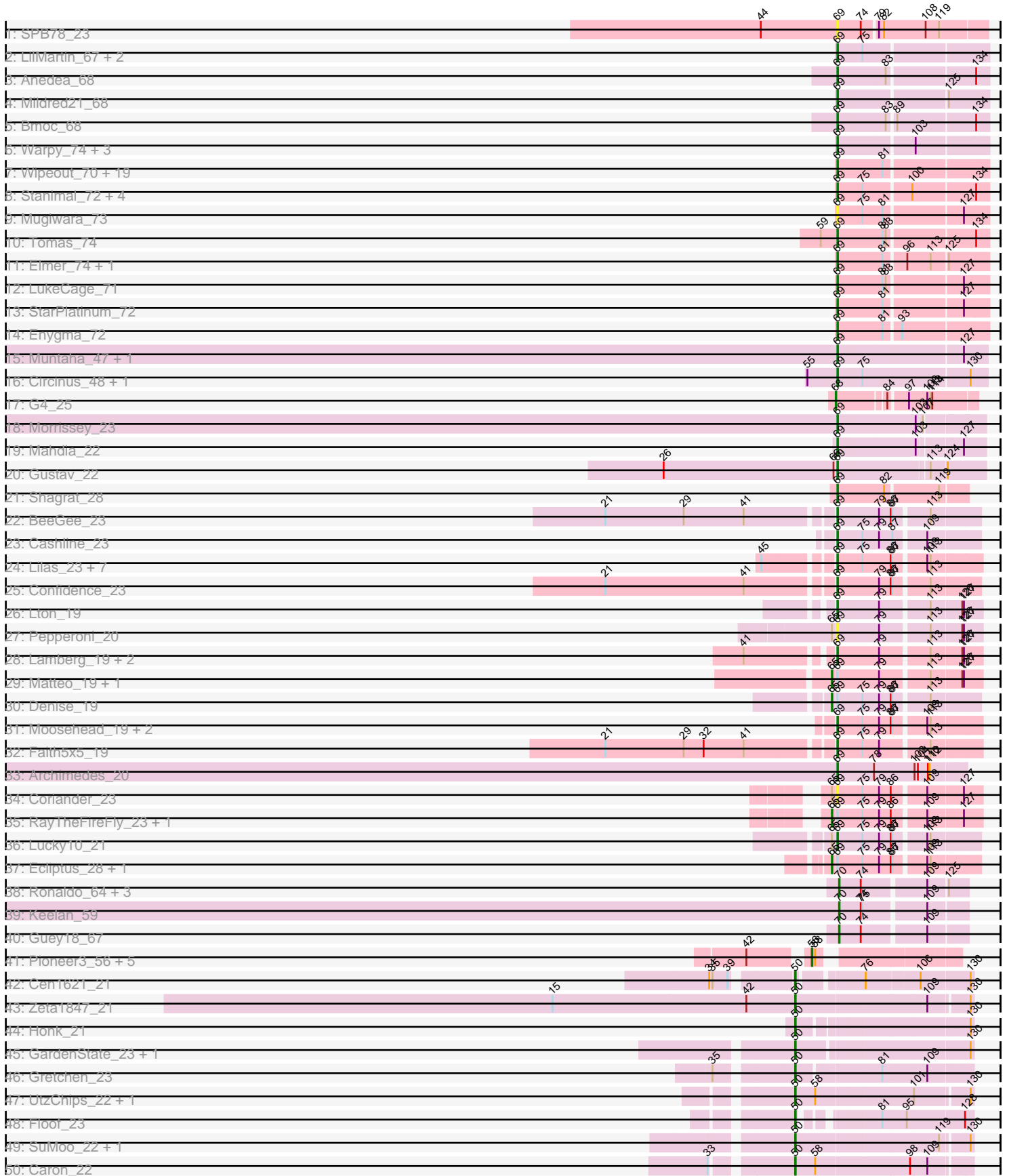
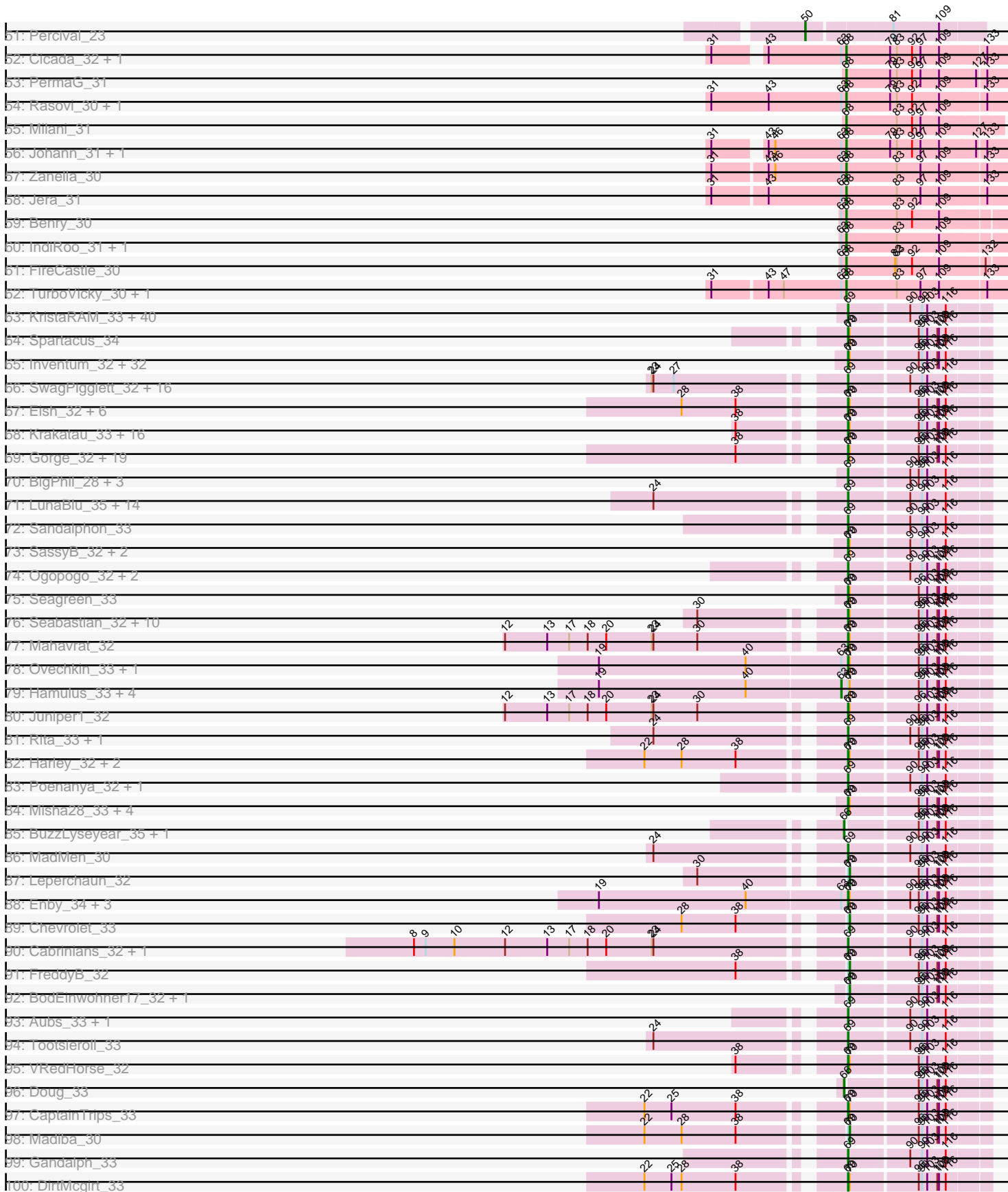
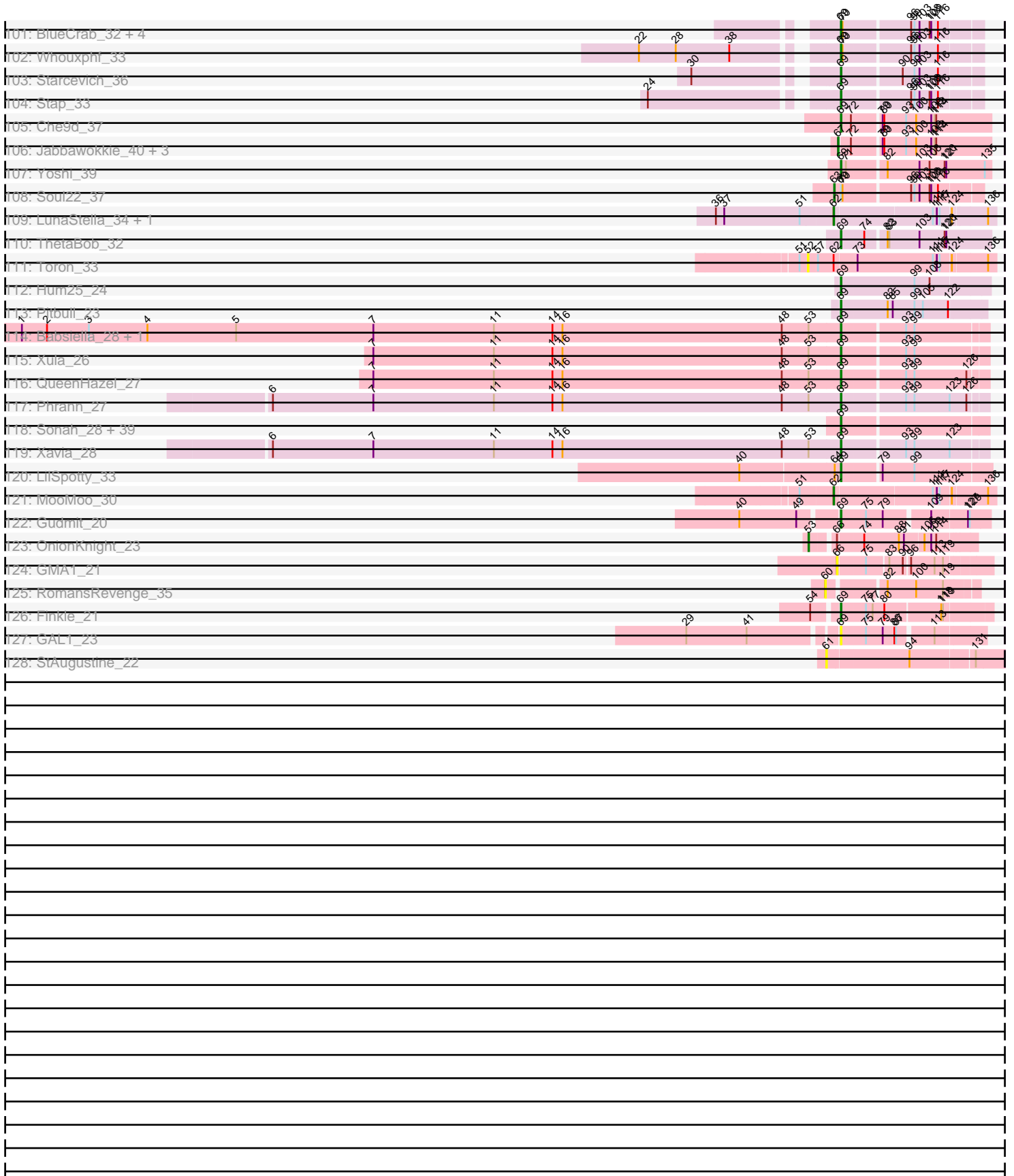


Pham 192225





Pham 192225



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 192225 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192225 has 417 members, 24 are drafts.

Phages represented in each track:

- Track 1 : SPB78_23
- Track 2 : LilMartin_67, MulchMansion_67, Angela_67
- Track 3 : Anedea_68
- Track 4 : Mildred21_68
- Track 5 : Bmoc_68
- Track 6 : Warpy_74, Jay2Jay_75, Evy_71, Targaryen_71
- Track 7 : Wipeout_70, Quaran19_72, Spelly_72, Spilled_73, Gibbi_76, MindFlayer_70, Amabiko_72, JimJam_72, Jollison_71, Bordeaux_70, Battuta_70, Birchlyn_69, Karimac_71, SaltySpitoon_72, KentuckyRacer_72, PumpkinSpice_71, CeilingFan_74, TomSawyer_70, IchabodCrane_69, Starbow_70
- Track 8 : Stanimal_72, Sollertia_72, Genie2_72, BoomerJR_72, Yaboi_72
- Track 9 : Mugiwara_73
- Track 10 : Tomas_74
- Track 11 : Elmer_74, Wofford_71
- Track 12 : LukeCage_71
- Track 13 : StarPlatinum_72
- Track 14 : Enygma_72
- Track 15 : Muntaha_47, Wakanda_47
- Track 16 : Circinus_48, BillNye_46
- Track 17 : G4_25
- Track 18 : Morrissey_23
- Track 19 : Mahdia_22
- Track 20 : Gustav_22
- Track 21 : Shagrat_28
- Track 22 : BeeGee_23
- Track 23 : Cashline_23
- Track 24 : Lilas_23, EMsquaredA_23, Pollux_23, BritBrat_23, Bradissa_23, EnalisNailo_23, Marteena_23, Floral_23
- Track 25 : Confidence_23
- Track 26 : Lton_19
- Track 27 : Pepperoni_20
- Track 28 : Lamberg_19, Nettuno_19, EdnaMode_19
- Track 29 : Matteo_19, Pickett_19
- Track 30 : Denise_19
- Track 31 : Moosehead_19, Morkie_21, PhorbesPhlower_21
- Track 32 : Faith5x5_19
- Track 33 : Archimedes_20

- Track 34 : Coriander_23
- Track 35 : RayTheFireFly_23, Doggs_22
- Track 36 : Lucky10_21
- Track 37 : Ecliptus_28, ODay_29
- Track 38 : Ronaldo_64, Ziko_64, Fryberger_61, Volt_64
- Track 39 : Keelan_59
- Track 40 : Guey18_67
- Track 41 : Pioneer3_56, Hortus1_56, OlinDD_56, Alleb_57, Tandem_56, Platte_56
- Track 42 : Cen1621_21
- Track 43 : Zeta1847_21
- Track 44 : Honk_21
- Track 45 : GardenState_23, IAmGroot_23
- Track 46 : Gretchen_23
- Track 47 : UtzChips_22, Barnstormer_22
- Track 48 : Floof_23
- Track 49 : SuMoo_22, Mabodamaca_23
- Track 50 : Caron_22
- Track 51 : Percival_23
- Track 52 : Cicada_32, SBlackberry_30
- Track 53 : PermaG_31
- Track 54 : Rasovi_30, Htur_30
- Track 55 : Milani_31
- Track 56 : Johann_31, Goodman_31
- Track 57 : Zanella_30
- Track 58 : Jera_31
- Track 59 : Benry_30
- Track 60 : IndiRoo_31, Sucha_27
- Track 61 : FireCastle_30
- Track 62 : TurboVicky_30, Typher_32
- Track 63 : KristaRAM_33, Shauna1_29, Hegedechwinu_33, MilleniumForce_33, Hlubikazi_33, Whatsapiecost_33, Eradicator_32, Melissauren88_32, DeadP_32, Fruitloop_31, Akhila_26, Batiatus_32, WillSterrel_34, Piper2020_34, Juice456_34, Tweety_32, Mandlovu_33, Latretium_33, DLane_32, JalFarm20_35, IrishSherpFalk_34, Flathead_32, Pippy_26, Ardmore_31, Blarby_41, Brocalys_27, Strokeseat_33, OwlsT2W_33, Ms6_26, PhesterPhotato_32, MilanaBonita_26, MinionDave_35, Coco12_32, Taj_32, Phanphagia_29, Mutaforma13_32, Wee_33, MulchSalad_31, Wachhund_32, Phalconet_32, Leozinho_34
- Track 64 : Spartacus_34
- Track 65 : Inventum_32, GigiOuiOui_32, Blexus_32, Empress_33, Royals2015_32, JoeyJr_32, OldBen_32, Phasih_33, Plumbus_34, Beakin_33, SiSi_32, RockyHorror_33, Pollywog_32, RitaG_33, Veteran_32, DaddyRickover_32, Scottish_33, Sassafras_33, Frankie_36, Zerg_32, Polka14_33, Dorothy_32, GUmbie_32, Mozy_34, KingMidas_34, Nitzel_33, Karhdo_32, Dante_32, Daenerys_32, RedBird_32, Che8_34, Alexphander_35, DaWorst_34
- Track 66 : SwagPigglett_32, NormanBulbieJr_32, Zizzle_32, Yorick_32, Jarcob_32, LastJedi_26, Martik_32, Koella_26, Maravista_32, LilMoolah_32, Lizziana_32, Hades_33, ShiLan_32, Clifton_26, Nivrat_32, ShowerHandel_32, Burwell21_32
- Track 67 : Eish_32, Moonbeam_33, Sabbb_33, Job42_36, Fancypants_32, DosHalletts_34, ArcusAngelus_32
- Track 68 : Krakatau_33, PMC_32, Cornucopia_33, DillTech15_32, Fastidio_34, Mantra_32, Totinger_33, LittleShirley_35, Rockne_32, Phatniss_33, UncleRicky_35, Llij_32, DotProduct_32, Drago_33, Chuckly_32, Rialto_36, XFactor_32

- Track 69 : Gorge_32, QuickMath_33, Kimberlium_34, Quico_33, Girafales_33, Saal_32, MulchExplorer_36, Spoonbill_32, Sparkdehlily_32, DRBy19_32, James_32, Florinda_32, Mattes_32, Crumble_26, Kersh_31, Radiance_32, BobaPhett_32, OlympiaSaint_32, Philus_32, TDanisky_32
- Track 70 : BigPhil_28, Sarma624_28, Cerasum_28, Velveteen_28
- Track 71 : LunaBlu_35, Cornie_32, Emma_34, Galactic_34, Renaud18_32, Filuzino_32, ShroomBoi_29, Firehouse51_33, Mova_33, Kenuha5_29, Bobi_34, SuperGrey_33, Byougenkin_32, Bubbles123_34, Guppsters_34
- Track 72 : Sandalphon_33
- Track 73 : SassyB_32, PopTart_32, Boomer_34
- Track 74 : Ogopogo_32, IbOuu_34, Ramsey_35
- Track 75 : Seagreen_33
- Track 76 : Seabastian_32, Ochi17_30, Estave1_30, Pacc40_32, OfUltron_32, Llama_32, Jinglebell_31, Modragons_32, SimranZ1_35, Oksu_33, AlpineSix_33
- Track 77 : Mahavrat_32
- Track 78 : Ovechkin_33, StAnnes_31
- Track 79 : Hamulus_33, Girr_34, Ruby_34, Kingsley_31, MisterCuddles_34
- Track 80 : Juniper1_32
- Track 81 : Rita_33, Bipolar_29
- Track 82 : Harley_32, Ibhubesi_32, Minnie_34
- Track 83 : Poenanya_32, Doomphist_32
- Track 84 : Misha28_33, Awesomesauce_33, TootsiePop_33, ChickenDinner_34, DocMcStuffins_34
- Track 85 : BuzzLyseyear_35, Spikelee_34
- Track 86 : MadMen_30
- Track 87 : Leperchaun_32
- Track 88 : Enby_34, SG4_33, Lorde_34, EleanorGeorge_33
- Track 89 : Chevrolet_33
- Track 90 : Cabrinians_32, Priscilla_32
- Track 91 : FreddyB_32
- Track 92 : BodEinwohner17_32, Marker_33
- Track 93 : Aubs_33, Donkeykong_32
- Track 94 : Tootsieroll_33
- Track 95 : VRedHorse_32
- Track 96 : Doug_33
- Track 97 : CaptainTrips_33
- Track 98 : Madiba_30
- Track 99 : Gandalph_33
- Track 100 : DirtMcgirt_33
- Track 101 : BlueCrab_32, Deb65_32, Geralt_32, Nimbo_32, PHappiness_32
- Track 102 : Whouxphf_33
- Track 103 : Starcevich_36
- Track 104 : Stap_33
- Track 105 : Che9d_37
- Track 106 : Jabbawokkie_40, Zapner_39, Demsculpinboyz_38, Avani_37
- Track 107 : Yoshi_39
- Track 108 : Soul22_37
- Track 109 : LunaStella_34, TChen_32
- Track 110 : ThetaBob_32
- Track 111 : Toron_33
- Track 112 : Hum25_24
- Track 113 : Pitbull_23
- Track 114 : Babsiella_28, HC_29

- Track 115 : Xula_26
- Track 116 : QueenHazel_27
- Track 117 : Phrann_27
- Track 118 : Sonah_28, Jung_27, Ksquared_28, Phegasus_28, Fishburne_28, Techage_28, Brusacoram_28, Shipwreck_30, Pygmy_30, Jebeks_28, Zilizebeth_28, CactusJack_28, Kari_28, Juniormint_28, Atcoo_28, StressBall_28, Glaske_28, Bartholomew_27, Venti_28, Dynamo_28, Polkaroo_28, Necropolis_28, Mangethe_28, Majeke_28, HUHilltop_28, FirstPlacePfu_28, Vidya_28, Camster_28, KilKor_28, Phalm_28, Phineas_28, Langerak_28, GreaseLightnin_28, StevieRay_28, Bunnies_28, Megiddo_28, Donovan_28, Malithi_28, Thespis_28, Arib1_28
- Track 119 : Xavia_28
- Track 120 : LilSpotty_33
- Track 121 : MooMoo_30
- Track 122 : Gudmit_20
- Track 123 : OnionKnight_23
- Track 124 : GMA1_21
- Track 125 : RomansRevenge_35
- Track 126 : Finkle_21
- Track 127 : GAL1_23
- Track 128 : StAugustine_22

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

The start number called the most often in the published annotations is 69, it was called in 322 of the 393 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_26, Alexphander_35, AlpineSix_33, Amabiko_72, Anedea_68, Angela_67, Archimedes_20, ArcusAngelus_32, Ardmore_31, Arib1_28, Atcoo_28, Aubs_33, Awesomesauce_33, Babsiella_28, Bartholomew_27, Batiatus_32, Battuta_70, Beakin_33, BeeGee_23, BigPhil_28, BillNye_46, Bipolar_29, Birchlyn_69, Blarby_41, Blexus_32, BlueCrab_32, Bmoc_68, BobaPhett_32, Bobi_34, BoomerJR_72, Boomer_34, Bordeaux_70, Bradissa_23, BritBrat_23, Brocalys_27, Brusacoram_28, Bubbles123_34, Bunnies_28, Burwell21_32, Byougenkin_32, Cabrinians_32, CactusJack_28, Camster_28, CaptainTrips_33, Cashline_23, CeilingFan_74, Cerasum_28, Che8_34, Che9d_37, ChickenDinner_34, Chuckly_32, Circinus_48, Clifton_26, Coco12_32, Confidence_23, Coriander_23, Cornie_32, Cornucopia_33, Crumble_26, DLane_32, DRBy19_32, DaWorst_34, DaddyRickover_32, Daenerys_32, Dante_32, DeadP_32, Deb65_32, DillTech15_32, DirtMcgirt_33, DocMcStuffsins_34, Donkeykong_32, Donovan_28, Doomphist_32, Dorothy_32, DosHalletts_34, DotProduct_32, Drago_33, Dynamo_28, EMSquaredA_23, EdnaMode_19, Eish_32, EleanorGeorge_33, Elmer_74, Emma_34, Empress_33, EnalisNailo_23, Enby_34, Enygma_72, Eradicator_32, Estave1_30, Evy_71, Faith5x5_19, Fancypants_32, Fastidio_34, Filuzino_32, Finkle_21, Firehouse51_33, FirstPlacePfu_28, Fishburne_28, Flathead_32, Floral_23, Florinda_32, Frankie_36, Fruitloop_31, GAL1_23, GUmbie_32, Galactic_34, Gandalph_33, Genie2_72, Geralt_32, Gibbi_76, GigiOuiOui_32, Girafales_33, Glaske_28, Gorge_32, GreaseLightnin_28, Gudmit_20, Guppsters_34, Gustav_22, HC_29, HUHilltop_28, Hades_33, Harley_32, Hegedechwinu_33, Hlubikazi_33, Hum25_24, IbOuu_34, lbhubesi_32, IchabodCrane_69, Inventum_32, IrishSherpFalk_34, JalFarm20_35,

James_32, Jarcob_32, Jay2Jay_75, Jebeks_28, JimJam_72, Jinglebell_31, Job42_36, JoeyJr_32, Jollison_71, Juice456_34, Jung_27, Juniormint_28, Juniper1_32, Karhdo_32, Kari_28, Karimac_71, KentuckyRacer_72, Kenuha5_29, Kersh_31, KilKor_28, Kimberlium_34, KingMidas_34, Koella_26, Krakatau_33, KristaRAM_33, Ksquared_28, Lamberg_19, Langerak_28, LastJedi_26, Latretium_33, Leozinho_34, LilMartin_67, LilMoolah_32, LilSpotty_33, Lilas_23, LittleShirley_35, Lizziana_32, Llama_32, Llij_32, Lorde_34, Lton_19, Lucky10_21, LukeCage_71, LunaBlu_35, MadMen_30, Mahavrat_32, Mahdia_22, Majeke_28, Malithi_28, Mandlovu_33, Mangethe_28, Mantra_32, Maravista_32, Marteena_23, Martik_32, Mattes_32, Megiddo_28, Melissauren88_32, MilanaBonita_26, Mildred21_68, MilleniumForce_33, MindFlayer_70, MinionDave_35, Minnie_34, Misha28_33, Modragons_32, Moonbeam_33, Moosehead_19, Morkie_21, Morrissey_23, Mova_33, Mozy_34, Ms6_26, Mugiwara_73, MulchExplorer_36, MulchMansion_67, MulchSalad_31, Muntaha_47, Mutaforma13_32, Necropolis_28, Nettuno_19, Nimbo_32, Nitzel_33, Nivrat_32, NormanBulbieJr_32, Ochi17_30, OfUltron_32, Ogopogo_32, Oksu_33, OldBen_32, OlympiaSaint_32, Ovechkin_33, OwlsT2W_33, PHappiness_32, PMC_32, Pacc40_32, Pepperoni_20, Phalconet_32, Phalm_28, Phanphagia_29, Phasih_33, Phatniss_33, Phegasus_28, PhesterPhotato_32, Philus_32, Phineas_28, PhorbesPhlower_21, Phrann_27, Piper2020_34, Pippy_26, Pitbull_23, Plumbus_34, Poenanya_32, Polka14_33, Polkaroo_28, Pollux_23, Pollywog_32, PopTart_32, Priscilla_32, PumpkinSpice_71, Pygmy_30, Quarant19_72, QueenHazel_27, QuickMath_33, Quico_33, Radiance_32, Ramsey_35, RedBird_32, Renaud18_32, Rialto_36, RitaG_33, Rita_33, Rockne_32, RockyHorror_33, Royals2015_32, SG4_33, SPB78_23, Saal_32, Sabbb_33, SaltySpittoon_72, Sandalphon_33, Sarma624_28, Sassafras_33, SassyB_32, Scottish_33, Seabastian_32, Seagreen_33, Shagrat_28, Shauna1_29, ShiLan_32, Shipwreck_30, ShowerHandel_32, ShroomBoi_29, SiSi_32, SimranZ1_35, Sollertia_72, Sonah_28, Sparkdehlily_32, Spartacus_34, Spelly_72, Spilled_73, Spoonbill_32, StAnnes_31, Stanimal_72, Stap_33, StarPlatinum_72, Starbow_70, Starcevich_36, StevieRay_28, StressBall_28, Strokeseat_33, SuperGrey_33, SwagPiggett_32, TDanisky_32, Taj_32, Targaryen_71, Techage_28, Thespis_28, ThetaBob_32, TomSawyer_70, Tomas_74, TootsiePop_33, Tootsieroll_33, Totinger_33, Tweety_32, UncleRicky_35, VRedHorse_32, Velveteen_28, Venti_28, Veteran_32, Vidya_28, Wachhund_32, Wakanda_47, Warpy_74, Wee_33, Whatsapiecost_33, Whouxphf_33, WillSterrel_34, Wipeout_70, Wofford_71, XFactor_32, Xavia_28, Xula_26, Yaboi_72, Yorick_32, Yoshi_39, Zerg_32, Zilizabeth_28, Zizzle_32,

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

- BodEinwohner17_32, Chevrolet_33, Denise_19, Doggs_22, Ecliptus_28, FreddyB_32, Girr_34, Hamulus_33, Kingsley_31, Leperchaun_32, Madiba_30, Marker_33, Matteo_19, MisterCuddles_34, ODay_29, Pickett_19, RayTheFireFly_23, Ruby_34, Soul22_37,

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

- Alleb_57, Avani_37, Barnstormer_22, Benry_30, BuzzLyseyear_35, Caron_22, Cen1621_21, Cicada_32, Demsculpinboyz_38, Doug_33, FireCastle_30, Floof_23, Fryberger_61, G4_25, GMA1_21, GardenState_23, Goodman_31, Gretchen_23, Guey18_67, Honk_21, Hortus1_56, Htur_30, IAmGroot_23, IndiRoo_31, Jabbawokkie_40, Jera_31, Johann_31, Keelan_59, LunaStella_34, Mabodamaca_23, Milani_31, MooMoo_30, OlinDD_56, OnionKnight_23, Percival_23, PermaG_31, Pioneer3_56, Platte_56, Rasovi_30, RomansRevenge_35, Ronaldo_64, SBlackberry_30, Spikelee_34, StAugustine_22, SuMoo_22, Sucha_27, TChen_32,

Tandem_56, Toron_33, TurboVicky_30, Typher_32, UtzChips_22, Volt_64, Zanella_30, Zapner_39, Zeta1847_21, Ziko_64,

Summary by start number:

Start 50:

- Found in 13 of 417 (3.1%) of genes in pham
- Manual Annotations of this start: 13 of 393
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_22 (EH), Caron_22 (EH), Cen1621_21 (EH), Floof_23 (EH), GardenState_23 (EH), Gretchen_23 (EH), Honk_21 (EH), IAmGroot_23 (EH), Mabodamaca_23 (EH), Percival_23 (EH), SuMoo_22 (EH), UtzChips_22 (EH), Zeta1847_21 (EH),

Start 52:

- Found in 1 of 417 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toron_33 (F6),

Start 53:

- Found in 7 of 417 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 393
- Called 14.3% of time when present
- Phage (with cluster) where this start called: OnionKnight_23 (singleton),

Start 56:

- Found in 6 of 417 (1.4%) of genes in pham
- Manual Annotations of this start: 6 of 393
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb_57 (ED1), Hortus1_56 (ED1), OlinDD_56 (ED1), Pioneer3_56 (ED1), Platte_56 (ED1), Tandem_56 (ED1),

Start 60:

- Found in 1 of 417 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_35 (singleton),

Start 61:

- Found in 1 of 417 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StAugustine_22 (singleton),

Start 62:

- Found in 4 of 417 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 393
- Called 75.0% of time when present
- Phage (with cluster) where this start called: LunaStella_34 (F4), MooMoo_30 (singleton), TChen_32 (F4),

Start 63:

- Found in 26 of 417 (6.2%) of genes in pham
- Manual Annotations of this start: 6 of 393
- Called 23.1% of time when present
- Phage (with cluster) where this start called: Girr_34 (F1), Hamulus_33 (F1), Kingsley_31 (F1), MisterCuddles_34 (F1), Ruby_34 (F1), Soul22_37 (F2),

Start 65:

- Found in 10 of 417 (2.4%) of genes in pham
- Manual Annotations of this start: 7 of 393
- Called 70.0% of time when present
- Phage (with cluster) where this start called: Denise_19 (CZ5), Doggs_22 (DB), Ecliptus_28 (DN), Matteo_19 (CZ2), ODay_29 (DN), Pickett_19 (CZ2), RayTheFireFly_23 (DB),

Start 66:

- Found in 6 of 417 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 393
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BuzzLyseyear_35 (F1), Doug_33 (F1), GMA1_21 (singleton), Spikelee_34 (F1),

Start 67:

- Found in 4 of 417 (1.0%) of genes in pham
- Manual Annotations of this start: 4 of 393
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani_37 (F2), Demsculpinboyz_38 (F2), Jabbawokkie_40 (F2), Zapner_39 (F2),

Start 68:

- Found in 17 of 417 (4.1%) of genes in pham
- Manual Annotations of this start: 16 of 393
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benry_30 (EJ), Cicada_32 (EJ), FireCastle_30 (EJ), G4_25 (BW), Goodman_31 (EJ), Htur_30 (EJ), IndiRoo_31 (EJ), Jera_31 (EJ), Johann_31 (EJ), Milani_31 (EJ), PermaG_31 (EJ), Rasovi_30 (EJ), SBlackberry_30 (EJ), Sucha_27 (EJ), TurboVicky_30 (EJ), Typher_32 (EJ), Zanella_30 (EJ),

Start 69:

- Found in 360 of 417 (86.3%) of genes in pham
- Manual Annotations of this start: 322 of 393
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Akhila_26 (F1), Alexphander_35 (F1), AlpineSix_33 (F1), Amabiko_72 (BE2), Anedea_68 (BE1), Angela_67 (BE1), Archimedes_20 (DA), ArcusAngelus_32 (F1), Ardmore_31 (F1), Arib1_28 (P1), Atcoo_28 (P1), Aubs_33 (F1), Awesomesauce_33 (F1), Babsiella_28 (I1), Bartholomew_27 (P1), Batiatus_32 (F1), Battuta_70 (BE2), Beakin_33 (F1), BeeGee_23 (CY), BigPhil_28 (F1), BillNye_46 (BK2), Bipolar_29 (F1), Birchlyn_69 (BE2), Blarby_41 (F), Blexus_32 (F1), BlueCrab_32 (F1), Bmoc_68 (BE1), BobaPhett_32 (F1), Bobi_34 (F1), BoomerJR_72 (BE2), Boomer_34 (F1), Bordeaux_70 (BE2), Bradissa_23 (CY1), BritBrat_23 (CY2), Brocalys_27 (F1), Brusacoram_28 (P1), Bubbles123_34 (F1), Bunnies_28 (P1), Burwell21_32 (F1), Byougenkin_32 (F1), Cabrinians_32 (F1), CactusJack_28 (P1), Camster_28 (P1),

CaptainTrips_33 (F1), Cashline_23 (CY), CeilingFan_74 (BE2), Cerasum_28 (F1), Che8_34 (F1), Che9d_37 (F2), ChickenDinner_34 (F1), Chuckly_32 (F1), Circinus_48 (BK2), Clifton_26 (F1), Coco12_32 (F1), Confidence_23 (CY1), Coriander_23 (DB), Cornie_32 (F5), Cornucopia_33 (F1), Crumble_26 (F1), DLane_32 (F1), DRBy19_32 (F1), DaWorst_34 (F1), DaddyRickover_32 (F1), Daenerys_32 (F1), Dante_32 (F1), DeadP_32 (F1), Deb65_32 (F1), DillTech15_32 (F1), DirtMcgirt_33 (F1), DocMcStuffins_34 (F1), Donkeykong_32 (F1), Donovan_28 (P1), Doomphist_32 (F1), Dorothy_32 (F1), DosHalletts_34 (F1), DotProduct_32 (F1), Drago_33 (F1), Dynamo_28 (P1), EMSquaredA_23 (CY1), EdnaMode_19 (CZ2), Eish_32 (F1), EleanorGeorge_33 (F1), Elmer_74 (BE2), Emma_34 (F1), Empress_33 (F1), EnalisNailo_23 (CY1), Enby_34 (F1), Enygma_72 (BE2), Eradicator_32 (F1), Estave1_30 (F1), Evy_71 (BE1), Faith5x5_19 (CZ6), Fancypants_32 (F1), Fastidio_34 (F1), Filuzino_32 (F1), Finkle_21 (singleton), Firehouse51_33 (F1), FirstPlacePfu_28 (P1), Fishburne_28 (P1), Flathead_32 (F1), Floral_23 (CY1), Florinda_32 (F1), Frankie_36 (F1), Fruitloop_31 (F1), GAL1_23 (singleton), GUmbie_32 (F1), Galactic_34 (F1), Gandolph_33 (F1), Genie2_72 (BE2), Geralt_32 (F1), Gibbi_76 (BE2), GigiOuiOui_32 (F1), Girafales_33 (F1), Glaske_28 (P1), Gorge_32 (F1), GreaseLightnin_28 (P1), Gudmit_20 (singleton), Guppsters_34 (F1), Gustav_22 (CD), HC_29 (I1), HUHilltop_28 (P1), Hades_33 (F1), Harley_32 (F1), Hegedechwinu_33 (F1), Hlubikazi_33 (F1), Hum25_24 (FQ), IbOuu_34 (F1), Ibhuesi_32 (F1), IchabodCrane_69 (BE2), Inventum_32 (F1), IrishSherpFalk_34 (F1), JalFarm20_35 (F1), James_32 (F1), Jarcob_32 (F1), Jay2Jay_75 (BE1), Jebeks_28 (P1), JimJam_72 (BE2), Jinglebell_31 (F1), Job42_36 (F1), JoeyJr_32 (F1), Jollison_71 (BE2), Juice456_34 (F1), Jung_27 (P1), Juniormint_28 (P1), Juniper1_32 (F1), Karhdo_32 (F1), Kari_28 (P1), Karimac_71 (BE2), KentuckyRacer_72 (BE2), Kenuha5_29 (F1), Kersh_31 (F1), KilKor_28 (P1), Kimberlium_34 (F1), KingMidas_34 (F1), Koella_26 (F1), Krakatau_33 (F1), KristaRAM_33 (F1), Ksquared_28 (P1), Lamberg_19 (CZ2), Langerak_28 (P1), LastJedi_26 (F1), Latretium_33 (F1), Leozinho_34 (F1), LilMartin_67 (BE1), LilMoolah_32 (F1), LilSpotty_33 (singleton), Lilas_23 (CY1), LittleShirley_35 (F1), Lizziana_32 (F1), Llama_32 (F1), Llij_32 (F1), Lorde_34 (F1), Lton_19 (CZ), Lucky10_21 (DH), LukeCage_71 (BE2), LunaBlu_35 (F1), MadMen_30 (F1), Mahavrat_32 (F1), Mahdia_22 (CD), Majeke_28 (P1), Malithi_28 (P1), Mandlovu_33 (F1), Mangethe_28 (P1), Mantra_32 (F1), Maravista_32 (F1), Marteena_23 (CY1), Martik_32 (F1), Mattes_32 (F1), Megiddo_28 (P1), Melissauren88_32 (F1), MilanaBonita_26 (F1), Mildred21_68 (BE1), MilleniumForce_33 (F1), MindFlayer_70 (BE2), MinionDave_35 (F1), Minnie_34 (F1), Misha28_33 (F1), Modragons_32 (F1), Moonbeam_33 (F1), Moosehead_19 (CZ6), Morkie_21 (DH), Morrissey_23 (CD), Mova_33 (F1), Mozy_34 (F1), Ms6_26 (F1), Mugiwara_73 (BE2), MulchExplorer_36 (F1), MulchMansion_67 (BE1), MulchSalad_31 (F), Muntaha_47 (BK2), Mutaforma13_32 (F1), Necropolis_28 (P1), Nettuno_19 (CZ2), Nimbo_32 (F1), Nitzel_33 (F1), Nivrat_32 (F1), NormanBulbieJr_32 (F1), Ochi17_30 (F1), OfUltron_32 (F1), Ogopogo_32 (F1), Oksu_33 (F1), OldBen_32 (F1), OlympiaSaint_32 (F1), Ovechkin_33 (F1), OwlsT2W_33 (F1), PHappiness_32 (F1), PMC_32 (F1), Pacc40_32 (F1), Pepperoni_20 (CZ), Phalconet_32 (F1), Phalm_28 (P1), Phanphagia_29 (F1), Phasih_33 (F1), Phatniss_33 (F1), Phegasus_28 (P1), PhesterPhotato_32 (F1), Philus_32 (F1), Phineas_28 (P1), PhorbesPhlower_21 (DH), Phrann_27 (N), Piper2020_34 (F1), Pippy_26 (F1), Pitbull_23 (FQ), Plumbus_34 (F1), Poenanya_32 (F1), Polka14_33 (F1), Polkaroo_28 (P1), Pollux_23 (CY1), Pollywog_32 (F1), PopTart_32 (F1), Priscilla_32 (F1), PumpkinSpice_71 (BE2), Pygmy_30 (P1), Quarant19_72 (BE2), QueenHazel_27 (I1), QuickMath_33 (F1), Quico_33 (F1), Radiance_32 (F1), Ramsey_35 (F1), RedBird_32 (F1), Renaud18_32 (F4), Rialto_36 (F1), RitaG_33 (F1), Rita_33 (F1), Rockne_32 (F1), RockyHorror_33

(F1), Royals2015_32 (F1), SG4_33 (F1), SPB78_23 (BA), Saal_32 (F1), Sabbb_33 (F1), SaltySpitoon_72 (BE2), Sandalphon_33 (F1), Sarma624_28 (F1), Sassafras_33 (F1), SassyB_32 (F1), Scottish_33 (F1), Seabastian_32 (F1), Seagreen_33 (F1), Shagrat_28 (CF), Shauna1_29 (F1), ShiLan_32 (F1), Shipwreck_30 (P1), ShowerHandel_32 (F1), ShroomBoi_29 (F1), SiSi_32 (F1), SimranZ1_35 (F1), Sollertia_72 (BE2), Sonah_28 (P1), Sparkdehlily_32 (F1), Spartacus_34 (F1), Spelly_72 (BE2), Spilled_73 (BE2), Spoonbill_32 (F1), StAnnes_31 (F1), Stanimal_72 (BE2), Stap_33 (F1), StarPlatinum_72 (BE2), Starbow_70 (BE2), Starceвич_36 (F1), StevieRay_28 (P1), StressBall_28 (P1), Strokeseat_33 (F1), SuperGrey_33 (F1), SwagPiggett_32 (F1), TDanisky_32 (F1), Taj_32 (F1), Targaryen_71 (BE1), Techage_28 (P1), Thespis_28 (P1), ThetaBob_32 (F4), TomSawyer_70 (BE2), Tomas_74 (BE2), TootsiePop_33 (F1), Tootsieroll_33 (F1), Totinger_33 (F1), Tweety_32 (F1), UncleRicky_35 (F1), VRedHorse_32 (F1), Velveteen_28 (F1), Venti_28 (P1), Veteran_32 (F1), Vidya_28 (P1), Wachhund_32 (F1), Wakanda_47 (BK2), Warpy_74 (BE1), Wee_33 (F1), Whatsapiecost_33 (F1), Whouxphf_33 (F1), WillSterrel_34 (F1), Wipeout_70 (BE2), Wofford_71 (BE2), XFactor_32 (F1), Xavia_28 (P3), Xula_26 (I1), Yaboi_72 (BE2), Yorick_32 (F1), Yoshi_39 (F2), Zerg_32 (F1), Zilizebeth_28 (P1), Zizzle_32 (F1),

Start 70:

- Found in 136 of 417 (32.6%) of genes in pham
- Manual Annotations of this start: 12 of 393
- Called 8.8% of time when present
- Phage (with cluster) where this start called: BodEinwohner17_32 (F1), Chevrolet_33 (F1), FreddyB_32 (F1), Fryberger_61 (DP), Guey18_67 (DP), Keelan_59 (DP), Leperchaun_32 (F1), Madiba_30 (F1), Marker_33 (F1), Ronaldo_64 (DP), Volt_64 (DP), Ziko_64 (DP),

Summary by clusters:

There are 34 clusters represented in this pham: DN, FQ, singleton, BA, DH, P3, CZ2, DB, DA, ED1, CZ5, DP, I1, F, CY2, CY1, P1, EH, EJ, CZ6, CF, N, CZ, CY, BK2, CD, F1, F2, F4, F5, F6, BW, BE2, BE1,

Info for manual annotations of cluster BE1:

- Start number 69 was manually annotated 10 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 69 was manually annotated 29 times for cluster BE2.

Info for manual annotations of cluster BK2:

- Start number 69 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster BW:

- Start number 68 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CD:

- Start number 69 was manually annotated 3 times for cluster CD.

Info for manual annotations of cluster CF:

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

Info for manual annotations of cluster CY:

- Start number 69 was manually annotated 2 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 69 was manually annotated 8 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 69 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ2:

- Start number 65 was manually annotated 2 times for cluster CZ2.
- Start number 69 was manually annotated 3 times for cluster CZ2.

Info for manual annotations of cluster CZ5:

- Start number 65 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 69 was manually annotated 2 times for cluster CZ6.

Info for manual annotations of cluster DA:

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

Info for manual annotations of cluster DB:

- Start number 65 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DH:

- Start number 69 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 65 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DP:

- Start number 70 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster ED1:

- Start number 56 was manually annotated 6 times for cluster ED1.

Info for manual annotations of cluster EH:

- Start number 50 was manually annotated 13 times for cluster EH.

Info for manual annotations of cluster EJ:

- Start number 68 was manually annotated 15 times for cluster EJ.

Info for manual annotations of cluster F1:

- Start number 63 was manually annotated 5 times for cluster F1.
- Start number 66 was manually annotated 3 times for cluster F1.
- Start number 69 was manually annotated 201 times for cluster F1.
- Start number 70 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 63 was manually annotated 1 time for cluster F2.
- Start number 67 was manually annotated 4 times for cluster F2.
- Start number 69 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 62 was manually annotated 2 times for cluster F4.
- Start number 69 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 69 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FQ:

- Start number 69 was manually annotated 2 times for cluster FQ.

Info for manual annotations of cluster I1:

- Start number 69 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster N:

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

Info for manual annotations of cluster P1:

- Start number 69 was manually annotated 37 times for cluster P1.

Info for manual annotations of cluster P3:

- Start number 69 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: Akhila_26 Start: 24607, Stop: 24840, Start Num: 69

Candidate Starts for Akhila_26:

(Start: 69 @24607 has 322 MA's), (90, 24706), (99, 24727), (103, 24736), (116, 24769),

Gene: Alexphander_35 Start: 29298, Stop: 29531, Start Num: 69

Candidate Starts for Alexphander_35:

(Start: 69 @29298 has 322 MA's), (Start: 70 @29301 has 12 MA's), (96, 29412), (99, 29418), (103, 29427), (108, 29445), (109, 29448), (116, 29460),

Gene: Alleb_57 Start: 35882, Stop: 36097, Start Num: 56

Candidate Starts for Alleb_57:

(42, 35792), (Start: 56 @35882 has 6 MA's), (58, 35888),

Gene: AlpineSix_33 Start: 28745, Stop: 28978, Start Num: 69

Candidate Starts for AlpineSix_33:

(30, 28529), (Start: 69 @28745 has 322 MA's), (Start: 70 @28748 has 12 MA's), (96, 28859), (99, 28865), (103, 28874), (108, 28892), (109, 28895), (116, 28907),

Gene: Amabiko_72 Start: 53129, Stop: 53380, Start Num: 69

Candidate Starts for Amabiko_72:

(Start: 69 @53129 has 322 MA's), (81, 53204),

Gene: Anedea_68 Start: 52701, Stop: 52952, Start Num: 69
Candidate Starts for Anedea_68:
(Start: 69 @52701 has 322 MA's), (83, 52782), (134, 52929),

Gene: Angela_67 Start: 52161, Stop: 52412, Start Num: 69
Candidate Starts for Angela_67:
(Start: 69 @52161 has 322 MA's), (75, 52203),

Gene: Archimedes_20 Start: 18843, Stop: 19064, Start Num: 69
Candidate Starts for Archimedes_20:
(Start: 69 @18843 has 322 MA's), (78, 18906), (102, 18978), (104, 18984), (110, 19002), (112, 19005),

Gene: ArcusAngelus_32 Start: 29080, Stop: 29313, Start Num: 69
Candidate Starts for ArcusAngelus_32:
(28, 28837), (38, 28933), (Start: 69 @29080 has 322 MA's), (Start: 70 @29083 has 12 MA's), (96, 29194), (99, 29200), (103, 29209), (108, 29227), (109, 29230), (116, 29242),

Gene: Ardmore_31 Start: 28524, Stop: 28757, Start Num: 69
Candidate Starts for Ardmore_31:
(Start: 69 @28524 has 322 MA's), (90, 28623), (99, 28644), (103, 28653), (116, 28686),

Gene: Arib1_28 Start: 25246, Stop: 25494, Start Num: 69
Candidate Starts for Arib1_28:
(Start: 69 @25246 has 322 MA's),

Gene: Atcoo_28 Start: 25729, Stop: 25977, Start Num: 69
Candidate Starts for Atcoo_28:
(Start: 69 @25729 has 322 MA's),

Gene: Aubs_33 Start: 28859, Stop: 29092, Start Num: 69
Candidate Starts for Aubs_33:
(Start: 69 @28859 has 322 MA's), (90, 28958), (99, 28979), (103, 28988), (116, 29021),

Gene: Avani_37 Start: 28000, Stop: 28257, Start Num: 67
Candidate Starts for Avani_37:
(Start: 67 @28000 has 4 MA's), (72, 28018), (79, 28063), (80, 28066), (93, 28105), (100, 28123), (109, 28150), (113, 28156), (114, 28159),

Gene: Awesomesauce_33 Start: 28413, Stop: 28646, Start Num: 69
Candidate Starts for Awesomesauce_33:
(Start: 69 @28413 has 322 MA's), (Start: 70 @28416 has 12 MA's), (96, 28527), (99, 28533), (103, 28542), (108, 28560), (109, 28563), (116, 28575),

Gene: Babsiella_28 Start: 25313, Stop: 25558, Start Num: 69
Candidate Starts for Babsiella_28:
(1, 23846), (2, 23891), (3, 23966), (4, 24071), (5, 24230), (7, 24476), (11, 24692), (14, 24797), (16, 24815), (48, 25208), (Start: 53 @25256 has 1 MA's), (Start: 69 @25313 has 322 MA's), (93, 25418), (99, 25433),

Gene: Barnstormer_22 Start: 18840, Stop: 19127, Start Num: 50
Candidate Starts for Barnstormer_22:

(Start: 50 @18840 has 13 MA's), (58, 18876), (101, 19038), (130, 19122),

Gene: Bartholomew_27 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for Bartholomew_27:

(Start: 69 @25240 has 322 MA's),

Gene: Batiatus_32 Start: 28517, Stop: 28750, Start Num: 69

Candidate Starts for Batiatus_32:

(Start: 69 @28517 has 322 MA's), (90, 28616), (99, 28637), (103, 28646), (116, 28679),

Gene: Battuta_70 Start: 53103, Stop: 53354, Start Num: 69

Candidate Starts for Battuta_70:

(Start: 69 @53103 has 322 MA's), (81, 53178),

Gene: Beakin_33 Start: 28431, Stop: 28664, Start Num: 69

Candidate Starts for Beakin_33:

(Start: 69 @28431 has 322 MA's), (Start: 70 @28434 has 12 MA's), (96, 28545), (99, 28551), (103, 28560), (108, 28578), (109, 28581), (116, 28593),

Gene: BeeGee_23 Start: 20766, Stop: 21002, Start Num: 69

Candidate Starts for BeeGee_23:

(21, 20376), (29, 20517), (41, 20625), (Start: 69 @20766 has 322 MA's), (79, 20838), (86, 20859), (87, 20862), (113, 20919),

Gene: Benry_30 Start: 20899, Stop: 21171, Start Num: 68

Candidate Starts for Benry_30:

(Start: 63 @20890 has 6 MA's), (Start: 68 @20899 has 16 MA's), (83, 20986), (92, 21013), (109, 21061),

Gene: BigPhil_28 Start: 24741, Stop: 24974, Start Num: 69

Candidate Starts for BigPhil_28:

(Start: 69 @24741 has 322 MA's), (90, 24840), (96, 24855), (99, 24861), (103, 24870), (116, 24903),

Gene: BillNye_46 Start: 46091, Stop: 46348, Start Num: 69

Candidate Starts for BillNye_46:

(55, 46037), (Start: 69 @46091 has 322 MA's), (75, 46133), (130, 46319),

Gene: Bipolar_29 Start: 27603, Stop: 27836, Start Num: 69

Candidate Starts for Bipolar_29:

(24, 27315), (Start: 69 @27603 has 322 MA's), (90, 27702), (96, 27717), (99, 27723), (103, 27732), (116, 27765),

Gene: Birchlyn_69 Start: 50986, Stop: 51237, Start Num: 69

Candidate Starts for Birchlyn_69:

(Start: 69 @50986 has 322 MA's), (81, 51061),

Gene: Blarby_41 Start: 28996, Stop: 29229, Start Num: 69

Candidate Starts for Blarby_41:

(Start: 69 @28996 has 322 MA's), (90, 29095), (99, 29116), (103, 29125), (116, 29158),

Gene: Blexus_32 Start: 28853, Stop: 29086, Start Num: 69

Candidate Starts for Blexus_32:

(Start: 69 @28853 has 322 MA's), (Start: 70 @28856 has 12 MA's), (96, 28967), (99, 28973), (103, 28982), (108, 29000), (109, 29003), (116, 29015),

Gene: BlueCrab_32 Start: 28703, Stop: 28936, Start Num: 69

Candidate Starts for BlueCrab_32:

(Start: 69 @28703 has 322 MA's), (Start: 70 @28706 has 12 MA's), (96, 28817), (99, 28823), (103, 28832), (108, 28850), (109, 28853), (116, 28865),

Gene: Bmoc_68 Start: 52505, Stop: 52756, Start Num: 69

Candidate Starts for Bmoc_68:

(Start: 69 @52505 has 322 MA's), (83, 52586), (89, 52598), (134, 52733),

Gene: BobaPhett_32 Start: 28723, Stop: 28956, Start Num: 69

Candidate Starts for BobaPhett_32:

(38, 28576), (Start: 69 @28723 has 322 MA's), (Start: 70 @28726 has 12 MA's), (96, 28837), (99, 28843), (103, 28852), (108, 28870), (109, 28873), (116, 28885),

Gene: Bobi_34 Start: 29230, Stop: 29463, Start Num: 69

Candidate Starts for Bobi_34:

(24, 28942), (Start: 69 @29230 has 322 MA's), (90, 29329), (99, 29350), (103, 29359), (116, 29392),

Gene: BodEinwohner17_32 Start: 28926, Stop: 29156, Start Num: 70

Candidate Starts for BodEinwohner17_32:

(Start: 69 @28923 has 322 MA's), (Start: 70 @28926 has 12 MA's), (96, 29037), (99, 29043), (103, 29052), (108, 29070), (109, 29073), (116, 29085),

Gene: Boomer_34 Start: 28593, Stop: 28826, Start Num: 69

Candidate Starts for Boomer_34:

(Start: 69 @28593 has 322 MA's), (Start: 70 @28596 has 12 MA's), (90, 28692), (99, 28713), (103, 28722), (116, 28755),

Gene: BoomerJR_72 Start: 52981, Stop: 53232, Start Num: 69

Candidate Starts for BoomerJR_72:

(Start: 69 @52981 has 322 MA's), (75, 53023), (100, 53101), (134, 53209),

Gene: Bordeaux_70 Start: 53258, Stop: 53509, Start Num: 69

Candidate Starts for Bordeaux_70:

(Start: 69 @53258 has 322 MA's), (81, 53333),

Gene: Bradissa_23 Start: 20951, Stop: 21190, Start Num: 69

Candidate Starts for Bradissa_23:

(45, 20843), (Start: 69 @20951 has 322 MA's), (75, 20993), (86, 21044), (87, 21047), (109, 21098), (113, 21104),

Gene: BritBrat_23 Start: 20804, Stop: 21043, Start Num: 69

Candidate Starts for BritBrat_23:

(45, 20696), (Start: 69 @20804 has 322 MA's), (75, 20846), (86, 20897), (87, 20900), (109, 20951), (113, 20957),

Gene: Brocalys_27 Start: 24320, Stop: 24553, Start Num: 69

Candidate Starts for Brocalys_27:

(Start: 69 @24320 has 322 MA's), (90, 24419), (99, 24440), (103, 24449), (116, 24482),

Gene: Brusacoram_28 Start: 25235, Stop: 25483, Start Num: 69
Candidate Starts for Brusacoram_28:
(Start: 69 @25235 has 322 MA's),

Gene: Bubbles123_34 Start: 29508, Stop: 29741, Start Num: 69
Candidate Starts for Bubbles123_34:
(24, 29220), (Start: 69 @29508 has 322 MA's), (90, 29607), (99, 29628), (103, 29637), (116, 29670),

Gene: Bunnies_28 Start: 25256, Stop: 25504, Start Num: 69
Candidate Starts for Bunnies_28:
(Start: 69 @25256 has 322 MA's),

Gene: Burwell21_32 Start: 28707, Stop: 28940, Start Num: 69
Candidate Starts for Burwell21_32:
(23, 28416), (24, 28419), (27, 28455), (Start: 69 @28707 has 322 MA's), (90, 28806), (99, 28827),
(103, 28836), (116, 28869),

Gene: BuzzLyseyear_35 Start: 29322, Stop: 29555, Start Num: 66
Candidate Starts for BuzzLyseyear_35:
(Start: 66 @29322 has 3 MA's), (96, 29436), (99, 29442), (103, 29451), (108, 29469), (109, 29472),
(116, 29484),

Gene: Byougenkin_32 Start: 28605, Stop: 28838, Start Num: 69
Candidate Starts for Byougenkin_32:
(24, 28317), (Start: 69 @28605 has 322 MA's), (90, 28704), (99, 28725), (103, 28734), (116, 28767),

Gene: Cabrinians_32 Start: 28785, Stop: 29018, Start Num: 69
Candidate Starts for Cabrinians_32:
(8, 28071), (9, 28092), (10, 28143), (12, 28233), (13, 28308), (17, 28347), (18, 28380), (20, 28413),
(23, 28494), (24, 28497), (Start: 69 @28785 has 322 MA's), (90, 28884), (99, 28905), (103, 28914),
(116, 28947),

Gene: CactusJack_28 Start: 25499, Stop: 25747, Start Num: 69
Candidate Starts for CactusJack_28:
(Start: 69 @25499 has 322 MA's),

Gene: Camster_28 Start: 25272, Stop: 25520, Start Num: 69
Candidate Starts for Camster_28:
(Start: 69 @25272 has 322 MA's),

Gene: CaptainTrips_33 Start: 28930, Stop: 29163, Start Num: 69
Candidate Starts for CaptainTrips_33:
(22, 28621), (25, 28669), (38, 28783), (Start: 69 @28930 has 322 MA's), (Start: 70 @28933 has 12
MA's), (96, 29044), (99, 29050), (103, 29059), (108, 29077), (109, 29080), (116, 29092),

Gene: Caron_22 Start: 18225, Stop: 18512, Start Num: 50
Candidate Starts for Caron_22:
(33, 18102), (Start: 50 @18225 has 13 MA's), (58, 18261), (98, 18417), (109, 18447),

Gene: Cashline_23 Start: 20633, Stop: 20869, Start Num: 69
Candidate Starts for Cashline_23:
(Start: 69 @20633 has 322 MA's), (75, 20675), (79, 20705), (87, 20729), (109, 20780),

Gene: CeilingFan_74 Start: 53018, Stop: 53269, Start Num: 69

Candidate Starts for CeilingFan_74:

(Start: 69 @53018 has 322 MA's), (81, 53093),

Gene: Cen1621_21 Start: 17291, Stop: 17560, Start Num: 50

Candidate Starts for Cen1621_21:

(34, 17165), (35, 17171), (39, 17198), (Start: 50 @17291 has 13 MA's), (76, 17387), (106, 17477), (130, 17555),

Gene: Cerasum_28 Start: 24741, Stop: 24974, Start Num: 69

Candidate Starts for Cerasum_28:

(Start: 69 @24741 has 322 MA's), (90, 24840), (96, 24855), (99, 24861), (103, 24870), (116, 24903),

Gene: Che8_34 Start: 28974, Stop: 29207, Start Num: 69

Candidate Starts for Che8_34:

(Start: 69 @28974 has 322 MA's), (Start: 70 @28977 has 12 MA's), (96, 29088), (99, 29094), (103, 29103), (108, 29121), (109, 29124), (116, 29136),

Gene: Che9d_37 Start: 28009, Stop: 28266, Start Num: 69

Candidate Starts for Che9d_37:

(Start: 69 @28009 has 322 MA's), (72, 28027), (79, 28072), (80, 28075), (93, 28114), (100, 28132), (109, 28159), (113, 28165), (114, 28168),

Gene: Chevrolet_33 Start: 29084, Stop: 29314, Start Num: 70

Candidate Starts for Chevrolet_33:

(28, 28838), (38, 28934), (Start: 69 @29081 has 322 MA's), (Start: 70 @29084 has 12 MA's), (96, 29195), (99, 29201), (103, 29210), (108, 29228), (109, 29231), (116, 29243),

Gene: ChickenDinner_34 Start: 29151, Stop: 29384, Start Num: 69

Candidate Starts for ChickenDinner_34:

(Start: 69 @29151 has 322 MA's), (Start: 70 @29154 has 12 MA's), (96, 29265), (99, 29271), (103, 29280), (108, 29298), (109, 29301), (116, 29313),

Gene: Chuckly_32 Start: 28706, Stop: 28939, Start Num: 69

Candidate Starts for Chuckly_32:

(38, 28559), (Start: 69 @28706 has 322 MA's), (Start: 70 @28709 has 12 MA's), (96, 28820), (99, 28826), (103, 28835), (108, 28853), (109, 28856), (116, 28868),

Gene: Cicada_32 Start: 22721, Stop: 23002, Start Num: 68

Candidate Starts for Cicada_32:

(31, 22508), (43, 22583), (Start: 63 @22712 has 6 MA's), (Start: 68 @22721 has 16 MA's), (79, 22796), (83, 22808), (92, 22835), (97, 22850), (109, 22883), (133, 22961),

Gene: Circinus_48 Start: 46230, Stop: 46487, Start Num: 69

Candidate Starts for Circinus_48:

(55, 46176), (Start: 69 @46230 has 322 MA's), (75, 46272), (130, 46458),

Gene: Clifton_26 Start: 24671, Stop: 24904, Start Num: 69

Candidate Starts for Clifton_26:

(23, 24380), (24, 24383), (27, 24419), (Start: 69 @24671 has 322 MA's), (90, 24770), (99, 24791), (103, 24800), (116, 24833),

Gene: Coco12_32 Start: 28590, Stop: 28823, Start Num: 69

Candidate Starts for Coco12_32:

(Start: 69 @28590 has 322 MA's), (90, 28689), (99, 28710), (103, 28719), (116, 28752),

Gene: Confidence_23 Start: 20796, Stop: 21032, Start Num: 69

Candidate Starts for Confidence_23:

(21, 20406), (41, 20655), (Start: 69 @20796 has 322 MA's), (79, 20868), (86, 20889), (87, 20892), (113, 20949),

Gene: Coriander_23 Start: 21345, Stop: 21584, Start Num: 69

Candidate Starts for Coriander_23:

(Start: 65 @21339 has 7 MA's), (Start: 69 @21345 has 322 MA's), (75, 21387), (79, 21417), (86, 21438), (109, 21492), (127, 21552),

Gene: Cornie_32 Start: 29028, Stop: 29261, Start Num: 69

Candidate Starts for Cornie_32:

(24, 28740), (Start: 69 @29028 has 322 MA's), (90, 29127), (99, 29148), (103, 29157), (116, 29190),

Gene: Cornucopia_33 Start: 28549, Stop: 28782, Start Num: 69

Candidate Starts for Cornucopia_33:

(38, 28402), (Start: 69 @28549 has 322 MA's), (Start: 70 @28552 has 12 MA's), (96, 28663), (99, 28669), (103, 28678), (108, 28696), (109, 28699), (116, 28711),

Gene: Crumble_26 Start: 24720, Stop: 24953, Start Num: 69

Candidate Starts for Crumble_26:

(38, 24573), (Start: 69 @24720 has 322 MA's), (Start: 70 @24723 has 12 MA's), (96, 24834), (99, 24840), (103, 24849), (108, 24867), (109, 24870), (116, 24882),

Gene: DLane_32 Start: 28494, Stop: 28727, Start Num: 69

Candidate Starts for DLane_32:

(Start: 69 @28494 has 322 MA's), (90, 28593), (99, 28614), (103, 28623), (116, 28656),

Gene: DRBy19_32 Start: 28632, Stop: 28865, Start Num: 69

Candidate Starts for DRBy19_32:

(38, 28485), (Start: 69 @28632 has 322 MA's), (Start: 70 @28635 has 12 MA's), (96, 28746), (99, 28752), (103, 28761), (108, 28779), (109, 28782), (116, 28794),

Gene: DaWorst_34 Start: 29072, Stop: 29305, Start Num: 69

Candidate Starts for DaWorst_34:

(Start: 69 @29072 has 322 MA's), (Start: 70 @29075 has 12 MA's), (96, 29186), (99, 29192), (103, 29201), (108, 29219), (109, 29222), (116, 29234),

Gene: DaddyRickover_32 Start: 28715, Stop: 28948, Start Num: 69

Candidate Starts for DaddyRickover_32:

(Start: 69 @28715 has 322 MA's), (Start: 70 @28718 has 12 MA's), (96, 28829), (99, 28835), (103, 28844), (108, 28862), (109, 28865), (116, 28877),

Gene: Daenerys_32 Start: 28536, Stop: 28769, Start Num: 69

Candidate Starts for Daenerys_32:

(Start: 69 @28536 has 322 MA's), (Start: 70 @28539 has 12 MA's), (96, 28650), (99, 28656), (103, 28665), (108, 28683), (109, 28686), (116, 28698),

Gene: Dante_32 Start: 28654, Stop: 28887, Start Num: 69

Candidate Starts for Dante_32:

(Start: 69 @28654 has 322 MA's), (Start: 70 @28657 has 12 MA's), (96, 28768), (99, 28774), (103, 28783), (108, 28801), (109, 28804), (116, 28816),

Gene: DeadP_32 Start: 28691, Stop: 28924, Start Num: 69

Candidate Starts for DeadP_32:

(Start: 69 @28691 has 322 MA's), (90, 28790), (99, 28811), (103, 28820), (116, 28853),

Gene: Deb65_32 Start: 28537, Stop: 28770, Start Num: 69

Candidate Starts for Deb65_32:

(Start: 69 @28537 has 322 MA's), (Start: 70 @28540 has 12 MA's), (96, 28651), (99, 28657), (103, 28666), (108, 28684), (109, 28687), (116, 28699),

Gene: Demsculpinboyz_38 Start: 27942, Stop: 28199, Start Num: 67

Candidate Starts for Demsculpinboyz_38:

(Start: 67 @27942 has 4 MA's), (72, 27960), (79, 28005), (80, 28008), (93, 28047), (100, 28065), (109, 28092), (113, 28098), (114, 28101),

Gene: Denise_19 Start: 17855, Stop: 18097, Start Num: 65

Candidate Starts for Denise_19:

(Start: 65 @17855 has 7 MA's), (Start: 69 @17861 has 322 MA's), (75, 17903), (79, 17933), (86, 17954), (87, 17957), (113, 18014),

Gene: DillTech15_32 Start: 28622, Stop: 28855, Start Num: 69

Candidate Starts for DillTech15_32:

(38, 28475), (Start: 69 @28622 has 322 MA's), (Start: 70 @28625 has 12 MA's), (96, 28736), (99, 28742), (103, 28751), (108, 28769), (109, 28772), (116, 28784),

Gene: DirtMcgirt_33 Start: 28357, Stop: 28590, Start Num: 69

Candidate Starts for DirtMcgirt_33:

(22, 28048), (25, 28096), (28, 28114), (38, 28210), (Start: 69 @28357 has 322 MA's), (Start: 70 @28360 has 12 MA's), (96, 28471), (99, 28477), (103, 28486), (108, 28504), (109, 28507), (116, 28519),

Gene: DocMcStuffins_34 Start: 29151, Stop: 29384, Start Num: 69

Candidate Starts for DocMcStuffins_34:

(Start: 69 @29151 has 322 MA's), (Start: 70 @29154 has 12 MA's), (96, 29265), (99, 29271), (103, 29280), (108, 29298), (109, 29301), (116, 29313),

Gene: Doggs_22 Start: 21038, Stop: 21283, Start Num: 65

Candidate Starts for Doggs_22:

(Start: 65 @21038 has 7 MA's), (Start: 69 @21044 has 322 MA's), (75, 21086), (79, 21116), (86, 21137), (109, 21191), (127, 21251),

Gene: Donkeykong_32 Start: 28717, Stop: 28950, Start Num: 69

Candidate Starts for Donkeykong_32:

(Start: 69 @28717 has 322 MA's), (90, 28816), (99, 28837), (103, 28846), (116, 28879),

Gene: Donovan_28 Start: 25229, Stop: 25477, Start Num: 69

Candidate Starts for Donovan_28:

(Start: 69 @25229 has 322 MA's),

Gene: Doomphist_32 Start: 28654, Stop: 28887, Start Num: 69

Candidate Starts for Doomphist_32:

(Start: 69 @28654 has 322 MA's), (90, 28753), (99, 28774), (103, 28783), (116, 28816),

Gene: Dorothy_32 Start: 28500, Stop: 28733, Start Num: 69

Candidate Starts for Dorothy_32:

(Start: 69 @28500 has 322 MA's), (Start: 70 @28503 has 12 MA's), (96, 28614), (99, 28620), (103, 28629), (108, 28647), (109, 28650), (116, 28662),

Gene: DosHalletts_34 Start: 28918, Stop: 29151, Start Num: 69

Candidate Starts for DosHalletts_34:

(28, 28675), (38, 28771), (Start: 69 @28918 has 322 MA's), (Start: 70 @28921 has 12 MA's), (96, 29032), (99, 29038), (103, 29047), (108, 29065), (109, 29068), (116, 29080),

Gene: DotProduct_32 Start: 28523, Stop: 28756, Start Num: 69

Candidate Starts for DotProduct_32:

(38, 28376), (Start: 69 @28523 has 322 MA's), (Start: 70 @28526 has 12 MA's), (96, 28637), (99, 28643), (103, 28652), (108, 28670), (109, 28673), (116, 28685),

Gene: Doug_33 Start: 29095, Stop: 29328, Start Num: 66

Candidate Starts for Doug_33:

(Start: 66 @29095 has 3 MA's), (96, 29209), (99, 29215), (103, 29224), (108, 29242), (109, 29245), (116, 29257),

Gene: Drago_33 Start: 28350, Stop: 28583, Start Num: 69

Candidate Starts for Drago_33:

(38, 28203), (Start: 69 @28350 has 322 MA's), (Start: 70 @28353 has 12 MA's), (96, 28464), (99, 28470), (103, 28479), (108, 28497), (109, 28500), (116, 28512),

Gene: Dynamo_28 Start: 25651, Stop: 25899, Start Num: 69

Candidate Starts for Dynamo_28:

(Start: 69 @25651 has 322 MA's),

Gene: EMSquaredA_23 Start: 20804, Stop: 21043, Start Num: 69

Candidate Starts for EMSquaredA_23:

(45, 20696), (Start: 69 @20804 has 322 MA's), (75, 20846), (86, 20897), (87, 20900), (109, 20951), (113, 20957),

Gene: Ecliptus_28 Start: 22063, Stop: 22305, Start Num: 65

Candidate Starts for Ecliptus_28:

(Start: 65 @22063 has 7 MA's), (Start: 69 @22069 has 322 MA's), (75, 22111), (79, 22141), (86, 22162), (87, 22165), (109, 22216), (113, 22222),

Gene: EdnaMode_19 Start: 17610, Stop: 17849, Start Num: 69

Candidate Starts for EdnaMode_19:

(41, 17475), (Start: 69 @17610 has 322 MA's), (79, 17682), (113, 17763), (126, 17814), (127, 17817),

Gene: Eish_32 Start: 29242, Stop: 29475, Start Num: 69

Candidate Starts for Eish_32:

(28, 28999), (38, 29095), (Start: 69 @29242 has 322 MA's), (Start: 70 @29245 has 12 MA's), (96, 29356), (99, 29362), (103, 29371), (108, 29389), (109, 29392), (116, 29404),

Gene: EleanorGeorge_33 Start: 29267, Stop: 29500, Start Num: 69

Candidate Starts for EleanorGeorge_33:

(19, 28832), (40, 29093), (Start: 63 @29258 has 6 MA's), (Start: 69 @29267 has 322 MA's), (Start: 70 @29270 has 12 MA's), (90, 29366), (96, 29381), (99, 29387), (103, 29396), (108, 29414), (109, 29417), (116, 29429),

Gene: Elmer_74 Start: 54196, Stop: 54447, Start Num: 69

Candidate Starts for Elmer_74:

(Start: 69 @54196 has 322 MA's), (81, 54271), (96, 54307), (113, 54349), (125, 54376),

Gene: Emma_34 Start: 29135, Stop: 29368, Start Num: 69

Candidate Starts for Emma_34:

(24, 28847), (Start: 69 @29135 has 322 MA's), (90, 29234), (99, 29255), (103, 29264), (116, 29297),

Gene: Empress_33 Start: 29950, Stop: 30183, Start Num: 69

Candidate Starts for Empress_33:

(Start: 69 @29950 has 322 MA's), (Start: 70 @29953 has 12 MA's), (96, 30064), (99, 30070), (103, 30079), (108, 30097), (109, 30100), (116, 30112),

Gene: EnalisNailo_23 Start: 20953, Stop: 21192, Start Num: 69

Candidate Starts for EnalisNailo_23:

(45, 20845), (Start: 69 @20953 has 322 MA's), (75, 20995), (86, 21046), (87, 21049), (109, 21100), (113, 21106),

Gene: Enby_34 Start: 28796, Stop: 29029, Start Num: 69

Candidate Starts for Enby_34:

(19, 28361), (40, 28622), (Start: 63 @28787 has 6 MA's), (Start: 69 @28796 has 322 MA's), (Start: 70 @28799 has 12 MA's), (90, 28895), (96, 28910), (99, 28916), (103, 28925), (108, 28943), (109, 28946), (116, 28958),

Gene: Enygma_72 Start: 54921, Stop: 55172, Start Num: 69

Candidate Starts for Enygma_72:

(Start: 69 @54921 has 322 MA's), (81, 54996), (93, 55023),

Gene: Eradicator_32 Start: 28637, Stop: 28870, Start Num: 69

Candidate Starts for Eradicator_32:

(Start: 69 @28637 has 322 MA's), (90, 28736), (99, 28757), (103, 28766), (116, 28799),

Gene: Estave1_30 Start: 28054, Stop: 28287, Start Num: 69

Candidate Starts for Estave1_30:

(30, 27838), (Start: 69 @28054 has 322 MA's), (Start: 70 @28057 has 12 MA's), (96, 28168), (99, 28174), (103, 28183), (108, 28201), (109, 28204), (116, 28216),

Gene: Evy_71 Start: 53796, Stop: 54047, Start Num: 69

Candidate Starts for Evy_71:

(Start: 69 @53796 has 322 MA's), (103, 53922),

Gene: Faith5x5_19 Start: 17558, Stop: 17797, Start Num: 69

Candidate Starts for Faith5x5_19:

(21, 17168), (29, 17309), (32, 17345), (41, 17417), (Start: 69 @17558 has 322 MA's), (75, 17600), (79, 17630), (113, 17711),

Gene: Fancypants_32 Start: 28543, Stop: 28776, Start Num: 69

Candidate Starts for Fancypants_32:

(28, 28300), (38, 28396), (Start: 69 @28543 has 322 MA's), (Start: 70 @28546 has 12 MA's), (96, 28657), (99, 28663), (103, 28672), (108, 28690), (109, 28693), (116, 28705),

Gene: Fastidio_34 Start: 28851, Stop: 29084, Start Num: 69

Candidate Starts for Fastidio_34:

(38, 28704), (Start: 69 @28851 has 322 MA's), (Start: 70 @28854 has 12 MA's), (96, 28965), (99, 28971), (103, 28980), (108, 28998), (109, 29001), (116, 29013),

Gene: Filuzino_32 Start: 28485, Stop: 28718, Start Num: 69

Candidate Starts for Filuzino_32:

(24, 28197), (Start: 69 @28485 has 322 MA's), (90, 28584), (99, 28605), (103, 28614), (116, 28647),

Gene: Finkle_21 Start: 18973, Stop: 19227, Start Num: 69

Candidate Starts for Finkle_21:

(54, 18934), (Start: 69 @18973 has 322 MA's), (75, 19015), (77, 19027), (80, 19048), (118, 19144), (119, 19147),

Gene: FireCastle_30 Start: 22475, Stop: 22750, Start Num: 68

Candidate Starts for FireCastle_30:

(Start: 63 @22466 has 6 MA's), (Start: 68 @22475 has 16 MA's), (82, 22559), (83, 22562), (92, 22589), (109, 22637), (132, 22712),

Gene: Firehouse51_33 Start: 29324, Stop: 29557, Start Num: 69

Candidate Starts for Firehouse51_33:

(24, 29036), (Start: 69 @29324 has 322 MA's), (90, 29423), (99, 29444), (103, 29453), (116, 29486),

Gene: FirstPlacePfu_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for FirstPlacePfu_28:

(Start: 69 @25240 has 322 MA's),

Gene: Fishburne_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for Fishburne_28:

(Start: 69 @25240 has 322 MA's),

Gene: Flathead_32 Start: 29131, Stop: 29364, Start Num: 69

Candidate Starts for Flathead_32:

(Start: 69 @29131 has 322 MA's), (90, 29230), (99, 29251), (103, 29260), (116, 29293),

Gene: Floof_23 Start: 18951, Stop: 19205, Start Num: 50

Candidate Starts for Floof_23:

(Start: 50 @18951 has 13 MA's), (81, 19056), (95, 19098), (128, 19191),

Gene: Floral_23 Start: 20804, Stop: 21043, Start Num: 69

Candidate Starts for Floral_23:

(45, 20696), (Start: 69 @20804 has 322 MA's), (75, 20846), (86, 20897), (87, 20900), (109, 20951), (113, 20957),

Gene: Florinda_32 Start: 28535, Stop: 28768, Start Num: 69

Candidate Starts for Florinda_32:

(38, 28388), (Start: 69 @28535 has 322 MA's), (Start: 70 @28538 has 12 MA's), (96, 28649), (99, 28655), (103, 28664), (108, 28682), (109, 28685), (116, 28697),

Gene: Frankie_36 Start: 29679, Stop: 29912, Start Num: 69

Candidate Starts for Frankie_36:

(Start: 69 @29679 has 322 MA's), (Start: 70 @29682 has 12 MA's), (96, 29793), (99, 29799), (103, 29808), (108, 29826), (109, 29829), (116, 29841),

Gene: FreddyB_32 Start: 28802, Stop: 29032, Start Num: 70

Candidate Starts for FreddyB_32:

(38, 28652), (Start: 69 @28799 has 322 MA's), (Start: 70 @28802 has 12 MA's), (96, 28913), (99, 28919), (103, 28928), (108, 28946), (109, 28949), (116, 28961),

Gene: Fruitloop_31 Start: 28680, Stop: 28913, Start Num: 69

Candidate Starts for Fruitloop_31:

(Start: 69 @28680 has 322 MA's), (90, 28779), (99, 28800), (103, 28809), (116, 28842),

Gene: Fryberger_61 Start: 34752, Stop: 34964, Start Num: 70

Candidate Starts for Fryberger_61:

(Start: 70 @34752 has 12 MA's), (74, 34791), (109, 34896), (125, 34929),

Gene: G4_25 Start: 19311, Stop: 19532, Start Num: 68

Candidate Starts for G4_25:

(Start: 68 @19311 has 16 MA's), (84, 19389), (97, 19416), (109, 19449), (113, 19455), (114, 19458),

Gene: GAL1_23 Start: 20309, Stop: 20548, Start Num: 69

Candidate Starts for GAL1_23:

(29, 20060), (41, 20168), (Start: 69 @20309 has 322 MA's), (75, 20351), (79, 20381), (86, 20402), (87, 20405), (113, 20462),

Gene: GMA1_21 Start: 18613, Stop: 18861, Start Num: 66

Candidate Starts for GMA1_21:

(Start: 66 @18613 has 3 MA's), (75, 18658), (83, 18694), (90, 18718), (96, 18727), (113, 18769), (119, 18784),

Gene: GUmbie_32 Start: 28554, Stop: 28787, Start Num: 69

Candidate Starts for GUmbie_32:

(Start: 69 @28554 has 322 MA's), (Start: 70 @28557 has 12 MA's), (96, 28668), (99, 28674), (103, 28683), (108, 28701), (109, 28704), (116, 28716),

Gene: Galactic_34 Start: 29372, Stop: 29605, Start Num: 69

Candidate Starts for Galactic_34:

(24, 29084), (Start: 69 @29372 has 322 MA's), (90, 29471), (99, 29492), (103, 29501), (116, 29534),

Gene: Gandalph_33 Start: 28870, Stop: 29103, Start Num: 69

Candidate Starts for Gandalph_33:

(Start: 69 @28870 has 322 MA's), (90, 28969), (99, 28990), (103, 28999), (116, 29032),

Gene: GardenState_23 Start: 19313, Stop: 19597, Start Num: 50

Candidate Starts for GardenState_23:

(Start: 50 @19313 has 13 MA's), (130, 19592),

Gene: Genie2_72 Start: 53095, Stop: 53346, Start Num: 69

Candidate Starts for Genie2_72:

(Start: 69 @53095 has 322 MA's), (75, 53137), (100, 53215), (134, 53323),

Gene: Geralt_32 Start: 28536, Stop: 28769, Start Num: 69

Candidate Starts for Geralt_32:

(Start: 69 @28536 has 322 MA's), (Start: 70 @28539 has 12 MA's), (96, 28650), (99, 28656), (103, 28665), (108, 28683), (109, 28686), (116, 28698),

Gene: Gibbi_76 Start: 53241, Stop: 53492, Start Num: 69

Candidate Starts for Gibbi_76:

(Start: 69 @53241 has 322 MA's), (81, 53316),

Gene: GigiOuiOui_32 Start: 28666, Stop: 28899, Start Num: 69

Candidate Starts for GigiOuiOui_32:

(Start: 69 @28666 has 322 MA's), (Start: 70 @28669 has 12 MA's), (96, 28780), (99, 28786), (103, 28795), (108, 28813), (109, 28816), (116, 28828),

Gene: Girafales_33 Start: 28343, Stop: 28576, Start Num: 69

Candidate Starts for Girafales_33:

(38, 28196), (Start: 69 @28343 has 322 MA's), (Start: 70 @28346 has 12 MA's), (96, 28457), (99, 28463), (103, 28472), (108, 28490), (109, 28493), (116, 28505),

Gene: Girr_34 Start: 29563, Stop: 29805, Start Num: 63

Candidate Starts for Girr_34:

(19, 29137), (40, 29398), (Start: 63 @29563 has 6 MA's), (Start: 69 @29572 has 322 MA's), (Start: 70 @29575 has 12 MA's), (96, 29686), (99, 29692), (103, 29701), (108, 29719), (109, 29722), (116, 29734),

Gene: Glaske_28 Start: 25499, Stop: 25747, Start Num: 69

Candidate Starts for Glaske_28:

(Start: 69 @25499 has 322 MA's),

Gene: Goodman_31 Start: 22634, Stop: 22915, Start Num: 68

Candidate Starts for Goodman_31:

(31, 22421), (43, 22496), (46, 22508), (Start: 63 @22625 has 6 MA's), (Start: 68 @22634 has 16 MA's), (79, 22709), (83, 22721), (92, 22748), (97, 22763), (109, 22796), (127, 22859), (133, 22874),

Gene: Gorge_32 Start: 28766, Stop: 28999, Start Num: 69

Candidate Starts for Gorge_32:

(38, 28619), (Start: 69 @28766 has 322 MA's), (Start: 70 @28769 has 12 MA's), (96, 28880), (99, 28886), (103, 28895), (108, 28913), (109, 28916), (116, 28928),

Gene: GreaseLightnin_28 Start: 25491, Stop: 25739, Start Num: 69

Candidate Starts for GreaseLightnin_28:

(Start: 69 @25491 has 322 MA's),

Gene: Gretchen_23 Start: 19981, Stop: 20262, Start Num: 50

Candidate Starts for Gretchen_23:

(35, 19858), (Start: 50 @19981 has 13 MA's), (81, 20113), (109, 20191),

Gene: Gudmit_20 Start: 18449, Stop: 18694, Start Num: 69

Candidate Starts for Gudmit_20:

(40, 18287), (49, 18386), (Start: 69 @18449 has 322 MA's), (75, 18491), (79, 18521), (109, 18596), (127, 18656), (129, 18659),

Gene: Guey18_67 Start: 36272, Stop: 36484, Start Num: 70

Candidate Starts for Guey18_67:

(Start: 70 @36272 has 12 MA's), (74, 36311), (109, 36416),

Gene: Guppsters_34 Start: 29052, Stop: 29285, Start Num: 69

Candidate Starts for Guppsters_34:

(24, 28764), (Start: 69 @29052 has 322 MA's), (90, 29151), (99, 29172), (103, 29181), (116, 29214),

Gene: Gustav_22 Start: 19031, Stop: 19273, Start Num: 69

Candidate Starts for Gustav_22:

(26, 18722), (Start: 66 @19028 has 3 MA's), (Start: 69 @19031 has 322 MA's), (113, 19181), (124, 19208),

Gene: HC_29 Start: 25369, Stop: 25614, Start Num: 69

Candidate Starts for HC_29:

(1, 23902), (2, 23947), (3, 24022), (4, 24127), (5, 24286), (7, 24532), (11, 24748), (14, 24853), (16, 24871), (48, 25264), (Start: 53 @25312 has 1 MA's), (Start: 69 @25369 has 322 MA's), (93, 25474), (99, 25489),

Gene: HUHilltop_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for HUHilltop_28:

(Start: 69 @25240 has 322 MA's),

Gene: Hades_33 Start: 28863, Stop: 29096, Start Num: 69

Candidate Starts for Hades_33:

(23, 28572), (24, 28575), (27, 28611), (Start: 69 @28863 has 322 MA's), (90, 28962), (99, 28983), (103, 28992), (116, 29025),

Gene: Hamulus_33 Start: 29517, Stop: 29759, Start Num: 63

Candidate Starts for Hamulus_33:

(19, 29091), (40, 29352), (Start: 63 @29517 has 6 MA's), (Start: 69 @29526 has 322 MA's), (Start: 70 @29529 has 12 MA's), (96, 29640), (99, 29646), (103, 29655), (108, 29673), (109, 29676), (116, 29688),

Gene: Harley_32 Start: 28472, Stop: 28705, Start Num: 69

Candidate Starts for Harley_32:

(22, 28163), (28, 28229), (38, 28325), (Start: 69 @28472 has 322 MA's), (Start: 70 @28475 has 12 MA's), (96, 28586), (99, 28592), (103, 28601), (108, 28619), (109, 28622), (116, 28634),

Gene: Hegedechwinu_33 Start: 28561, Stop: 28794, Start Num: 69

Candidate Starts for Hegedechwinu_33:

(Start: 69 @28561 has 322 MA's), (90, 28660), (99, 28681), (103, 28690), (116, 28723),

Gene: Hlubikazi_33 Start: 29358, Stop: 29591, Start Num: 69

Candidate Starts for Hlubikazi_33:

(Start: 69 @29358 has 322 MA's), (90, 29457), (99, 29478), (103, 29487), (116, 29520),

Gene: Honk_21 Start: 17157, Stop: 17432, Start Num: 50

Candidate Starts for Honk_21:

(Start: 50 @17157 has 13 MA's), (130, 17427),

Gene: Hortus1_56 Start: 35872, Stop: 36087, Start Num: 56

Candidate Starts for Hortus1_56:

(42, 35782), (Start: 56 @35872 has 6 MA's), (58, 35878),

Gene: Htur_30 Start: 22726, Stop: 23004, Start Num: 68

Candidate Starts for Htur_30:

(31, 22486), (43, 22588), (Start: 63 @22717 has 6 MA's), (Start: 68 @22726 has 16 MA's), (79, 22801), (83, 22813), (92, 22840), (109, 22888), (133, 22966),

Gene: Hum25_24 Start: 17738, Stop: 17992, Start Num: 69

Candidate Starts for Hum25_24:

(Start: 69 @17738 has 322 MA's), (99, 17864), (108, 17891),

Gene: IAmGroot_23 Start: 19974, Stop: 20258, Start Num: 50

Candidate Starts for IAmGroot_23:

(Start: 50 @19974 has 13 MA's), (130, 20253),

Gene: lbOuu_34 Start: 29111, Stop: 29344, Start Num: 69

Candidate Starts for lbOuu_34:

(Start: 69 @29111 has 322 MA's), (90, 29210), (99, 29231), (103, 29240), (108, 29258), (109, 29261), (116, 29273),

Gene: lbhubesi_32 Start: 28479, Stop: 28712, Start Num: 69

Candidate Starts for lbhubesi_32:

(22, 28170), (28, 28236), (38, 28332), (Start: 69 @28479 has 322 MA's), (Start: 70 @28482 has 12 MA's), (96, 28593), (99, 28599), (103, 28608), (108, 28626), (109, 28629), (116, 28641),

Gene: IchabodCrane_69 Start: 52830, Stop: 53081, Start Num: 69

Candidate Starts for IchabodCrane_69:

(Start: 69 @52830 has 322 MA's), (81, 52905),

Gene: IndiRoo_31 Start: 20932, Stop: 21204, Start Num: 68

Candidate Starts for IndiRoo_31:

(Start: 63 @20923 has 6 MA's), (Start: 68 @20932 has 16 MA's), (83, 21019), (109, 21094),

Gene: Inventum_32 Start: 29216, Stop: 29449, Start Num: 69

Candidate Starts for Inventum_32:

(Start: 69 @29216 has 322 MA's), (Start: 70 @29219 has 12 MA's), (96, 29330), (99, 29336), (103, 29345), (108, 29363), (109, 29366), (116, 29378),

Gene: IrishSherpFalk_34 Start: 30123, Stop: 30356, Start Num: 69

Candidate Starts for IrishSherpFalk_34:

(Start: 69 @30123 has 322 MA's), (90, 30222), (99, 30243), (103, 30252), (116, 30285),

Gene: Jabbawokkie_40 Start: 29390, Stop: 29647, Start Num: 67

Candidate Starts for Jabbawokkie_40:

(Start: 67 @29390 has 4 MA's), (72, 29408), (79, 29453), (80, 29456), (93, 29495), (100, 29513), (109, 29540), (113, 29546), (114, 29549),

Gene: JalFarm20_35 Start: 29611, Stop: 29844, Start Num: 69

Candidate Starts for JalFarm20_35:

(Start: 69 @29611 has 322 MA's), (90, 29710), (99, 29731), (103, 29740), (116, 29773),

Gene: James_32 Start: 28723, Stop: 28956, Start Num: 69

Candidate Starts for James_32:

(38, 28576), (Start: 69 @28723 has 322 MA's), (Start: 70 @28726 has 12 MA's), (96, 28837), (99, 28843), (103, 28852), (108, 28870), (109, 28873), (116, 28885),

Gene: Jarcob_32 Start: 28759, Stop: 28992, Start Num: 69
Candidate Starts for Jarcob_32:
(23, 28468), (24, 28471), (27, 28507), (Start: 69 @28759 has 322 MA's), (90, 28858), (99, 28879),
(103, 28888), (116, 28921),

Gene: Jay2Jay_75 Start: 54649, Stop: 54900, Start Num: 69
Candidate Starts for Jay2Jay_75:
(Start: 69 @54649 has 322 MA's), (103, 54775),

Gene: Jebeks_28 Start: 25225, Stop: 25473, Start Num: 69
Candidate Starts for Jebeks_28:
(Start: 69 @25225 has 322 MA's),

Gene: Jera_31 Start: 21768, Stop: 22046, Start Num: 68
Candidate Starts for Jera_31:
(31, 21537), (43, 21630), (Start: 63 @21759 has 6 MA's), (Start: 68 @21768 has 16 MA's), (83,
21855), (97, 21897), (109, 21930), (133, 22008),

Gene: JimJam_72 Start: 53204, Stop: 53455, Start Num: 69
Candidate Starts for JimJam_72:
(Start: 69 @53204 has 322 MA's), (81, 53279),

Gene: Jinglebell_31 Start: 28744, Stop: 28977, Start Num: 69
Candidate Starts for Jinglebell_31:
(30, 28528), (Start: 69 @28744 has 322 MA's), (Start: 70 @28747 has 12 MA's), (96, 28858), (99,
28864), (103, 28873), (108, 28891), (109, 28894), (116, 28906),

Gene: Job42_36 Start: 30532, Stop: 30765, Start Num: 69
Candidate Starts for Job42_36:
(28, 30289), (38, 30385), (Start: 69 @30532 has 322 MA's), (Start: 70 @30535 has 12 MA's), (96,
30646), (99, 30652), (103, 30661), (108, 30679), (109, 30682), (116, 30694),

Gene: JoeyJr_32 Start: 28704, Stop: 28937, Start Num: 69
Candidate Starts for JoeyJr_32:
(Start: 69 @28704 has 322 MA's), (Start: 70 @28707 has 12 MA's), (96, 28818), (99, 28824), (103,
28833), (108, 28851), (109, 28854), (116, 28866),

Gene: Johann_31 Start: 22634, Stop: 22915, Start Num: 68
Candidate Starts for Johann_31:
(31, 22421), (43, 22496), (46, 22508), (Start: 63 @22625 has 6 MA's), (Start: 68 @22634 has 16
MA's), (79, 22709), (83, 22721), (92, 22748), (97, 22763), (109, 22796), (127, 22859), (133, 22874),

Gene: Jollison_71 Start: 53086, Stop: 53337, Start Num: 69
Candidate Starts for Jollison_71:
(Start: 69 @53086 has 322 MA's), (81, 53161),

Gene: Juice456_34 Start: 29832, Stop: 30065, Start Num: 69
Candidate Starts for Juice456_34:
(Start: 69 @29832 has 322 MA's), (90, 29931), (99, 29952), (103, 29961), (116, 29994),

Gene: Jung_27 Start: 25202, Stop: 25450, Start Num: 69
Candidate Starts for Jung_27:

(Start: 69 @25202 has 322 MA's),

Gene: Juniormint_28 Start: 25278, Stop: 25526, Start Num: 69

Candidate Starts for Juniormint_28:

(Start: 69 @25278 has 322 MA's),

Gene: Juniper1_32 Start: 28502, Stop: 28735, Start Num: 69

Candidate Starts for Juniper1_32:

(12, 27944), (13, 28019), (17, 28058), (18, 28091), (20, 28124), (23, 28205), (24, 28208), (30, 28286), (Start: 69 @28502 has 322 MA's), (Start: 70 @28505 has 12 MA's), (96, 28616), (103, 28631), (108, 28649), (109, 28652), (116, 28664),

Gene: Karhdo_32 Start: 28668, Stop: 28901, Start Num: 69

Candidate Starts for Karhdo_32:

(Start: 69 @28668 has 322 MA's), (Start: 70 @28671 has 12 MA's), (96, 28782), (99, 28788), (103, 28797), (108, 28815), (109, 28818), (116, 28830),

Gene: Kari_28 Start: 25237, Stop: 25485, Start Num: 69

Candidate Starts for Kari_28:

(Start: 69 @25237 has 322 MA's),

Gene: Karimac_71 Start: 53235, Stop: 53486, Start Num: 69

Candidate Starts for Karimac_71:

(Start: 69 @53235 has 322 MA's), (81, 53310),

Gene: Keelan_59 Start: 34992, Stop: 35204, Start Num: 70

Candidate Starts for Keelan_59:

(Start: 70 @34992 has 12 MA's), (74, 35031), (75, 35034), (109, 35136),

Gene: KentuckyRacer_72 Start: 53019, Stop: 53270, Start Num: 69

Candidate Starts for KentuckyRacer_72:

(Start: 69 @53019 has 322 MA's), (81, 53094),

Gene: Kenuha5_29 Start: 27646, Stop: 27879, Start Num: 69

Candidate Starts for Kenuha5_29:

(24, 27358), (Start: 69 @27646 has 322 MA's), (90, 27745), (99, 27766), (103, 27775), (116, 27808),

Gene: Kersh_31 Start: 29742, Stop: 29975, Start Num: 69

Candidate Starts for Kersh_31:

(38, 29595), (Start: 69 @29742 has 322 MA's), (Start: 70 @29745 has 12 MA's), (96, 29856), (99, 29862), (103, 29871), (108, 29889), (109, 29892), (116, 29904),

Gene: KilKor_28 Start: 25499, Stop: 25747, Start Num: 69

Candidate Starts for KilKor_28:

(Start: 69 @25499 has 322 MA's),

Gene: Kimberlium_34 Start: 29660, Stop: 29893, Start Num: 69

Candidate Starts for Kimberlium_34:

(38, 29513), (Start: 69 @29660 has 322 MA's), (Start: 70 @29663 has 12 MA's), (96, 29774), (99, 29780), (103, 29789), (108, 29807), (109, 29810), (116, 29822),

Gene: KingMidas_34 Start: 30399, Stop: 30632, Start Num: 69

Candidate Starts for KingMidas_34:

(Start: 69 @30399 has 322 MA's), (Start: 70 @30402 has 12 MA's), (96, 30513), (99, 30519), (103, 30528), (108, 30546), (109, 30549), (116, 30561),

Gene: Kingsley_31 Start: 28346, Stop: 28588, Start Num: 63

Candidate Starts for Kingsley_31:

(19, 27920), (40, 28181), (Start: 63 @28346 has 6 MA's), (Start: 69 @28355 has 322 MA's), (Start: 70 @28358 has 12 MA's), (96, 28469), (99, 28475), (103, 28484), (108, 28502), (109, 28505), (116, 28517),

Gene: Koella_26 Start: 24683, Stop: 24916, Start Num: 69

Candidate Starts for Koella_26:

(23, 24392), (24, 24395), (27, 24431), (Start: 69 @24683 has 322 MA's), (90, 24782), (99, 24803), (103, 24812), (116, 24845),

Gene: Krakatau_33 Start: 29229, Stop: 29462, Start Num: 69

Candidate Starts for Krakatau_33:

(38, 29082), (Start: 69 @29229 has 322 MA's), (Start: 70 @29232 has 12 MA's), (96, 29343), (99, 29349), (103, 29358), (108, 29376), (109, 29379), (116, 29391),

Gene: KristaRAM_33 Start: 29355, Stop: 29588, Start Num: 69

Candidate Starts for KristaRAM_33:

(Start: 69 @29355 has 322 MA's), (90, 29454), (99, 29475), (103, 29484), (116, 29517),

Gene: Ksquared_28 Start: 25256, Stop: 25504, Start Num: 69

Candidate Starts for Ksquared_28:

(Start: 69 @25256 has 322 MA's),

Gene: Lamberg_19 Start: 17610, Stop: 17849, Start Num: 69

Candidate Starts for Lamberg_19:

(41, 17475), (Start: 69 @17610 has 322 MA's), (79, 17682), (113, 17763), (126, 17814), (127, 17817),

Gene: Langerak_28 Start: 25224, Stop: 25472, Start Num: 69

Candidate Starts for Langerak_28:

(Start: 69 @25224 has 322 MA's),

Gene: LastJedi_26 Start: 24714, Stop: 24947, Start Num: 69

Candidate Starts for LastJedi_26:

(23, 24423), (24, 24426), (27, 24462), (Start: 69 @24714 has 322 MA's), (90, 24813), (99, 24834), (103, 24843), (116, 24876),

Gene: Latretium_33 Start: 29314, Stop: 29547, Start Num: 69

Candidate Starts for Latretium_33:

(Start: 69 @29314 has 322 MA's), (90, 29413), (99, 29434), (103, 29443), (116, 29476),

Gene: Leozinho_34 Start: 28957, Stop: 29190, Start Num: 69

Candidate Starts for Leozinho_34:

(Start: 69 @28957 has 322 MA's), (90, 29056), (99, 29077), (103, 29086), (116, 29119),

Gene: Leperchaun_32 Start: 28612, Stop: 28842, Start Num: 70

Candidate Starts for Leperchaun_32:

(30, 28393), (Start: 69 @28609 has 322 MA's), (Start: 70 @28612 has 12 MA's), (96, 28723), (99, 28729), (103, 28738), (108, 28756), (109, 28759), (116, 28771),

Gene: LilMartin_67 Start: 52109, Stop: 52360, Start Num: 69
Candidate Starts for LilMartin_67:
(Start: 69 @52109 has 322 MA's), (75, 52151),

Gene: LilMoolah_32 Start: 28807, Stop: 29040, Start Num: 69
Candidate Starts for LilMoolah_32:
(23, 28516), (24, 28519), (27, 28555), (Start: 69 @28807 has 322 MA's), (90, 28906), (99, 28927),
(103, 28936), (116, 28969),

Gene: LilSpotty_33 Start: 26076, Stop: 26330, Start Num: 69
Candidate Starts for LilSpotty_33:
(40, 25902), (64, 26067), (Start: 69 @26076 has 322 MA's), (79, 26139), (99, 26196),

Gene: Lilas_23 Start: 20953, Stop: 21192, Start Num: 69
Candidate Starts for Lilas_23:
(45, 20845), (Start: 69 @20953 has 322 MA's), (75, 20995), (86, 21046), (87, 21049), (109, 21100),
(113, 21106),

Gene: LittleShirley_35 Start: 30174, Stop: 30407, Start Num: 69
Candidate Starts for LittleShirley_35:
(38, 30027), (Start: 69 @30174 has 322 MA's), (Start: 70 @30177 has 12 MA's), (96, 30288), (99,
30294), (103, 30303), (108, 30321), (109, 30324), (116, 30336),

Gene: Lizziana_32 Start: 28682, Stop: 28915, Start Num: 69
Candidate Starts for Lizziana_32:
(23, 28391), (24, 28394), (27, 28430), (Start: 69 @28682 has 322 MA's), (90, 28781), (99, 28802),
(103, 28811), (116, 28844),

Gene: Llama_32 Start: 28743, Stop: 28976, Start Num: 69
Candidate Starts for Llama_32:
(30, 28527), (Start: 69 @28743 has 322 MA's), (Start: 70 @28746 has 12 MA's), (96, 28857), (99,
28863), (103, 28872), (108, 28890), (109, 28893), (116, 28905),

Gene: Llij_32 Start: 28514, Stop: 28747, Start Num: 69
Candidate Starts for Llij_32:
(38, 28367), (Start: 69 @28514 has 322 MA's), (Start: 70 @28517 has 12 MA's), (96, 28628), (99,
28634), (103, 28643), (108, 28661), (109, 28664), (116, 28676),

Gene: Lorde_34 Start: 28771, Stop: 29004, Start Num: 69
Candidate Starts for Lorde_34:
(19, 28336), (40, 28597), (Start: 63 @28762 has 6 MA's), (Start: 69 @28771 has 322 MA's), (Start: 70
@28774 has 12 MA's), (90, 28870), (96, 28885), (99, 28891), (103, 28900), (108, 28918), (109,
28921), (116, 28933),

Gene: Lton_19 Start: 17639, Stop: 17878, Start Num: 69
Candidate Starts for Lton_19:
(Start: 69 @17639 has 322 MA's), (79, 17711), (113, 17792), (126, 17843), (127, 17846),

Gene: Lucky10_21 Start: 18592, Stop: 18828, Start Num: 69
Candidate Starts for Lucky10_21:
(Start: 65 @18586 has 7 MA's), (Start: 69 @18592 has 322 MA's), (75, 18634), (79, 18664), (86,
18685), (87, 18688), (109, 18739), (113, 18745),

Gene: LukeCage_71 Start: 52989, Stop: 53240, Start Num: 69
Candidate Starts for LukeCage_71:
(Start: 69 @52989 has 322 MA's), (81, 53064), (83, 53070), (127, 53196),

Gene: LunaBlu_35 Start: 29546, Stop: 29779, Start Num: 69
Candidate Starts for LunaBlu_35:
(24, 29258), (Start: 69 @29546 has 322 MA's), (90, 29645), (99, 29666), (103, 29675), (116, 29708),

Gene: LunaStella_34 Start: 29277, Stop: 29540, Start Num: 62
Candidate Starts for LunaStella_34:
(36, 29070), (37, 29085), (51, 29220), (Start: 62 @29277 has 3 MA's), (111, 29442), (115, 29448),
(117, 29451), (124, 29469), (136, 29526),

Gene: Mabodamaca_23 Start: 19124, Stop: 19408, Start Num: 50
Candidate Starts for Mabodamaca_23:
(Start: 50 @19124 has 13 MA's), (119, 19364), (130, 19403),

Gene: MadMen_30 Start: 27967, Stop: 28200, Start Num: 69
Candidate Starts for MadMen_30:
(24, 27679), (Start: 69 @27967 has 322 MA's), (90, 28066), (99, 28087), (103, 28096), (116, 28129),

Gene: Madiba_30 Start: 27447, Stop: 27677, Start Num: 70
Candidate Starts for Madiba_30:
(22, 27135), (28, 27201), (38, 27297), (Start: 69 @27444 has 322 MA's), (Start: 70 @27447 has 12 MA's), (96, 27558), (99, 27564), (103, 27573), (108, 27591), (109, 27594), (116, 27606),

Gene: Mahavrat_32 Start: 28574, Stop: 28807, Start Num: 69
Candidate Starts for Mahavrat_32:
(12, 28016), (13, 28091), (17, 28130), (18, 28163), (20, 28196), (23, 28277), (24, 28280), (30, 28358),
(Start: 69 @28574 has 322 MA's), (Start: 70 @28577 has 12 MA's), (96, 28688), (99, 28694), (103, 28703), (108, 28721), (109, 28724), (116, 28736),

Gene: Mahdia_22 Start: 18708, Stop: 18950, Start Num: 69
Candidate Starts for Mahdia_22:
(Start: 69 @18708 has 322 MA's), (103, 18840), (127, 18912),

Gene: Majeke_28 Start: 25246, Stop: 25494, Start Num: 69
Candidate Starts for Majeke_28:
(Start: 69 @25246 has 322 MA's),

Gene: Malithi_28 Start: 25165, Stop: 25413, Start Num: 69
Candidate Starts for Malithi_28:
(Start: 69 @25165 has 322 MA's),

Gene: Mandlovu_33 Start: 29300, Stop: 29533, Start Num: 69
Candidate Starts for Mandlovu_33:
(Start: 69 @29300 has 322 MA's), (90, 29399), (99, 29420), (103, 29429), (116, 29462),

Gene: Mangethe_28 Start: 25246, Stop: 25494, Start Num: 69
Candidate Starts for Mangethe_28:
(Start: 69 @25246 has 322 MA's),

Gene: Mantra_32 Start: 28633, Stop: 28866, Start Num: 69

Candidate Starts for Mantra_32:

(38, 28486), (Start: 69 @28633 has 322 MA's), (Start: 70 @28636 has 12 MA's), (96, 28747), (99, 28753), (103, 28762), (108, 28780), (109, 28783), (116, 28795),

Gene: Maravista_32 Start: 28464, Stop: 28697, Start Num: 69

Candidate Starts for Maravista_32:

(23, 28173), (24, 28176), (27, 28212), (Start: 69 @28464 has 322 MA's), (90, 28563), (99, 28584), (103, 28593), (116, 28626),

Gene: Marker_33 Start: 28403, Stop: 28633, Start Num: 70

Candidate Starts for Marker_33:

(Start: 69 @28400 has 322 MA's), (Start: 70 @28403 has 12 MA's), (96, 28514), (99, 28520), (103, 28529), (108, 28547), (109, 28550), (116, 28562),

Gene: Marteena_23 Start: 20804, Stop: 21043, Start Num: 69

Candidate Starts for Marteena_23:

(45, 20696), (Start: 69 @20804 has 322 MA's), (75, 20846), (86, 20897), (87, 20900), (109, 20951), (113, 20957),

Gene: Martik_32 Start: 28709, Stop: 28942, Start Num: 69

Candidate Starts for Martik_32:

(23, 28418), (24, 28421), (27, 28457), (Start: 69 @28709 has 322 MA's), (90, 28808), (99, 28829), (103, 28838), (116, 28871),

Gene: Matteo_19 Start: 17541, Stop: 17786, Start Num: 65

Candidate Starts for Matteo_19:

(Start: 65 @17541 has 7 MA's), (Start: 69 @17547 has 322 MA's), (79, 17619), (113, 17700), (126, 17751), (127, 17754),

Gene: Mattes_32 Start: 28723, Stop: 28956, Start Num: 69

Candidate Starts for Mattes_32:

(38, 28576), (Start: 69 @28723 has 322 MA's), (Start: 70 @28726 has 12 MA's), (96, 28837), (99, 28843), (103, 28852), (108, 28870), (109, 28873), (116, 28885),

Gene: Megiddo_28 Start: 25499, Stop: 25747, Start Num: 69

Candidate Starts for Megiddo_28:

(Start: 69 @25499 has 322 MA's),

Gene: Melissauren88_32 Start: 28676, Stop: 28909, Start Num: 69

Candidate Starts for Melissauren88_32:

(Start: 69 @28676 has 322 MA's), (90, 28775), (99, 28796), (103, 28805), (116, 28838),

Gene: MilanaBonita_26 Start: 24607, Stop: 24840, Start Num: 69

Candidate Starts for MilanaBonita_26:

(Start: 69 @24607 has 322 MA's), (90, 24706), (99, 24727), (103, 24736), (116, 24769),

Gene: Milani_31 Start: 21543, Stop: 21809, Start Num: 68

Candidate Starts for Milani_31:

(Start: 68 @21543 has 16 MA's), (83, 21630), (92, 21657), (97, 21672), (109, 21705),

Gene: Mildred21_68 Start: 52306, Stop: 52557, Start Num: 69

Candidate Starts for Mildred21_68:

(Start: 69 @52306 has 322 MA's), (125, 52486),

Gene: MilleniumForce_33 Start: 29468, Stop: 29701, Start Num: 69
Candidate Starts for MilleniumForce_33:
(Start: 69 @29468 has 322 MA's), (90, 29567), (99, 29588), (103, 29597), (116, 29630),

Gene: MindFlayer_70 Start: 52737, Stop: 52988, Start Num: 69
Candidate Starts for MindFlayer_70:
(Start: 69 @52737 has 322 MA's), (81, 52812),

Gene: MinionDave_35 Start: 29705, Stop: 29938, Start Num: 69
Candidate Starts for MinionDave_35:
(Start: 69 @29705 has 322 MA's), (90, 29804), (99, 29825), (103, 29834), (116, 29867),

Gene: Minnie_34 Start: 29518, Stop: 29751, Start Num: 69
Candidate Starts for Minnie_34:
(22, 29209), (28, 29275), (38, 29371), (Start: 69 @29518 has 322 MA's), (Start: 70 @29521 has 12 MA's), (96, 29632), (99, 29638), (103, 29647), (108, 29665), (109, 29668), (116, 29680),

Gene: Misha28_33 Start: 28418, Stop: 28651, Start Num: 69
Candidate Starts for Misha28_33:
(Start: 69 @28418 has 322 MA's), (Start: 70 @28421 has 12 MA's), (96, 28532), (99, 28538), (103, 28547), (108, 28565), (109, 28568), (116, 28580),

Gene: MisterCuddles_34 Start: 29563, Stop: 29805, Start Num: 63
Candidate Starts for MisterCuddles_34:
(19, 29137), (40, 29398), (Start: 63 @29563 has 6 MA's), (Start: 69 @29572 has 322 MA's), (Start: 70 @29575 has 12 MA's), (96, 29686), (99, 29692), (103, 29701), (108, 29719), (109, 29722), (116, 29734),

Gene: Modragons_32 Start: 28588, Stop: 28821, Start Num: 69
Candidate Starts for Modragons_32:
(30, 28372), (Start: 69 @28588 has 322 MA's), (Start: 70 @28591 has 12 MA's), (96, 28702), (99, 28708), (103, 28717), (108, 28735), (109, 28738), (116, 28750),

Gene: MooMoo_30 Start: 27824, Stop: 28087, Start Num: 62
Candidate Starts for MooMoo_30:
(51, 27767), (Start: 62 @27824 has 3 MA's), (111, 27989), (115, 27995), (117, 27998), (124, 28016), (136, 28073),

Gene: Moonbeam_33 Start: 29222, Stop: 29455, Start Num: 69
Candidate Starts for Moonbeam_33:
(28, 28979), (38, 29075), (Start: 69 @29222 has 322 MA's), (Start: 70 @29225 has 12 MA's), (96, 29336), (99, 29342), (103, 29351), (108, 29369), (109, 29372), (116, 29384),

Gene: Moosehead_19 Start: 17566, Stop: 17805, Start Num: 69
Candidate Starts for Moosehead_19:
(Start: 69 @17566 has 322 MA's), (75, 17608), (79, 17638), (86, 17659), (87, 17662), (109, 17713), (113, 17719),

Gene: Morkie_21 Start: 18439, Stop: 18675, Start Num: 69
Candidate Starts for Morkie_21:
(Start: 69 @18439 has 322 MA's), (75, 18481), (79, 18511), (86, 18532), (87, 18535), (109, 18586), (113, 18592),

Gene: Morrissey_23 Start: 19911, Stop: 20153, Start Num: 69
Candidate Starts for Morrissey_23:
(Start: 69 @19911 has 322 MA's), (103, 20043), (107, 20052),

Gene: Mova_33 Start: 28357, Stop: 28590, Start Num: 69
Candidate Starts for Mova_33:
(24, 28069), (Start: 69 @28357 has 322 MA's), (90, 28456), (99, 28477), (103, 28486), (116, 28519),

Gene: Mozy_34 Start: 29413, Stop: 29646, Start Num: 69
Candidate Starts for Mozy_34:
(Start: 69 @29413 has 322 MA's), (Start: 70 @29416 has 12 MA's), (96, 29527), (99, 29533), (103, 29542), (108, 29560), (109, 29563), (116, 29575),

Gene: Ms6_26 Start: 24139, Stop: 24372, Start Num: 69
Candidate Starts for Ms6_26:
(Start: 69 @24139 has 322 MA's), (90, 24238), (99, 24259), (103, 24268), (116, 24301),

Gene: Mugiwara_73 Start: 53488, Stop: 53739, Start Num: 69
Candidate Starts for Mugiwara_73:
(Start: 69 @53488 has 322 MA's), (75, 53530), (81, 53563), (127, 53695),

Gene: MulchExplorer_36 Start: 29659, Stop: 29892, Start Num: 69
Candidate Starts for MulchExplorer_36:
(38, 29512), (Start: 69 @29659 has 322 MA's), (Start: 70 @29662 has 12 MA's), (96, 29773), (99, 29779), (103, 29788), (108, 29806), (109, 29809), (116, 29821),

Gene: MulchMansion_67 Start: 52109, Stop: 52360, Start Num: 69
Candidate Starts for MulchMansion_67:
(Start: 69 @52109 has 322 MA's), (75, 52151),

Gene: MulchSalad_31 Start: 25420, Stop: 25653, Start Num: 69
Candidate Starts for MulchSalad_31:
(Start: 69 @25420 has 322 MA's), (90, 25519), (99, 25540), (103, 25549), (116, 25582),

Gene: Muntaha_47 Start: 44490, Stop: 44744, Start Num: 69
Candidate Starts for Muntaha_47:
(Start: 69 @44490 has 322 MA's), (127, 44703),

Gene: Mutaforma13_32 Start: 28792, Stop: 29025, Start Num: 69
Candidate Starts for Mutaforma13_32:
(Start: 69 @28792 has 322 MA's), (90, 28891), (99, 28912), (103, 28921), (116, 28954),

Gene: Necropolis_28 Start: 25237, Stop: 25485, Start Num: 69
Candidate Starts for Necropolis_28:
(Start: 69 @25237 has 322 MA's),

Gene: Nettuno_19 Start: 17613, Stop: 17852, Start Num: 69
Candidate Starts for Nettuno_19:
(41, 17478), (Start: 69 @17613 has 322 MA's), (79, 17685), (113, 17766), (126, 17817), (127, 17820),

Gene: Nimbo_32 Start: 28540, Stop: 28773, Start Num: 69
Candidate Starts for Nimbo_32:

(Start: 69 @28540 has 322 MA's), (Start: 70 @28543 has 12 MA's), (96, 28654), (99, 28660), (103, 28669), (108, 28687), (109, 28690), (116, 28702),

Gene: Nitzel_33 Start: 29256, Stop: 29489, Start Num: 69

Candidate Starts for Nitzel_33:

(Start: 69 @29256 has 322 MA's), (Start: 70 @29259 has 12 MA's), (96, 29370), (99, 29376), (103, 29385), (108, 29403), (109, 29406), (116, 29418),

Gene: Nivrat_32 Start: 28681, Stop: 28914, Start Num: 69

Candidate Starts for Nivrat_32:

(23, 28390), (24, 28393), (27, 28429), (Start: 69 @28681 has 322 MA's), (90, 28780), (99, 28801), (103, 28810), (116, 28843),

Gene: NormanBulbieJr_32 Start: 28696, Stop: 28929, Start Num: 69

Candidate Starts for NormanBulbieJr_32:

(23, 28405), (24, 28408), (27, 28444), (Start: 69 @28696 has 322 MA's), (90, 28795), (99, 28816), (103, 28825), (116, 28858),

Gene: ODay_29 Start: 22346, Stop: 22588, Start Num: 65

Candidate Starts for ODay_29:

(Start: 65 @22346 has 7 MA's), (Start: 69 @22352 has 322 MA's), (75, 22394), (79, 22424), (86, 22445), (87, 22448), (109, 22499), (113, 22505),

Gene: Ochi17_30 Start: 28195, Stop: 28428, Start Num: 69

Candidate Starts for Ochi17_30:

(30, 27979), (Start: 69 @28195 has 322 MA's), (Start: 70 @28198 has 12 MA's), (96, 28309), (99, 28315), (103, 28324), (108, 28342), (109, 28345), (116, 28357),

Gene: OfUltron_32 Start: 28744, Stop: 28977, Start Num: 69

Candidate Starts for OfUltron_32:

(30, 28528), (Start: 69 @28744 has 322 MA's), (Start: 70 @28747 has 12 MA's), (96, 28858), (99, 28864), (103, 28873), (108, 28891), (109, 28894), (116, 28906),

Gene: Ogopogo_32 Start: 27888, Stop: 28121, Start Num: 69

Candidate Starts for Ogopogo_32:

(Start: 69 @27888 has 322 MA's), (90, 27987), (99, 28008), (103, 28017), (108, 28035), (109, 28038), (116, 28050),

Gene: Oksu_33 Start: 28588, Stop: 28821, Start Num: 69

Candidate Starts for Oksu_33:

(30, 28372), (Start: 69 @28588 has 322 MA's), (Start: 70 @28591 has 12 MA's), (96, 28702), (99, 28708), (103, 28717), (108, 28735), (109, 28738), (116, 28750),

Gene: OldBen_32 Start: 28571, Stop: 28804, Start Num: 69

Candidate Starts for OldBen_32:

(Start: 69 @28571 has 322 MA's), (Start: 70 @28574 has 12 MA's), (96, 28685), (99, 28691), (103, 28700), (108, 28718), (109, 28721), (116, 28733),

Gene: OlinDD_56 Start: 35871, Stop: 36086, Start Num: 56

Candidate Starts for OlinDD_56:

(42, 35781), (Start: 56 @35871 has 6 MA's), (58, 35877),

Gene: OlympiaSaint_32 Start: 28985, Stop: 29218, Start Num: 69

Candidate Starts for OlympiaSaint_32:

(38, 28838), (Start: 69 @28985 has 322 MA's), (Start: 70 @28988 has 12 MA's), (96, 29099), (99, 29105), (103, 29114), (108, 29132), (109, 29135), (116, 29147),

Gene: OnionKnight_23 Start: 18605, Stop: 18871, Start Num: 53

Candidate Starts for OnionKnight_23:

(Start: 53 @18605 has 1 MA's), (Start: 66 @18641 has 3 MA's), (74, 18683), (88, 18743), (91, 18752), (106, 18785), (109, 18797), (114, 18806),

Gene: Ovechkin_33 Start: 29544, Stop: 29777, Start Num: 69

Candidate Starts for Ovechkin_33:

(19, 29109), (40, 29370), (Start: 63 @29535 has 6 MA's), (Start: 69 @29544 has 322 MA's), (Start: 70 @29547 has 12 MA's), (96, 29658), (99, 29664), (103, 29673), (108, 29691), (109, 29694), (116, 29706),

Gene: OwlsT2W_33 Start: 28960, Stop: 29193, Start Num: 69

Candidate Starts for OwlsT2W_33:

(Start: 69 @28960 has 322 MA's), (90, 29059), (99, 29080), (103, 29089), (116, 29122),

Gene: PHappiness_32 Start: 28513, Stop: 28746, Start Num: 69

Candidate Starts for PHappiness_32:

(Start: 69 @28513 has 322 MA's), (Start: 70 @28516 has 12 MA's), (96, 28627), (99, 28633), (103, 28642), (108, 28660), (109, 28663), (116, 28675),

Gene: PMC_32 Start: 28514, Stop: 28747, Start Num: 69

Candidate Starts for PMC_32:

(38, 28367), (Start: 69 @28514 has 322 MA's), (Start: 70 @28517 has 12 MA's), (96, 28628), (99, 28634), (103, 28643), (108, 28661), (109, 28664), (116, 28676),

Gene: Pacc40_32 Start: 28705, Stop: 28938, Start Num: 69

Candidate Starts for Pacc40_32:

(30, 28489), (Start: 69 @28705 has 322 MA's), (Start: 70 @28708 has 12 MA's), (96, 28819), (99, 28825), (103, 28834), (108, 28852), (109, 28855), (116, 28867),

Gene: Pepperoni_20 Start: 18419, Stop: 18658, Start Num: 69

Candidate Starts for Pepperoni_20:

(Start: 65 @18413 has 7 MA's), (Start: 69 @18419 has 322 MA's), (79, 18491), (113, 18572), (126, 18623), (127, 18626),

Gene: Percival_23 Start: 19815, Stop: 20096, Start Num: 50

Candidate Starts for Percival_23:

(Start: 50 @19815 has 13 MA's), (81, 19947), (109, 20025),

Gene: PermaG_31 Start: 22670, Stop: 22951, Start Num: 68

Candidate Starts for PermaG_31:

(Start: 68 @22670 has 16 MA's), (79, 22745), (83, 22757), (92, 22784), (97, 22799), (109, 22832), (127, 22895), (133, 22910),

Gene: Phalconet_32 Start: 28642, Stop: 28875, Start Num: 69

Candidate Starts for Phalconet_32:

(Start: 69 @28642 has 322 MA's), (90, 28741), (99, 28762), (103, 28771), (116, 28804),

Gene: Phalm_28 Start: 25499, Stop: 25747, Start Num: 69

Candidate Starts for Phalm_28:
(Start: 69 @25499 has 322 MA's),

Gene: Phanphagia_29 Start: 27665, Stop: 27898, Start Num: 69
Candidate Starts for Phanphagia_29:
(Start: 69 @27665 has 322 MA's), (90, 27764), (99, 27785), (103, 27794), (116, 27827),

Gene: Phasih_33 Start: 29091, Stop: 29324, Start Num: 69
Candidate Starts for Phasih_33:
(Start: 69 @29091 has 322 MA's), (Start: 70 @29094 has 12 MA's), (96, 29205), (99, 29211), (103, 29220), (108, 29238), (109, 29241), (116, 29253),

Gene: Phatniss_33 Start: 29031, Stop: 29264, Start Num: 69
Candidate Starts for Phatniss_33:
(38, 28884), (Start: 69 @29031 has 322 MA's), (Start: 70 @29034 has 12 MA's), (96, 29145), (99, 29151), (103, 29160), (108, 29178), (109, 29181), (116, 29193),

Gene: Phegasus_28 Start: 25246, Stop: 25494, Start Num: 69
Candidate Starts for Phegasus_28:
(Start: 69 @25246 has 322 MA's),

Gene: PhesterPhotato_32 Start: 28562, Stop: 28795, Start Num: 69
Candidate Starts for PhesterPhotato_32:
(Start: 69 @28562 has 322 MA's), (90, 28661), (99, 28682), (103, 28691), (116, 28724),

Gene: Philus_32 Start: 28608, Stop: 28841, Start Num: 69
Candidate Starts for Philus_32:
(38, 28461), (Start: 69 @28608 has 322 MA's), (Start: 70 @28611 has 12 MA's), (96, 28722), (99, 28728), (103, 28737), (108, 28755), (109, 28758), (116, 28770),

Gene: Phineas_28 Start: 25611, Stop: 25859, Start Num: 69
Candidate Starts for Phineas_28:
(Start: 69 @25611 has 322 MA's),

Gene: PhorbesPhlower_21 Start: 18439, Stop: 18675, Start Num: 69
Candidate Starts for PhorbesPhlower_21:
(Start: 69 @18439 has 322 MA's), (75, 18481), (79, 18511), (86, 18532), (87, 18535), (109, 18586), (113, 18592),

Gene: Phrann_27 Start: 24392, Stop: 24637, Start Num: 69
Candidate Starts for Phrann_27:
(6, 23375), (7, 23555), (11, 23771), (14, 23876), (16, 23894), (48, 24287), (Start: 53 @24335 has 1 MA's), (Start: 69 @24392 has 322 MA's), (93, 24497), (99, 24512), (123, 24575), (126, 24605),

Gene: Pickett_19 Start: 17534, Stop: 17779, Start Num: 65
Candidate Starts for Pickett_19:
(Start: 65 @17534 has 7 MA's), (Start: 69 @17540 has 322 MA's), (79, 17612), (113, 17693), (126, 17744), (127, 17747),

Gene: Pioneer3_56 Start: 35879, Stop: 36094, Start Num: 56
Candidate Starts for Pioneer3_56:
(42, 35789), (Start: 56 @35879 has 6 MA's), (58, 35885),

Gene: Piper2020_34 Start: 29134, Stop: 29367, Start Num: 69

Candidate Starts for Piper2020_34:

(Start: 69 @29134 has 322 MA's), (90, 29233), (99, 29254), (103, 29263), (116, 29296),

Gene: Pippy_26 Start: 24672, Stop: 24905, Start Num: 69

Candidate Starts for Pippy_26:

(Start: 69 @24672 has 322 MA's), (90, 24771), (99, 24792), (103, 24801), (116, 24834),

Gene: Pitbull_23 Start: 17606, Stop: 17854, Start Num: 69

Candidate Starts for Pitbull_23:

(Start: 69 @17606 has 322 MA's), (82, 17687), (85, 17696), (99, 17732), (105, 17747), (122, 17792),

Gene: Platte_56 Start: 35664, Stop: 35879, Start Num: 56

Candidate Starts for Platte_56:

(42, 35574), (Start: 56 @35664 has 6 MA's), (58, 35670),

Gene: Plumbus_34 Start: 28611, Stop: 28844, Start Num: 69

Candidate Starts for Plumbus_34:

(Start: 69 @28611 has 322 MA's), (Start: 70 @28614 has 12 MA's), (96, 28725), (99, 28731), (103, 28740), (108, 28758), (109, 28761), (116, 28773),

Gene: Poenanya_32 Start: 28654, Stop: 28887, Start Num: 69

Candidate Starts for Poenanya_32:

(Start: 69 @28654 has 322 MA's), (90, 28753), (99, 28774), (103, 28783), (116, 28816),

Gene: Polka14_33 Start: 29157, Stop: 29390, Start Num: 69

Candidate Starts for Polka14_33:

(Start: 69 @29157 has 322 MA's), (Start: 70 @29160 has 12 MA's), (96, 29271), (99, 29277), (103, 29286), (108, 29304), (109, 29307), (116, 29319),

Gene: Polkaroo_28 Start: 25256, Stop: 25504, Start Num: 69

Candidate Starts for Polkaroo_28:

(Start: 69 @25256 has 322 MA's),

Gene: Pollux_23 Start: 20804, Stop: 21043, Start Num: 69

Candidate Starts for Pollux_23:

(45, 20696), (Start: 69 @20804 has 322 MA's), (75, 20846), (86, 20897), (87, 20900), (109, 20951), (113, 20957),

Gene: Pollywog_32 Start: 28866, Stop: 29099, Start Num: 69

Candidate Starts for Pollywog_32:

(Start: 69 @28866 has 322 MA's), (Start: 70 @28869 has 12 MA's), (96, 28980), (99, 28986), (103, 28995), (108, 29013), (109, 29016), (116, 29028),

Gene: PopTart_32 Start: 28847, Stop: 29080, Start Num: 69

Candidate Starts for PopTart_32:

(Start: 69 @28847 has 322 MA's), (Start: 70 @28850 has 12 MA's), (90, 28946), (99, 28967), (103, 28976), (116, 29009),

Gene: Priscilla_32 Start: 28794, Stop: 29027, Start Num: 69

Candidate Starts for Priscilla_32:

(8, 28080), (9, 28101), (10, 28152), (12, 28242), (13, 28317), (17, 28356), (18, 28389), (20, 28422), (23, 28503), (24, 28506), (Start: 69 @28794 has 322 MA's), (90, 28893), (99, 28914), (103, 28923),

(116, 28956),

Gene: PumpkinSpice_71 Start: 53129, Stop: 53380, Start Num: 69

Candidate Starts for PumpkinSpice_71:

(Start: 69 @53129 has 322 MA's), (81, 53204),

Gene: Pygmy_30 Start: 27079, Stop: 27327, Start Num: 69

Candidate Starts for Pygmy_30:

(Start: 69 @27079 has 322 MA's),

Gene: Quaran19_72 Start: 53120, Stop: 53371, Start Num: 69

Candidate Starts for Quaran19_72:

(Start: 69 @53120 has 322 MA's), (81, 53195),

Gene: QueenHazel_27 Start: 25412, Stop: 25657, Start Num: 69

Candidate Starts for QueenHazel_27:

(7, 24575), (11, 24791), (14, 24896), (16, 24914), (48, 25307), (Start: 53 @25355 has 1 MA's), (Start: 69 @25412 has 322 MA's), (93, 25517), (99, 25532), (126, 25625),

Gene: QuickMath_33 Start: 29883, Stop: 30116, Start Num: 69

Candidate Starts for QuickMath_33:

(38, 29736), (Start: 69 @29883 has 322 MA's), (Start: 70 @29886 has 12 MA's), (96, 29997), (99, 30003), (103, 30012), (108, 30030), (109, 30033), (116, 30045),

Gene: Quico_33 Start: 28343, Stop: 28576, Start Num: 69

Candidate Starts for Quico_33:

(38, 28196), (Start: 69 @28343 has 322 MA's), (Start: 70 @28346 has 12 MA's), (96, 28457), (99, 28463), (103, 28472), (108, 28490), (109, 28493), (116, 28505),

Gene: Radiance_32 Start: 28707, Stop: 28940, Start Num: 69

Candidate Starts for Radiance_32:

(38, 28560), (Start: 69 @28707 has 322 MA's), (Start: 70 @28710 has 12 MA's), (96, 28821), (99, 28827), (103, 28836), (108, 28854), (109, 28857), (116, 28869),

Gene: Ramsey_35 Start: 29367, Stop: 29600, Start Num: 69

Candidate Starts for Ramsey_35:

(Start: 69 @29367 has 322 MA's), (90, 29466), (99, 29487), (103, 29496), (108, 29514), (109, 29517), (116, 29529),

Gene: Rasovi_30 Start: 22726, Stop: 23004, Start Num: 68

Candidate Starts for Rasovi_30:

(31, 22486), (43, 22588), (Start: 63 @22717 has 6 MA's), (Start: 68 @22726 has 16 MA's), (79, 22801), (83, 22813), (92, 22840), (109, 22888), (133, 22966),

Gene: RayTheFireFly_23 Start: 21371, Stop: 21616, Start Num: 65

Candidate Starts for RayTheFireFly_23:

(Start: 65 @21371 has 7 MA's), (Start: 69 @21377 has 322 MA's), (75, 21419), (79, 21449), (86, 21470), (109, 21524), (127, 21584),

Gene: RedBird_32 Start: 28512, Stop: 28745, Start Num: 69

Candidate Starts for RedBird_32:

(Start: 69 @28512 has 322 MA's), (Start: 70 @28515 has 12 MA's), (96, 28626), (99, 28632), (103, 28641), (108, 28659), (109, 28662), (116, 28674),

Gene: Renaud18_32 Start: 28732, Stop: 28965, Start Num: 69
Candidate Starts for Renaud18_32:
(24, 28444), (Start: 69 @28732 has 322 MA's), (90, 28831), (99, 28852), (103, 28861), (116, 28894),

Gene: Rialto_36 Start: 30865, Stop: 31098, Start Num: 69
Candidate Starts for Rialto_36:
(38, 30718), (Start: 69 @30865 has 322 MA's), (Start: 70 @30868 has 12 MA's), (96, 30979), (99, 30985), (103, 30994), (108, 31012), (109, 31015), (116, 31027),

Gene: Rita_33 Start: 28781, Stop: 29014, Start Num: 69
Candidate Starts for Rita_33:
(24, 28493), (Start: 69 @28781 has 322 MA's), (90, 28880), (96, 28895), (99, 28901), (103, 28910), (116, 28943),

Gene: RitaG_33 Start: 28977, Stop: 29210, Start Num: 69
Candidate Starts for RitaG_33:
(Start: 69 @28977 has 322 MA's), (Start: 70 @28980 has 12 MA's), (96, 29091), (99, 29097), (103, 29106), (108, 29124), (109, 29127), (116, 29139),

Gene: Rockne_32 Start: 28514, Stop: 28747, Start Num: 69
Candidate Starts for Rockne_32:
(38, 28367), (Start: 69 @28514 has 322 MA's), (Start: 70 @28517 has 12 MA's), (96, 28628), (99, 28634), (103, 28643), (108, 28661), (109, 28664), (116, 28676),

Gene: RockyHorror_33 Start: 28458, Stop: 28691, Start Num: 69
Candidate Starts for RockyHorror_33:
(Start: 69 @28458 has 322 MA's), (Start: 70 @28461 has 12 MA's), (96, 28572), (99, 28578), (103, 28587), (108, 28605), (109, 28608), (116, 28620),

Gene: RomansRevenge_35 Start: 33483, Stop: 33725, Start Num: 60
Candidate Starts for RomansRevenge_35:
(60, 33483), (82, 33570), (100, 33621), (119, 33669),

Gene: Ronaldo_64 Start: 35651, Stop: 35863, Start Num: 70
Candidate Starts for Ronaldo_64:
(Start: 70 @35651 has 12 MA's), (74, 35690), (109, 35795), (125, 35828),

Gene: Royals2015_32 Start: 28631, Stop: 28864, Start Num: 69
Candidate Starts for Royals2015_32:
(Start: 69 @28631 has 322 MA's), (Start: 70 @28634 has 12 MA's), (96, 28745), (99, 28751), (103, 28760), (108, 28778), (109, 28781), (116, 28793),

Gene: Ruby_34 Start: 29563, Stop: 29805, Start Num: 63
Candidate Starts for Ruby_34:
(19, 29137), (40, 29398), (Start: 63 @29563 has 6 MA's), (Start: 69 @29572 has 322 MA's), (Start: 70 @29575 has 12 MA's), (96, 29686), (99, 29692), (103, 29701), (108, 29719), (109, 29722), (116, 29734),

Gene: SBlackberry_30 Start: 22499, Stop: 22780, Start Num: 68
Candidate Starts for SBlackberry_30:
(31, 22286), (43, 22361), (Start: 63 @22490 has 6 MA's), (Start: 68 @22499 has 16 MA's), (79, 22574), (83, 22586), (92, 22613), (97, 22628), (109, 22661), (133, 22739),

Gene: SG4_33 Start: 29281, Stop: 29514, Start Num: 69

Candidate Starts for SG4_33:

(19, 28846), (40, 29107), (Start: 63 @29272 has 6 MA's), (Start: 69 @29281 has 322 MA's), (Start: 70 @29284 has 12 MA's), (90, 29380), (96, 29395), (99, 29401), (103, 29410), (108, 29428), (109, 29431), (116, 29443),

Gene: SPB78_23 Start: 20233, Stop: 20484, Start Num: 69

Candidate Starts for SPB78_23:

(44, 20095), (Start: 69 @20233 has 322 MA's), (74, 20272), (79, 20296), (82, 20305), (108, 20380), (119, 20404),

Gene: Saal_32 Start: 28586, Stop: 28819, Start Num: 69

Candidate Starts for Saal_32:

(38, 28439), (Start: 69 @28586 has 322 MA's), (Start: 70 @28589 has 12 MA's), (96, 28700), (99, 28706), (103, 28715), (108, 28733), (109, 28736), (116, 28748),

Gene: Sabbb_33 Start: 28931, Stop: 29164, Start Num: 69

Candidate Starts for Sabbb_33:

(28, 28688), (38, 28784), (Start: 69 @28931 has 322 MA's), (Start: 70 @28934 has 12 MA's), (96, 29045), (99, 29051), (103, 29060), (108, 29078), (109, 29081), (116, 29093),

Gene: SaltySpittoon_72 Start: 53129, Stop: 53380, Start Num: 69

Candidate Starts for SaltySpittoon_72:

(Start: 69 @53129 has 322 MA's), (81, 53204),

Gene: Sandalphon_33 Start: 29315, Stop: 29548, Start Num: 69

Candidate Starts for Sandalphon_33:

(Start: 69 @29315 has 322 MA's), (90, 29414), (99, 29435), (103, 29444), (116, 29477),

Gene: Sarma624_28 Start: 24741, Stop: 24974, Start Num: 69

Candidate Starts for Sarma624_28:

(Start: 69 @24741 has 322 MA's), (90, 24840), (96, 24855), (99, 24861), (103, 24870), (116, 24903),

Gene: Sassafras_33 Start: 29216, Stop: 29449, Start Num: 69

Candidate Starts for Sassafras_33:

(Start: 69 @29216 has 322 MA's), (Start: 70 @29219 has 12 MA's), (96, 29330), (99, 29336), (103, 29345), (108, 29363), (109, 29366), (116, 29378),

Gene: SassyB_32 Start: 28847, Stop: 29080, Start Num: 69

Candidate Starts for SassyB_32:

(Start: 69 @28847 has 322 MA's), (Start: 70 @28850 has 12 MA's), (90, 28946), (99, 28967), (103, 28976), (116, 29009),

Gene: Scottish_33 Start: 29837, Stop: 30070, Start Num: 69

Candidate Starts for Scottish_33:

(Start: 69 @29837 has 322 MA's), (Start: 70 @29840 has 12 MA's), (96, 29951), (99, 29957), (103, 29966), (108, 29984), (109, 29987), (116, 29999),

Gene: Seabastian_32 Start: 28744, Stop: 28977, Start Num: 69

Candidate Starts for Seabastian_32:

(30, 28528), (Start: 69 @28744 has 322 MA's), (Start: 70 @28747 has 12 MA's), (96, 28858), (99, 28864), (103, 28873), (108, 28891), (109, 28894), (116, 28906),

Gene: Seagreen_33 Start: 28654, Stop: 28887, Start Num: 69
Candidate Starts for Seagreen_33:
(Start: 69 @28654 has 322 MA's), (Start: 70 @28657 has 12 MA's), (96, 28768), (103, 28783), (108, 28801), (109, 28804), (116, 28816),

Gene: Shagrat_28 Start: 27081, Stop: 27296, Start Num: 69
Candidate Starts for Shagrat_28:
(Start: 69 @27081 has 322 MA's), (82, 27159), (119, 27249),

Gene: Shauna1_29 Start: 27668, Stop: 27901, Start Num: 69
Candidate Starts for Shauna1_29:
(Start: 69 @27668 has 322 MA's), (90, 27767), (99, 27788), (103, 27797), (116, 27830),

Gene: ShiLan_32 Start: 28750, Stop: 28983, Start Num: 69
Candidate Starts for ShiLan_32:
(23, 28459), (24, 28462), (27, 28498), (Start: 69 @28750 has 322 MA's), (90, 28849), (99, 28870), (103, 28879), (116, 28912),

Gene: Shipwreck_30 Start: 27054, Stop: 27302, Start Num: 69
Candidate Starts for Shipwreck_30:
(Start: 69 @27054 has 322 MA's),

Gene: ShowerHandel_32 Start: 28709, Stop: 28942, Start Num: 69
Candidate Starts for ShowerHandel_32:
(23, 28418), (24, 28421), (27, 28457), (Start: 69 @28709 has 322 MA's), (90, 28808), (99, 28829), (103, 28838), (116, 28871),

Gene: ShroomBoi_29 Start: 27607, Stop: 27840, Start Num: 69
Candidate Starts for ShroomBoi_29:
(24, 27319), (Start: 69 @27607 has 322 MA's), (90, 27706), (99, 27727), (103, 27736), (116, 27769),

Gene: SiSi_32 Start: 28515, Stop: 28748, Start Num: 69
Candidate Starts for SiSi_32:
(Start: 69 @28515 has 322 MA's), (Start: 70 @28518 has 12 MA's), (96, 28629), (99, 28635), (103, 28644), (108, 28662), (109, 28665), (116, 28677),

Gene: SimranZ1_35 Start: 28834, Stop: 29067, Start Num: 69
Candidate Starts for SimranZ1_35:
(30, 28618), (Start: 69 @28834 has 322 MA's), (Start: 70 @28837 has 12 MA's), (96, 28948), (99, 28954), (103, 28963), (108, 28981), (109, 28984), (116, 28996),

Gene: Sollertia_72 Start: 53095, Stop: 53346, Start Num: 69
Candidate Starts for Sollertia_72:
(Start: 69 @53095 has 322 MA's), (75, 53137), (100, 53215), (134, 53323),

Gene: Sonah_28 Start: 25227, Stop: 25475, Start Num: 69
Candidate Starts for Sonah_28:
(Start: 69 @25227 has 322 MA's),

Gene: Soul22_37 Start: 28902, Stop: 29144, Start Num: 63
Candidate Starts for Soul22_37:

(Start: 63 @28902 has 6 MA's), (Start: 69 @28911 has 322 MA's), (Start: 70 @28914 has 12 MA's), (96, 29025), (99, 29031), (103, 29040), (108, 29058), (109, 29061), (116, 29073),

Gene: Sparkdehlily_32 Start: 28632, Stop: 28865, Start Num: 69

Candidate Starts for Sparkdehlily_32:

(38, 28485), (Start: 69 @28632 has 322 MA's), (Start: 70 @28635 has 12 MA's), (96, 28746), (99, 28752), (103, 28761), (108, 28779), (109, 28782), (116, 28794),

Gene: Spartacus_34 Start: 29042, Stop: 29275, Start Num: 69

Candidate Starts for Spartacus_34:

(Start: 69 @29042 has 322 MA's), (Start: 70 @29045 has 12 MA's), (96, 29156), (99, 29162), (103, 29171), (108, 29189), (109, 29192), (116, 29204),

Gene: Spelly_72 Start: 53084, Stop: 53335, Start Num: 69

Candidate Starts for Spelly_72:

(Start: 69 @53084 has 322 MA's), (81, 53159),

Gene: Spikelee_34 Start: 28780, Stop: 29013, Start Num: 66

Candidate Starts for Spikelee_34:

(Start: 66 @28780 has 3 MA's), (96, 28894), (99, 28900), (103, 28909), (108, 28927), (109, 28930), (116, 28942),

Gene: Spilled_73 Start: 53201, Stop: 53452, Start Num: 69

Candidate Starts for Spilled_73:

(Start: 69 @53201 has 322 MA's), (81, 53276),

Gene: Spoonbill_32 Start: 28796, Stop: 29029, Start Num: 69

Candidate Starts for Spoonbill_32:

(38, 28649), (Start: 69 @28796 has 322 MA's), (Start: 70 @28799 has 12 MA's), (96, 28910), (99, 28916), (103, 28925), (108, 28943), (109, 28946), (116, 28958),

Gene: StAnnes_31 Start: 29111, Stop: 29344, Start Num: 69

Candidate Starts for StAnnes_31:

(19, 28676), (40, 28937), (Start: 63 @29102 has 6 MA's), (Start: 69 @29111 has 322 MA's), (Start: 70 @29114 has 12 MA's), (96, 29225), (99, 29231), (103, 29240), (108, 29258), (109, 29261), (116, 29273),

Gene: StAugustine_22 Start: 16877, Stop: 17173, Start Num: 61

Candidate Starts for StAugustine_22:

(61, 16877), (94, 17015), (131, 17123),

Gene: Stanimal_72 Start: 52984, Stop: 53235, Start Num: 69

Candidate Starts for Stanimal_72:

(Start: 69 @52984 has 322 MA's), (75, 53026), (100, 53104), (134, 53212),

Gene: Stap_33 Start: 28688, Stop: 28921, Start Num: 69

Candidate Starts for Stap_33:

(24, 28397), (Start: 69 @28688 has 322 MA's), (96, 28802), (99, 28808), (103, 28817), (108, 28835), (109, 28838), (116, 28850),

Gene: StarPlatinum_72 Start: 53629, Stop: 53880, Start Num: 69

Candidate Starts for StarPlatinum_72:

(Start: 69 @53629 has 322 MA's), (81, 53704), (127, 53836),

Gene: Starbow_70 Start: 53105, Stop: 53356, Start Num: 69

Candidate Starts for Starbow_70:

(Start: 69 @53105 has 322 MA's), (81, 53180),

Gene: Starcevich_36 Start: 29410, Stop: 29643, Start Num: 69

Candidate Starts for Starcevich_36:

(30, 29200), (Start: 69 @29410 has 322 MA's), (90, 29509), (99, 29530), (103, 29539), (116, 29572),

Gene: StevieRay_28 Start: 25219, Stop: 25464, Start Num: 69

Candidate Starts for StevieRay_28:

(Start: 69 @25219 has 322 MA's),

Gene: StressBall_28 Start: 25499, Stop: 25747, Start Num: 69

Candidate Starts for StressBall_28:

(Start: 69 @25499 has 322 MA's),

Gene: Strokeseat_33 Start: 29357, Stop: 29590, Start Num: 69

Candidate Starts for Strokeseat_33:

(Start: 69 @29357 has 322 MA's), (90, 29456), (99, 29477), (103, 29486), (116, 29519),

Gene: SuMoo_22 Start: 18079, Stop: 18363, Start Num: 50

Candidate Starts for SuMoo_22:

(Start: 50 @18079 has 13 MA's), (119, 18319), (130, 18358),

Gene: Sucha_27 Start: 19896, Stop: 20168, Start Num: 68

Candidate Starts for Sucha_27:

(Start: 63 @19887 has 6 MA's), (Start: 68 @19896 has 16 MA's), (83, 19983), (109, 20058),

Gene: SuperGrey_33 Start: 29503, Stop: 29736, Start Num: 69

Candidate Starts for SuperGrey_33:

(24, 29215), (Start: 69 @29503 has 322 MA's), (90, 29602), (99, 29623), (103, 29632), (116, 29665),

Gene: SwagPiggett_32 Start: 28520, Stop: 28753, Start Num: 69

Candidate Starts for SwagPiggett_32:

(23, 28229), (24, 28232), (27, 28268), (Start: 69 @28520 has 322 MA's), (90, 28619), (99, 28640), (103, 28649), (116, 28682),

Gene: TChen_32 Start: 29278, Stop: 29541, Start Num: 62

Candidate Starts for TChen_32:

(36, 29071), (37, 29086), (51, 29221), (Start: 62 @29278 has 3 MA's), (111, 29443), (115, 29449), (117, 29452), (124, 29470), (136, 29527),

Gene: TDanisky_32 Start: 28632, Stop: 28865, Start Num: 69

Candidate Starts for TDanisky_32:

(38, 28485), (Start: 69 @28632 has 322 MA's), (Start: 70 @28635 has 12 MA's), (96, 28746), (99, 28752), (103, 28761), (108, 28779), (109, 28782), (116, 28794),

Gene: Taj_32 Start: 28693, Stop: 28926, Start Num: 69

Candidate Starts for Taj_32:

(Start: 69 @28693 has 322 MA's), (90, 28792), (99, 28813), (103, 28822), (116, 28855),

Gene: Tandem_56 Start: 35818, Stop: 36033, Start Num: 56

Candidate Starts for Tandem_56:
(42, 35728), (Start: 56 @35818 has 6 MA's), (58, 35824),

Gene: Targaryen_71 Start: 54698, Stop: 54949, Start Num: 69
Candidate Starts for Targaryen_71:
(Start: 69 @54698 has 322 MA's), (103, 54824),

Gene: Techage_28 Start: 25231, Stop: 25479, Start Num: 69
Candidate Starts for Techage_28:
(Start: 69 @25231 has 322 MA's),

Gene: Thespis_28 Start: 25235, Stop: 25483, Start Num: 69
Candidate Starts for Thespis_28:
(Start: 69 @25235 has 322 MA's),

Gene: ThetaBob_32 Start: 28234, Stop: 28491, Start Num: 69
Candidate Starts for ThetaBob_32:
(Start: 69 @28234 has 322 MA's), (74, 28273), (82, 28306), (83, 28309), (103, 28363), (120, 28408),
(121, 28411),

Gene: TomSawyer_70 Start: 52723, Stop: 52974, Start Num: 69
Candidate Starts for TomSawyer_70:
(Start: 69 @52723 has 322 MA's), (81, 52798),

Gene: Tomas_74 Start: 55444, Stop: 55695, Start Num: 69
Candidate Starts for Tomas_74:
(59, 55414), (Start: 69 @55444 has 322 MA's), (81, 55519), (83, 55525), (134, 55672),

Gene: TootsiePop_33 Start: 28418, Stop: 28651, Start Num: 69
Candidate Starts for TootsiePop_33:
(Start: 69 @28418 has 322 MA's), (Start: 70 @28421 has 12 MA's), (96, 28532), (99, 28538), (103,
28547), (108, 28565), (109, 28568), (116, 28580),

Gene: Tootsieroll_33 Start: 28584, Stop: 28817, Start Num: 69
Candidate Starts for Tootsieroll_33:
(24, 28293), (Start: 69 @28584 has 322 MA's), (90, 28683), (99, 28704), (103, 28713), (116, 28746),

Gene: Toron_33 Start: 29073, Stop: 29384, Start Num: 52
Candidate Starts for Toron_33:
(51, 29058), (52, 29073), (57, 29088), (Start: 62 @29115 has 3 MA's), (73, 29151), (111, 29286), (115,
29292), (117, 29295), (124, 29313), (136, 29370),

Gene: Totinger_33 Start: 28516, Stop: 28749, Start Num: 69
Candidate Starts for Totinger_33:
(38, 28369), (Start: 69 @28516 has 322 MA's), (Start: 70 @28519 has 12 MA's), (96, 28630), (99,
28636), (103, 28645), (108, 28663), (109, 28666), (116, 28678),

Gene: TurboVicky_30 Start: 22515, Stop: 22793, Start Num: 68
Candidate Starts for TurboVicky_30:
(31, 22284), (43, 22377), (47, 22404), (Start: 63 @22506 has 6 MA's), (Start: 68 @22515 has 16
MA's), (83, 22602), (97, 22644), (109, 22677), (133, 22755),

Gene: Tweety_32 Start: 28751, Stop: 28984, Start Num: 69

Candidate Starts for Tweety_32:

(Start: 69 @28751 has 322 MA's), (90, 28850), (99, 28871), (103, 28880), (116, 28913),

Gene: Typher_32 Start: 22644, Stop: 22922, Start Num: 68

Candidate Starts for Typher_32:

(31, 22413), (43, 22506), (47, 22533), (Start: 63 @22635 has 6 MA's), (Start: 68 @22644 has 16 MA's), (83, 22731), (97, 22773), (109, 22806), (133, 22884),

Gene: UncleRicky_35 Start: 29847, Stop: 30080, Start Num: 69

Candidate Starts for UncleRicky_35:

(38, 29700), (Start: 69 @29847 has 322 MA's), (Start: 70 @29850 has 12 MA's), (96, 29961), (99, 29967), (103, 29976), (108, 29994), (109, 29997), (116, 30009),

Gene: UtzChips_22 Start: 18828, Stop: 19115, Start Num: 50

Candidate Starts for UtzChips_22:

(Start: 50 @18828 has 13 MA's), (58, 18864), (101, 19026), (130, 19110),

Gene: VRedHorse_32 Start: 28705, Stop: 28938, Start Num: 69

Candidate Starts for VRedHorse_32:

(38, 28558), (Start: 69 @28705 has 322 MA's), (Start: 70 @28708 has 12 MA's), (96, 28819), (99, 28825), (103, 28834), (116, 28867),

Gene: Velveteen_28 Start: 24741, Stop: 24974, Start Num: 69

Candidate Starts for Velveteen_28:

(Start: 69 @24741 has 322 MA's), (90, 24840), (96, 24855), (99, 24861), (103, 24870), (116, 24903),

Gene: Venti_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for Venti_28:

(Start: 69 @25240 has 322 MA's),

Gene: Veteran_32 Start: 28554, Stop: 28787, Start Num: 69

Candidate Starts for Veteran_32:

(Start: 69 @28554 has 322 MA's), (Start: 70 @28557 has 12 MA's), (96, 28668), (99, 28674), (103, 28683), (108, 28701), (109, 28704), (116, 28716),

Gene: Vidya_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for Vidya_28:

(Start: 69 @25240 has 322 MA's),

Gene: Volt_64 Start: 35815, Stop: 36027, Start Num: 70

Candidate Starts for Volt_64:

(Start: 70 @35815 has 12 MA's), (74, 35854), (109, 35959), (125, 35992),

Gene: Wachhund_32 Start: 28708, Stop: 28941, Start Num: 69

Candidate Starts for Wachhund_32:

(Start: 69 @28708 has 322 MA's), (90, 28807), (99, 28828), (103, 28837), (116, 28870),

Gene: Wakanda_47 Start: 44427, Stop: 44681, Start Num: 69

Candidate Starts for Wakanda_47:

(Start: 69 @44427 has 322 MA's), (127, 44640),

Gene: Warpy_74 Start: 54162, Stop: 54413, Start Num: 69

Candidate Starts for Warpy_74:

(Start: 69 @54162 has 322 MA's), (103, 54288),

Gene: Wee_33 Start: 29231, Stop: 29464, Start Num: 69

Candidate Starts for Wee_33:

(Start: 69 @29231 has 322 MA's), (90, 29330), (99, 29351), (103, 29360), (116, 29393),

Gene: Whatsapiecost_33 Start: 28967, Stop: 29200, Start Num: 69

Candidate Starts for Whatsapiecost_33:

(Start: 69 @28967 has 322 MA's), (90, 29066), (99, 29087), (103, 29096), (116, 29129),

Gene: Whouxphf_33 Start: 29025, Stop: 29258, Start Num: 69

Candidate Starts for Whouxphf_33:

(22, 28716), (28, 28782), (38, 28878), (Start: 69 @29025 has 322 MA's), (Start: 70 @29028 has 12 MA's), (96, 29139), (99, 29145), (103, 29154), (116, 29187),

Gene: WillSterrel_34 Start: 30156, Stop: 30389, Start Num: 69

Candidate Starts for WillSterrel_34:

(Start: 69 @30156 has 322 MA's), (90, 30255), (99, 30276), (103, 30285), (116, 30318),

Gene: Wipeout_70 Start: 53474, Stop: 53725, Start Num: 69

Candidate Starts for Wipeout_70:

(Start: 69 @53474 has 322 MA's), (81, 53549),

Gene: Wofford_71 Start: 54159, Stop: 54410, Start Num: 69

Candidate Starts for Wofford_71:

(Start: 69 @54159 has 322 MA's), (81, 54234), (96, 54270), (113, 54312), (125, 54339),

Gene: XFactor_32 Start: 28712, Stop: 28945, Start Num: 69

Candidate Starts for XFactor_32:

(38, 28565), (Start: 69 @28712 has 322 MA's), (Start: 70 @28715 has 12 MA's), (96, 28826), (99, 28832), (103, 28841), (108, 28859), (109, 28862), (116, 28874),

Gene: Xavia_28 Start: 25869, Stop: 26114, Start Num: 69

Candidate Starts for Xavia_28:

(6, 24852), (7, 25032), (11, 25248), (14, 25353), (16, 25371), (48, 25764), (Start: 53 @25812 has 1 MA's), (Start: 69 @25869 has 322 MA's), (93, 25974), (99, 25989), (123, 26052),

Gene: Xula_26 Start: 24936, Stop: 25181, Start Num: 69

Candidate Starts for Xula_26:

(7, 24099), (11, 24315), (14, 24420), (16, 24438), (48, 24831), (Start: 53 @24879 has 1 MA's), (Start: 69 @24936 has 322 MA's), (93, 25041), (99, 25056),

Gene: Yaboi_72 Start: 53072, Stop: 53323, Start Num: 69

Candidate Starts for Yaboi_72:

(Start: 69 @53072 has 322 MA's), (75, 53114), (100, 53192), (134, 53300),

Gene: Yorick_32 Start: 28707, Stop: 28940, Start Num: 69

Candidate Starts for Yorick_32:

(23, 28416), (24, 28419), (27, 28455), (Start: 69 @28707 has 322 MA's), (90, 28806), (99, 28827), (103, 28836), (116, 28869),

Gene: Yoshi_39 Start: 28311, Stop: 28568, Start Num: 69

Candidate Starts for Yoshi_39:

(Start: 69 @28311 has 322 MA's), (71, 28320), (82, 28383), (103, 28440), (108, 28458), (120, 28485), (121, 28488), (135, 28557),

Gene: Zanella_30 Start: 22523, Stop: 22801, Start Num: 68

Candidate Starts for Zanella_30:

(31, 22292), (43, 22385), (46, 22397), (Start: 63 @22514 has 6 MA's), (Start: 68 @22523 has 16 MA's), (83, 22610), (97, 22652), (109, 22685), (133, 22763),

Gene: Zapner_39 Start: 29391, Stop: 29648, Start Num: 67

Candidate Starts for Zapner_39:

(Start: 67 @29391 has 4 MA's), (72, 29409), (79, 29454), (80, 29457), (93, 29496), (100, 29514), (109, 29541), (113, 29547), (114, 29550),

Gene: Zerg_32 Start: 28567, Stop: 28800, Start Num: 69

Candidate Starts for Zerg_32:

(Start: 69 @28567 has 322 MA's), (Start: 70 @28570 has 12 MA's), (96, 28681), (99, 28687), (103, 28696), (108, 28714), (109, 28717), (116, 28729),

Gene: Zeta1847_21 Start: 18934, Stop: 19224, Start Num: 50

Candidate Starts for Zeta1847_21:

(15, 18499), (42, 18847), (Start: 50 @18934 has 13 MA's), (109, 19159), (130, 19219),

Gene: Ziko_64 Start: 35637, Stop: 35849, Start Num: 70

Candidate Starts for Ziko_64:

(Start: 70 @35637 has 12 MA's), (74, 35676), (109, 35781), (125, 35814),

Gene: Zilizebeth_28 Start: 25240, Stop: 25488, Start Num: 69

Candidate Starts for Zilizebeth_28:

(Start: 69 @25240 has 322 MA's),

Gene: Zizzle_32 Start: 28651, Stop: 28884, Start Num: 69

Candidate Starts for Zizzle_32:

(23, 28360), (24, 28363), (27, 28399), (Start: 69 @28651 has 322 MA's), (90, 28750), (99, 28771), (103, 28780), (116, 28813),