36 Start: 30285, Stop: 30542, Start Num: 51

Candidate Starts for Gengar_36:

(Start: 51 @30285 has 5 MA's), (Start: 72 @30318 has 224 MA's), (78, 30348), (82, 30360), (88, 30396), (90, 30399), (93, 30426), (100, 30456), (101, 30459), (110, 30486),

Gene: Glexan_109 Start: 63167, Stop: 63430, Start Num: 72

Candidate Starts for Glexan_109:

(Start: 72 @63167 has 224 MA's), (78, 63197), (92, 63272), (124, 63389),

Gene: Goku_109 Start: 63305, Stop: 63568, Start Num: 72

Candidate Starts for Goku_109:

(Start: 72 @63305 has 224 MA's), (78, 63335), (92, 63410), (95, 63425), (124, 63527),

Gene: Goldilocks_113 Start: 62986, Stop: 63249, Start Num: 72

Candidate Starts for Goldilocks_113:

(Start: 72 @62986 has 224 MA's), (78, 63016), (92, 63091), (124, 63208),

Gene: GooberAzure_113 Start: 62970, Stop: 63233, Start Num: 72

Candidate Starts for GooberAzure_113:

(Start: 72 @62970 has 224 MA's), (78, 63000), (92, 63075), (124, 63192),

Gene: Guanica15_37 Start: 28984, Stop: 29211, Start Num: 72

Candidate Starts for Guanica15_37:

(Start: 57 @28972 has 2 MA's), (58, 28975), (Start: 72 @28984 has 224 MA's), (82, 29026), (96, 29107), (99, 29119),

Gene: Guillsminger_36 Start: 30256, Stop: 30513, Start Num: 51

Candidate Starts for Guillsminger_36:

(Start: 51 @30256 has 5 MA's), (Start: 72 @30289 has 224 MA's), (78, 30319), (82, 30331), (88, 30367), (90, 30370), (93, 30397), (100, 30427), (101, 30430), (110, 30457),

Gene: GuuelaD_93 Start: 59928, Stop: 60188, Start Num: 72

Candidate Starts for GuuelaD_93:

(Start: 72 @59928 has 224 MA's), (76, 59952), (92, 60033), (99, 60060), (103, 60072), (104, 60075), (106, 60081), (107, 60087), (117, 60129), (119, 60135),

Gene: Hafay_97 Start: 60035, Stop: 60274, Start Num: 72

Candidate Starts for Hafay_97:

(Start: 72 @60035 has 224 MA's), (92, 60140), (99, 60167), (100, 60170), (102, 60176), (103, 60179), (107, 60194), (117, 60236), (119, 60242),

Gene: Halena_89 Start: 56807, Stop: 57046, Start Num: 72

Candidate Starts for Halena_89:

(Start: 70 @56804 has 1 MA's), (Start: 72 @56807 has 224 MA's), (92, 56912), (95, 56927), (99, 56939), (104, 56954), (107, 56966), (117, 57008), (119, 57014),

Gene: Hammy_35 Start: 29798, Stop: 30028, Start Num: 55

Candidate Starts for Hammy_35:

(Start: 55 @29798 has 26 MA's), (Start: 72 @29801 has 224 MA's),

Gene: HanKaySha_110 Start: 63158, Stop: 63421, Start Num: 72

Candidate Starts for HanKaySha_110:

(Start: 72 @63158 has 224 MA's), (78, 63188), (92, 63263), (95, 63278), (124, 63380),

Gene: Harella_111 Start: 63683, Stop: 63946, Start Num: 72

Candidate Starts for Harella_111:

(Start: 72 @63683 has 224 MA's), (78, 63713), (92, 63788), (124, 63905),

Gene: Heftyboy_36 Start: 30435, Stop: 30659, Start Num: 72

Candidate Starts for Heftyboy_36:

(Start: 51 @30402 has 5 MA's), (Start: 72 @30435 has 224 MA's), (78, 30465), (82, 30477), (88, 30513), (90, 30516), (93, 30543), (100, 30573), (101, 30576), (110, 30603), (117, 30636),

Gene: Henry_108 Start: 62968, Stop: 63231, Start Num: 72

Candidate Starts for Henry_108:

(Start: 72 @62968 has 224 MA's), (78, 62998), (92, 63073), (95, 63088), (124, 63190),

Gene: Highbury_106 Start: 61315, Stop: 61578, Start Num: 72

Candidate Starts for Highbury_106:

(Start: 72 @61315 has 224 MA's), (78, 61345), (92, 61420), (95, 61435), (124, 61537),

Gene: Hilltopfarm_30 Start: 27540, Stop: 27812, Start Num: 68

Candidate Starts for Hilltopfarm_30:

(7, 27174), (15, 27261), (Start: 66 @27537 has 2 MA's), (Start: 68 @27540 has 2 MA's), (Start: 72 @27549 has 224 MA's), (75, 27567), (82, 27591), (83, 27594), (88, 27633), (90, 27636), (100, 27690), (101, 27693), (104, 27702), (119, 27762),

Gene: Holt_115 Start: 63384, Stop: 63647, Start Num: 72

Candidate Starts for Holt_115:

(Start: 72 @63384 has 224 MA's), (78, 63414), (92, 63489), (124, 63606),

Gene: Hoonter_113 Start: 63463, Stop: 63726, Start Num: 72
Candidate Starts for Hoonter_113:
(Start: 72 @63463 has 224 MA's), (78, 63493), (92, 63568), (124, 63685),

Gene: Hokey_110 Start: 63769, Stop: 64032, Start Num: 72
Candidate Starts for Hokey_110:
(Start: 72 @63769 has 224 MA's), (78, 63799), (92, 63874), (124, 63991),

Gene: HufflyPuff_112 Start: 64078, Stop: 64341, Start Num: 72
Candidate Starts for HufflyPuff_112:
(Start: 72 @64078 has 224 MA's), (78, 64108), (92, 64183), (124, 64300),

Gene: Hurricane_37 Start: 30347, Stop: 30586, Start Num: 55
Candidate Starts for Hurricane_37:
(31, 30227), (36, 30257), (Start: 55 @30347 has 26 MA's), (83, 30404), (110, 30530), (115, 30554),

Gene: IHOP_108 Start: 62686, Stop: 62949, Start Num: 72
Candidate Starts for IHOP_108:
(Start: 72 @62686 has 224 MA's), (78, 62716), (92, 62791), (124, 62908),

Gene: Icee_111 Start: 62494, Stop: 62757, Start Num: 72
Candidate Starts for Icee_111:
(Start: 72 @62494 has 224 MA's), (78, 62524), (92, 62599), (124, 62716),

Gene: Inca_107 Start: 61175, Stop: 61438, Start Num: 72
Candidate Starts for Inca_107:
(Start: 72 @61175 has 224 MA's), (78, 61205), (92, 61280), (124, 61397),

Gene: InvictusManeo_35 Start: 30301, Stop: 30525, Start Num: 72
Candidate Starts for InvictusManeo_35:
(Start: 72 @30301 has 224 MA's), (78, 30331), (82, 30343), (88, 30379), (90, 30382), (100, 30439),
(107, 30460), (110, 30469), (115, 30493), (117, 30502),

Gene: Itos_96 Start: 58875, Stop: 59135, Start Num: 72
Candidate Starts for Itos_96:
(Start: 72 @58875 has 224 MA's), (76, 58899), (92, 58980), (103, 59019), (104, 59022), (106, 59028),
(107, 59034), (117, 59076), (119, 59082),

Gene: JF1_37 Start: 30619, Stop: 30906, Start Num: 55
Candidate Starts for JF1_37:
(9, 30298), (14, 30361), (Start: 55 @30619 has 26 MA's), (Start: 72 @30625 has 224 MA's), (Start: 79
@30658 has 1 MA's), (86, 30682), (91, 30718), (101, 30769), (102, 30772), (108, 30790), (110,
30796), (120, 30838), (121, 30841), (122, 30844),

Gene: JeTaime_108 Start: 62594, Stop: 62857, Start Num: 72
Candidate Starts for JeTaime_108:
(Start: 72 @62594 has 224 MA's), (78, 62624), (92, 62699), (124, 62816),

Gene: Jobypre_94 Start: 59729, Stop: 59998, Start Num: 67
Candidate Starts for Jobypre_94:
(Start: 67 @59729 has 20 MA's), (78, 59768), (92, 59843), (99, 59870), (102, 59879), (121, 59951),

Gene: JoeDirt_93 Start: 58479, Stop: 58721, Start Num: 70

Candidate Starts for JoeDirt_93:

(Start: 70 @58479 has 1 MA's), (Start: 72 @58482 has 224 MA's), (92, 58587), (95, 58602), (99, 58614), (104, 58629), (107, 58641), (117, 58683), (119, 58689),

Gene: Jubie_92 Start: 59864, Stop: 60133, Start Num: 67

Candidate Starts for Jubie_92:

(Start: 67 @59864 has 20 MA's), (78, 59903), (92, 59978), (99, 60005), (102, 60014), (121, 60086),

Gene: Juliette_39 Start: 30778, Stop: 31065, Start Num: 55

Candidate Starts for Juliette_39:

(14, 30520), (Start: 55 @30778 has 26 MA's), (Start: 72 @30784 has 224 MA's), (Start: 79 @30817 has 1 MA's), (86, 30841), (91, 30877), (101, 30928), (102, 30931), (108, 30949), (110, 30955), (120, 30997), (121, 31000), (122, 31003),

Gene: Kahlid_95 Start: 59728, Stop: 59988, Start Num: 72

Candidate Starts for Kahlid_95:

(Start: 72 @59728 has 224 MA's), (76, 59752), (92, 59833), (99, 59860), (103, 59872), (104, 59875), (106, 59881), (107, 59887), (117, 59929), (119, 59935),

Gene: Kanye_107 Start: 63219, Stop: 63482, Start Num: 72

Candidate Starts for Kanye_107:

(Start: 72 @63219 has 224 MA's), (78, 63249), (92, 63324), (124, 63441),

Gene: Keshu_37 Start: 30338, Stop: 30577, Start Num: 55

Candidate Starts for Keshu_37:

(36, 30248), (Start: 55 @30338 has 26 MA's), (83, 30395), (101, 30491), (115, 30545),

Gene: KiSi_36 Start: 29106, Stop: 29339, Start Num: 55

Candidate Starts for KiSi_36:

(2, 28674), (4, 28698), (10, 28788), (31, 28986), (36, 29016), (Start: 55 @29106 has 26 MA's), (Start: 72 @29109 has 224 MA's), (86, 29166),

Gene: Kimchi_114 Start: 63111, Stop: 63374, Start Num: 72

Candidate Starts for Kimchi_114:

(Start: 72 @63111 has 224 MA's), (78, 63141), (92, 63216), (124, 63333),

Gene: Kingsolomon_91 Start: 59838, Stop: 60107, Start Num: 67

Candidate Starts for Kingsolomon_91:

(Start: 67 @59838 has 20 MA's), (78, 59877), (92, 59952), (99, 59979), (102, 59988), (121, 60060),

Gene: KirDoubleO7_91 Start: 59750, Stop: 60019, Start Num: 67

Candidate Starts for KirDoubleO7_91:

(Start: 67 @59750 has 20 MA's), (78, 59789), (92, 59864), (99, 59891), (102, 59900), (121, 59972),

Gene: Kostya_110 Start: 62788, Stop: 63051, Start Num: 72

Candidate Starts for Kostya_110:

(Start: 72 @62788 has 224 MA's), (78, 62818), (92, 62893), (124, 63010),

Gene: Kratio_34 Start: 29847, Stop: 30071, Start Num: 72

Candidate Starts for Kratio_34:

(Start: 72 @29847 has 224 MA's), (78, 29877), (82, 29889), (88, 29925), (90, 29928), (100, 29985), (107, 30006), (110, 30015), (117, 30048),

Gene: Kraw_38 Start: 30550, Stop: 30831, Start Num: 72

Candidate Starts for Kraw_38:

(14, 30286), (Start: 55 @30544 has 26 MA's), (Start: 72 @30550 has 224 MA's), (Start: 79 @30583 has 1 MA's), (86, 30607), (91, 30643), (101, 30694), (102, 30697), (108, 30715), (110, 30721), (120, 30763), (121, 30766), (122, 30769),

Gene: Krueger_36 Start: 28751, Stop: 28984, Start Num: 55

Candidate Starts for Krueger_36:

(36, 28661), (Start: 55 @28751 has 26 MA's), (Start: 72 @28754 has 224 MA's), (86, 28811), (91, 28847), (117, 28955),

Gene: Krypton555_95 Start: 60241, Stop: 60510, Start Num: 67

Candidate Starts for Krypton555_95:

(Start: 67 @60241 has 20 MA's), (78, 60280), (92, 60355), (99, 60382), (102, 60391), (121, 60463),

Gene: Kudrefre_129 Start: 69576, Stop: 69818, Start Num: 67

Candidate Starts for Kudrefre_129:

(63, 69570), (Start: 67 @69576 has 20 MA's), (82, 69627), (92, 69690), (94, 69711), (110, 69765), (112, 69774), (116, 69795),

Gene: Kumao_73 Start: 50178, Stop: 50432, Start Num: 71

Candidate Starts for Kumao_73:

(Start: 71 @50178 has 1 MA's), (Start: 79 @50211 has 1 MA's), (85, 50229), (89, 50256), (90, 50259), (99, 50319), (106, 50337), (109, 50352), (112, 50367),

Gene: Larva_36 Start: 30011, Stop: 30235, Start Num: 72

Candidate Starts for Larva_36:

(Start: 72 @30011 has 224 MA's), (78, 30041), (82, 30053), (88, 30089), (90, 30092), (100, 30149), (107, 30170), (108, 30173), (110, 30179), (115, 30203), (117, 30212),

Gene: LastHope_37 Start: 28857, Stop: 29096, Start Num: 57

Candidate Starts for LastHope_37:

(11, 28575), (25, 28683), (44, 28812), (Start: 57 @28857 has 2 MA's), (58, 28860), (Start: 72 @28869 has 224 MA's), (82, 28911), (96, 28992), (99, 29004), (110, 29037), (120, 29076),

Gene: LeBron_91 Start: 57114, Stop: 57353, Start Num: 72

Candidate Starts for LeBron_91:

(Start: 70 @57111 has 1 MA's), (Start: 72 @57114 has 224 MA's), (92, 57219), (95, 57234), (99, 57246), (104, 57261), (107, 57273), (119, 57321),

Gene: LeMond_36 Start: 29177, Stop: 29410, Start Num: 55

Candidate Starts for LeMond_36:

(2, 28745), (4, 28769), (10, 28859), (31, 29057), (36, 29087), (Start: 55 @29177 has 26 MA's), (Start: 72 @29180 has 224 MA's), (86, 29237),

Gene: Leston_36 Start: 30386, Stop: 30643, Start Num: 51

Candidate Starts for Leston_36:

(Start: 51 @30386 has 5 MA's), (Start: 72 @30419 has 224 MA's), (78, 30449), (82, 30461), (88, 30497), (90, 30500), (93, 30527), (100, 30557), (101, 30560), (110, 30587),

Gene: Lewan_97 Start: 59968, Stop: 60228, Start Num: 72

Candidate Starts for Lewan_97:

(Start: 72 @59968 has 224 MA's), (76, 59992), (92, 60073), (103, 60112), (104, 60115), (106, 60121), (107, 60127), (117, 60169), (119, 60175),

Gene: LilDestine_94 Start: 59639, Stop: 59899, Start Num: 72

Candidate Starts for LilDestine_94:

(Start: 72 @59639 has 224 MA's), (76, 59663), (92, 59744), (99, 59771), (103, 59783), (104, 59786), (106, 59792), (107, 59798), (117, 59840), (119, 59846),

Gene: Lilac_111 Start: 63912, Stop: 64175, Start Num: 72

Candidate Starts for Lilac_111:

(Start: 72 @63912 has 224 MA's), (78, 63942), (92, 64017), (124, 64134),

Gene: Lilizi_110 Start: 63198, Stop: 63461, Start Num: 72

Candidate Starts for Lilizi_110:

(Start: 72 @63198 has 224 MA's), (78, 63228), (92, 63303), (124, 63420),

Gene: Lilpickle_109 Start: 62610, Stop: 62873, Start Num: 72

Candidate Starts for Lilpickle_109:

(Start: 72 @62610 has 224 MA's), (78, 62640), (92, 62715), (124, 62832),

Gene: LiyuLake_92 Start: 59823, Stop: 60092, Start Num: 67

Candidate Starts for LiyuLake_92:

(Start: 67 @59823 has 20 MA's), (78, 59862), (92, 59937), (99, 59964), (102, 59973), (121, 60045),

Gene: Loadrie_95 Start: 60130, Stop: 60390, Start Num: 72

Candidate Starts for Loadrie_95:

(Start: 72 @60130 has 224 MA's), (76, 60154), (92, 60235), (99, 60262), (103, 60274), (104, 60277), (106, 60283), (107, 60289), (117, 60331), (119, 60337),

Gene: Lolly9_92 Start: 59914, Stop: 60183, Start Num: 67

Candidate Starts for Lolly9_92:

(Start: 67 @59914 has 20 MA's), (78, 59953), (92, 60028), (99, 60055), (102, 60064), (121, 60136),

Gene: Lozinak_149 Start: 81275, Stop: 81574, Start Num: 47

Candidate Starts for Lozinak_149:

(Start: 47 @81275 has 11 MA's), (Start: 77 @81356 has 1 MA's), (99, 81461), (105, 81479), (119, 81545), (125, 81563),

Gene: Lumos_93 Start: 59726, Stop: 59995, Start Num: 67

Candidate Starts for Lumos_93:

(Start: 67 @59726 has 20 MA's), (78, 59765), (92, 59840), (99, 59867), (102, 59876), (121, 59948),

Gene: MAckerman_90 Start: 56800, Stop: 57039, Start Num: 72

Candidate Starts for MAckerman_90:

(Start: 70 @56797 has 1 MA's), (Start: 72 @56800 has 224 MA's), (92, 56905), (95, 56920), (99, 56932), (104, 56947), (107, 56959), (117, 57001), (119, 57007),

Gene: MPhalcon_111 Start: 63313, Stop: 63576, Start Num: 72

Candidate Starts for MPhalcon_111:

(Start: 72 @63313 has 224 MA's), (78, 63343), (92, 63418), (124, 63535),

Gene: MacnCheese_37 Start: 30394, Stop: 30618, Start Num: 72

Candidate Starts for MacnCheese_37:

(36, 30301), (Start: 55 @30391 has 26 MA's), (Start: 72 @30394 has 224 MA's),

Gene: MadamMonkfish_109 Start: 62620, Stop: 62883, Start Num: 72

Candidate Starts for MadamMonkfish_109:

(Start: 72 @62620 has 224 MA's), (78, 62650), (92, 62725), (95, 62740), (124, 62842),

Gene: MalagasyRose_37 Start: 29428, Stop: 29652, Start Num: 72

Candidate Starts for MalagasyRose_37:

(29, 29272), (40, 29350), (41, 29353), (Start: 72 @29428 has 224 MA's), (81, 29467), (82, 29470), (93, 29536), (96, 29551), (98, 29560), (108, 29590), (110, 29596), (114, 29611), (122, 29641),

Gene: Malthus_38 Start: 30550, Stop: 30831, Start Num: 72

Candidate Starts for Malthus_38:

(14, 30286), (Start: 55 @30544 has 26 MA's), (Start: 72 @30550 has 224 MA's), (Start: 79 @30583 has 1 MA's), (86, 30607), (91, 30643), (101, 30694), (102, 30697), (108, 30715), (110, 30721), (120, 30763), (121, 30766), (122, 30769),

Gene: Manda_111 Start: 63350, Stop: 63613, Start Num: 72

Candidate Starts for Manda_111:

(Start: 72 @63350 has 224 MA's), (78, 63380), (92, 63455), (95, 63470), (124, 63572),

Gene: MarkPhew_37 Start: 29081, Stop: 29311, Start Num: 72

Candidate Starts for MarkPhew_37:

(10, 28760), (31, 28958), (36, 28988), (Start: 55 @29078 has 26 MA's), (Start: 72 @29081 has 224 MA's), (78, 29111), (86, 29138),

Gene: Marshmallow_108 Start: 63308, Stop: 63571, Start Num: 72

Candidate Starts for Marshmallow_108:

(Start: 72 @63308 has 224 MA's), (78, 63338), (92, 63413), (95, 63428), (124, 63530),

Gene: Maxxinista_112 Start: 63097, Stop: 63360, Start Num: 72

Candidate Starts for Maxxinista_112:

(Start: 72 @63097 has 224 MA's), (78, 63127), (92, 63202), (124, 63319),

Gene: McMater_36 Start: 28807, Stop: 29037, Start Num: 55

Candidate Starts for McMater_36:

(10, 28489), (23, 28618), (31, 28687), (36, 28717), (Start: 55 @28807 has 26 MA's), (Start: 72 @28810 has 224 MA's), (96, 28933), (107, 28969),

Gene: Miley16_96 Start: 60332, Stop: 60592, Start Num: 72

Candidate Starts for Miley16_96:

(Start: 72 @60332 has 224 MA's), (76, 60356), (92, 60437), (103, 60476), (104, 60479), (106, 60485), (107, 60491), (117, 60533), (119, 60539),

Gene: Mindy_109 Start: 62629, Stop: 62892, Start Num: 72

Candidate Starts for Mindy_109:

(Start: 72 @62629 has 224 MA's), (78, 62659), (92, 62734), (124, 62851),

Gene: MiniLon_97 Start: 59915, Stop: 60184, Start Num: 67

Candidate Starts for MiniLon_97:

(Start: 67 @59915 has 20 MA's), (78, 59954), (92, 60029), (99, 60056), (102, 60065), (121, 60137),

Gene: MiniMac_97 Start: 59910, Stop: 60179, Start Num: 67

Candidate Starts for MiniMac_97:

(Start: 67 @59910 has 20 MA's), (78, 59949), (92, 60024), (99, 60051), (102, 60060), (121, 60132),

Gene: Miniwave_105 Start: 62806, Stop: 63069, Start Num: 72

Candidate Starts for Miniwave_105:

(Start: 72 @62806 has 224 MA's), (78, 62836), (92, 62911), (124, 63028),

Gene: Miryou_36 Start: 30274, Stop: 30498, Start Num: 72

Candidate Starts for Miryou_36:

(Start: 51 @30241 has 5 MA's), (Start: 72 @30274 has 224 MA's), (78, 30304), (82, 30316), (93, 30382), (100, 30412), (110, 30442), (117, 30475),

Gene: Misfit_111 Start: 64409, Stop: 64672, Start Num: 72

Candidate Starts for Misfit_111:

(Start: 72 @64409 has 224 MA's), (78, 64439), (92, 64514), (124, 64631),

Gene: Miskis_147 Start: 80036, Stop: 80335, Start Num: 47

Candidate Starts for Miskis_147:

(Start: 47 @80036 has 11 MA's), (Start: 77 @80117 has 1 MA's), (99, 80222), (105, 80240), (119, 80306), (125, 80324),

Gene: MissDaisy_37 Start: 30393, Stop: 30674, Start Num: 72

Candidate Starts for MissDaisy_37:

(Start: 55 @30387 has 26 MA's), (Start: 72 @30393 has 224 MA's), (Start: 79 @30426 has 1 MA's), (86, 30450), (91, 30486), (101, 30537), (102, 30540), (108, 30558), (110, 30564), (111, 30567), (120, 30606), (121, 30609), (122, 30612),

Gene: Mitti_37 Start: 30551, Stop: 30832, Start Num: 72

Candidate Starts for Mitti_37:

(Start: 55 @30545 has 26 MA's), (Start: 72 @30551 has 224 MA's), (Start: 79 @30584 has 1 MA's), (86, 30608), (91, 30644), (101, 30695), (102, 30698), (108, 30716), (110, 30722), (120, 30764), (121, 30767), (122, 30770),

Gene: MkaliMitinis3_98 Start: 60094, Stop: 60354, Start Num: 72

Candidate Starts for MkaliMitinis3_98:

(Start: 72 @60094 has 224 MA's), (76, 60118), (92, 60199), (103, 60238), (104, 60241), (106, 60247), (107, 60253), (117, 60295), (119, 60301),

Gene: Moldemort_112 Start: 63078, Stop: 63341, Start Num: 72

Candidate Starts for Moldemort_112:

(Start: 72 @63078 has 224 MA's), (78, 63108), (92, 63183), (95, 63198), (124, 63300),

Gene: Moostard_90 Start: 59833, Stop: 60102, Start Num: 67

Candidate Starts for Moostard_90:

(Start: 67 @59833 has 20 MA's), (78, 59872), (92, 59947), (99, 59974), (102, 59983), (121, 60055),

Gene: Mosby_107 Start: 62773, Stop: 63036, Start Num: 72

Candidate Starts for Mosby_107:

(Start: 72 @62773 has 224 MA's), (78, 62803), (92, 62878), (124, 62995),

Gene: MsGreen_93 Start: 59728, Stop: 59997, Start Num: 67

Candidate Starts for MsGreen_93:

(Start: 67 @59728 has 20 MA's), (78, 59767), (92, 59842), (99, 59869), (102, 59878), (121, 59950),

Gene: Murica_114 Start: 65112, Stop: 65375, Start Num: 72
Candidate Starts for Murica_114:
(Start: 72 @65112 has 224 MA's), (78, 65142), (92, 65217), (124, 65334),

Gene: Murphy_109 Start: 63470, Stop: 63733, Start Num: 72
Candidate Starts for Murphy_109:
(Start: 72 @63470 has 224 MA's), (78, 63500), (92, 63575), (95, 63590), (124, 63692),

Gene: Myrale_110 Start: 63567, Stop: 63830, Start Num: 72
Candidate Starts for Myrale_110:
(Start: 72 @63567 has 224 MA's), (78, 63597), (92, 63672), (124, 63789),

Gene: Nala_112 Start: 63822, Stop: 64085, Start Num: 72
Candidate Starts for Nala_112:
(Start: 72 @63822 has 224 MA's), (78, 63852), (92, 63927), (124, 64044),

Gene: NelitzaMV_107 Start: 61795, Stop: 62058, Start Num: 72
Candidate Starts for NelitzaMV_107:
(Start: 72 @61795 has 224 MA's), (78, 61825), (92, 61900), (124, 62017),

Gene: Nergal_32 Start: 27271, Stop: 27504, Start Num: 57
Candidate Starts for Nergal_32:
(Start: 57 @27271 has 2 MA's), (82, 27319), (84, 27325), (110, 27448), (117, 27481),

Gene: Netyap_95 Start: 59970, Stop: 60230, Start Num: 72
Candidate Starts for Netyap_95:
(Start: 72 @59970 has 224 MA's), (76, 59994), (92, 60075), (103, 60114), (104, 60117), (106, 60123),
(107, 60129), (117, 60171), (119, 60177),

Gene: Neville_126 Start: 70558, Stop: 70776, Start Num: 73
Candidate Starts for Neville_126:
(Start: 70 @70552 has 1 MA's), (Start: 73 @70558 has 3 MA's), (74, 70567), (Start: 77 @70582 has 1 MA's), (78, 70585), (Start: 79 @70588 has 1 MA's), (81, 70594), (84, 70603), (86, 70612), (90, 70636),
(91, 70648), (95, 70675), (96, 70678), (100, 70693), (101, 70696), (103, 70699), (107, 70714), (108, 70717), (110, 70723), (111, 70726), (118, 70756), (123, 70771),

Gene: Nibb_35 Start: 28648, Stop: 28878, Start Num: 72
Candidate Starts for Nibb_35:
(36, 28555), (Start: 55 @28645 has 26 MA's), (Start: 72 @28648 has 224 MA's), (86, 28705), (110, 28816),

Gene: Nicholas_91 Start: 59838, Stop: 60107, Start Num: 67
Candidate Starts for Nicholas_91:
(Start: 67 @59838 has 20 MA's), (78, 59877), (92, 59952), (99, 59979), (102, 59988), (121, 60060),

Gene: Nicholasp3_96 Start: 59810, Stop: 60070, Start Num: 72
Candidate Starts for Nicholasp3_96:
(Start: 72 @59810 has 224 MA's), (76, 59834), (92, 59915), (99, 59942), (103, 59954), (104, 59957),
(106, 59963), (107, 59969), (117, 60011), (119, 60017),

Gene: Niklas_36 Start: 28813, Stop: 29040, Start Num: 72
Candidate Starts for Niklas_36:

(10, 28492), (23, 28621), (31, 28690), (36, 28720), (Start: 55 @28810 has 26 MA's), (Start: 72 @28813 has 224 MA's), (96, 28936), (107, 28972),

Gene: Nimrod_110 Start: 63456, Stop: 63719, Start Num: 72
Candidate Starts for Nimrod_110:
(Start: 72 @63456 has 224 MA's), (78, 63486), (92, 63561), (124, 63678),

Gene: NoSleep_110 Start: 62630, Stop: 62893, Start Num: 72
Candidate Starts for NoSleep_110:
(Start: 72 @62630 has 224 MA's), (78, 62660), (92, 62735), (124, 62852),

Gene: Norvs_147 Start: 80466, Stop: 80765, Start Num: 47
Candidate Starts for Norvs_147:
(Start: 47 @80466 has 11 MA's), (Start: 77 @80547 has 1 MA's), (99, 80652), (105, 80670), (119, 80736), (125, 80754),

Gene: Octobien14_125 Start: 68110, Stop: 68352, Start Num: 67
Candidate Starts for Octobien14_125:
(63, 68104), (Start: 67 @68110 has 20 MA's), (Start: 73 @68122 has 3 MA's), (76, 68143), (82, 68161), (92, 68224), (94, 68245), (106, 68284), (110, 68299), (112, 68308), (118, 68332),

Gene: OhShagHennessy_88 Start: 57057, Stop: 57296, Start Num: 72
Candidate Starts for OhShagHennessy_88:
(Start: 70 @57054 has 1 MA's), (Start: 72 @57057 has 224 MA's), (92, 57162), (95, 57177), (99, 57189), (104, 57204), (107, 57216), (117, 57258), (119, 57264),

Gene: OkiRoe_36 Start: 30291, Stop: 30515, Start Num: 72
Candidate Starts for OkiRoe_36:
(Start: 51 @30258 has 5 MA's), (Start: 72 @30291 has 224 MA's), (78, 30321), (82, 30333), (88, 30369), (90, 30372), (93, 30399), (100, 30429), (101, 30432), (110, 30459),

Gene: OmniCritical_37 Start: 30529, Stop: 30816, Start Num: 55
Candidate Starts for OmniCritical_37:
(Start: 55 @30529 has 26 MA's), (Start: 72 @30535 has 224 MA's), (Start: 79 @30568 has 1 MA's), (86, 30592), (91, 30628), (101, 30679), (102, 30682), (108, 30700), (110, 30706), (120, 30748), (121, 30751), (122, 30754),

Gene: Omnicron_39 Start: 29782, Stop: 30006, Start Num: 72
Candidate Starts for Omnicron_39:
(Start: 72 @29782 has 224 MA's), (78, 29812), (82, 29824), (90, 29863), (100, 29920), (108, 29944), (110, 29950), (115, 29974), (117, 29983),

Gene: OneUp_134 Start: 80067, Stop: 80324, Start Num: 61
Candidate Starts for OneUp_134:
(Start: 61 @80067 has 3 MA's), (Start: 70 @80082 has 1 MA's), (Start: 72 @80085 has 224 MA's), (Start: 73 @80088 has 3 MA's), (90, 80166), (105, 80235), (112, 80271), (114, 80277), (119, 80301), (120, 80304),

Gene: OrionPax_108 Start: 62703, Stop: 62966, Start Num: 72
Candidate Starts for OrionPax_108:
(Start: 72 @62703 has 224 MA's), (78, 62733), (92, 62808), (95, 62823), (124, 62925),

Gene: Oscar_36 Start: 29182, Stop: 29412, Start Num: 72

Candidate Starts for Oscar_36:

(2, 28747), (4, 28771), (10, 28861), (31, 29059), (36, 29089), (Start: 55 @29179 has 26 MA's), (Start: 72 @29182 has 224 MA's), (78, 29212), (86, 29239),

Gene: PYPDinur_97 Start: 60288, Stop: 60527, Start Num: 72

Candidate Starts for PYPDinur_97:

(64, 60282), (Start: 72 @60288 has 224 MA's), (90, 60369), (92, 60393), (99, 60420), (111, 60459), (119, 60495), (121, 60501),

Gene: Paola_36 Start: 30256, Stop: 30513, Start Num: 51

Candidate Starts for Paola_36:

(Start: 51 @30256 has 5 MA's), (Start: 72 @30289 has 224 MA's), (78, 30319), (82, 30331), (88, 30367), (90, 30370), (93, 30397), (100, 30427), (101, 30430), (110, 30457),

Gene: Paperbeatsrock_109 Start: 63484, Stop: 63747, Start Num: 72

Candidate Starts for Paperbeatsrock_109:

(Start: 72 @63484 has 224 MA's), (78, 63514), (92, 63589), (124, 63706),

Gene: Pat3_107 Start: 62123, Stop: 62386, Start Num: 72

Candidate Starts for Pat3_107:

(Start: 72 @62123 has 224 MA's), (78, 62153), (92, 62228), (124, 62345),

Gene: Patt_37 Start: 30369, Stop: 30650, Start Num: 72

Candidate Starts for Patt_37:

(Start: 55 @30363 has 26 MA's), (Start: 72 @30369 has 224 MA's), (Start: 79 @30402 has 1 MA's), (86, 30426), (91, 30462), (101, 30513), (102, 30516), (108, 30534), (110, 30540), (111, 30543), (120, 30582), (121, 30585), (122, 30588),

Gene: Peanam_36 Start: 28807, Stop: 29037, Start Num: 55

Candidate Starts for Peanam_36:

(10, 28489), (23, 28618), (31, 28687), (36, 28717), (Start: 55 @28807 has 26 MA's), (Start: 72 @28810 has 224 MA's), (96, 28933), (107, 28969),

Gene: Phaja_108 Start: 62688, Stop: 62951, Start Num: 72

Candidate Starts for Phaja_108:

(Start: 72 @62688 has 224 MA's), (78, 62718), (92, 62793), (124, 62910),

Gene: Pharb_35 Start: 29653, Stop: 29877, Start Num: 72

Candidate Starts for Pharb_35:

(10, 29332), (31, 29530), (36, 29560), (Start: 55 @29650 has 26 MA's), (Start: 72 @29653 has 224 MA's), (86, 29710),

Gene: Pharsalus_107 Start: 63183, Stop: 63446, Start Num: 72

Candidate Starts for Pharsalus_107:

(Start: 72 @63183 has 224 MA's), (78, 63213), (92, 63288), (124, 63405),

Gene: PhatBacter_113 Start: 63852, Stop: 64115, Start Num: 72

Candidate Starts for PhatBacter_113:

(Start: 72 @63852 has 224 MA's), (78, 63882), (92, 63957), (124, 64074),

Gene: Phaux_112 Start: 64412, Stop: 64675, Start Num: 72

Candidate Starts for Phaux_112:

(Start: 72 @64412 has 224 MA's), (78, 64442), (92, 64517), (95, 64532), (124, 64634),

Gene: PhelpsODU_36 Start: 28916, Stop: 29149, Start Num: 55

Candidate Starts for PhelpsODU_36:

(Start: 55 @28916 has 26 MA's), (98, 29057), (121, 29135),

Gene: PhinkBoden_147 Start: 80864, Stop: 81163, Start Num: 47

Candidate Starts for PhinkBoden_147:

(Start: 47 @80864 has 11 MA's), (Start: 77 @80945 has 1 MA's), (99, 81050), (105, 81068), (119, 81134), (125, 81152),

Gene: Phrank_36 Start: 28866, Stop: 29099, Start Num: 55

Candidate Starts for Phrank_36:

(36, 28776), (Start: 55 @28866 has 26 MA's), (98, 29007), (121, 29085),

Gene: Phrappuccino_198 Start: 133100, Stop: 133375, Start Num: 59

Candidate Starts for Phrappuccino_198:

(Start: 59 @133100 has 2 MA's), (103, 133265), (104, 133268), (108, 133283), (117, 133319), (119, 133325),

Gene: Phrux_106 Start: 62490, Stop: 62753, Start Num: 72

Candidate Starts for Phrux_106:

(Start: 72 @62490 has 224 MA's), (78, 62520), (92, 62595), (124, 62712),

Gene: Pixie_36 Start: 29889, Stop: 30128, Start Num: 55

Candidate Starts for Pixie_36:

(2, 29457), (4, 29481), (10, 29571), (31, 29769), (36, 29799), (Start: 55 @29889 has 26 MA's), (83, 29946), (101, 30042), (110, 30072),

Gene: Porky_108 Start: 62234, Stop: 62497, Start Num: 72

Candidate Starts for Porky_108:

(Start: 72 @62234 has 224 MA's), (78, 62264), (92, 62339), (95, 62354), (124, 62456),

Gene: Psycho_36 Start: 30141, Stop: 30365, Start Num: 72

Candidate Starts for Psycho_36:

(Start: 72 @30141 has 224 MA's), (78, 30171), (82, 30183), (88, 30219), (90, 30222), (100, 30279), (107, 30300), (108, 30303), (110, 30309), (115, 30333), (117, 30342),

Gene: Pumpkin_111 Start: 62830, Stop: 63093, Start Num: 72

Candidate Starts for Pumpkin_111:

(Start: 72 @62830 has 224 MA's), (78, 62860), (92, 62935), (124, 63052),

Gene: Quallification_111 Start: 63898, Stop: 64161, Start Num: 72

Candidate Starts for Quallification_111:

(Start: 72 @63898 has 224 MA's), (78, 63928), (92, 64003), (124, 64120),

Gene: Quby_97 Start: 59700, Stop: 59939, Start Num: 72

Candidate Starts for Quby_97:

(46, 59646), (65, 59694), (Start: 72 @59700 has 224 MA's), (90, 59781), (92, 59805), (99, 59832), (111, 59871), (119, 59907), (121, 59913),

Gene: Rabbitrun_128 Start: 72178, Stop: 72396, Start Num: 73

Candidate Starts for Rabbitrun_128:

(Start: 70 @72172 has 1 MA's), (Start: 73 @72178 has 3 MA's), (74, 72187), (Start: 77 @72202 has 1 MA's), (78, 72205), (Start: 79 @72208 has 1 MA's), (82, 72217), (84, 72223), (86, 72232), (92, 72280), (96, 72298), (100, 72313), (101, 72316), (103, 72319), (107, 72334), (108, 72337), (110, 72343), (111, 72346), (118, 72376), (123, 72391),

Gene: Rakim_111 Start: 62900, Stop: 63163, Start Num: 72

Candidate Starts for Rakim_111:

(Start: 72 @62900 has 224 MA's), (78, 62930), (92, 63005), (124, 63122),

Gene: Rando14_38 Start: 29354, Stop: 29578, Start Num: 61

Candidate Starts for Rando14_38:

(Start: 61 @29354 has 3 MA's), (78, 29384), (82, 29396), (90, 29435), (100, 29492), (108, 29516), (110, 29522), (115, 29546), (117, 29555),

Gene: Reptar3000_37 Start: 30360, Stop: 30641, Start Num: 72

Candidate Starts for Reptar3000_37:

(Start: 55 @30354 has 26 MA's), (Start: 72 @30360 has 224 MA's), (Start: 79 @30393 has 1 MA's), (86, 30417), (91, 30453), (101, 30504), (102, 30507), (108, 30525), (110, 30531), (111, 30534), (120, 30573), (121, 30576), (122, 30579),

Gene: Richo_36 Start: 28807, Stop: 29037, Start Num: 55

Candidate Starts for Richo_36:

(10, 28489), (23, 28618), (31, 28687), (36, 28717), (Start: 55 @28807 has 26 MA's), (Start: 72 @28810 has 224 MA's), (96, 28933), (107, 28969),

Gene: Rimmer_108 Start: 63289, Stop: 63552, Start Num: 72

Candidate Starts for Rimmer_108:

(Start: 72 @63289 has 224 MA's), (78, 63319), (92, 63394), (124, 63511),

Gene: RiverMonster_109 Start: 63385, Stop: 63648, Start Num: 72

Candidate Starts for RiverMonster_109:

(Start: 72 @63385 has 224 MA's), (78, 63415), (92, 63490), (124, 63607),

Gene: Rose5_93 Start: 58324, Stop: 58563, Start Num: 72

Candidate Starts for Rose5_93:

(Start: 70 @58321 has 1 MA's), (Start: 72 @58324 has 224 MA's), (92, 58429), (95, 58444), (99, 58456), (104, 58471), (107, 58483), (117, 58525), (119, 58531),

Gene: Rumpelstiltskin_92 Start: 59603, Stop: 59863, Start Num: 72

Candidate Starts for Rumpelstiltskin_92:

(Start: 72 @59603 has 224 MA's), (76, 59627), (92, 59708), (99, 59735), (103, 59747), (104, 59750), (106, 59756), (107, 59762), (117, 59804), (119, 59810),

Gene: Ruthiejr_38 Start: 30510, Stop: 30797, Start Num: 55

Candidate Starts for Ruthiejr_38:

(14, 30252), (Start: 55 @30510 has 26 MA's), (Start: 72 @30516 has 224 MA's), (Start: 79 @30549 has 1 MA's), (86, 30573), (91, 30609), (101, 30660), (102, 30663), (108, 30681), (110, 30687), (120, 30729), (121, 30732), (122, 30735),

Gene: Saints25_106 Start: 61315, Stop: 61578, Start Num: 72

Candidate Starts for Saints25_106:

(Start: 72 @61315 has 224 MA's), (78, 61345), (92, 61420), (95, 61435), (124, 61537),

Gene: SamScheppers_37 Start: 31023, Stop: 31310, Start Num: 55

Candidate Starts for SamScheppers_37:

(Start: 55 @31023 has 26 MA's), (Start: 72 @31029 has 224 MA's), (Start: 79 @31062 has 1 MA's), (86, 31086), (91, 31122), (101, 31173), (102, 31176), (108, 31194), (110, 31200), (120, 31242), (121, 31245), (122, 31248),

Gene: Samty_92 Start: 59826, Stop: 60095, Start Num: 67

Candidate Starts for Samty_92:

(Start: 67 @59826 has 20 MA's), (78, 59865), (92, 59940), (99, 59967), (102, 59976), (121, 60048),

Gene: Sarshaun_97 Start: 60721, Stop: 60981, Start Num: 72

Candidate Starts for Sarshaun_97:

(Start: 72 @60721 has 224 MA's), (76, 60745), (92, 60826), (103, 60865), (104, 60868), (106, 60874), (107, 60880), (117, 60922), (119, 60928),

Gene: Scarlett_36 Start: 29182, Stop: 29412, Start Num: 72

Candidate Starts for Scarlett_36:

(Start: 55 @29179 has 26 MA's), (Start: 72 @29182 has 224 MA's), (86, 29239),

Gene: Sephiroth_124 Start: 69346, Stop: 69588, Start Num: 67

Candidate Starts for Sephiroth_124:

(63, 69340), (Start: 67 @69346 has 20 MA's), (82, 69397), (92, 69460), (94, 69481), (110, 69535), (112, 69544), (116, 69565),

Gene: Settecandela_223 Start: 141947, Stop: 142222, Start Num: 59

Candidate Starts for Settecandela_223:

(Start: 59 @141947 has 2 MA's), (103, 142112), (104, 142115), (108, 142130), (117, 142166), (119, 142172),

Gene: Shadow1_35 Start: 28661, Stop: 28891, Start Num: 72

Candidate Starts for Shadow1_35:

(31, 28538), (36, 28568), (Start: 55 @28658 has 26 MA's), (Start: 72 @28661 has 224 MA's), (86, 28718), (117, 28862),

Gene: Shagrat_102 Start: 54294, Stop: 54536, Start Num: 69

Candidate Starts for Shagrat_102:

(28, 54126), (35, 54174), (44, 54228), (Start: 69 @54294 has 1 MA's), (91, 54393), (104, 54447), (108, 54462),

Gene: ShamWow_110 Start: 63783, Stop: 64046, Start Num: 72

Candidate Starts for ShamWow_110:

(Start: 72 @63783 has 224 MA's), (78, 63813), (92, 63888), (124, 64005),

Gene: Shaobing_36 Start: 28810, Stop: 29037, Start Num: 72

Candidate Starts for Shaobing_36:

(10, 28489), (23, 28618), (31, 28687), (36, 28717), (Start: 55 @28807 has 26 MA's), (Start: 72 @28810 has 224 MA's), (96, 28933), (107, 28969),

Gene: ShedlockHolmes_37 Start: 30411, Stop: 30650, Start Num: 55

Candidate Starts for ShedlockHolmes_37:

(10, 30093), (31, 30291), (36, 30321), (Start: 55 @30411 has 26 MA's), (83, 30468), (110, 30594), (115, 30618),

Gene: Sheng711_98 Start: 59764, Stop: 60003, Start Num: 72
Candidate Starts for Sheng711_98:
(64, 59758), (Start: 72 @59764 has 224 MA's), (90, 59845), (92, 59869), (99, 59896), (106, 59917),
(111, 59935), (119, 59971),

Gene: ShereKhan_108 Start: 64144, Stop: 64407, Start Num: 72
Candidate Starts for ShereKhan_108:
(Start: 72 @64144 has 224 MA's), (78, 64174), (92, 64249), (124, 64366),

Gene: Silverleaf_91 Start: 57820, Stop: 58059, Start Num: 72
Candidate Starts for Silverleaf_91:
(Start: 70 @57817 has 1 MA's), (Start: 72 @57820 has 224 MA's), (92, 57925), (95, 57940), (99,
57952), (104, 57967), (107, 57979), (119, 58027),

Gene: Simpliphy_108 Start: 62956, Stop: 63219, Start Num: 72
Candidate Starts for Simpliphy_108:
(Start: 72 @62956 has 224 MA's), (78, 62986), (92, 63061), (95, 63076), (124, 63178),

Gene: SirDuracell_110 Start: 62622, Stop: 62885, Start Num: 72
Candidate Starts for SirDuracell_110:
(Start: 72 @62622 has 224 MA's), (78, 62652), (92, 62727), (124, 62844),

Gene: SirPhilip_35 Start: 28286, Stop: 28516, Start Num: 55
Candidate Starts for SirPhilip_35:
(Start: 55 @28286 has 26 MA's), (Start: 72 @28289 has 224 MA's), (86, 28346),

Gene: Slarp_37 Start: 30638, Stop: 30919, Start Num: 72
Candidate Starts for Slarp_37:
(Start: 55 @30632 has 26 MA's), (Start: 72 @30638 has 224 MA's), (Start: 79 @30671 has 1 MA's),
(86, 30695), (91, 30731), (98, 30773), (101, 30782), (102, 30785), (108, 30803), (110, 30809), (120,
30851), (121, 30854), (122, 30857),

Gene: Smoothie_150 Start: 80851, Stop: 81150, Start Num: 47
Candidate Starts for Smoothie_150:
(Start: 47 @80851 has 11 MA's), (Start: 77 @80932 has 1 MA's), (105, 81055), (119, 81121), (125,
81139),

Gene: Snenia_92 Start: 59730, Stop: 59999, Start Num: 67
Candidate Starts for Snenia_92:
(Start: 67 @59730 has 20 MA's), (78, 59769), (92, 59844), (99, 59871), (102, 59880), (121, 59952),

Gene: SoSeph_36 Start: 30435, Stop: 30659, Start Num: 72
Candidate Starts for SoSeph_36:
(Start: 51 @30402 has 5 MA's), (Start: 72 @30435 has 224 MA's), (78, 30465), (82, 30477), (88,
30513), (90, 30516), (93, 30543), (100, 30573), (101, 30576), (110, 30603), (117, 30636),

Gene: Soap141_96 Start: 60721, Stop: 60981, Start Num: 72
Candidate Starts for Soap141_96:
(Start: 72 @60721 has 224 MA's), (76, 60745), (92, 60826), (103, 60865), (104, 60868), (106, 60874),
(107, 60880), (117, 60922), (119, 60928),

Gene: SophKB_108 Start: 62945, Stop: 63208, Start Num: 72
Candidate Starts for SophKB_108:

(Start: 72 @62945 has 224 MA's), (78, 62975), (92, 63050), (95, 63065), (124, 63167),

Gene: Sotrice96_111 Start: 63409, Stop: 63672, Start Num: 72

Candidate Starts for Sotrice96_111:

(Start: 72 @63409 has 224 MA's), (78, 63439), (92, 63514), (124, 63631),

Gene: Stank_112 Start: 63183, Stop: 63446, Start Num: 72

Candidate Starts for Stank_112:

(Start: 72 @63183 has 224 MA's), (78, 63213), (92, 63288), (124, 63405),

Gene: Stark_110 Start: 63269, Stop: 63532, Start Num: 72

Candidate Starts for Stark_110:

(Start: 72 @63269 has 224 MA's), (78, 63299), (92, 63374), (124, 63491),

Gene: StellaBean_108 Start: 63566, Stop: 63829, Start Num: 72

Candidate Starts for StellaBean_108:

(Start: 72 @63566 has 224 MA's), (78, 63596), (92, 63671), (124, 63788),

Gene: StolenFromERC_112 Start: 63108, Stop: 63371, Start Num: 72

Candidate Starts for StolenFromERC_112:

(Start: 72 @63108 has 224 MA's), (78, 63138), (92, 63213), (124, 63330),

Gene: Sunflower1121_35 Start: 28754, Stop: 28984, Start Num: 72

Candidate Starts for Sunflower1121_35:

(36, 28661), (Start: 55 @28751 has 26 MA's), (Start: 72 @28754 has 224 MA's), (86, 28811), (117, 28955),

Gene: Syleon_129 Start: 70097, Stop: 70339, Start Num: 67

Candidate Starts for Syleon_129:

(63, 70091), (Start: 67 @70097 has 20 MA's), (82, 70148), (92, 70211), (94, 70232), (110, 70286), (112, 70295), (116, 70316),

Gene: Syra333_36 Start: 28680, Stop: 28910, Start Num: 72

Candidate Starts for Syra333_36:

(10, 28359), (15, 28422), (19, 28446), (31, 28557), (36, 28587), (Start: 55 @28677 has 26 MA's), (Start: 72 @28680 has 224 MA's), (86, 28737), (117, 28881),

Gene: TBond007_36 Start: 29888, Stop: 30127, Start Num: 55

Candidate Starts for TBond007_36:

(31, 29768), (36, 29798), (Start: 55 @29888 has 26 MA's), (83, 29945), (101, 30041), (110, 30071),

Gene: TBrady12_113 Start: 62620, Stop: 62883, Start Num: 72

Candidate Starts for TBrady12_113:

(Start: 72 @62620 has 224 MA's), (78, 62650), (92, 62725), (124, 62842),

Gene: TClif_37 Start: 29261, Stop: 29491, Start Num: 72

Candidate Starts for TClif_37:

(10, 28940), (15, 29003), (19, 29027), (31, 29138), (36, 29168), (Start: 72 @29261 has 224 MA's),

Gene: Taquito_37 Start: 31057, Stop: 31305, Start Num: 79

Candidate Starts for Taquito_37:

(12, 30796), (13, 30802), (Start: 79 @31057 has 1 MA's), (86, 31081), (91, 31117), (101, 31168), (102, 31171), (108, 31189), (110, 31195), (120, 31237), (121, 31240), (122, 31243),

Gene: Tarkin_109 Start: 64009, Stop: 64272, Start Num: 72
Candidate Starts for Tarkin_109:
(Start: 72 @64009 has 224 MA's), (78, 64039), (92, 64114), (124, 64231),

Gene: TeardropMSU_106 Start: 62511, Stop: 62774, Start Num: 72
Candidate Starts for TeardropMSU_106:
(Start: 72 @62511 has 224 MA's), (78, 62541), (92, 62616), (124, 62733),

Gene: Teaspoon_110 Start: 63168, Stop: 63431, Start Num: 72
Candidate Starts for Teaspoon_110:
(Start: 72 @63168 has 224 MA's), (78, 63198), (92, 63273), (124, 63390),

Gene: Terminus_113 Start: 64409, Stop: 64672, Start Num: 72
Candidate Starts for Terminus_113:
(Start: 72 @64409 has 224 MA's), (78, 64439), (92, 64514), (124, 64631),

Gene: Thresher_111 Start: 64049, Stop: 64312, Start Num: 72
Candidate Starts for Thresher_111:
(Start: 72 @64049 has 224 MA's), (78, 64079), (92, 64154), (124, 64271),

Gene: Thyatira_36 Start: 30289, Stop: 30513, Start Num: 72
Candidate Starts for Thyatira_36:
(Start: 51 @30256 has 5 MA's), (Start: 72 @30289 has 224 MA's), (78, 30319), (82, 30331), (88, 30367), (90, 30370), (93, 30397), (100, 30427), (110, 30457),

Gene: Tierra_36 Start: 29587, Stop: 29820, Start Num: 55
Candidate Starts for Tierra_36:
(36, 29497), (Start: 55 @29587 has 26 MA's), (98, 29728), (121, 29806),

Gene: TingHuaYa_36 Start: 28723, Stop: 28950, Start Num: 72
Candidate Starts for TingHuaYa_36:
(17, 28600), (21, 28630), (32, 28720), (Start: 72 @28723 has 224 MA's), (82, 28765), (96, 28846), (99, 28858), (110, 28891), (120, 28930),

Gene: Tomaszewski_105 Start: 62947, Stop: 63210, Start Num: 72
Candidate Starts for Tomaszewski_105:
(Start: 72 @62947 has 224 MA's), (78, 62977), (92, 63052), (124, 63169),

Gene: Toniann_149 Start: 80607, Stop: 80906, Start Num: 47
Candidate Starts for Toniann_149:
(Start: 47 @80607 has 11 MA's), (Start: 77 @80688 has 1 MA's), (99, 80793), (105, 80811), (119, 80877), (125, 80895),

Gene: Toto_108 Start: 63783, Stop: 64046, Start Num: 72
Candidate Starts for Toto_108:
(Start: 72 @63783 has 224 MA's), (78, 63813), (92, 63888), (124, 64005),

Gene: Tourach_96 Start: 60701, Stop: 60940, Start Num: 72
Candidate Starts for Tourach_96:
(Start: 72 @60701 has 224 MA's), (76, 60725), (78, 60731), (92, 60806), (99, 60833), (102, 60842), (103, 60845), (104, 60848), (106, 60854), (107, 60860), (117, 60902), (119, 60908),

Gene: Traaww1_106 Start: 62332, Stop: 62595, Start Num: 72
Candidate Starts for Traaww1_106:
(Start: 72 @62332 has 224 MA's), (78, 62362), (92, 62437), (124, 62554),

Gene: Trax_127 Start: 71378, Stop: 71596, Start Num: 73
Candidate Starts for Trax_127:
(Start: 70 @71372 has 1 MA's), (Start: 73 @71378 has 3 MA's), (74, 71387), (Start: 77 @71402 has 1 MA's), (78, 71405), (Start: 79 @71408 has 1 MA's), (81, 71414), (82, 71417), (84, 71423), (86, 71432), (90, 71456), (91, 71468), (92, 71480), (93, 71483), (95, 71495), (96, 71498), (100, 71513), (101, 71516), (103, 71519), (107, 71534), (110, 71543), (111, 71546), (118, 71576), (123, 71591),

Gene: TribbleTrouble_36 Start: 30199, Stop: 30423, Start Num: 72
Candidate Starts for TribbleTrouble_36:
(50, 30175), (Start: 72 @30199 has 224 MA's), (105, 30352), (110, 30367),

Gene: Tuco_111 Start: 64570, Stop: 64833, Start Num: 72
Candidate Starts for Tuco_111:
(Start: 72 @64570 has 224 MA's), (78, 64600), (92, 64675), (124, 64792),

Gene: Typha_30 Start: 27510, Stop: 27782, Start Num: 68
Candidate Starts for Typha_30:
(15, 27231), (Start: 66 @27507 has 2 MA's), (Start: 68 @27510 has 2 MA's), (Start: 72 @27519 has 224 MA's), (75, 27537), (82, 27561), (83, 27564), (88, 27603), (90, 27606), (100, 27660), (101, 27663), (104, 27672), (119, 27732),

Gene: Tyson_93 Start: 58217, Stop: 58456, Start Num: 72
Candidate Starts for Tyson_93:
(Start: 70 @58214 has 1 MA's), (Start: 72 @58217 has 224 MA's), (92, 58322), (95, 58337), (99, 58349), (104, 58364), (107, 58376), (119, 58424),

Gene: UPIE_91 Start: 57813, Stop: 58052, Start Num: 72
Candidate Starts for UPIE_91:
(Start: 70 @57810 has 1 MA's), (Start: 72 @57813 has 224 MA's), (92, 57918), (95, 57933), (99, 57945), (104, 57960), (107, 57972), (117, 58014), (119, 58020),

Gene: Ukulele_104 Start: 62768, Stop: 63031, Start Num: 72
Candidate Starts for Ukulele_104:
(Start: 72 @62768 has 224 MA's), (78, 62798), (92, 62873), (124, 62990),

Gene: Unicorn_36 Start: 28916, Stop: 29149, Start Num: 55
Candidate Starts for Unicorn_36:
(Start: 55 @28916 has 26 MA's), (98, 29057), (121, 29135),

Gene: Validus_36 Start: 28742, Stop: 28969, Start Num: 72
Candidate Starts for Validus_36:
(10, 28421), (19, 28508), (23, 28550), (31, 28619), (36, 28649), (Start: 55 @28739 has 26 MA's), (Start: 72 @28742 has 224 MA's), (83, 28787), (122, 28955),

Gene: Vetrix_94 Start: 59584, Stop: 59844, Start Num: 72
Candidate Starts for Vetrix_94:
(Start: 72 @59584 has 224 MA's), (76, 59608), (92, 59689), (99, 59716), (103, 59728), (104, 59731), (106, 59737), (107, 59743), (117, 59785), (119, 59791),

Gene: Wamburgexpress_91 Start: 57941, Stop: 58180, Start Num: 72

Candidate Starts for Wamburgexpress_91:

(Start: 70 @57938 has 1 MA's), (Start: 72 @57941 has 224 MA's), (92, 58046), (95, 58061), (99, 58073), (104, 58088), (107, 58100), (117, 58142), (119, 58148),

Gene: Waterfoul_37 Start: 30530, Stop: 30754, Start Num: 72

Candidate Starts for Waterfoul_37:

(Start: 59 @30524 has 2 MA's), (Start: 72 @30530 has 224 MA's), (78, 30560), (82, 30572), (88, 30608), (90, 30611), (93, 30638), (100, 30668), (110, 30698), (117, 30731),

Gene: Whirlwind_94 Start: 60069, Stop: 60338, Start Num: 67

Candidate Starts for Whirlwind_94:

(Start: 67 @60069 has 20 MA's), (78, 60108), (92, 60183), (99, 60210), (102, 60219), (121, 60291),

Gene: Wiggin_112 Start: 62613, Stop: 62876, Start Num: 72

Candidate Starts for Wiggin_112:

(Start: 72 @62613 has 224 MA's), (78, 62643), (92, 62718), (124, 62835),

Gene: Wigglewigggle_96 Start: 59892, Stop: 60152, Start Num: 72

Candidate Starts for Wigglewigggle_96:

(Start: 72 @59892 has 224 MA's), (76, 59916), (92, 59997), (103, 60036), (104, 60039), (106, 60045), (107, 60051), (117, 60093), (119, 60099),

Gene: Wilder_97 Start: 59728, Stop: 59988, Start Num: 72

Candidate Starts for Wilder_97:

(Start: 72 @59728 has 224 MA's), (76, 59752), (92, 59833), (99, 59860), (103, 59872), (104, 59875), (106, 59881), (107, 59887), (117, 59929), (119, 59935),

Gene: Willez_105 Start: 61735, Stop: 61998, Start Num: 72

Candidate Starts for Willez_105:

(Start: 72 @61735 has 224 MA's), (78, 61765), (92, 61840), (124, 61957),

Gene: WilliamBoone_150 Start: 78865, Stop: 79164, Start Num: 47

Candidate Starts for WilliamBoone_150:

(Start: 47 @78865 has 11 MA's), (86, 78976), (103, 79063), (105, 79069), (119, 79135), (125, 79153),

Gene: Winky_96 Start: 60332, Stop: 60592, Start Num: 72

Candidate Starts for Winky_96:

(Start: 72 @60332 has 224 MA's), (76, 60356), (92, 60437), (103, 60476), (104, 60479), (106, 60485), (107, 60491), (117, 60533), (119, 60539),

Gene: Wintermute_37 Start: 30625, Stop: 30906, Start Num: 72

Candidate Starts for Wintermute_37:

(Start: 55 @30619 has 26 MA's), (Start: 72 @30625 has 224 MA's), (Start: 79 @30658 has 1 MA's), (86, 30682), (91, 30718), (101, 30769), (102, 30772), (108, 30790), (110, 30796), (120, 30838), (121, 30841), (122, 30844),

Gene: Wyatt2_93 Start: 58248, Stop: 58487, Start Num: 72

Candidate Starts for Wyatt2_93:

(Start: 70 @58245 has 1 MA's), (Start: 72 @58248 has 224 MA's), (92, 58353), (95, 58368), (99, 58380), (104, 58395), (107, 58407), (117, 58449), (119, 58455),

Gene: Xandras_109 Start: 62436, Stop: 62699, Start Num: 72

Candidate Starts for Xandras_109:

(Start: 72 @62436 has 224 MA's), (78, 62466), (92, 62541), (124, 62658),

Gene: Ximenita_37 Start: 28862, Stop: 29095, Start Num: 55

Candidate Starts for Ximenita_37:

(36, 28772), (Start: 55 @28862 has 26 MA's), (Start: 72 @28865 has 224 MA's), (86, 28922), (117, 29066),

Gene: Y10_37 Start: 30625, Stop: 30906, Start Num: 72

Candidate Starts for Y10_37:

(9, 30298), (14, 30361), (Start: 55 @30619 has 26 MA's), (Start: 72 @30625 has 224 MA's), (Start: 79 @30658 has 1 MA's), (86, 30682), (91, 30718), (101, 30769), (102, 30772), (108, 30790), (110, 30796), (120, 30838), (121, 30841), (122, 30844),

Gene: Y2_37 Start: 30625, Stop: 30906, Start Num: 72

Candidate Starts for Y2_37:

(9, 30298), (14, 30361), (Start: 55 @30619 has 26 MA's), (Start: 72 @30625 has 224 MA's), (Start: 79 @30658 has 1 MA's), (86, 30682), (91, 30718), (101, 30769), (102, 30772), (108, 30790), (110, 30796), (120, 30838), (121, 30841), (122, 30844),

Gene: YassJohnny_107 Start: 61756, Stop: 62019, Start Num: 72

Candidate Starts for YassJohnny_107:

(Start: 72 @61756 has 224 MA's), (78, 61786), (92, 61861), (124, 61978),

Gene: Youngblood_114 Start: 63905, Stop: 64168, Start Num: 72

Candidate Starts for Youngblood_114:

(Start: 72 @63905 has 224 MA's), (78, 63935), (92, 64010), (124, 64127),

Gene: Yuna_37 Start: 29330, Stop: 29563, Start Num: 55

Candidate Starts for Yuna_37:

(10, 29012), (31, 29210), (36, 29240), (Start: 55 @29330 has 26 MA's), (Start: 72 @29339 has 224 MA's), (78, 29369), (86, 29396), (99, 29474), (101, 29480),

Gene: Yunkel11_37 Start: 28983, Stop: 29210, Start Num: 72

Candidate Starts for Yunkel11_37:

(11, 28689), (20, 28755), (22, 28767), (28, 28824), (Start: 57 @28971 has 2 MA's), (58, 28974), (Start: 72 @28983 has 224 MA's), (82, 29025), (96, 29106), (99, 29118),

Gene: Zakai_97 Start: 60371, Stop: 60631, Start Num: 72

Candidate Starts for Zakai_97:

(Start: 72 @60371 has 224 MA's), (76, 60395), (92, 60476), (99, 60503), (103, 60515), (104, 60518), (106, 60524), (107, 60530), (117, 60572), (119, 60578),

Gene: Zaria_92 Start: 57356, Stop: 57595, Start Num: 72

Candidate Starts for Zaria_92:

(Start: 70 @57353 has 1 MA's), (Start: 72 @57356 has 224 MA's), (92, 57461), (95, 57476), (99, 57488), (104, 57503), (107, 57515), (119, 57563),

Gene: ZhongYanYuan_93 Start: 59783, Stop: 60043, Start Num: 72

Candidate Starts for ZhongYanYuan_93:

(Start: 72 @59783 has 224 MA's), (92, 59888), (99, 59915), (100, 59918), (102, 59924), (103, 59927), (107, 59942), (117, 59984), (119, 59990),

Gene: xkcd_114 Start: 64090, Stop: 64353, Start Num: 72

Candidate Starts for xkcd_114:

(Start: 72 @64090 has 224 MA's), (78, 64120), (92, 64195), (124, 64312),