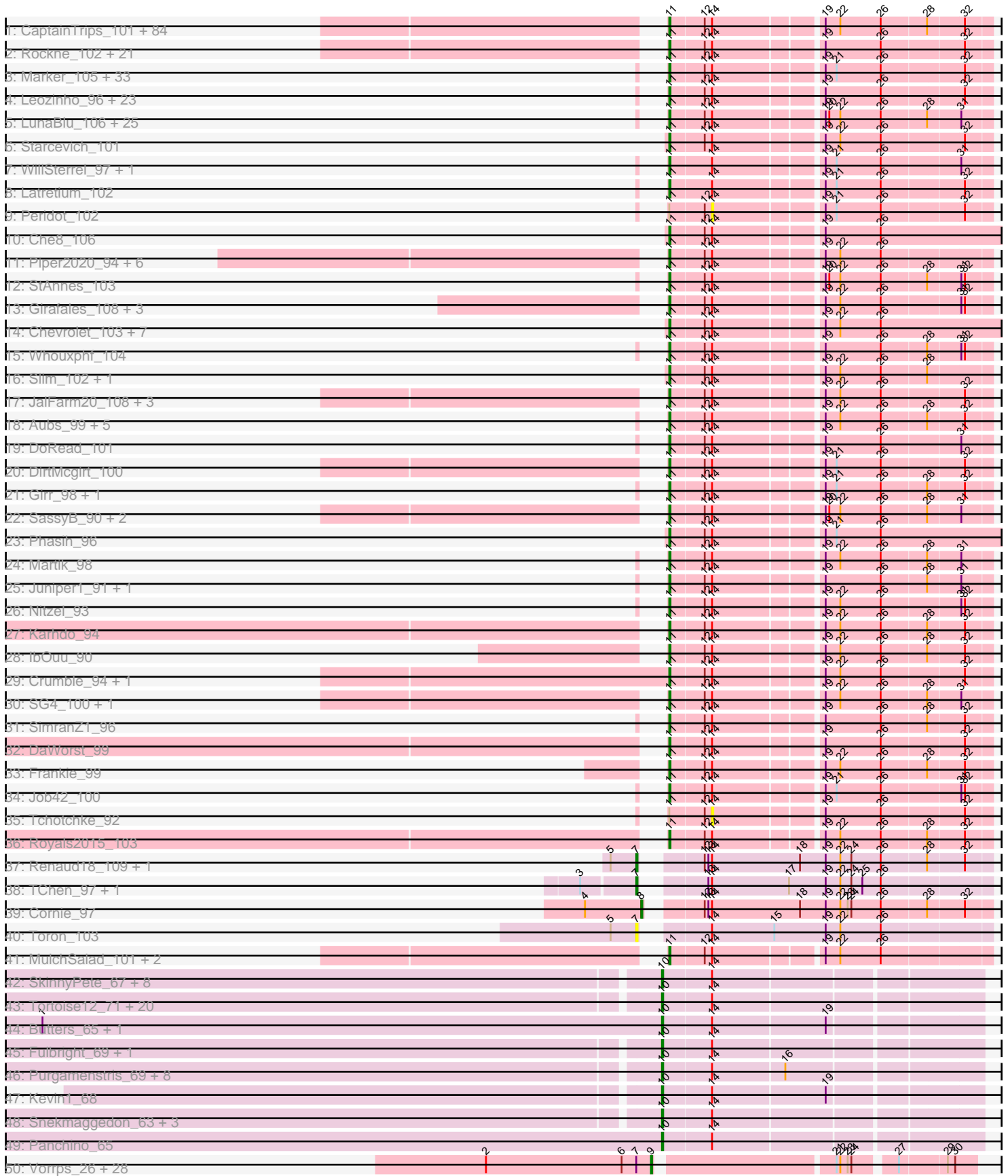


Pham 303007



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 303007 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303007 has 346 members, 33 are drafts.

Phages represented in each track:

- Track 1 : CaptainTrips_101, Brocalys_91, DeadP_99, DotProduct_93, Ruby_96, XFactor_90, Jennelsea_96, BobaPhett_101, Seagreen_100, Chuckly_96, Corium_98, Bobi_101, Burwell21_93, Lizziana_100, DLane_99, Tweety_100, NormanBulbieJr_97, Melissauen88_89, Jinglebell_106, Wee_102, Phanphagia_104, Rita_99, Koella_92, Emma_104, LittleShirley_107, Brookers_98, Zizzle_102, KingJulian_107, Flathead_101, PhesterPhotato_103, Hlubikazi_97, Medindi_104, IMpilo_97, Zerg_97, Ardmore_83, Coco12_100, MilleniumForce_99, Cerasum_98, Phatniss_97, Mova_101, Whatsapiecost_93, Kenuha5_91, FreddyB_109, Taj_105, Maravista_96, SwagPiggett_101, PatoPoderoso_100, OwlsT2W_97, SuperGrey_99, Dante_97, Shauna1_101, Eish_104, Mandlovu_97, Sarma624_101, Brushbloom_99, Ms6_101, Violac_100, Philus_103, Mozy_103, Pippy_97, Cabrinians_96, Priscilla_100, Phalconet_100, Filuzino_99, James_103, Jant_106, Fruitloop_97, Akhila_93, Doomslug_117, Beanstalk_95, Clifton_91, Tootsieroll_93, Bubbles123_93, MilanaBonita_92, Hamulus_99, ShowerHandel_100, LastJedi_90, Okabe_91, Kingsley_108, Hegedechwinu_107, Strokeseat_97, Velveteen_96, BigPhil_96, Bipolar_101, Batiatus_99
- Track 2 : Rockne_102, Lorde_102, Saal_97, Nivrat_99, Mantra_97, LilMoolah_102, RockyHorror_103, UncleRicky_99, ShiLan_102, Spoonbill_99, GUmbie_98, Drago_98, Boomer_101, Lucia_99, Mattes_100, Minnie_94, Gorge_98, Spikelee_100, PMC_98, Jarcob_102, Sandalphon_99, Enby_103
- Track 3 : Marker_105, Radiance_97, Nimbo_91, JoeyJr_102, Leperchaun_101, Deb65_92, Totinger_102, Polka14_103, Geralt_92, Dorothy_100, Pacc40_97, Sassafras_101, Doug_96, BlueCrab_102, KingMidas_99, Gandolph_99, Eradicator_91, Pollywog_101, Doomphist_104, Rialto_104, BodEinwohner17_109, RitaG_98, RedBird_100, Alexphander_100, Poenanya_103, Scottish_99, PHappiness_99, BuzzLyseyear_106, Moonbeam_102, Inventum_97, Empress_99, OldBen_96, Daenerys_97, DaddyRickover_101
- Track 4 : Leozinho_96, Donkeykong_105, Ogopogo_103, Grimmer_107, Topiatin_101, ShroomBoi_97, Madiba_98, Plumbus_98, DillTech15_105, Yorick_95, Llij_94, Cheesepuff_104, MulchExplorer_99, Juice456_98, ByChance_90, DRBy19_99, Spartacus_106, Estave1_107, Sparkdehliily_106, Kimberlium_101, Krakatau_92, GigiOuiOui_94, Fancypants_106, TDanisky_107
- Track 5 : LunaBlu_106, Polo2Bam_111, EmiMonkey_88, Kersh_102, AlpineSix_97, Ochi17_105, Seabastian_106, Ovechkin_102, PhlipPhlop_89, Nichirin_99, SiSi_95, Mutaforma13_100, NewHope4_107, Llama_106, Vivum_99, Harley_101, Byougenkin_96, Modragons_103, Wachhund_96, Enzomatic_112, Ramsey_104, OfUltron_106, Oksu_103, lbhubesi_96, SeaLumen_108, Veteran_90

- Track 6 : Starcevich_101
- Track 7 : WillSterrel_97, IrishSherpFalk_99
- Track 8 : Latretium_102
- Track 9 : Peridot_102
- Track 10 : Che8_106
- Track 11 : Piper2020_94, DocMcStuffins_87, Misha28_89, Aloeri_91, ChickenDinner_90, TootsiePop_89, Awesomesauce_90
- Track 12 : StAnnes_103
- Track 13 : Girafales_108, Florinda_111, Mwanjiwa_102, Quico_108
- Track 14 : Chevrolet_103, QuickMath_100, MadMen_104, ArcusAngelus_99, Galactic_103, Hades_96, EleanorGeorge_103, MinionDave_97
- Track 15 : Whouxphf_104
- Track 16 : Slim_102, Emmaloid_102
- Track 17 : JalFarm20_108, Sabbb_102, Stap_94, Beakin_91
- Track 18 : Aubs_99, VRedHorse_100, DosHalletts_96, Guppsters_94, KristaRAM_107, Cornucopia_99
- Track 19 : DoRead_101
- Track 20 : DirtMcgirt_100
- Track 21 : Girr_98, MisterCuddles_99
- Track 22 : SassyB_90, Firehouse51_93, PopTart_90
- Track 23 : Phasih_96
- Track 24 : Martik_98
- Track 25 : Juniper1_91, Mahavrat_93
- Track 26 : Nitzel_93
- Track 27 : Karhdo_94
- Track 28 : lbOuu_90
- Track 29 : Crumble_94, OlympiaSaint_103
- Track 30 : SG4_100, Blexus_96
- Track 31 : SimranZ1_96
- Track 32 : DaWorst_99
- Track 33 : Frankie_99
- Track 34 : Job42_100
- Track 35 : Tchotchke_92
- Track 36 : Royals2015_103
- Track 37 : Renaud18_109, ThetaBob_102
- Track 38 : TChen_97, LunaStella_97
- Track 39 : Cornie_97
- Track 40 : Toron_103
- Track 41 : MulchSalad_101, LordVader_95, Squirty_98
- Track 42 : SkinnyPete_67, Philonius_71, Xeno_68, Charlie_67, Bosection6_65, Phrann_66, Journey_63, Impisi_69, PhancyPhin_68
- Track 43 : Tortoise12_71, Pipsqueaks_72, Carcharodon_70, Silvafighter_73, Tessdabest_71, Parmesanjohn_71, Cubone_76, Chewbacca_73, Silvy_67, Duplicity_69, Andies_64, Smurph_71, EGUnicorn_65, Phloss_69, Tapioca_69, Magsby_70, Schnauzer_73, Aggie_66, Scitech_66, Xerxes_71, Melville_76
- Track 44 : Butters_65, Rubeelu_65
- Track 45 : Fulbright_69, Shweta_65
- Track 46 : Purgamenstris_69, Hanako_68, Rebel_65, Spinach_68, Raymond7_62, Redi_68, ShrimpFriedEgg_69, Nenae_69, BabeRuth_69
- Track 47 : Kevin1_68
- Track 48 : Snekmaggedon_63, MichelleMyBell_69, SpongeBob_64, Jamie19_64
- Track 49 : Panchino_65

- Track 50 : Vorrps_26, YungJamal_28, KingPhillip3_23, JangDynasty_25, YoyoKar_24, Wildflower_26, MadKillah_27, Dylan_25, Firecracker_26, Alkhayr_26, TelAviv_23, Corndog_28, Catdawg_25, Ryadel_28, Murai_26, Familton_26, Idergollasper_25, FoulBall_25, Schuy_27, Smooch_29, Krili_26, Ashwin_27, Zebo_25, Mori_26, Zakhe101_26, SchoolBus_25, Shida_26, Wogge42_25, Blessica_26
- Track 51 : Bora_24
- Track 52 : Imara_24, Vagabond_26, Winget_26
- Track 53 : NiebruSaylor_26

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

The start number called the most often in the published annotations is 11, it was called in 233 of the 313 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_93, Alexphander_100, Aloeri_91, AlpineSix_97, ArcusAngelus_99, Ardmore_83, Aubs_99, Awesomesauce_90, Batiatus_99, Beakin_91, Beanstalk_95, BigPhil_96, Bipolar_101, Blexus_96, BlueCrab_102, BobaPhett_101, Bobi_101, BodEinwohner17_109, Boomer_101, Brocalys_91, Brookers_98, Brushbloom_99, Bubbles123_93, Burwell21_93, BuzzLyseyear_106, ByChance_90, Byougenkin_96, Cabrinians_96, CaptainTrips_101, Cerasum_98, Che8_106, CheesePuff_104, Chevrolet_103, ChickenDinner_90, Chuckly_96, Clifton_91, Coco12_100, Corium_98, Cornucopia_99, Crumble_94, DLane_99, DRBy19_99, DaWorst_99, DaddyRickover_101, Daenerys_97, Dante_97, DeadP_99, Deb65_92, DillTech15_105, DirtMcGirt_100, DoRead_101, DocMcStuffins_87, Donkeykong_105, Doomphist_104, Doomslug_117, Dorothy_100, DosHalletts_96, DotProduct_93, Doug_96, Drago_98, Eish_104, EleanorGeorge_103, EmiMonkey_88, Emma_104, Emmaloid_102, Empress_99, Enby_103, Enzomatic_112, Eradicator_91, Estave1_107, FancyPants_106, Filuzino_99, Firehouse51_93, Flathead_101, Florinda_111, Frankie_99, FreddyB_109, Fruitloop_97, GUmBie_98, Galactic_103, Gandolph_99, Geralt_92, GigiOuiOui_94, Girafales_108, Girr_98, Gorge_98, Grimmer_107, Guppsters_94, Hades_96, Hamulus_99, Harley_101, Hegedechwinu_107, Hlubikazi_97, IMpilo_97, IbOuu_90, Ihubesi_96, Inventum_97, IrishSherpFalk_99, JalFarm20_108, James_103, Jant_106, Jarcob_102, Jennelsea_96, Jinglebell_106, Job42_100, JoeyJr_102, Juice456_98, Juniper1_91, Karhdo_94, Kenuha5_91, Kersh_102, Kimberlium_101, KingJulian_107, KingMidas_99, Kingsley_108, Koella_92, Krakatau_92, KristaRAM_107, LastJedi_90, Latretium_102, Leozinho_96, Leperchaun_101, LilMoolah_102, LittleShirley_107, Lizziana_100, Llama_106, Llij_94, LordVader_95, Lorde_102, Lucia_99, LunaBlu_106, MadMen_104, Madiba_98, Mahavrat_93, Mandlovu_97, Mantra_97, Maravista_96, Marker_105, Martik_98, Mattes_100, Medindi_104, Melissauren88_89, MilanaBonita_92, MilleniumForce_99, MinionDave_97, Minnie_94, Misha28_89, MisterCuddles_99, Modragons_103, Moonbeam_102, Mova_101, Mozy_103, Ms6_101, MulchExplorer_99, MulchSalad_101, Mutaforma13_100, Mwanjiwa_102, NewHope4_107, Nichirin_99, Nimbo_91, Nitzel_93, Nivrat_99, NormanBulbieJr_97, Ochi17_105, OfUltron_106, Ogopogo_103, Okabe_91, Oksu_103, OldBen_96, OlympiaSaint_103, Ovechkin_102, OwlsT2W_97, PHappiness_99, PMC_98, Pacc40_97, PatoPoderoso_100, Phalconet_100, Phanphagia_104, Phasih_96, Phatniss_97, PhesterPotato_103, Philus_103, PhilipPhlop_89, Piper2020_94,

Pippy_97, Plumbus_98, Poenanya_103, Polka14_103, Pollywog_101, Polo2Bam_111, PopTart_90, Priscilla_100, QuickMath_100, Quico_108, Radiance_97, Ramsey_104, RedBird_100, Rialto_104, RitaG_98, Rita_99, Rockne_102, RockyHorror_103, Royals2015_103, Ruby_96, SG4_100, Saal_97, Sabbb_102, Sandalphon_99, Sarma624_101, Sassafras_101, SassyB_90, Scottish_99, SeaLumen_108, Seabastian_106, Seagreen_100, Shauna1_101, ShiLan_102, ShowerHandel_100, ShroomBoi_97, SiSi_95, SimranZ1_96, Slim_102, Sparkdehlily_106, Spartacus_106, Spikelee_100, Spoonbill_99, Squirty_98, StAnnes_103, Stap_94, Starceвич_101, Strokeseat_97, SuperGrey_99, SwagPiggett_101, TDanisky_107, Taj_105, TootsiePop_89, Tootsieroll_93, Topiatin_101, Totinger_102, Tweety_100, UncleRicky_99, VRedHorse_100, Velveteen_96, Veteran_90, Violac_100, Vivum_99, Wachhund_96, Wee_102, Whatsapiecost_93, Whouxphf_104, WillSterrel_97, XFactor_90, Yorick_95, Zerg_97, Zizzle_102,

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

- Peridot_102, Tchotchke_92,

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

- Aggie_66, Alkhayr_26, Andies_64, Ashwin_27, BabeRuth_69, Blessica_26, Bora_24, Bosection6_65, Butters_65, Carcharodon_70, Catdawg_25, Charlie_67, Chewbacca_73, Corndog_28, Cornie_97, Cubone_76, Duplicity_69, Dylan_25, EGUnicorn_65, Familton_26, Firecracker_26, FoulBall_25, Fulbright_69, Hanako_68, Idergollasper_25, Imara_24, Impisi_69, Jamie19_64, JangDynasty_25, Journey_63, Kevin1_68, KingPhillip3_23, Krili_26, LunaStella_97, MadKillah_27, Magsby_70, Melville_76, MichelleMyBell_69, Mori_26, Murai_26, Nenae_69, NiebruSaylor_26, Panchino_65, Parmesanjohn_71, PhancyPhin_68, Philonius_71, Phloss_69, Phrann_66, Pipsqueaks_72, Purgamenstris_69, Raymond7_62, Rebel_65, Redi_68, Renaud18_109, Rubeelu_65, Ryadel_28, Schnauzer_73, SchoolBus_25, Schuy_27, Scitech_66, Shida_26, ShrimpFriedEgg_69, Shweta_65, Silvafighter_73, Silvy_67, SkinnyPete_67, Smooch_29, Smurph_71, Snekmaggedon_63, Spinach_68, SpongeBob_64, TChen_97, Tapioca_69, TelAviv_23, Tessdabest_71, ThetaBob_102, Toron_103, Tortoise12_71, Vagabond_26, Vorrrps_26, Wildflower_26, Winget_26, Wogge42_25, Xeno_68, Xerxes_71, YoyoKar_24, YungJamal_28, Zakhe101_26, Zebo_25,

Summary by start number:

Start 7:

- Found in 39 of 346 (11.3%) of genes in pham
- Manual Annotations of this start: 4 of 313
- Called 12.8% of time when present
- Phage (with cluster) where this start called: LunaStella_97 (F4), Renaud18_109 (F4), TChen_97 (F4), ThetaBob_102 (F4), Toron_103 (F6),

Start 8:

- Found in 1 of 346 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 313
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cornie_97 (F5),

Start 9:

- Found in 34 of 346 (9.8%) of genes in pham

- Manual Annotations of this start: 30 of 313
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_26 (O), Ashwin_27 (O), Blessica_26 (O), Bora_24 (O), Catdawg_25 (O), Corndog_28 (O), Dylan_25 (O), Familton_26 (O), Firecracker_26 (O), FoulBall_25 (O), Idergollasper_25 (O), Imara_24 (O), JangDynasty_25 (O), KingPhillip3_23 (O), Krili_26 (O), MadKillah_27 (O), Mori_26 (O), Murai_26 (O), NiebruSaylor_26 (O), Ryadel_28 (O), SchoolBus_25 (O), Schuy_27 (O), Shida_26 (O), Smooch_29 (O), TelAviv_23 (O), Vagabond_26 (O), Vorrrps_26 (O), Wildflower_26 (O), Winget_26 (O), Wogge42_25 (O), YoyoKar_24 (O), YungJamal_28 (O), Zakhe101_26 (O), Zebo_25 (O),

Start 10:

- Found in 49 of 346 (14.2%) of genes in pham
- Manual Annotations of this start: 45 of 313
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie_66 (N), Andies_64 (N), BabeRuth_69 (N), Bosection6_65 (N), Butters_65 (N), Carcharodon_70 (N), Charlie_67 (N), Chewbacca_73 (N), Cubone_76 (N), Duplicity_69 (N), EGUnicorn_65 (N), Fulbright_69 (N), Hanako_68 (N), Impisi_69 (N), Jamie19_64 (N), Journey_63 (N), Kevin1_68 (N), Magsby_70 (N), Melville_76 (N), MichelleMyBell_69 (N), Nenae_69 (N), Panchino_65 (N), Parmesanjohn_71 (N), PhancyPhin_68 (N), Philonius_71 (N), Phloss_69 (N), Phrann_66 (N), Pipsqueaks_72 (N), Purgamenstris_69 (N), Raymond7_62 (N), Rebel_65 (N), Redi_68 (N), Rubeelu_65 (N), Schnauzer_73 (N), Scitech_66 (N), ShrimpFriedEgg_69 (N), Shweta_65 (N), Silvafighter_73 (N), Silvy_67 (N), SkinnyPete_67 (N), Smurph_71 (N), Snekmaggedon_63 (N), Spinach_68 (N), SpongeBob_64 (N), Tapioca_69 (N), Tessdabest_71 (N), Tortoise12_71 (N), Xeno_68 (N), Xerxes_71 (N),

Start 11:

- Found in 257 of 346 (74.3%) of genes in pham
- Manual Annotations of this start: 233 of 313
- Called 99.2% of time when present
- Phage (with cluster) where this start called: Akhila_93 (F1), Alexphander_100 (F1), Aloeri_91 (F1), AlpineSix_97 (F1), ArcusAngelus_99 (F1), Ardmore_83 (F1), Aubs_99 (F1), Awesomesauce_90 (F1), Batiatus_99 (F1), Beakin_91 (F1), Beanstalk_95 (F1), BigPhil_96 (F1), Bipolar_101 (F1), Blexus_96 (F1), BlueCrab_102 (F1), BobaPhett_101 (F1), Bobi_101 (F1), BodEinwohner17_109 (F1), Boomer_101 (F1), Brocalys_91 (F1), Brookers_98 (F1), Brushbloom_99 (F1), Bubbles123_93 (F1), Burwell21_93 (F1), BuzzLyseyear_106 (F1), ByChance_90 (F1), Byougenkin_96 (F1), Cabrinians_96 (F1), CaptainTrips_101 (F1), Cerasum_98 (F1), Che8_106 (F1), CheesePuff_104 (F1), Chevrolet_103 (F1), ChickenDinner_90 (F1), Chuckly_96 (F1), Clifton_91 (F1), Coco12_100 (F1), Corium_98 (F1), Cornucopia_99 (F1), Crumble_94 (F1), DLane_99 (F1), DRBy19_99 (F1), DaWorst_99 (F1), DaddyRickover_101 (F1), Daenerys_97 (F1), Dante_97 (F1), DeadP_99 (F1), Deb65_92 (F1), DillTech15_105 (F1), DirtMcGirt_100 (F1), DoRead_101 (F1), DocMcStuffins_87 (F1), Donkeykong_105 (F1), Doomphist_104 (F1), Doomslug_117 (F), Dorothy_100 (F1), DosHalletts_96 (F1), DotProduct_93 (F1), Doug_96 (F1), Drago_98 (F1), Eish_104 (F1), EleanorGeorge_103 (F1), EmiMonkey_88 (F1), Emma_104 (F1), Emmaloid_102 (F1), Empress_99 (F1), Enby_103 (F1), Enzomatic_112 (F1), Eradicator_91 (F1), Estave1_107 (F1), Fancypants_106 (F1), Filuzino_99 (F1), Firehouse51_93 (F1), Flathead_101 (F1), Florinda_111 (F1), Frankie_99 (F1), FreddyB_109 (F1), Fruitloop_97 (F1), GUmbie_98 (F1), Galactic_103 (F1), Gandolph_99 (F1), Geralt_92 (F1), GigiOuiOui_94 (F1), Girafales_108 (F1), Girr_98 (F1), Gorge_98 (F1),

Grimmer_107 (F1), Guppsters_94 (F1), Hades_96 (F1), Hamulus_99 (F1), Harley_101 (F1), Hegedechwinu_107 (F1), Hlubikazi_97 (F1), IMpilo_97 (F1), IbOuu_90 (F1), Ibhubesi_96 (F1), Inventum_97 (F1), IrishSherpFalk_99 (F1), JalFarm20_108 (F1), James_103 (F1), Jant_106 (F1), Jarcob_102 (F1), Jennelsea_96 (F1), Jinglebell_106 (F1), Job42_100 (F1), JoeyJr_102 (F1), Juice456_98 (F1), Juniper1_91 (F1), Karhdo_94 (F1), Kenuha5_91 (F1), Kersh_102 (F1), Kimberlium_101 (F1), KingJulian_107 (F1), KingMidas_99 (F1), Kingsley_108 (F1), Koella_92 (F1), Krakatau_92 (F1), KristaRAM_107 (F1), LastJedi_90 (F1), Latretium_102 (F1), Leozinho_96 (F1), Leperchaun_101 (F1), LilMoolah_102 (F1), LittleShirley_107 (F1), Lizziana_100 (F1), Llama_106 (F1), Llij_94 (F1), LordVader_95 (F1), Lorde_102 (F1), Lucia_99 (F1), LunaBlu_106 (F1), MadMen_104 (F1), Madiba_98 (F1), Mahavrat_93 (F1), Mandlovu_97 (F1), Mantra_97 (F1), Maravista_96 (F1), Marker_105 (F1), Martik_98 (F1), Mattes_100 (F1), Medindi_104 (F1), Melissauren88_89 (F1), MilanaBonita_92 (F1), MilleniumForce_99 (F1), MinionDave_97 (F1), Minnie_94 (F1), Misha28_89 (F1), MisterCuddles_99 (F1), Modragons_103 (F1), Moonbeam_102 (F1), Mova_101 (F1), Mozy_103 (F1), Ms6_101 (F1), MulchExplorer_99 (F1), MulchSalad_101 (F1), Mutaforma13_100 (F1), Mwanjiwa_102 (F1), NewHope4_107 (F1), Nichirin_99 (F1), Nimbo_91 (F1), Nitzel_93 (F1), Nivrat_99 (F1), NormanBulbieJr_97 (F1), Ochi17_105 (F1), OfUltron_106 (F1), Ogopogo_103 (F1), Okabe_91 (F8), Oksu_103 (F1), OldBen_96 (F1), OlympiaSaint_103 (F1), Ovechkin_102 (F1), OwlsT2W_97 (F1), PHappiness_99 (F1), PMC_98 (F1), Pacc40_97 (F1), PatoPoderoso_100 (F1), Phalconet_100 (F1), Phanphagia_104 (F1), Phasih_96 (F1), Phatniss_97 (F1), PhesterPhotato_103 (F1), Philus_103 (F1), PhilipPhlop_89 (F1), Piper2020_94 (F1), Pippy_97 (F1), Plumbus_98 (F1), Poenanya_103 (F1), Polka14_103 (F1), Pollywog_101 (F1), Polo2Bam_111 (F1), PopTart_90 (F1), Priscilla_100 (F1), QuickMath_100 (F1), Quico_108 (F1), Radiance_97 (F1), Ramsey_104 (F1), RedBird_100 (F1), Rialto_104 (F1), RitaG_98 (F1), Rita_99 (F1), Rockne_102 (F1), RockyHorror_103 (F1), Royals2015_103 (F1), Ruby_96 (F1), SG4_100 (F1), Saal_97 (F1), Sabbb_102 (F1), Sandalphon_99 (F1), Sarma624_101 (F1), Sassafras_101 (F1), SassyB_90 (F1), Scottish_99 (F1), SeaLumen_108 (F1), Sebastian_106 (F1), Seagreen_100 (F1), Shauna1_101 (F1), ShiLan_102 (F1), ShowerHandel_100 (F1), ShroomBoi_97 (F1), SiSi_95 (F1), SimranZ1_96 (F1), Slim_102 (F1), Sparkdehlily_106 (F1), Spartacus_106 (F1), Spikelee_100 (F1), Spoonbill_99 (F1), Squirty_98 (F3), StAnnes_103 (F1), Stap_94 (F1), Starcevich_101 (F1), Strokeseat_97 (F1), SuperGrey_99 (F1), SwagPiggett_101 (F1), TDanisky_107 (F1), Taj_105 (F1), TootsiePop_89 (F1), Tootsieroll_93 (F1), Topiatin_101 (F1), Totinger_102 (F1), Tweety_100 (F1), UncleRicky_99 (F1), VRedHorse_100 (F1), Velveteen_96 (F1), Veteran_90 (F1), Violac_100 (F1), Vivum_99 (F1), Wachhund_96 (F1), Wee_102 (F1), Whatsapiecost_93 (F1), Whouxphf_104 (F1), WillSterrel_97 (F1), XFactor_90 (F1), Yorick_95 (F1), Zerg_97 (F1), Zizzle_102 (F1),

Start 14:

- Found in 312 of 346 (90.2%) of genes in pham
- No Manual Annotations of this start.
- Called 0.6% of time when present
- Phage (with cluster) where this start called: Peridot_102 (F1), Tchotchke_92 (F1),

Summary by clusters:

There are 10 clusters represented in this pham: F1, F3, F4, F5, F6, F, F8, F7, O, N,

Info for manual annotations of cluster F1:

- Start number 11 was manually annotated 232 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 11 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 7 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 8 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster N:

- Start number 10 was manually annotated 45 times for cluster N.

Info for manual annotations of cluster O:

- Start number 9 was manually annotated 30 times for cluster O.

Gene Information:

Gene: Aggie_66 Start: 43624, Stop: 43869, Start Num: 10

Candidate Starts for Aggie_66:

(Start: 10 @43624 has 45 MA's), (14, 43663),

Gene: Akhila_93 Start: 52629, Stop: 52871, Start Num: 11

Candidate Starts for Akhila_93:

(Start: 11 @52629 has 233 MA's), (12, 52656), (14, 52662), (19, 52743), (22, 52755), (26, 52788), (28, 52824), (32, 52851),

Gene: Alexphander_100 Start: 54963, Stop: 55205, Start Num: 11

Candidate Starts for Alexphander_100:

(Start: 11 @54963 has 233 MA's), (12, 54990), (14, 54996), (19, 55077), (21, 55086), (26, 55122), (32, 55185),

Gene: Alkhayr_26 Start: 11847, Stop: 12083, Start Num: 9

Candidate Starts for Alkhayr_26:

(2, 11712), (6, 11823), (Start: 7 @11835 has 4 MA's), (Start: 9 @11847 has 30 MA's), (21, 11982), (22, 11985), (23, 11991), (24, 11994), (27, 12024), (29, 12060), (30, 12066),

Gene: Aloeri_91 Start: 53767, Stop: 54009, Start Num: 11

Candidate Starts for Aloeri_91:

(Start: 11 @53767 has 233 MA's), (12, 53794), (14, 53800), (19, 53881), (22, 53893), (26, 53926),

Gene: AlpineSix_97 Start: 53347, Stop: 53589, Start Num: 11

Candidate Starts for AlpineSix_97:

(Start: 11 @53347 has 233 MA's), (12, 53374), (14, 53380), (19, 53461), (20, 53464), (22, 53473), (26, 53506), (28, 53542), (31, 53566),

Gene: Andies_64 Start: 43070, Stop: 43315, Start Num: 10

Candidate Starts for Andies_64:

(Start: 10 @43070 has 45 MA's), (14, 43109),

Gene: ArcusAngelus_99 Start: 54880, Stop: 55146, Start Num: 11

Candidate Starts for ArcusAngelus_99:

(Start: 11 @54880 has 233 MA's), (12, 54907), (14, 54913), (19, 54994), (22, 55006), (26, 55039),

Gene: Ardmore_83 Start: 48518, Stop: 48760, Start Num: 11

Candidate Starts for Ardmore_83:

(Start: 11 @48518 has 233 MA's), (12, 48545), (14, 48551), (19, 48632), (22, 48644), (26, 48677), (28, 48713), (32, 48740),

Gene: Ashwin_27 Start: 12067, Stop: 12303, Start Num: 9

Candidate Starts for Ashwin_27:

(2, 11932), (6, 12043), (Start: 7 @12055 has 4 MA's), (Start: 9 @12067 has 30 MA's), (21, 12202), (22, 12205), (23, 12211), (24, 12214), (27, 12244), (29, 12280), (30, 12286),

Gene: Aubs_99 Start: 55520, Stop: 55762, Start Num: 11

Candidate Starts for Aubs_99:

(Start: 11 @55520 has 233 MA's), (12, 55547), (14, 55553), (19, 55634), (22, 55646), (26, 55679), (28, 55715), (32, 55742),

Gene: Awesomesauce_90 Start: 54003, Stop: 54245, Start Num: 11

Candidate Starts for Awesomesauce_90:

(Start: 11 @54003 has 233 MA's), (12, 54030), (14, 54036), (19, 54117), (22, 54129), (26, 54162),

Gene: BabeRuth_69 Start: 41878, Stop: 42123, Start Num: 10

Candidate Starts for BabeRuth_69:

(Start: 10 @41878 has 45 MA's), (14, 41917), (16, 41974),

Gene: Batiatus_99 Start: 54068, Stop: 54310, Start Num: 11

Candidate Starts for Batiatus_99:

(Start: 11 @54068 has 233 MA's), (12, 54095), (14, 54101), (19, 54182), (22, 54194), (26, 54227), (28, 54263), (32, 54290),

Gene: Beakin_91 Start: 51041, Stop: 51283, Start Num: 11

Candidate Starts for Beakin_91:

(Start: 11 @51041 has 233 MA's), (12, 51068), (14, 51074), (19, 51155), (22, 51167), (26, 51200), (32, 51263),

Gene: Beanstalk_95 Start: 53218, Stop: 53460, Start Num: 11

Candidate Starts for Beanstalk_95:

(Start: 11 @53218 has 233 MA's), (12, 53245), (14, 53251), (19, 53332), (22, 53344), (26, 53377), (28, 53413), (32, 53440),

Gene: BigPhil_96 Start: 50860, Stop: 51102, Start Num: 11

Candidate Starts for BigPhil_96:

(Start: 11 @50860 has 233 MA's), (12, 50887), (14, 50893), (19, 50974), (22, 50986), (26, 51019), (28, 51055), (32, 51082),

Gene: Bipolar_101 Start: 55837, Stop: 56079, Start Num: 11

Candidate Starts for Bipolar_101:

(Start: 11 @55837 has 233 MA's), (12, 55864), (14, 55870), (19, 55951), (22, 55963), (26, 55996), (28, 56032), (32, 56059),

Gene: Blessica_26 Start: 11870, Stop: 12106, Start Num: 9

Candidate Starts for Blessica_26:

(2, 11735), (6, 11846), (Start: 7 @11858 has 4 MA's), (Start: 9 @11870 has 30 MA's), (21, 12005), (22, 12008), (23, 12014), (24, 12017), (27, 12047), (29, 12083), (30, 12089),

Gene: Blexus_96 Start: 54444, Stop: 54689, Start Num: 11

Candidate Starts for Blexus_96:

(Start: 11 @54444 has 233 MA's), (12, 54471), (14, 54477), (19, 54561), (22, 54573), (26, 54606), (28, 54642), (31, 54666),

Gene: BlueCrab_102 Start: 55440, Stop: 55682, Start Num: 11

Candidate Starts for BlueCrab_102:

(Start: 11 @55440 has 233 MA's), (12, 55467), (14, 55473), (19, 55554), (21, 55563), (26, 55599), (32, 55662),

Gene: BobaPhett_101 Start: 56126, Stop: 56368, Start Num: 11

Candidate Starts for BobaPhett_101:

(Start: 11 @56126 has 233 MA's), (12, 56153), (14, 56159), (19, 56240), (22, 56252), (26, 56285), (28, 56321), (32, 56348),

Gene: Bobi_101 Start: 55542, Stop: 55784, Start Num: 11

Candidate Starts for Bobi_101:

(Start: 11 @55542 has 233 MA's), (12, 55569), (14, 55575), (19, 55656), (22, 55668), (26, 55701), (28, 55737), (32, 55764),

Gene: BodEinwohner17_109 Start: 56496, Stop: 56738, Start Num: 11

Candidate Starts for BodEinwohner17_109:

(Start: 11 @56496 has 233 MA's), (12, 56523), (14, 56529), (19, 56610), (21, 56619), (26, 56655), (32, 56718),

Gene: Boomer_101 Start: 54793, Stop: 55035, Start Num: 11

Candidate Starts for Boomer_101:

(Start: 11 @54793 has 233 MA's), (12, 54820), (14, 54826), (19, 54907), (26, 54952), (32, 55015),

Gene: Bora_24 Start: 11520, Stop: 11756, Start Num: 9

Candidate Starts for Bora_24:

(6, 11496), (Start: 7 @11508 has 4 MA's), (Start: 9 @11520 has 30 MA's), (21, 11655), (22, 11658), (23, 11664), (24, 11667), (27, 11697), (29, 11733), (30, 11739),

Gene: Bosection6_65 Start: 42694, Stop: 42939, Start Num: 10

Candidate Starts for Bosection6_65:

(Start: 10 @42694 has 45 MA's), (14, 42733),

Gene: Brocalys_91 Start: 51605, Stop: 51847, Start Num: 11

Candidate Starts for Brocalys_91:

(Start: 11 @51605 has 233 MA's), (12, 51632), (14, 51638), (19, 51719), (22, 51731), (26, 51764), (28, 51800), (32, 51827),

Gene: Brookers_98 Start: 53811, Stop: 54053, Start Num: 11

Candidate Starts for Brookers_98:

(Start: 11 @53811 has 233 MA's), (12, 53838), (14, 53844), (19, 53925), (22, 53937), (26, 53970), (28, 54006), (32, 54033),

Gene: Brushbloom_99 Start: 55112, Stop: 55354, Start Num: 11

Candidate Starts for Brushbloom_99:

(Start: 11 @55112 has 233 MA's), (12, 55139), (14, 55145), (19, 55226), (22, 55238), (26, 55271), (28, 55307), (32, 55334),

Gene: Bubbles123_93 Start: 53880, Stop: 54122, Start Num: 11

Candidate Starts for Bubbles123_93:

(Start: 11 @53880 has 233 MA's), (12, 53907), (14, 53913), (19, 53994), (22, 54006), (26, 54039), (28, 54075), (32, 54102),

Gene: Burwell21_93 Start: 53891, Stop: 54133, Start Num: 11

Candidate Starts for Burwell21_93:

(Start: 11 @53891 has 233 MA's), (12, 53918), (14, 53924), (19, 54005), (22, 54017), (26, 54050), (28, 54086), (32, 54113),

Gene: Butters_65 Start: 40786, Stop: 41031, Start Num: 10

Candidate Starts for Butters_65:

(1, 40279), (Start: 10 @40786 has 45 MA's), (14, 40825), (19, 40915),

Gene: BuzzLyseyear_106 Start: 56651, Stop: 56893, Start Num: 11

Candidate Starts for BuzzLyseyear_106:

(Start: 11 @56651 has 233 MA's), (12, 56678), (14, 56684), (19, 56765), (21, 56774), (26, 56810), (32, 56873),

Gene: ByChance_90 Start: 49963, Stop: 50205, Start Num: 11

Candidate Starts for ByChance_90:

(Start: 11 @49963 has 233 MA's), (12, 49990), (14, 49996), (19, 50077), (26, 50122), (32, 50185),

Gene: Byougenkin_96 Start: 50927, Stop: 51169, Start Num: 11

Candidate Starts for Byougenkin_96:

(Start: 11 @50927 has 233 MA's), (12, 50954), (14, 50960), (19, 51041), (20, 51044), (22, 51053), (26, 51086), (28, 51122), (31, 51146),

Gene: Cabrinians_96 Start: 53526, Stop: 53768, Start Num: 11

Candidate Starts for Cabrinians_96:

(Start: 11 @53526 has 233 MA's), (12, 53553), (14, 53559), (19, 53640), (22, 53652), (26, 53685), (28, 53721), (32, 53748),

Gene: CaptainTrips_101 Start: 53706, Stop: 53948, Start Num: 11

Candidate Starts for CaptainTrips_101:

(Start: 11 @53706 has 233 MA's), (12, 53733), (14, 53739), (19, 53820), (22, 53832), (26, 53865), (28, 53901), (32, 53928),

Gene: Carcharodon_70 Start: 42971, Stop: 43216, Start Num: 10

Candidate Starts for Carcharodon_70:

(Start: 10 @42971 has 45 MA's), (14, 43010),

Gene: Catdawg_25 Start: 11476, Stop: 11712, Start Num: 9

Candidate Starts for Catdawg_25:

(2, 11341), (6, 11452), (Start: 7 @11464 has 4 MA's), (Start: 9 @11476 has 30 MA's), (21, 11611), (22, 11614), (23, 11620), (24, 11623), (27, 11653), (29, 11689), (30, 11695),

Gene: Cerasum_98 Start: 50878, Stop: 51120, Start Num: 11

Candidate Starts for Cerasum_98:

(Start: 11 @50878 has 233 MA's), (12, 50905), (14, 50911), (19, 50992), (22, 51004), (26, 51037), (28, 51073), (32, 51100),

Gene: Charlie_67 Start: 42318, Stop: 42563, Start Num: 10

Candidate Starts for Charlie_67:

(Start: 10 @42318 has 45 MA's), (14, 42357),

Gene: Che8_106 Start: 55705, Stop: 55971, Start Num: 11

Candidate Starts for Che8_106:

(Start: 11 @55705 has 233 MA's), (12, 55732), (14, 55738), (19, 55819), (26, 55864),

Gene: Cheesepuff_104 Start: 53887, Stop: 54129, Start Num: 11

Candidate Starts for Cheesepuff_104:

(Start: 11 @53887 has 233 MA's), (12, 53914), (14, 53920), (19, 54001), (26, 54046), (32, 54109),

Gene: Chevrolet_103 Start: 54881, Stop: 55147, Start Num: 11

Candidate Starts for Chevrolet_103:

(Start: 11 @54881 has 233 MA's), (12, 54908), (14, 54914), (19, 54995), (22, 55007), (26, 55040),

Gene: Chewbacca_73 Start: 42866, Stop: 43111, Start Num: 10

Candidate Starts for Chewbacca_73:

(Start: 10 @42866 has 45 MA's), (14, 42905),

Gene: ChickenDinner_90 Start: 53767, Stop: 54009, Start Num: 11

Candidate Starts for ChickenDinner_90:

(Start: 11 @53767 has 233 MA's), (12, 53794), (14, 53800), (19, 53881), (22, 53893), (26, 53926),

Gene: Chuckly_96 Start: 50748, Stop: 50990, Start Num: 11

Candidate Starts for Chuckly_96:

(Start: 11 @50748 has 233 MA's), (12, 50775), (14, 50781), (19, 50862), (22, 50874), (26, 50907), (28, 50943), (32, 50970),

Gene: Clifton_91 Start: 52580, Stop: 52822, Start Num: 11

Candidate Starts for Clifton_91:

(Start: 11 @52580 has 233 MA's), (12, 52607), (14, 52613), (19, 52694), (22, 52706), (26, 52739), (28, 52775), (32, 52802),

Gene: Coco12_100 Start: 54935, Stop: 55177, Start Num: 11

Candidate Starts for Coco12_100:

(Start: 11 @54935 has 233 MA's), (12, 54962), (14, 54968), (19, 55049), (22, 55061), (26, 55094), (28, 55130), (32, 55157),

Gene: Corium_98 Start: 55735, Stop: 55977, Start Num: 11

Candidate Starts for Corium_98:

(Start: 11 @55735 has 233 MA's), (12, 55762), (14, 55768), (19, 55849), (22, 55861), (26, 55894), (28, 55930), (32, 55957),

Gene: Corndog_28 Start: 12146, Stop: 12382, Start Num: 9

Candidate Starts for Corndog_28:

(2, 12011), (6, 12122), (Start: 7 @12134 has 4 MA's), (Start: 9 @12146 has 30 MA's), (21, 12281), (22, 12284), (23, 12290), (24, 12293), (27, 12323), (29, 12359), (30, 12365),

Gene: Cornie_97 Start: 53611, Stop: 53871, Start Num: 8

Candidate Starts for Cornie_97:

(4, 53566), (Start: 8 @53611 has 1 MA's), (12, 53644), (13, 53647), (14, 53650), (18, 53722), (19, 53743), (22, 53755), (23, 53761), (24, 53764), (26, 53788), (28, 53824), (32, 53851),

Gene: Cornucopia_99 Start: 52006, Stop: 52248, Start Num: 11

Candidate Starts for Cornucopia_99:

(Start: 11 @52006 has 233 MA's), (12, 52033), (14, 52039), (19, 52120), (22, 52132), (26, 52165), (28, 52201), (32, 52228),

Gene: Crumble_94 Start: 50274, Stop: 50516, Start Num: 11

Candidate Starts for Crumble_94:

(Start: 11 @50274 has 233 MA's), (12, 50301), (14, 50307), (19, 50388), (22, 50400), (26, 50433), (32, 50496),

Gene: Cubone_76 Start: 43593, Stop: 43838, Start Num: 10

Candidate Starts for Cubone_76:

(Start: 10 @43593 has 45 MA's), (14, 43632),

Gene: DLane_99 Start: 54988, Stop: 55230, Start Num: 11

Candidate Starts for DLane_99:

(Start: 11 @54988 has 233 MA's), (12, 55015), (14, 55021), (19, 55102), (22, 55114), (26, 55147), (28, 55183), (32, 55210),

Gene: DRBy19_99 Start: 55207, Stop: 55449, Start Num: 11

Candidate Starts for DRBy19_99:

(Start: 11 @55207 has 233 MA's), (12, 55234), (14, 55240), (19, 55321), (26, 55366), (32, 55429),

Gene: DaWorst_99 Start: 53822, Stop: 54064, Start Num: 11

Candidate Starts for DaWorst_99:

(Start: 11 @53822 has 233 MA's), (12, 53849), (14, 53855), (19, 53936), (26, 53981), (32, 54044),

Gene: DaddyRickover_101 Start: 54690, Stop: 54932, Start Num: 11

Candidate Starts for DaddyRickover_101:

(Start: 11 @54690 has 233 MA's), (12, 54717), (14, 54723), (19, 54804), (21, 54813), (26, 54849), (32, 54912),

Gene: Daenerys_97 Start: 54857, Stop: 55099, Start Num: 11

Candidate Starts for Daenerys_97:

(Start: 11 @54857 has 233 MA's), (12, 54884), (14, 54890), (19, 54971), (21, 54980), (26, 55016), (32, 55079),

Gene: Dante_97 Start: 55338, Stop: 55580, Start Num: 11

Candidate Starts for Dante_97:

(Start: 11 @55338 has 233 MA's), (12, 55365), (14, 55371), (19, 55452), (22, 55464), (26, 55497), (28, 55533), (32, 55560),

Gene: DeadP_99 Start: 52566, Stop: 52808, Start Num: 11

Candidate Starts for DeadP_99:

(Start: 11 @52566 has 233 MA's), (12, 52593), (14, 52599), (19, 52680), (22, 52692), (26, 52725), (28, 52761), (32, 52788),

Gene: Deb65_92 Start: 52581, Stop: 52823, Start Num: 11

Candidate Starts for Deb65_92:

(Start: 11 @52581 has 233 MA's), (12, 52608), (14, 52614), (19, 52695), (21, 52704), (26, 52740), (32, 52803),

Gene: DillTech15_105 Start: 54163, Stop: 54405, Start Num: 11

Candidate Starts for DillTech15_105:

(Start: 11 @54163 has 233 MA's), (12, 54190), (14, 54196), (19, 54277), (26, 54322), (32, 54385),

Gene: DirtMcgirt_100 Start: 51403, Stop: 51645, Start Num: 11

Candidate Starts for DirtMcgirt_100:

(Start: 11 @51403 has 233 MA's), (12, 51430), (14, 51436), (19, 51517), (21, 51526), (26, 51562), (32, 51625),

Gene: DoRead_101 Start: 52479, Stop: 52721, Start Num: 11

Candidate Starts for DoRead_101:

(Start: 11 @52479 has 233 MA's), (12, 52506), (14, 52512), (19, 52593), (26, 52638), (31, 52698),

Gene: DocMcStuffins_87 Start: 55397, Stop: 55639, Start Num: 11

Candidate Starts for DocMcStuffins_87:

(Start: 11 @55397 has 233 MA's), (12, 55424), (14, 55430), (19, 55511), (22, 55523), (26, 55556),

Gene: Donkeykong_105 Start: 56323, Stop: 56565, Start Num: 11

Candidate Starts for Donkeykong_105:

(Start: 11 @56323 has 233 MA's), (12, 56350), (14, 56356), (19, 56437), (26, 56482), (32, 56545),

Gene: Doomphist_104 Start: 55510, Stop: 55752, Start Num: 11

Candidate Starts for Doomphist_104:

(Start: 11 @55510 has 233 MA's), (12, 55537), (14, 55543), (19, 55624), (21, 55633), (26, 55669), (32, 55732),

Gene: Doomslug_117 Start: 57037, Stop: 57279, Start Num: 11

Candidate Starts for Doomslug_117:

(Start: 11 @57037 has 233 MA's), (12, 57064), (14, 57070), (19, 57151), (22, 57163), (26, 57196), (28, 57232), (32, 57259),

Gene: Dorothy_100 Start: 55679, Stop: 55921, Start Num: 11

Candidate Starts for Dorothy_100:

(Start: 11 @55679 has 233 MA's), (12, 55706), (14, 55712), (19, 55793), (21, 55802), (26, 55838), (32, 55901),

Gene: DosHalletts_96 Start: 54328, Stop: 54570, Start Num: 11

Candidate Starts for DosHalletts_96:

(Start: 11 @54328 has 233 MA's), (12, 54355), (14, 54361), (19, 54442), (22, 54454), (26, 54487), (28, 54523), (32, 54550),

Gene: DotProduct_93 Start: 51695, Stop: 51937, Start Num: 11

Candidate Starts for DotProduct_93:

(Start: 11 @51695 has 233 MA's), (12, 51722), (14, 51728), (19, 51809), (22, 51821), (26, 51854), (28, 51890), (32, 51917),

Gene: Doug_96 Start: 55242, Stop: 55484, Start Num: 11
Candidate Starts for Doug_96:
(Start: 11 @55242 has 233 MA's), (12, 55269), (14, 55275), (19, 55356), (21, 55365), (26, 55401), (32, 55464),

Gene: Drago_98 Start: 51406, Stop: 51648, Start Num: 11
Candidate Starts for Drago_98:
(Start: 11 @51406 has 233 MA's), (12, 51433), (14, 51439), (19, 51520), (26, 51565), (32, 51628),

Gene: Duplicity_69 Start: 42228, Stop: 42473, Start Num: 10
Candidate Starts for Duplicity_69:
(Start: 10 @42228 has 45 MA's), (14, 42267),

Gene: Dylan_25 Start: 11872, Stop: 12108, Start Num: 9
Candidate Starts for Dylan_25:
(2, 11737), (6, 11848), (Start: 7 @11860 has 4 MA's), (Start: 9 @11872 has 30 MA's), (21, 12007), (22, 12010), (23, 12016), (24, 12019), (27, 12049), (29, 12085), (30, 12091),

Gene: EGUunicorn_65 Start: 41294, Stop: 41539, Start Num: 10
Candidate Starts for EGUunicorn_65:
(Start: 10 @41294 has 45 MA's), (14, 41333),

Gene: Eish_104 Start: 55004, Stop: 55246, Start Num: 11
Candidate Starts for Eish_104:
(Start: 11 @55004 has 233 MA's), (12, 55031), (14, 55037), (19, 55118), (22, 55130), (26, 55163), (28, 55199), (32, 55226),

Gene: EleanorGeorge_103 Start: 56271, Stop: 56537, Start Num: 11
Candidate Starts for EleanorGeorge_103:
(Start: 11 @56271 has 233 MA's), (12, 56298), (14, 56304), (19, 56385), (22, 56397), (26, 56430),

Gene: EmiMonkey_88 Start: 55438, Stop: 55680, Start Num: 11
Candidate Starts for EmiMonkey_88:
(Start: 11 @55438 has 233 MA's), (12, 55465), (14, 55471), (19, 55552), (20, 55555), (22, 55564), (26, 55597), (28, 55633), (31, 55657),

Gene: Emma_104 Start: 53272, Stop: 53514, Start Num: 11
Candidate Starts for Emma_104:
(Start: 11 @53272 has 233 MA's), (12, 53299), (14, 53305), (19, 53386), (22, 53398), (26, 53431), (28, 53467), (32, 53494),

Gene: Emmaloid_102 Start: 54192, Stop: 54434, Start Num: 11
Candidate Starts for Emmaloid_102:
(Start: 11 @54192 has 233 MA's), (12, 54219), (14, 54225), (19, 54306), (22, 54318), (26, 54351), (28, 54387),

Gene: Empress_99 Start: 53773, Stop: 54015, Start Num: 11
Candidate Starts for Empress_99:
(Start: 11 @53773 has 233 MA's), (12, 53800), (14, 53806), (19, 53887), (21, 53896), (26, 53932), (32, 53995),

Gene: Enby_103 Start: 51682, Stop: 51924, Start Num: 11

Candidate Starts for Enby_103:

(Start: 11 @51682 has 233 MA's), (12, 51709), (14, 51715), (19, 51796), (26, 51841), (32, 51904),

Gene: Enzomatic_112 Start: 53598, Stop: 53840, Start Num: 11

Candidate Starts for Enzomatic_112:

(Start: 11 @53598 has 233 MA's), (12, 53625), (14, 53631), (19, 53712), (20, 53715), (22, 53724), (26, 53757), (28, 53793), (31, 53817),

Gene: Eradicator_91 Start: 52543, Stop: 52785, Start Num: 11

Candidate Starts for Eradicator_91:

(Start: 11 @52543 has 233 MA's), (12, 52570), (14, 52576), (19, 52657), (21, 52666), (26, 52702), (32, 52765),

Gene: Estave1_107 Start: 57566, Stop: 57808, Start Num: 11

Candidate Starts for Estave1_107:

(Start: 11 @57566 has 233 MA's), (12, 57593), (14, 57599), (19, 57680), (26, 57725), (32, 57788),

Gene: Familton_26 Start: 11477, Stop: 11713, Start Num: 9

Candidate Starts for Familton_26:

(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Fancypants_106 Start: 57072, Stop: 57314, Start Num: 11

Candidate Starts for Fancypants_106:

(Start: 11 @57072 has 233 MA's), (12, 57099), (14, 57105), (19, 57186), (26, 57231), (32, 57294),

Gene: Filuzino_99 Start: 55683, Stop: 55925, Start Num: 11

Candidate Starts for Filuzino_99:

(Start: 11 @55683 has 233 MA's), (12, 55710), (14, 55716), (19, 55797), (22, 55809), (26, 55842), (28, 55878), (32, 55905),

Gene: Firecracker_26 Start: 11770, Stop: 12006, Start Num: 9

Candidate Starts for Firecracker_26:

(2, 11635), (6, 11746), (Start: 7 @11758 has 4 MA's), (Start: 9 @11770 has 30 MA's), (21, 11905), (22, 11908), (23, 11914), (24, 11917), (27, 11947), (29, 11983), (30, 11989),

Gene: Firehouse51_93 Start: 54500, Stop: 54742, Start Num: 11

Candidate Starts for Firehouse51_93:

(Start: 11 @54500 has 233 MA's), (12, 54527), (14, 54533), (19, 54614), (20, 54617), (22, 54626), (26, 54659), (28, 54695), (31, 54719),

Gene: Flathead_101 Start: 54004, Stop: 54246, Start Num: 11

Candidate Starts for Flathead_101:

(Start: 11 @54004 has 233 MA's), (12, 54031), (14, 54037), (19, 54118), (22, 54130), (26, 54163), (28, 54199), (32, 54226),

Gene: Florinda_111 Start: 56089, Stop: 56331, Start Num: 11

Candidate Starts for Florinda_111:

(Start: 11 @56089 has 233 MA's), (12, 56116), (14, 56122), (19, 56203), (22, 56215), (26, 56248), (31, 56308), (32, 56311),

Gene: FoulBall_25 Start: 11477, Stop: 11713, Start Num: 9

Candidate Starts for FoulBall_25:

(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Frankie_99 Start: 53912, Stop: 54154, Start Num: 11

Candidate Starts for Frankie_99:

(Start: 11 @53912 has 233 MA's), (12, 53939), (14, 53945), (19, 54026), (22, 54038), (26, 54071), (28, 54107), (32, 54134),

Gene: FreddyB_109 Start: 55172, Stop: 55414, Start Num: 11

Candidate Starts for FreddyB_109:

(Start: 11 @55172 has 233 MA's), (12, 55199), (14, 55205), (19, 55286), (22, 55298), (26, 55331), (28, 55367), (32, 55394),

Gene: Fruitloop_97 Start: 54848, Stop: 55090, Start Num: 11

Candidate Starts for Fruitloop_97:

(Start: 11 @54848 has 233 MA's), (12, 54875), (14, 54881), (19, 54962), (22, 54974), (26, 55007), (28, 55043), (32, 55070),

Gene: Fulbright_69 Start: 41687, Stop: 41932, Start Num: 10

Candidate Starts for Fulbright_69:

(Start: 10 @41687 has 45 MA's), (14, 41726),

Gene: GUmbie_98 Start: 53709, Stop: 53951, Start Num: 11

Candidate Starts for GUmbie_98:

(Start: 11 @53709 has 233 MA's), (12, 53736), (14, 53742), (19, 53823), (26, 53868), (32, 53931),

Gene: Galactic_103 Start: 54132, Stop: 54398, Start Num: 11

Candidate Starts for Galactic_103:

(Start: 11 @54132 has 233 MA's), (12, 54159), (14, 54165), (19, 54246), (22, 54258), (26, 54291),

Gene: Gandalph_99 Start: 51815, Stop: 52057, Start Num: 11

Candidate Starts for Gandalph_99:

(Start: 11 @51815 has 233 MA's), (12, 51842), (14, 51848), (19, 51929), (21, 51938), (26, 51974), (32, 52037),

Gene: Geralt_92 Start: 52579, Stop: 52821, Start Num: 11

Candidate Starts for Geralt_92:

(Start: 11 @52579 has 233 MA's), (12, 52606), (14, 52612), (19, 52693), (21, 52702), (26, 52738), (32, 52801),

Gene: GigiOuiOui_94 Start: 52712, Stop: 52954, Start Num: 11

Candidate Starts for GigiOuiOui_94:

(Start: 11 @52712 has 233 MA's), (12, 52739), (14, 52745), (19, 52826), (26, 52871), (32, 52934),

Gene: Girafales_108 Start: 55694, Stop: 55936, Start Num: 11

Candidate Starts for Girafales_108:

(Start: 11 @55694 has 233 MA's), (12, 55721), (14, 55727), (19, 55808), (22, 55820), (26, 55853), (31, 55913), (32, 55916),

Gene: Girr_98 Start: 54578, Stop: 54820, Start Num: 11

Candidate Starts for Girr_98:

(Start: 11 @54578 has 233 MA's), (12, 54605), (14, 54611), (19, 54692), (21, 54701), (26, 54737), (28, 54773), (32, 54800),

Gene: Gorge_98 Start: 54799, Stop: 55041, Start Num: 11
Candidate Starts for Gorge_98:
(Start: 11 @54799 has 233 MA's), (12, 54826), (14, 54832), (19, 54913), (26, 54958), (32, 55021),

Gene: Grimmer_107 Start: 54156, Stop: 54398, Start Num: 11
Candidate Starts for Grimmer_107:
(Start: 11 @54156 has 233 MA's), (12, 54183), (14, 54189), (19, 54270), (26, 54315), (32, 54378),

Gene: Guppsters_94 Start: 51689, Stop: 51931, Start Num: 11
Candidate Starts for Guppsters_94:
(Start: 11 @51689 has 233 MA's), (12, 51716), (14, 51722), (19, 51803), (22, 51815), (26, 51848), (28, 51884), (32, 51911),

Gene: Hades_96 Start: 51298, Stop: 51564, Start Num: 11
Candidate Starts for Hades_96:
(Start: 11 @51298 has 233 MA's), (12, 51325), (14, 51331), (19, 51412), (22, 51424), (26, 51457),

Gene: Hamulus_99 Start: 53533, Stop: 53775, Start Num: 11
Candidate Starts for Hamulus_99:
(Start: 11 @53533 has 233 MA's), (12, 53560), (14, 53566), (19, 53647), (22, 53659), (26, 53692), (28, 53728), (32, 53755),

Gene: Hanako_68 Start: 41878, Stop: 42123, Start Num: 10
Candidate Starts for Hanako_68:
(Start: 10 @41878 has 45 MA's), (14, 41917), (16, 41974),

Gene: Harley_101 Start: 54705, Stop: 54947, Start Num: 11
Candidate Starts for Harley_101:
(Start: 11 @54705 has 233 MA's), (12, 54732), (14, 54738), (19, 54819), (20, 54822), (22, 54831), (26, 54864), (28, 54900), (31, 54924),

Gene: Hegedechwinu_107 Start: 54069, Stop: 54311, Start Num: 11
Candidate Starts for Hegedechwinu_107:
(Start: 11 @54069 has 233 MA's), (12, 54096), (14, 54102), (19, 54183), (22, 54195), (26, 54228), (28, 54264), (32, 54291),

Gene: Hlubikazi_97 Start: 52312, Stop: 52554, Start Num: 11
Candidate Starts for Hlubikazi_97:
(Start: 11 @52312 has 233 MA's), (12, 52339), (14, 52345), (19, 52426), (22, 52438), (26, 52471), (28, 52507), (32, 52534),

Gene: IMpilo_97 Start: 52311, Stop: 52553, Start Num: 11
Candidate Starts for IMpilo_97:
(Start: 11 @52311 has 233 MA's), (12, 52338), (14, 52344), (19, 52425), (22, 52437), (26, 52470), (28, 52506), (32, 52533),

Gene: IbOuu_90 Start: 51675, Stop: 51917, Start Num: 11
Candidate Starts for IbOuu_90:
(Start: 11 @51675 has 233 MA's), (12, 51702), (14, 51708), (19, 51789), (22, 51801), (26, 51834), (28, 51870), (32, 51897),

Gene: lbhubesi_96 Start: 51574, Stop: 51816, Start Num: 11

Candidate Starts for Ibhubesi_96:

(Start: 11 @51574 has 233 MA's), (12, 51601), (14, 51607), (19, 51688), (20, 51691), (22, 51700), (26, 51733), (28, 51769), (31, 51793),

Gene: Idergollasper_25 Start: 11477, Stop: 11713, Start Num: 9

Candidate Starts for Idergollasper_25:

(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Imara_24 Start: 11730, Stop: 11966, Start Num: 9

Candidate Starts for Imara_24:

(2, 11595), (6, 11706), (Start: 7 @11718 has 4 MA's), (Start: 9 @11730 has 30 MA's), (21, 11865), (22, 11868), (23, 11874), (24, 11877), (27, 11907), (29, 11943), (30, 11949),

Gene: Impisi_69 Start: 41334, Stop: 41579, Start Num: 10

Candidate Starts for Impisi_69:

(Start: 10 @41334 has 45 MA's), (14, 41373),

Gene: Inventum_97 Start: 53867, Stop: 54109, Start Num: 11

Candidate Starts for Inventum_97:

(Start: 11 @53867 has 233 MA's), (12, 53894), (14, 53900), (19, 53981), (21, 53990), (26, 54026), (32, 54089),

Gene: IrishSherpFalk_99 Start: 54202, Stop: 54444, Start Num: 11

Candidate Starts for IrishSherpFalk_99:

(Start: 11 @54202 has 233 MA's), (14, 54235), (19, 54316), (21, 54325), (26, 54361), (31, 54421),

Gene: JalFarm20_108 Start: 56010, Stop: 56252, Start Num: 11

Candidate Starts for JalFarm20_108:

(Start: 11 @56010 has 233 MA's), (12, 56037), (14, 56043), (19, 56124), (22, 56136), (26, 56169), (32, 56232),

Gene: James_103 Start: 56181, Stop: 56423, Start Num: 11

Candidate Starts for James_103:

(Start: 11 @56181 has 233 MA's), (12, 56208), (14, 56214), (19, 56295), (22, 56307), (26, 56340), (28, 56376), (32, 56403),

Gene: Jamie19_64 Start: 40560, Stop: 40805, Start Num: 10

Candidate Starts for Jamie19_64:

(Start: 10 @40560 has 45 MA's), (14, 40599),

Gene: JangDynasty_25 Start: 11566, Stop: 11802, Start Num: 9

Candidate Starts for JangDynasty_25:

(2, 11431), (6, 11542), (Start: 7 @11554 has 4 MA's), (Start: 9 @11566 has 30 MA's), (21, 11701), (22, 11704), (23, 11710), (24, 11713), (27, 11743), (29, 11779), (30, 11785),

Gene: Jant_106 Start: 53496, Stop: 53738, Start Num: 11

Candidate Starts for Jant_106:

(Start: 11 @53496 has 233 MA's), (12, 53523), (14, 53529), (19, 53610), (22, 53622), (26, 53655), (28, 53691), (32, 53718),

Gene: Jacob_102 Start: 55780, Stop: 56022, Start Num: 11

Candidate Starts for Jacob_102:

(Start: 11 @55780 has 233 MA's), (12, 55807), (14, 55813), (19, 55894), (26, 55939), (32, 56002),

Gene: Jennelsea_96 Start: 53081, Stop: 53323, Start Num: 11

Candidate Starts for Jennelsea_96:

(Start: 11 @53081 has 233 MA's), (12, 53108), (14, 53114), (19, 53195), (22, 53207), (26, 53240), (28, 53276), (32, 53303),

Gene: Jinglebell_106 Start: 55457, Stop: 55699, Start Num: 11

Candidate Starts for Jinglebell_106:

(Start: 11 @55457 has 233 MA's), (12, 55484), (14, 55490), (19, 55571), (22, 55583), (26, 55616), (28, 55652), (32, 55679),

Gene: Job42_100 Start: 56355, Stop: 56597, Start Num: 11

Candidate Starts for Job42_100:

(Start: 11 @56355 has 233 MA's), (12, 56382), (14, 56388), (19, 56469), (21, 56478), (26, 56514), (31, 56574), (32, 56577),

Gene: JoeyJr_102 Start: 55775, Stop: 56017, Start Num: 11

Candidate Starts for JoeyJr_102:

(Start: 11 @55775 has 233 MA's), (12, 55802), (14, 55808), (19, 55889), (21, 55898), (26, 55934), (32, 55997),

Gene: Journey_63 Start: 41277, Stop: 41522, Start Num: 10

Candidate Starts for Journey_63:

(Start: 10 @41277 has 45 MA's), (14, 41316),

Gene: Juice456_98 Start: 53485, Stop: 53727, Start Num: 11

Candidate Starts for Juice456_98:

(Start: 11 @53485 has 233 MA's), (12, 53512), (14, 53518), (19, 53599), (26, 53644), (32, 53707),

Gene: Juniper1_91 Start: 52472, Stop: 52714, Start Num: 11

Candidate Starts for Juniper1_91:

(Start: 11 @52472 has 233 MA's), (12, 52499), (14, 52505), (19, 52586), (26, 52631), (28, 52667), (31, 52691),

Gene: Karhdo_94 Start: 51944, Stop: 52186, Start Num: 11

Candidate Starts for Karhdo_94:

(Start: 11 @51944 has 233 MA's), (12, 51971), (14, 51977), (19, 52058), (22, 52070), (26, 52103), (28, 52139), (32, 52166),

Gene: Kenuha5_91 Start: 53357, Stop: 53599, Start Num: 11

Candidate Starts for Kenuha5_91:

(Start: 11 @53357 has 233 MA's), (12, 53384), (14, 53390), (19, 53471), (22, 53483), (26, 53516), (28, 53552), (32, 53579),

Gene: Kersh_102 Start: 56526, Stop: 56768, Start Num: 11

Candidate Starts for Kersh_102:

(Start: 11 @56526 has 233 MA's), (12, 56553), (14, 56559), (19, 56640), (20, 56643), (22, 56652), (26, 56685), (28, 56721), (31, 56745),

Gene: Kevin1_68 Start: 41283, Stop: 41528, Start Num: 10

Candidate Starts for Kevin1_68:

(Start: 10 @41283 has 45 MA's), (14, 41322), (19, 41412),

Gene: Kimberlium_101 Start: 53585, Stop: 53827, Start Num: 11
Candidate Starts for Kimberlium_101:
(Start: 11 @53585 has 233 MA's), (12, 53612), (14, 53618), (19, 53699), (26, 53744), (32, 53807),

Gene: KingJulian_107 Start: 56599, Stop: 56841, Start Num: 11
Candidate Starts for KingJulian_107:
(Start: 11 @56599 has 233 MA's), (12, 56626), (14, 56632), (19, 56713), (22, 56725), (26, 56758), (28, 56794), (32, 56821),

Gene: KingMidas_99 Start: 54004, Stop: 54246, Start Num: 11
Candidate Starts for KingMidas_99:
(Start: 11 @54004 has 233 MA's), (12, 54031), (14, 54037), (19, 54118), (21, 54127), (26, 54163), (32, 54226),

Gene: KingPhillip3_23 Start: 11477, Stop: 11713, Start Num: 9
Candidate Starts for KingPhillip3_23:
(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Kingsley_108 Start: 57542, Stop: 57784, Start Num: 11
Candidate Starts for Kingsley_108:
(Start: 11 @57542 has 233 MA's), (12, 57569), (14, 57575), (19, 57656), (22, 57668), (26, 57701), (28, 57737), (32, 57764),

Gene: Koella_92 Start: 50943, Stop: 51185, Start Num: 11
Candidate Starts for Koella_92:
(Start: 11 @50943 has 233 MA's), (12, 50970), (14, 50976), (19, 51057), (22, 51069), (26, 51102), (28, 51138), (32, 51165),

Gene: Krakatau_92 Start: 49902, Stop: 50144, Start Num: 11
Candidate Starts for Krakatau_92:
(Start: 11 @49902 has 233 MA's), (12, 49929), (14, 49935), (19, 50016), (26, 50061), (32, 50124),

Gene: Krili_26 Start: 11836, Stop: 12072, Start Num: 9
Candidate Starts for Krili_26:
(2, 11701), (6, 11812), (Start: 7 @11824 has 4 MA's), (Start: 9 @11836 has 30 MA's), (21, 11971), (22, 11974), (23, 11980), (24, 11983), (27, 12013), (29, 12049), (30, 12055),

Gene: KristaRAM_107 Start: 55265, Stop: 55507, Start Num: 11
Candidate Starts for KristaRAM_107:
(Start: 11 @55265 has 233 MA's), (12, 55292), (14, 55298), (19, 55379), (22, 55391), (26, 55424), (28, 55460), (32, 55487),

Gene: LastJedi_90 Start: 52000, Stop: 52242, Start Num: 11
Candidate Starts for LastJedi_90:
(Start: 11 @52000 has 233 MA's), (12, 52027), (14, 52033), (19, 52114), (22, 52126), (26, 52159), (28, 52195), (32, 52222),

Gene: Latretium_102 Start: 55046, Stop: 55288, Start Num: 11
Candidate Starts for Latretium_102:
(Start: 11 @55046 has 233 MA's), (14, 55079), (19, 55160), (21, 55169), (26, 55205), (32, 55268),

Gene: Leozinho_96 Start: 51523, Stop: 51765, Start Num: 11
Candidate Starts for Leozinho_96:
(Start: 11 @51523 has 233 MA's), (12, 51550), (14, 51556), (19, 51637), (26, 51682), (32, 51745),

Gene: Leperchaun_101 Start: 55009, Stop: 55251, Start Num: 11
Candidate Starts for Leperchaun_101:
(Start: 11 @55009 has 233 MA's), (12, 55036), (14, 55042), (19, 55123), (21, 55132), (26, 55168), (32, 55231),

Gene: LilMoolah_102 Start: 54980, Stop: 55222, Start Num: 11
Candidate Starts for LilMoolah_102:
(Start: 11 @54980 has 233 MA's), (12, 55007), (14, 55013), (19, 55094), (26, 55139), (32, 55202),

Gene: LittleShirley_107 Start: 55377, Stop: 55619, Start Num: 11
Candidate Starts for LittleShirley_107:
(Start: 11 @55377 has 233 MA's), (12, 55404), (14, 55410), (19, 55491), (22, 55503), (26, 55536), (28, 55572), (32, 55599),

Gene: Lizziana_100 Start: 55248, Stop: 55490, Start Num: 11
Candidate Starts for Lizziana_100:
(Start: 11 @55248 has 233 MA's), (12, 55275), (14, 55281), (19, 55362), (22, 55374), (26, 55407), (28, 55443), (32, 55470),

Gene: Llama_106 Start: 55100, Stop: 55342, Start Num: 11
Candidate Starts for Llama_106:
(Start: 11 @55100 has 233 MA's), (12, 55127), (14, 55133), (19, 55214), (20, 55217), (22, 55226), (26, 55259), (28, 55295), (31, 55319),

Gene: Llij_94 Start: 52931, Stop: 53173, Start Num: 11
Candidate Starts for Llij_94:
(Start: 11 @52931 has 233 MA's), (12, 52958), (14, 52964), (19, 53045), (26, 53090), (32, 53153),

Gene: LordVader_95 Start: 50847, Stop: 51089, Start Num: 11
Candidate Starts for LordVader_95:
(Start: 11 @50847 has 233 MA's), (12, 50874), (14, 50880), (19, 50961), (22, 50973), (26, 51006),

Gene: Lorde_102 Start: 50847, Stop: 51089, Start Num: 11
Candidate Starts for Lorde_102:
(Start: 11 @50847 has 233 MA's), (12, 50874), (14, 50880), (19, 50961), (26, 51006), (32, 51069),

Gene: Lucia_99 Start: 51695, Stop: 51937, Start Num: 11
Candidate Starts for Lucia_99:
(Start: 11 @51695 has 233 MA's), (12, 51722), (14, 51728), (19, 51809), (26, 51854), (32, 51917),

Gene: LunaBlu_106 Start: 55618, Stop: 55860, Start Num: 11
Candidate Starts for LunaBlu_106:
(Start: 11 @55618 has 233 MA's), (12, 55645), (14, 55651), (19, 55732), (20, 55735), (22, 55744), (26, 55777), (28, 55813), (31, 55837),

Gene: LunaStella_97 Start: 52426, Stop: 52686, Start Num: 7
Candidate Starts for LunaStella_97:
(3, 52384), (Start: 7 @52426 has 4 MA's), (13, 52462), (14, 52465), (17, 52528), (19, 52558), (22, 52570), (24, 52579), (25, 52588), (26, 52603),

Gene: MadKillah_27 Start: 11869, Stop: 12105, Start Num: 9

Candidate Starts for MadKillah_27:

(2, 11734), (6, 11845), (Start: 7 @11857 has 4 MA's), (Start: 9 @11869 has 30 MA's), (21, 12004), (22, 12007), (23, 12013), (24, 12016), (27, 12046), (29, 12082), (30, 12088),

Gene: MadMen_104 Start: 54546, Stop: 54812, Start Num: 11

Candidate Starts for MadMen_104:

(Start: 11 @54546 has 233 MA's), (12, 54573), (14, 54579), (19, 54660), (22, 54672), (26, 54705),

Gene: Madiba_98 Start: 53288, Stop: 53530, Start Num: 11

Candidate Starts for Madiba_98:

(Start: 11 @53288 has 233 MA's), (12, 53315), (14, 53321), (19, 53402), (26, 53447), (32, 53510),

Gene: Magsby_70 Start: 42933, Stop: 43178, Start Num: 10

Candidate Starts for Magsby_70:

(Start: 10 @42933 has 45 MA's), (14, 42972),

Gene: Mahavrat_93 Start: 51501, Stop: 51743, Start Num: 11

Candidate Starts for Mahavrat_93:

(Start: 11 @51501 has 233 MA's), (12, 51528), (14, 51534), (19, 51615), (26, 51660), (28, 51696), (31, 51720),

Gene: Mandlovu_97 Start: 52254, Stop: 52496, Start Num: 11

Candidate Starts for Mandlovu_97:

(Start: 11 @52254 has 233 MA's), (12, 52281), (14, 52287), (19, 52368), (22, 52380), (26, 52413), (28, 52449), (32, 52476),

Gene: Mantra_97 Start: 53608, Stop: 53850, Start Num: 11

Candidate Starts for Mantra_97:

(Start: 11 @53608 has 233 MA's), (12, 53635), (14, 53641), (19, 53722), (26, 53767), (32, 53830),

Gene: Maravista_96 Start: 55908, Stop: 56150, Start Num: 11

Candidate Starts for Maravista_96:

(Start: 11 @55908 has 233 MA's), (12, 55935), (14, 55941), (19, 56022), (22, 56034), (26, 56067), (28, 56103), (32, 56130),

Gene: Marker_105 Start: 55391, Stop: 55633, Start Num: 11

Candidate Starts for Marker_105:

(Start: 11 @55391 has 233 MA's), (12, 55418), (14, 55424), (19, 55505), (21, 55514), (26, 55550), (32, 55613),

Gene: Martik_98 Start: 55711, Stop: 55953, Start Num: 11

Candidate Starts for Martik_98:

(Start: 11 @55711 has 233 MA's), (12, 55738), (14, 55744), (19, 55825), (22, 55837), (26, 55870), (28, 55906), (31, 55930),

Gene: Mattes_100 Start: 54917, Stop: 55159, Start Num: 11

Candidate Starts for Mattes_100:

(Start: 11 @54917 has 233 MA's), (12, 54944), (14, 54950), (19, 55031), (26, 55076), (32, 55139),

Gene: Medindi_104 Start: 55059, Stop: 55301, Start Num: 11

Candidate Starts for Medindi_104:

(Start: 11 @55059 has 233 MA's), (12, 55086), (14, 55092), (19, 55173), (22, 55185), (26, 55218), (28, 55254), (32, 55281),

Gene: Melissauren88_89 Start: 50733, Stop: 50975, Start Num: 11

Candidate Starts for Melissauren88_89:

(Start: 11 @50733 has 233 MA's), (12, 50760), (14, 50766), (19, 50847), (22, 50859), (26, 50892), (28, 50928), (32, 50955),

Gene: Melville_76 Start: 42542, Stop: 42787, Start Num: 10

Candidate Starts for Melville_76:

(Start: 10 @42542 has 45 MA's), (14, 42581),

Gene: MichelleMyBell_69 Start: 41523, Stop: 41768, Start Num: 10

Candidate Starts for MichelleMyBell_69:

(Start: 10 @41523 has 45 MA's), (14, 41562),

Gene: MilanaBonita_92 Start: 52629, Stop: 52871, Start Num: 11

Candidate Starts for MilanaBonita_92:

(Start: 11 @52629 has 233 MA's), (12, 52656), (14, 52662), (19, 52743), (22, 52755), (26, 52788), (28, 52824), (32, 52851),

Gene: MilleniumForce_99 Start: 54436, Stop: 54678, Start Num: 11

Candidate Starts for MilleniumForce_99:

(Start: 11 @54436 has 233 MA's), (12, 54463), (14, 54469), (19, 54550), (22, 54562), (26, 54595), (28, 54631), (32, 54658),

Gene: MinionDave_97 Start: 54338, Stop: 54604, Start Num: 11

Candidate Starts for MinionDave_97:

(Start: 11 @54338 has 233 MA's), (12, 54365), (14, 54371), (19, 54452), (22, 54464), (26, 54497),

Gene: Minnie_94 Start: 55329, Stop: 55571, Start Num: 11

Candidate Starts for Minnie_94:

(Start: 11 @55329 has 233 MA's), (12, 55356), (14, 55362), (19, 55443), (26, 55488), (32, 55551),

Gene: Misha28_89 Start: 54702, Stop: 54944, Start Num: 11

Candidate Starts for Misha28_89:

(Start: 11 @54702 has 233 MA's), (12, 54729), (14, 54735), (19, 54816), (22, 54828), (26, 54861),

Gene: MisterCuddles_99 Start: 54578, Stop: 54820, Start Num: 11

Candidate Starts for MisterCuddles_99:

(Start: 11 @54578 has 233 MA's), (12, 54605), (14, 54611), (19, 54692), (21, 54701), (26, 54737), (28, 54773), (32, 54800),

Gene: Modragons_103 Start: 55088, Stop: 55330, Start Num: 11

Candidate Starts for Modragons_103:

(Start: 11 @55088 has 233 MA's), (12, 55115), (14, 55121), (19, 55202), (20, 55205), (22, 55214), (26, 55247), (28, 55283), (31, 55307),

Gene: Moonbeam_102 Start: 54824, Stop: 55066, Start Num: 11

Candidate Starts for Moonbeam_102:

(Start: 11 @54824 has 233 MA's), (12, 54851), (14, 54857), (19, 54938), (21, 54947), (26, 54983), (32, 55046),

Gene: Mori_26 Start: 11707, Stop: 11943, Start Num: 9

Candidate Starts for Mori_26:

(2, 11572), (6, 11683), (Start: 7 @11695 has 4 MA's), (Start: 9 @11707 has 30 MA's), (21, 11842), (22, 11845), (23, 11851), (24, 11854), (27, 11884), (29, 11920), (30, 11926),

Gene: Mova_101 Start: 54366, Stop: 54608, Start Num: 11

Candidate Starts for Mova_101:

(Start: 11 @54366 has 233 MA's), (12, 54393), (14, 54399), (19, 54480), (22, 54492), (26, 54525), (28, 54561), (32, 54588),

Gene: Mozy_103 Start: 54001, Stop: 54243, Start Num: 11

Candidate Starts for Mozy_103:

(Start: 11 @54001 has 233 MA's), (12, 54028), (14, 54034), (19, 54115), (22, 54127), (26, 54160), (28, 54196), (32, 54223),

Gene: Ms6_101 Start: 50624, Stop: 50866, Start Num: 11

Candidate Starts for Ms6_101:

(Start: 11 @50624 has 233 MA's), (12, 50651), (14, 50657), (19, 50738), (22, 50750), (26, 50783), (28, 50819), (32, 50846),

Gene: MulchExplorer_99 Start: 53256, Stop: 53498, Start Num: 11

Candidate Starts for MulchExplorer_99:

(Start: 11 @53256 has 233 MA's), (12, 53283), (14, 53289), (19, 53370), (26, 53415), (32, 53478),

Gene: MulchSalad_101 Start: 55257, Stop: 55499, Start Num: 11

Candidate Starts for MulchSalad_101:

(Start: 11 @55257 has 233 MA's), (12, 55284), (14, 55290), (19, 55371), (22, 55383), (26, 55416),

Gene: Murai_26 Start: 11708, Stop: 11944, Start Num: 9

Candidate Starts for Murai_26:

(2, 11573), (6, 11684), (Start: 7 @11696 has 4 MA's), (Start: 9 @11708 has 30 MA's), (21, 11843), (22, 11846), (23, 11852), (24, 11855), (27, 11885), (29, 11921), (30, 11927),

Gene: Mutaforma13_100 Start: 54035, Stop: 54277, Start Num: 11

Candidate Starts for Mutaforma13_100:

(Start: 11 @54035 has 233 MA's), (12, 54062), (14, 54068), (19, 54149), (20, 54152), (22, 54161), (26, 54194), (28, 54230), (31, 54254),

Gene: Mwanjiwa_102 Start: 55438, Stop: 55680, Start Num: 11

Candidate Starts for Mwanjiwa_102:

(Start: 11 @55438 has 233 MA's), (12, 55465), (14, 55471), (19, 55552), (22, 55564), (26, 55597), (31, 55657), (32, 55660),

Gene: Nenae_69 Start: 41880, Stop: 42125, Start Num: 10

Candidate Starts for Nenae_69:

(Start: 10 @41880 has 45 MA's), (14, 41919), (16, 41976),

Gene: NewHope4_107 Start: 53744, Stop: 53986, Start Num: 11

Candidate Starts for NewHope4_107:

(Start: 11 @53744 has 233 MA's), (12, 53771), (14, 53777), (19, 53858), (20, 53861), (22, 53870), (26, 53903), (28, 53939), (31, 53963),

Gene: Nichirin_99 Start: 54943, Stop: 55185, Start Num: 11

Candidate Starts for Nichirin_99:

(Start: 11 @54943 has 233 MA's), (12, 54970), (14, 54976), (19, 55057), (20, 55060), (22, 55069), (26, 55102), (28, 55138), (31, 55162),

Gene: NiebruSaylor_26 Start: 11708, Stop: 11944, Start Num: 9

Candidate Starts for NiebruSaylor_26:

(2, 11573), (6, 11684), (Start: 7 @11696 has 4 MA's), (Start: 9 @11708 has 30 MA's), (21, 11843), (22, 11846), (23, 11852), (24, 11855), (27, 11885), (29, 11921), (30, 11927),

Gene: Nimbo_91 Start: 52581, Stop: 52823, Start Num: 11

Candidate Starts for Nimbo_91:

(Start: 11 @52581 has 233 MA's), (12, 52608), (14, 52614), (19, 52695), (21, 52704), (26, 52740), (32, 52803),

Gene: Nitzel_93 Start: 51194, Stop: 51436, Start Num: 11

Candidate Starts for Nitzel_93:

(Start: 11 @51194 has 233 MA's), (12, 51221), (14, 51227), (19, 51308), (22, 51320), (26, 51353), (31, 51413), (32, 51416),

Gene: Nivrat_99 Start: 54853, Stop: 55095, Start Num: 11

Candidate Starts for Nivrat_99:

(Start: 11 @54853 has 233 MA's), (12, 54880), (14, 54886), (19, 54967), (26, 55012), (32, 55075),

Gene: NormanBulbieJr_97 Start: 54957, Stop: 55199, Start Num: 11

Candidate Starts for NormanBulbieJr_97:

(Start: 11 @54957 has 233 MA's), (12, 54984), (14, 54990), (19, 55071), (22, 55083), (26, 55116), (28, 55152), (32, 55179),

Gene: Ochi17_105 Start: 54695, Stop: 54937, Start Num: 11

Candidate Starts for Ochi17_105:

(Start: 11 @54695 has 233 MA's), (12, 54722), (14, 54728), (19, 54809), (20, 54812), (22, 54821), (26, 54854), (28, 54890), (31, 54914),

Gene: OfUltron_106 Start: 55244, Stop: 55486, Start Num: 11

Candidate Starts for OfUltron_106:

(Start: 11 @55244 has 233 MA's), (12, 55271), (14, 55277), (19, 55358), (20, 55361), (22, 55370), (26, 55403), (28, 55439), (31, 55463),

Gene: Ogopogo_103 Start: 53186, Stop: 53428, Start Num: 11

Candidate Starts for Ogopogo_103:

(Start: 11 @53186 has 233 MA's), (12, 53213), (14, 53219), (19, 53300), (26, 53345), (32, 53408),

Gene: Okabe_91 Start: 50411, Stop: 50653, Start Num: 11

Candidate Starts for Okabe_91:

(Start: 11 @50411 has 233 MA's), (12, 50438), (14, 50444), (19, 50525), (22, 50537), (26, 50570), (28, 50606), (32, 50633),

Gene: Oksu_103 Start: 56334, Stop: 56576, Start Num: 11

Candidate Starts for Oksu_103:

(Start: 11 @56334 has 233 MA's), (12, 56361), (14, 56367), (19, 56448), (20, 56451), (22, 56460), (26, 56493), (28, 56529), (31, 56553),

Gene: OldBen_96 Start: 53973, Stop: 54215, Start Num: 11

Candidate Starts for OldBen_96:

(Start: 11 @53973 has 233 MA's), (12, 54000), (14, 54006), (19, 54087), (21, 54096), (26, 54132), (32, 54195),

Gene: OlympiaSaint_103 Start: 55147, Stop: 55389, Start Num: 11

Candidate Starts for OlympiaSaint_103:

(Start: 11 @55147 has 233 MA's), (12, 55174), (14, 55180), (19, 55261), (22, 55273), (26, 55306), (32, 55369),

Gene: Ovechkin_102 Start: 54673, Stop: 54915, Start Num: 11

Candidate Starts for Ovechkin_102:

(Start: 11 @54673 has 233 MA's), (12, 54700), (14, 54706), (19, 54787), (20, 54790), (22, 54799), (26, 54832), (28, 54868), (31, 54892),

Gene: OwlsT2W_97 Start: 52877, Stop: 53119, Start Num: 11

Candidate Starts for OwlsT2W_97:

(Start: 11 @52877 has 233 MA's), (12, 52904), (14, 52910), (19, 52991), (22, 53003), (26, 53036), (28, 53072), (32, 53099),

Gene: PHappiness_99 Start: 54802, Stop: 55044, Start Num: 11

Candidate Starts for PHappiness_99:

(Start: 11 @54802 has 233 MA's), (12, 54829), (14, 54835), (19, 54916), (21, 54925), (26, 54961), (32, 55024),

Gene: PMC_98 Start: 53017, Stop: 53259, Start Num: 11

Candidate Starts for PMC_98:

(Start: 11 @53017 has 233 MA's), (12, 53044), (14, 53050), (19, 53131), (26, 53176), (32, 53239),

Gene: Pacc40_97 Start: 55396, Stop: 55638, Start Num: 11

Candidate Starts for Pacc40_97:

(Start: 11 @55396 has 233 MA's), (12, 55423), (14, 55429), (19, 55510), (21, 55519), (26, 55555), (32, 55618),

Gene: Panchino_65 Start: 42798, Stop: 43043, Start Num: 10

Candidate Starts for Panchino_65:

(Start: 10 @42798 has 45 MA's), (14, 42837),

Gene: Parmesanjohn_71 Start: 42991, Stop: 43236, Start Num: 10

Candidate Starts for Parmesanjohn_71:

(Start: 10 @42991 has 45 MA's), (14, 43030),

Gene: PatoPoderoso_100 Start: 56599, Stop: 56841, Start Num: 11

Candidate Starts for PatoPoderoso_100:

(Start: 11 @56599 has 233 MA's), (12, 56626), (14, 56632), (19, 56713), (22, 56725), (26, 56758), (28, 56794), (32, 56821),

Gene: Peridot_102 Start: 54419, Stop: 54628, Start Num: 14

Candidate Starts for Peridot_102:

(Start: 11 @54386 has 233 MA's), (12, 54413), (14, 54419), (19, 54500), (21, 54509), (26, 54545), (32, 54608),

Gene: Phalconet_100 Start: 54026, Stop: 54268, Start Num: 11

Candidate Starts for Phalconet_100:

(Start: 11 @54026 has 233 MA's), (12, 54053), (14, 54059), (19, 54140), (22, 54152), (26, 54185), (28, 54221), (32, 54248),

Gene: PhancyPhin_68 Start: 41737, Stop: 41982, Start Num: 10

Candidate Starts for PhancyPhin_68:

(Start: 10 @41737 has 45 MA's), (14, 41776),

Gene: Phanphagia_104 Start: 55781, Stop: 56023, Start Num: 11

Candidate Starts for Phanphagia_104:

(Start: 11 @55781 has 233 MA's), (12, 55808), (14, 55814), (19, 55895), (22, 55907), (26, 55940), (28, 55976), (32, 56003),

Gene: Phasih_96 Start: 52914, Stop: 53180, Start Num: 11

Candidate Starts for Phasih_96:

(Start: 11 @52914 has 233 MA's), (12, 52941), (14, 52947), (19, 53028), (21, 53037), (26, 53073),

Gene: Phatniss_97 Start: 53358, Stop: 53600, Start Num: 11

Candidate Starts for Phatniss_97:

(Start: 11 @53358 has 233 MA's), (12, 53385), (14, 53391), (19, 53472), (22, 53484), (26, 53517), (28, 53553), (32, 53580),

Gene: PhesterPhotato_103 Start: 54000, Stop: 54242, Start Num: 11

Candidate Starts for PhesterPhotato_103:

(Start: 11 @54000 has 233 MA's), (12, 54027), (14, 54033), (19, 54114), (22, 54126), (26, 54159), (28, 54195), (32, 54222),

Gene: Philonius_71 Start: 43177, Stop: 43422, Start Num: 10

Candidate Starts for Philonius_71:

(Start: 10 @43177 has 45 MA's), (14, 43216),

Gene: Philus_103 Start: 56088, Stop: 56330, Start Num: 11

Candidate Starts for Philus_103:

(Start: 11 @56088 has 233 MA's), (12, 56115), (14, 56121), (19, 56202), (22, 56214), (26, 56247), (28, 56283), (32, 56310),

Gene: PhlipPhlop_89 Start: 55438, Stop: 55680, Start Num: 11

Candidate Starts for PhlipPhlop_89:

(Start: 11 @55438 has 233 MA's), (12, 55465), (14, 55471), (19, 55552), (20, 55555), (22, 55564), (26, 55597), (28, 55633), (31, 55657),

Gene: Phloss_69 Start: 42398, Stop: 42643, Start Num: 10

Candidate Starts for Phloss_69:

(Start: 10 @42398 has 45 MA's), (14, 42437),

Gene: Phrann_66 Start: 44154, Stop: 44399, Start Num: 10

Candidate Starts for Phrann_66:

(Start: 10 @44154 has 45 MA's), (14, 44193),

Gene: Piper2020_94 Start: 54950, Stop: 55192, Start Num: 11

Candidate Starts for Piper2020_94:

(Start: 11 @54950 has 233 MA's), (12, 54977), (14, 54983), (19, 55064), (22, 55076), (26, 55109),

Gene: Pippy_97 Start: 53228, Stop: 53470, Start Num: 11

Candidate Starts for Pippy_97:

(Start: 11 @53228 has 233 MA's), (12, 53255), (14, 53261), (19, 53342), (22, 53354), (26, 53387), (28, 53423), (32, 53450),

Gene: Pipsqueaks_72 Start: 42969, Stop: 43214, Start Num: 10

Candidate Starts for Pipsqueaks_72:

(Start: 10 @42969 has 45 MA's), (14, 43008),

Gene: Plumbus_98 Start: 51698, Stop: 51940, Start Num: 11

Candidate Starts for Plumbus_98:

(Start: 11 @51698 has 233 MA's), (12, 51725), (14, 51731), (19, 51812), (26, 51857), (32, 51920),

Gene: Poenanya_103 Start: 55510, Stop: 55752, Start Num: 11

Candidate Starts for Poenanya_103:

(Start: 11 @55510 has 233 MA's), (12, 55537), (14, 55543), (19, 55624), (21, 55633), (26, 55669), (32, 55732),

Gene: Polka14_103 Start: 55571, Stop: 55813, Start Num: 11

Candidate Starts for Polka14_103:

(Start: 11 @55571 has 233 MA's), (12, 55598), (14, 55604), (19, 55685), (21, 55694), (26, 55730), (32, 55793),

Gene: Pollywog_101 Start: 55629, Stop: 55871, Start Num: 11

Candidate Starts for Pollywog_101:

(Start: 11 @55629 has 233 MA's), (12, 55656), (14, 55662), (19, 55743), (21, 55752), (26, 55788), (32, 55851),

Gene: Polo2Bam_111 Start: 53598, Stop: 53840, Start Num: 11

Candidate Starts for Polo2Bam_111:

(Start: 11 @53598 has 233 MA's), (12, 53625), (14, 53631), (19, 53712), (20, 53715), (22, 53724), (26, 53757), (28, 53793), (31, 53817),

Gene: PopTart_90 Start: 51430, Stop: 51672, Start Num: 11

Candidate Starts for PopTart_90:

(Start: 11 @51430 has 233 MA's), (12, 51457), (14, 51463), (19, 51544), (20, 51547), (22, 51556), (26, 51589), (28, 51625), (31, 51649),

Gene: Priscilla_100 Start: 55055, Stop: 55297, Start Num: 11

Candidate Starts for Priscilla_100:

(Start: 11 @55055 has 233 MA's), (12, 55082), (14, 55088), (19, 55169), (22, 55181), (26, 55214), (28, 55250), (32, 55277),

Gene: Purgamenstris_69 Start: 41878, Stop: 42123, Start Num: 10

Candidate Starts for Purgamenstris_69:

(Start: 10 @41878 has 45 MA's), (14, 41917), (16, 41974),

Gene: QuickMath_100 Start: 53837, Stop: 54103, Start Num: 11

Candidate Starts for QuickMath_100:

(Start: 11 @53837 has 233 MA's), (12, 53864), (14, 53870), (19, 53951), (22, 53963), (26, 53996),

Gene: Quico_108 Start: 55909, Stop: 56151, Start Num: 11

Candidate Starts for Quico_108:

(Start: 11 @55909 has 233 MA's), (12, 55936), (14, 55942), (19, 56023), (22, 56035), (26, 56068), (31, 56128), (32, 56131),

Gene: Radiance_97 Start: 53914, Stop: 54156, Start Num: 11

Candidate Starts for Radiance_97:

(Start: 11 @53914 has 233 MA's), (12, 53941), (14, 53947), (19, 54028), (21, 54037), (26, 54073), (32, 54136),

Gene: Ramsey_104 Start: 55810, Stop: 56052, Start Num: 11

Candidate Starts for Ramsey_104:

(Start: 11 @55810 has 233 MA's), (12, 55837), (14, 55843), (19, 55924), (20, 55927), (22, 55936), (26, 55969), (28, 56005), (31, 56029),

Gene: Raymond7_62 Start: 41666, Stop: 41911, Start Num: 10

Candidate Starts for Raymond7_62:

(Start: 10 @41666 has 45 MA's), (14, 41705), (16, 41762),

Gene: Rebel_65 Start: 39862, Stop: 40107, Start Num: 10

Candidate Starts for Rebel_65:

(Start: 10 @39862 has 45 MA's), (14, 39901), (16, 39958),

Gene: RedBird_100 Start: 55549, Stop: 55791, Start Num: 11

Candidate Starts for RedBird_100:

(Start: 11 @55549 has 233 MA's), (12, 55576), (14, 55582), (19, 55663), (21, 55672), (26, 55708), (32, 55771),

Gene: Redi_68 Start: 41877, Stop: 42122, Start Num: 10

Candidate Starts for Redi_68:

(Start: 10 @41877 has 45 MA's), (14, 41916), (16, 41973),

Gene: Renaud18_109 Start: 55181, Stop: 55441, Start Num: 7

Candidate Starts for Renaud18_109:

(5, 55160), (Start: 7 @55181 has 4 MA's), (12, 55214), (13, 55217), (14, 55220), (18, 55292), (19, 55313), (22, 55325), (24, 55334), (26, 55358), (28, 55394), (32, 55421),

Gene: Rialto_104 Start: 55165, Stop: 55407, Start Num: 11

Candidate Starts for Rialto_104:

(Start: 11 @55165 has 233 MA's), (12, 55192), (14, 55198), (19, 55279), (21, 55288), (26, 55324), (32, 55387),

Gene: Rita_99 Start: 55625, Stop: 55867, Start Num: 11

Candidate Starts for Rita_99:

(Start: 11 @55625 has 233 MA's), (12, 55652), (14, 55658), (19, 55739), (22, 55751), (26, 55784), (28, 55820), (32, 55847),

Gene: RitaG_98 Start: 54604, Stop: 54846, Start Num: 11

Candidate Starts for RitaG_98:

(Start: 11 @54604 has 233 MA's), (12, 54631), (14, 54637), (19, 54718), (21, 54727), (26, 54763), (32, 54826),

Gene: Rockne_102 Start: 53029, Stop: 53271, Start Num: 11

Candidate Starts for Rockne_102:

(Start: 11 @53029 has 233 MA's), (12, 53056), (14, 53062), (19, 53143), (26, 53188), (32, 53251),

Gene: RockyHorror_103 Start: 53714, Stop: 53956, Start Num: 11
Candidate Starts for RockyHorror_103:
(Start: 11 @53714 has 233 MA's), (12, 53741), (14, 53747), (19, 53828), (26, 53873), (32, 53936),

Gene: Royals2015_103 Start: 53160, Stop: 53402, Start Num: 11
Candidate Starts for Royals2015_103:
(Start: 11 @53160 has 233 MA's), (12, 53187), (14, 53193), (19, 53274), (22, 53286), (26, 53319), (28, 53355), (32, 53382),

Gene: Rubeelu_65 Start: 40786, Stop: 41031, Start Num: 10
Candidate Starts for Rubeelu_65:
(1, 40279), (Start: 10 @40786 has 45 MA's), (14, 40825), (19, 40915),

Gene: Ruby_96 Start: 54580, Stop: 54822, Start Num: 11
Candidate Starts for Ruby_96:
(Start: 11 @54580 has 233 MA's), (12, 54607), (14, 54613), (19, 54694), (22, 54706), (26, 54739), (28, 54775), (32, 54802),

Gene: Ryadel_28 Start: 12290, Stop: 12526, Start Num: 9
Candidate Starts for Ryadel_28:
(2, 12155), (6, 12266), (Start: 7 @12278 has 4 MA's), (Start: 9 @12290 has 30 MA's), (21, 12425), (22, 12428), (23, 12434), (24, 12437), (27, 12467), (29, 12503), (30, 12509),

Gene: SG4_100 Start: 55394, Stop: 55636, Start Num: 11
Candidate Starts for SG4_100:
(Start: 11 @55394 has 233 MA's), (12, 55421), (14, 55427), (19, 55508), (22, 55520), (26, 55553), (28, 55589), (31, 55613),

Gene: Saal_97 Start: 54619, Stop: 54861, Start Num: 11
Candidate Starts for Saal_97:
(Start: 11 @54619 has 233 MA's), (12, 54646), (14, 54652), (19, 54733), (26, 54778), (32, 54841),

Gene: Sabbb_102 Start: 52585, Stop: 52827, Start Num: 11
Candidate Starts for Sabbb_102:
(Start: 11 @52585 has 233 MA's), (12, 52612), (14, 52618), (19, 52699), (22, 52711), (26, 52744), (32, 52807),

Gene: Sandalphon_99 Start: 55612, Stop: 55854, Start Num: 11
Candidate Starts for Sandalphon_99:
(Start: 11 @55612 has 233 MA's), (12, 55639), (14, 55645), (19, 55726), (26, 55771), (32, 55834),

Gene: Sarma624_101 Start: 51554, Stop: 51796, Start Num: 11
Candidate Starts for Sarma624_101:
(Start: 11 @51554 has 233 MA's), (12, 51581), (14, 51587), (19, 51668), (22, 51680), (26, 51713), (28, 51749), (32, 51776),

Gene: Sassafras_101 Start: 53866, Stop: 54108, Start Num: 11
Candidate Starts for Sassafras_101:
(Start: 11 @53866 has 233 MA's), (12, 53893), (14, 53899), (19, 53980), (21, 53989), (26, 54025), (32, 54088),

Gene: SassyB_90 Start: 51430, Stop: 51672, Start Num: 11

Candidate Starts for SassyB_90:

(Start: 11 @51430 has 233 MA's), (12, 51457), (14, 51463), (19, 51544), (20, 51547), (22, 51556), (26, 51589), (28, 51625), (31, 51649),

Gene: Schnauzer_73 Start: 42991, Stop: 43236, Start Num: 10

Candidate Starts for Schnauzer_73:

(Start: 10 @42991 has 45 MA's), (14, 43030),

Gene: SchoolBus_25 Start: 11477, Stop: 11713, Start Num: 9

Candidate Starts for SchoolBus_25:

(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Schuy_27 Start: 11869, Stop: 12105, Start Num: 9

Candidate Starts for Schuy_27:

(2, 11734), (6, 11845), (Start: 7 @11857 has 4 MA's), (Start: 9 @11869 has 30 MA's), (21, 12004), (22, 12007), (23, 12013), (24, 12016), (27, 12046), (29, 12082), (30, 12088),

Gene: Scitech_66 Start: 42394, Stop: 42639, Start Num: 10

Candidate Starts for Scitech_66:

(Start: 10 @42394 has 45 MA's), (14, 42433),

Gene: Scottish_99 Start: 53443, Stop: 53685, Start Num: 11

Candidate Starts for Scottish_99:

(Start: 11 @53443 has 233 MA's), (12, 53470), (14, 53476), (19, 53557), (21, 53566), (26, 53602), (32, 53665),

Gene: SeaLumen_108 Start: 53598, Stop: 53840, Start Num: 11

Candidate Starts for SeaLumen_108:

(Start: 11 @53598 has 233 MA's), (12, 53625), (14, 53631), (19, 53712), (20, 53715), (22, 53724), (26, 53757), (28, 53793), (31, 53817),

Gene: Seabastian_106 Start: 55245, Stop: 55487, Start Num: 11

Candidate Starts for Seabastian_106:

(Start: 11 @55245 has 233 MA's), (12, 55272), (14, 55278), (19, 55359), (20, 55362), (22, 55371), (26, 55404), (28, 55440), (31, 55464),

Gene: Seagreen_100 Start: 54532, Stop: 54774, Start Num: 11

Candidate Starts for Seagreen_100:

(Start: 11 @54532 has 233 MA's), (12, 54559), (14, 54565), (19, 54646), (22, 54658), (26, 54691), (28, 54727), (32, 54754),

Gene: Shauna1_101 Start: 55397, Stop: 55639, Start Num: 11

Candidate Starts for Shauna1_101:

(Start: 11 @55397 has 233 MA's), (12, 55424), (14, 55430), (19, 55511), (22, 55523), (26, 55556), (28, 55592), (32, 55619),

Gene: ShiLan_102 Start: 56636, Stop: 56878, Start Num: 11

Candidate Starts for ShiLan_102:

(Start: 11 @56636 has 233 MA's), (12, 56663), (14, 56669), (19, 56750), (26, 56795), (32, 56858),

Gene: Shida_26 Start: 11774, Stop: 12010, Start Num: 9

Candidate Starts for Shida_26:

(2, 11639), (6, 11750), (Start: 7 @11762 has 4 MA's), (Start: 9 @11774 has 30 MA's), (21, 11909), (22, 11912), (23, 11918), (24, 11921), (27, 11951), (29, 11987), (30, 11993),

Gene: ShowerHandel_100 Start: 53901, Stop: 54143, Start Num: 11

Candidate Starts for ShowerHandel_100:

(Start: 11 @53901 has 233 MA's), (12, 53928), (14, 53934), (19, 54015), (22, 54027), (26, 54060), (28, 54096), (32, 54123),

Gene: ShrimpFriedEgg_69 Start: 41877, Stop: 42122, Start Num: 10

Candidate Starts for ShrimpFriedEgg_69:

(Start: 10 @41877 has 45 MA's), (14, 41916), (16, 41973),

Gene: ShroomBoi_97 Start: 53949, Stop: 54191, Start Num: 11

Candidate Starts for ShroomBoi_97:

(Start: 11 @53949 has 233 MA's), (12, 53976), (14, 53982), (19, 54063), (26, 54108), (32, 54171),

Gene: Shweta_65 Start: 41973, Stop: 42218, Start Num: 10

Candidate Starts for Shweta_65:

(Start: 10 @41973 has 45 MA's), (14, 42012),

Gene: SiSi_95 Start: 53133, Stop: 53375, Start Num: 11

Candidate Starts for SiSi_95:

(Start: 11 @53133 has 233 MA's), (12, 53160), (14, 53166), (19, 53247), (20, 53250), (22, 53259), (26, 53292), (28, 53328), (31, 53352),

Gene: Silvafighter_73 Start: 42534, Stop: 42779, Start Num: 10

Candidate Starts for Silvafighter_73:

(Start: 10 @42534 has 45 MA's), (14, 42573),

Gene: Silvy_67 Start: 43624, Stop: 43869, Start Num: 10

Candidate Starts for Silvy_67:

(Start: 10 @43624 has 45 MA's), (14, 43663),

Gene: SimranZ1_96 Start: 52496, Stop: 52738, Start Num: 11

Candidate Starts for SimranZ1_96:

(Start: 11 @52496 has 233 MA's), (12, 52523), (14, 52529), (19, 52610), (26, 52655), (28, 52691), (32, 52718),

Gene: SkinnyPete_67 Start: 42760, Stop: 43005, Start Num: 10

Candidate Starts for SkinnyPete_67:

(Start: 10 @42760 has 45 MA's), (14, 42799),

Gene: Slim_102 Start: 54183, Stop: 54425, Start Num: 11

Candidate Starts for Slim_102:

(Start: 11 @54183 has 233 MA's), (12, 54210), (14, 54216), (19, 54297), (22, 54309), (26, 54342), (28, 54378),

Gene: Smooch_29 Start: 13223, Stop: 13459, Start Num: 9

Candidate Starts for Smooch_29:

(2, 13088), (6, 13199), (Start: 7 @13211 has 4 MA's), (Start: 9 @13223 has 30 MA's), (21, 13358), (22, 13361), (23, 13367), (24, 13370), (27, 13400), (29, 13436), (30, 13442),

Gene: Smurph_71 Start: 42991, Stop: 43236, Start Num: 10

Candidate Starts for Smurph_71:
(Start: 10 @42991 has 45 MA's), (14, 43030),

Gene: Snekmaggedon_63 Start: 40560, Stop: 40805, Start Num: 10
Candidate Starts for Snekmaggedon_63:
(Start: 10 @40560 has 45 MA's), (14, 40599),

Gene: Sparkdehlily_106 Start: 53114, Stop: 53356, Start Num: 11
Candidate Starts for Sparkdehlily_106:
(Start: 11 @53114 has 233 MA's), (12, 53141), (14, 53147), (19, 53228), (26, 53273), (32, 53336),

Gene: Spartacus_106 Start: 57228, Stop: 57470, Start Num: 11
Candidate Starts for Spartacus_106:
(Start: 11 @57228 has 233 MA's), (12, 57255), (14, 57261), (19, 57342), (26, 57387), (32, 57450),

Gene: Spikelee_100 Start: 55608, Stop: 55850, Start Num: 11
Candidate Starts for Spikelee_100:
(Start: 11 @55608 has 233 MA's), (12, 55635), (14, 55641), (19, 55722), (26, 55767), (32, 55830),

Gene: Spinach_68 Start: 41877, Stop: 42122, Start Num: 10
Candidate Starts for Spinach_68:
(Start: 10 @41877 has 45 MA's), (14, 41916), (16, 41973),

Gene: SpongeBob_64 Start: 40560, Stop: 40805, Start Num: 10
Candidate Starts for SpongeBob_64:
(Start: 10 @40560 has 45 MA's), (14, 40599),

Gene: Spoonbill_99 Start: 52549, Stop: 52791, Start Num: 11
Candidate Starts for Spoonbill_99:
(Start: 11 @52549 has 233 MA's), (12, 52576), (14, 52582), (19, 52663), (26, 52708), (32, 52771),

Gene: Squirty_98 Start: 57518, Stop: 57760, Start Num: 11
Candidate Starts for Squirty_98:
(Start: 11 @57518 has 233 MA's), (12, 57545), (14, 57551), (19, 57632), (22, 57644), (26, 57677),

Gene: StAnnes_103 Start: 55445, Stop: 55687, Start Num: 11
Candidate Starts for StAnnes_103:
(Start: 11 @55445 has 233 MA's), (12, 55472), (14, 55478), (19, 55559), (20, 55562), (22, 55571), (26, 55604), (28, 55640), (31, 55664), (32, 55667),

Gene: Stap_94 Start: 51161, Stop: 51403, Start Num: 11
Candidate Starts for Stap_94:
(Start: 11 @51161 has 233 MA's), (12, 51188), (14, 51194), (19, 51275), (22, 51287), (26, 51320), (32, 51383),

Gene: Starcevich_101 Start: 55278, Stop: 55520, Start Num: 11
Candidate Starts for Starcevich_101:
(Start: 11 @55278 has 233 MA's), (12, 55305), (14, 55311), (19, 55392), (22, 55404), (26, 55437), (32, 55500),

Gene: Strokeseat_97 Start: 52311, Stop: 52553, Start Num: 11
Candidate Starts for Strokeseat_97:

(Start: 11 @52311 has 233 MA's), (12, 52338), (14, 52344), (19, 52425), (22, 52437), (26, 52470), (28, 52506), (32, 52533),

Gene: SuperGrey_99 Start: 56197, Stop: 56439, Start Num: 11

Candidate Starts for SuperGrey_99:

(Start: 11 @56197 has 233 MA's), (12, 56224), (14, 56230), (19, 56311), (22, 56323), (26, 56356), (28, 56392), (32, 56419),

Gene: SwagPigglett_101 Start: 55755, Stop: 55997, Start Num: 11

Candidate Starts for SwagPigglett_101:

(Start: 11 @55755 has 233 MA's), (12, 55782), (14, 55788), (19, 55869), (22, 55881), (26, 55914), (28, 55950), (32, 55977),

Gene: TChen_97 Start: 54377, Stop: 54637, Start Num: 7

Candidate Starts for TChen_97:

(3, 54335), (Start: 7 @54377 has 4 MA's), (13, 54413), (14, 54416), (17, 54479), (19, 54509), (22, 54521), (24, 54530), (25, 54539), (26, 54554),

Gene: TDanisky_107 Start: 53114, Stop: 53356, Start Num: 11

Candidate Starts for TDanisky_107:

(Start: 11 @53114 has 233 MA's), (12, 53141), (14, 53147), (19, 53228), (26, 53273), (32, 53336),

Gene: Taj_105 Start: 55403, Stop: 55645, Start Num: 11

Candidate Starts for Taj_105:

(Start: 11 @55403 has 233 MA's), (12, 55430), (14, 55436), (19, 55517), (22, 55529), (26, 55562), (28, 55598), (32, 55625),

Gene: Tapioca_69 Start: 43496, Stop: 43741, Start Num: 10

Candidate Starts for Tapioca_69:

(Start: 10 @43496 has 45 MA's), (14, 43535),

Gene: Tchotchke_92 Start: 52710, Stop: 52919, Start Num: 14

Candidate Starts for Tchotchke_92:

(Start: 11 @52677 has 233 MA's), (12, 52704), (14, 52710), (19, 52791), (26, 52836), (32, 52899),

Gene: TelAviv_23 Start: 11474, Stop: 11710, Start Num: 9

Candidate Starts for TelAviv_23:

(2, 11339), (6, 11450), (Start: 7 @11462 has 4 MA's), (Start: 9 @11474 has 30 MA's), (21, 11609), (22, 11612), (23, 11618), (24, 11621), (27, 11651), (29, 11687), (30, 11693),

Gene: Tessdabest_71 Start: 43125, Stop: 43370, Start Num: 10

Candidate Starts for Tessdabest_71:

(Start: 10 @43125 has 45 MA's), (14, 43164),

Gene: ThetaBob_102 Start: 53402, Stop: 53662, Start Num: 7

Candidate Starts for ThetaBob_102:

(5, 53381), (Start: 7 @53402 has 4 MA's), (12, 53435), (13, 53438), (14, 53441), (18, 53513), (19, 53534), (22, 53546), (24, 53555), (26, 53579), (28, 53615), (32, 53642),

Gene: TootsiePop_89 Start: 54702, Stop: 54944, Start Num: 11

Candidate Starts for TootsiePop_89:

(Start: 11 @54702 has 233 MA's), (12, 54729), (14, 54735), (19, 54816), (22, 54828), (26, 54861),

Gene: Tootsieroll_93 Start: 54547, Stop: 54789, Start Num: 11
Candidate Starts for Tootsieroll_93:
(Start: 11 @54547 has 233 MA's), (12, 54574), (14, 54580), (19, 54661), (22, 54673), (26, 54706), (28, 54742), (32, 54769),

Gene: Topiatin_101 Start: 55144, Stop: 55386, Start Num: 11
Candidate Starts for Topiatin_101:
(Start: 11 @55144 has 233 MA's), (12, 55171), (14, 55177), (19, 55258), (26, 55303), (32, 55366),

Gene: Toron_103 Start: 56010, Stop: 56270, Start Num: 7
Candidate Starts for Toron_103:
(5, 55989), (Start: 7 @56010 has 4 MA's), (14, 56049), (15, 56100), (19, 56142), (22, 56154), (26, 56187),

Gene: Tortoise12_71 Start: 41980, Stop: 42225, Start Num: 10
Candidate Starts for Tortoise12_71:
(Start: 10 @41980 has 45 MA's), (14, 42019),

Gene: Totinger_102 Start: 54678, Stop: 54920, Start Num: 11
Candidate Starts for Totinger_102:
(Start: 11 @54678 has 233 MA's), (12, 54705), (14, 54711), (19, 54792), (21, 54801), (26, 54837), (32, 54900),

Gene: Tweety_100 Start: 54797, Stop: 55039, Start Num: 11
Candidate Starts for Tweety_100:
(Start: 11 @54797 has 233 MA's), (12, 54824), (14, 54830), (19, 54911), (22, 54923), (26, 54956), (28, 54992), (32, 55019),

Gene: UncleRicky_99 Start: 52903, Stop: 53145, Start Num: 11
Candidate Starts for UncleRicky_99:
(Start: 11 @52903 has 233 MA's), (12, 52930), (14, 52936), (19, 53017), (26, 53062), (32, 53125),

Gene: VRedHorse_100 Start: 51653, Stop: 51895, Start Num: 11
Candidate Starts for VRedHorse_100:
(Start: 11 @51653 has 233 MA's), (12, 51680), (14, 51686), (19, 51767), (22, 51779), (26, 51812), (28, 51848), (32, 51875),

Gene: Vagabond_26 Start: 11751, Stop: 11987, Start Num: 9
Candidate Starts for Vagabond_26:
(2, 11616), (6, 11727), (Start: 7 @11739 has 4 MA's), (Start: 9 @11751 has 30 MA's), (21, 11886), (22, 11889), (23, 11895), (24, 11898), (27, 11928), (29, 11964), (30, 11970),

Gene: Velveteen_96 Start: 51554, Stop: 51796, Start Num: 11
Candidate Starts for Velveteen_96:
(Start: 11 @51554 has 233 MA's), (12, 51581), (14, 51587), (19, 51668), (22, 51680), (26, 51713), (28, 51749), (32, 51776),

Gene: Veteran_90 Start: 53001, Stop: 53243, Start Num: 11
Candidate Starts for Veteran_90:
(Start: 11 @53001 has 233 MA's), (12, 53028), (14, 53034), (19, 53115), (20, 53118), (22, 53127), (26, 53160), (28, 53196), (31, 53220),

Gene: Violac_100 Start: 55049, Stop: 55291, Start Num: 11

Candidate Starts for Violac_100:

(Start: 11 @55049 has 233 MA's), (12, 55076), (14, 55082), (19, 55163), (22, 55175), (26, 55208), (28, 55244), (32, 55271),

Gene: Vivum_99 Start: 55990, Stop: 56232, Start Num: 11

Candidate Starts for Vivum_99:

(Start: 11 @55990 has 233 MA's), (12, 56017), (14, 56023), (19, 56104), (20, 56107), (22, 56116), (26, 56149), (28, 56185), (31, 56209),

Gene: Vorrps_26 Start: 11708, Stop: 11944, Start Num: 9

Candidate Starts for Vorrps_26:

(2, 11573), (6, 11684), (Start: 7 @11696 has 4 MA's), (Start: 9 @11708 has 30 MA's), (21, 11843), (22, 11846), (23, 11852), (24, 11855), (27, 11885), (29, 11921), (30, 11927),

Gene: Wachhund_96 Start: 50849, Stop: 51091, Start Num: 11

Candidate Starts for Wachhund_96:

(Start: 11 @50849 has 233 MA's), (12, 50876), (14, 50882), (19, 50963), (20, 50966), (22, 50975), (26, 51008), (28, 51044), (31, 51068),

Gene: Wee_102 Start: 55479, Stop: 55721, Start Num: 11

Candidate Starts for Wee_102:

(Start: 11 @55479 has 233 MA's), (12, 55506), (14, 55512), (19, 55593), (22, 55605), (26, 55638), (28, 55674), (32, 55701),

Gene: Whatsapiecost_93 Start: 49204, Stop: 49446, Start Num: 11

Candidate Starts for Whatsapiecost_93:

(Start: 11 @49204 has 233 MA's), (12, 49231), (14, 49237), (19, 49318), (22, 49330), (26, 49363), (28, 49399), (32, 49426),

Gene: Whouxphf_104 Start: 55947, Stop: 56189, Start Num: 11

Candidate Starts for Whouxphf_104:

(Start: 11 @55947 has 233 MA's), (12, 55974), (14, 55980), (19, 56061), (26, 56106), (28, 56142), (31, 56166), (32, 56169),

Gene: Wildflower_26 Start: 11731, Stop: 11967, Start Num: 9

Candidate Starts for Wildflower_26:

(2, 11596), (6, 11707), (Start: 7 @11719 has 4 MA's), (Start: 9 @11731 has 30 MA's), (21, 11866), (22, 11869), (23, 11875), (24, 11878), (27, 11908), (29, 11944), (30, 11950),

Gene: WillSterrel_97 Start: 54235, Stop: 54477, Start Num: 11

Candidate Starts for WillSterrel_97:

(Start: 11 @54235 has 233 MA's), (14, 54268), (19, 54349), (21, 54358), (26, 54394), (31, 54454),

Gene: Winget_26 Start: 11750, Stop: 11986, Start Num: 9

Candidate Starts for Winget_26:

(2, 11615), (6, 11726), (Start: 7 @11738 has 4 MA's), (Start: 9 @11750 has 30 MA's), (21, 11885), (22, 11888), (23, 11894), (24, 11897), (27, 11927), (29, 11963), (30, 11969),

Gene: Wogge42_25 Start: 11839, Stop: 12075, Start Num: 9

Candidate Starts for Wogge42_25:

(2, 11704), (6, 11815), (Start: 7 @11827 has 4 MA's), (Start: 9 @11839 has 30 MA's), (21, 11974), (22, 11977), (23, 11983), (24, 11986), (27, 12016), (29, 12052), (30, 12058),

Gene: XFactor_90 Start: 51995, Stop: 52237, Start Num: 11
Candidate Starts for XFactor_90:
(Start: 11 @51995 has 233 MA's), (12, 52022), (14, 52028), (19, 52109), (22, 52121), (26, 52154), (28, 52190), (32, 52217),

Gene: Xeno_68 Start: 41677, Stop: 41922, Start Num: 10
Candidate Starts for Xeno_68:
(Start: 10 @41677 has 45 MA's), (14, 41716),

Gene: Xerxes_71 Start: 42988, Stop: 43233, Start Num: 10
Candidate Starts for Xerxes_71:
(Start: 10 @42988 has 45 MA's), (14, 43027),

Gene: Yorick_95 Start: 55296, Stop: 55538, Start Num: 11
Candidate Starts for Yorick_95:
(Start: 11 @55296 has 233 MA's), (12, 55323), (14, 55329), (19, 55410), (26, 55455), (32, 55518),

Gene: YoyoKar_24 Start: 11478, Stop: 11714, Start Num: 9
Candidate Starts for YoyoKar_24:
(2, 11343), (6, 11454), (Start: 7 @11466 has 4 MA's), (Start: 9 @11478 has 30 MA's), (21, 11613), (22, 11616), (23, 11622), (24, 11625), (27, 11655), (29, 11691), (30, 11697),

Gene: YungJamal_28 Start: 12026, Stop: 12262, Start Num: 9
Candidate Starts for YungJamal_28:
(2, 11891), (6, 12002), (Start: 7 @12014 has 4 MA's), (Start: 9 @12026 has 30 MA's), (21, 12161), (22, 12164), (23, 12170), (24, 12173), (27, 12203), (29, 12239), (30, 12245),

Gene: Zakhe101_26 Start: 11876, Stop: 12112, Start Num: 9
Candidate Starts for Zakhe101_26:
(2, 11741), (6, 11852), (Start: 7 @11864 has 4 MA's), (Start: 9 @11876 has 30 MA's), (21, 12011), (22, 12014), (23, 12020), (24, 12023), (27, 12053), (29, 12089), (30, 12095),

Gene: Zebo_25 Start: 11477, Stop: 11713, Start Num: 9
Candidate Starts for Zebo_25:
(2, 11342), (6, 11453), (Start: 7 @11465 has 4 MA's), (Start: 9 @11477 has 30 MA's), (21, 11612), (22, 11615), (23, 11621), (24, 11624), (27, 11654), (29, 11690), (30, 11696),

Gene: Zerg_97 Start: 53870, Stop: 54112, Start Num: 11
Candidate Starts for Zerg_97:
(Start: 11 @53870 has 233 MA's), (12, 53897), (14, 53903), (19, 53984), (22, 53996), (26, 54029), (28, 54065), (32, 54092),

Gene: Zizzle_102 Start: 55946, Stop: 56188, Start Num: 11
Candidate Starts for Zizzle_102:
(Start: 11 @55946 has 233 MA's), (12, 55973), (14, 55979), (19, 56060), (22, 56072), (26, 56105), (28, 56141), (32, 56168),