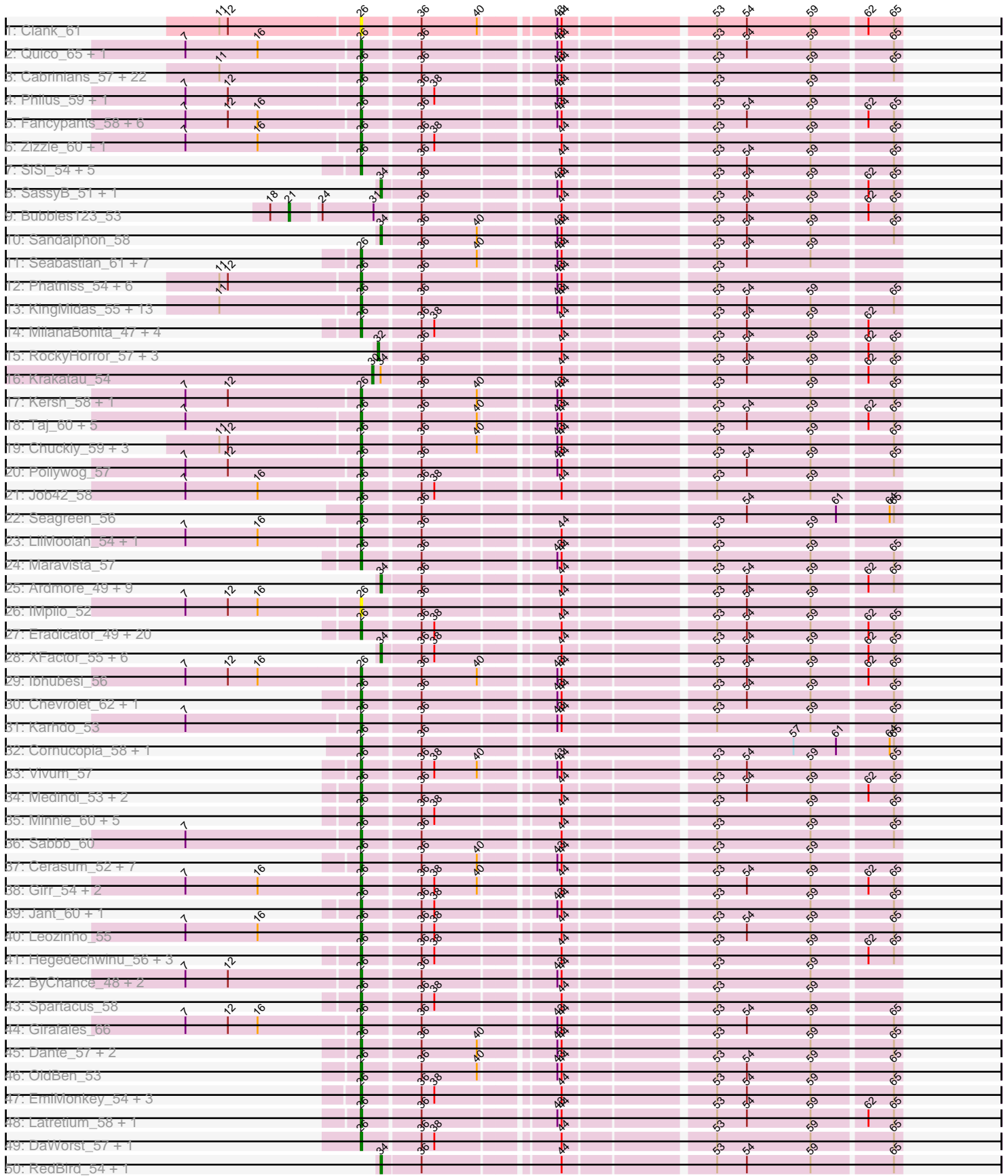
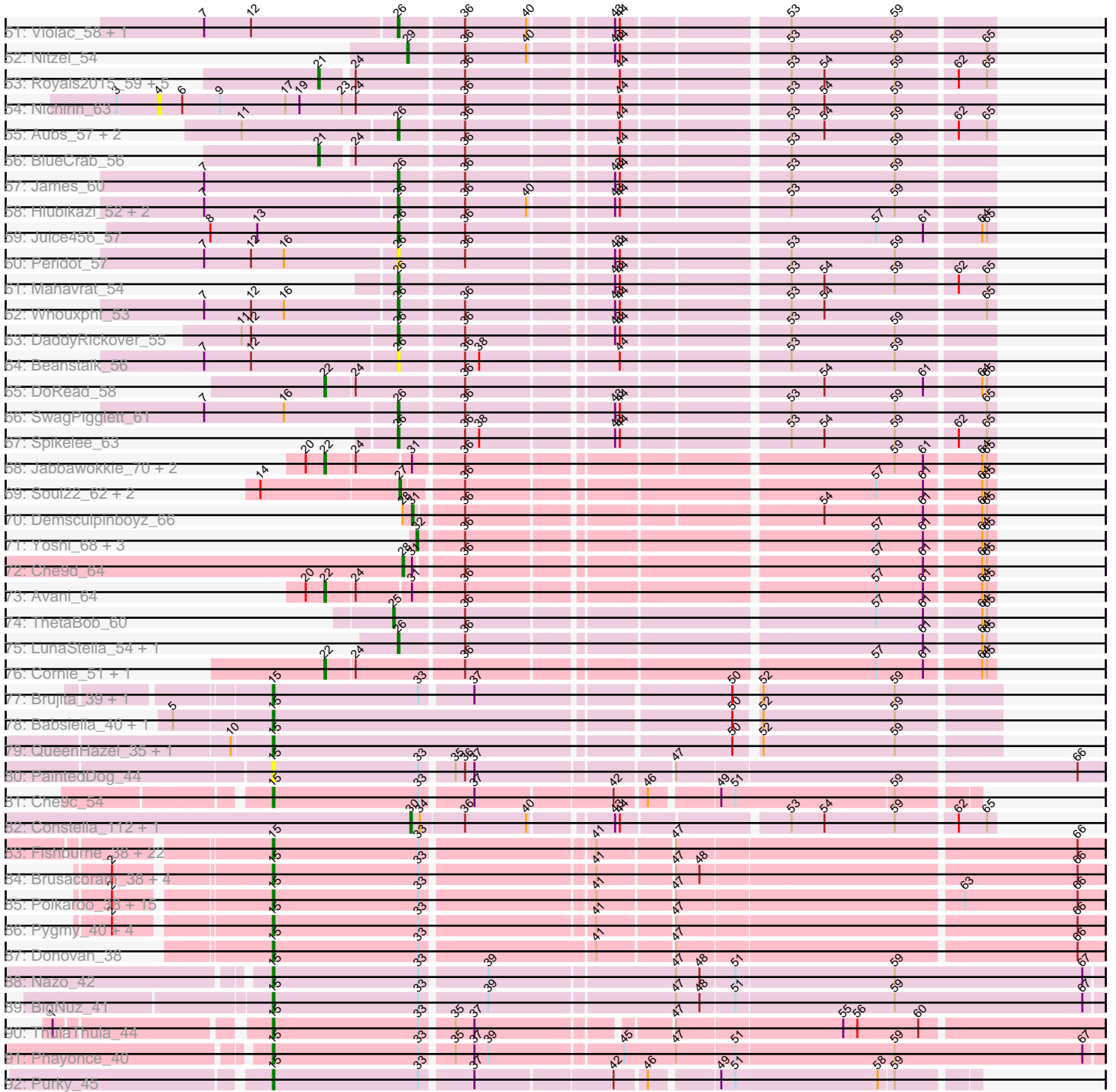


Pham 311151



Pham 311151



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 311151 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311151 has 307 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Clank_61
- Track 2 : Quico_65, Florinda_68
- Track 3 : Cabrinians_57, Crumble_51, OlympiaSaint_58, Jarcob_56, Brocalys_51, Burwell21_54, Jennelsea_53, ShowerHandel_59, Lizziana_62, Starcevich_55, Koella_50, LastJedi_50, NormanBulbieJr_56, Estave1_59, Priscilla_56, ShiLan_55, Clifton_51, Gorge_60, Saal_58, Pippy_54, FreddyB_57, Martik_56, Yorick_55
- Track 4 : Philus_59, DRBy19_59
- Track 5 : Fancypants_58, SeaLumen_60, NewHope4_57, Galactic_55, LunaBlu_58, Enzomatic_62, Polo2Bam_61
- Track 6 : Zizzle_60, Mattes_60
- Track 7 : SiSi_54, Mozy_65, Alexphander_60, SuperGrey_60, Mantra_52, Plumbus_58
- Track 8 : SassyB_51, PopTart_51
- Track 9 : Bubbles123_53
- Track 10 : Sandalphon_58
- Track 11 : Seabastian_61, Jinglebell_61, OfUltron_61, Ochi17_59, AlpineSix_61, Modragons_60, Oksu_60, Llama_61
- Track 12 : Phatniss_54, Llij_52, Drago_54, DirtMcgirt_55, Lucia_55, UncleRicky_55, Lorde_56
- Track 13 : KingMidas_55, Deb65_51, PHappiness_51, Leperchaun_48, Daenerys_50, JoeyJr_51, Boomer_61, Geralt_51, RitaG_51, PMC_53, Pacc40_50, Nimbo_50, Scottish_54, Rockne_57
- Track 14 : MilanaBonita_47, Donkeykong_60, Akhila_48, Phanphagia_54, Shauna1_55
- Track 15 : RockyHorror_57, Ogopogo_62, Kenuha5_54, Zerg_56
- Track 16 : Krakatau_54
- Track 17 : Kersh_58, ShroomBoi_58
- Track 18 : Taj_60, DeadP_62, Tchotchke_57, Tweety_56, Wee_59, KristaRAM_59
- Track 19 : Chuckly_59, Rita_57, MadMen_54, BobaPhett_60
- Track 20 : Pollywog_57
- Track 21 : Job42_58
- Track 22 : Seagreen_56
- Track 23 : LilMoolah_54, Nivrat_52
- Track 24 : Maravista_57
- Track 25 : Ardmore_49, DLane_52, Moonbeam_55, Melissauren88_55, Bobi_62, Filuzino_55, Fruitloop_54, Emma_58, Phalconet_55, Okabe_52
- Track 26 : IMpilo_52

- Track 27 : Eradicator_49, Sassafras_54, Veteran_53, GUmbie_54, Enby_57, Juniper1_54, CaptainTrips_53, OwlsT2W_56, Wachhund_58, MinionDave_55, BuzzLyseyear_62, Sparkdehlily_64, Doomslug_65, Mwanjiwa_62, Bipolar_55, Inventum_51, SilverChicken_67, SG4_53, Hades_57, PhesterPhotato_57, TDanisky_64
- Track 28 : XFactor_55, Hamulus_58, Batiatus_55, PatoPoderoso_53, KingJulian_56, Ms6_52, Corium_53
- Track 29 : lbhubesi_56
- Track 30 : Chevrolet_62, ArcusAngelus_59
- Track 31 : Karhdo_53
- Track 32 : Cornucopia_58, Gandalph_59
- Track 33 : Vivum_57
- Track 34 : Medindi_53, SimranZ1_56, StAnnes_55
- Track 35 : Minnie_60, Mova_57, MilleniumForce_60, Squirty_59, Brushbloom_59, Whatsapiecost_57
- Track 36 : Sabbb_60
- Track 37 : Cerasum_52, BigPhil_52, Kingsley_53, Brookers_53, Coco12_55, Sarma624_54, Tootsieroll_57, Velveteen_51
- Track 38 : Girr_54, Ruby_52, MisterCuddles_54
- Track 39 : Jant_60, Guppsters_57
- Track 40 : Leozinho_55
- Track 41 : Hegedechwinu_56, Renaud18_61, Radiance_55, IbOuu_55
- Track 42 : ByChance_48, LittleShirley_55, Totinger_55
- Track 43 : Spartacus_58
- Track 44 : Girafales_66
- Track 45 : Dante_57, Ramsey_56, Ovechkin_55
- Track 46 : OldBen_53
- Track 47 : EmiMonkey_54, DosHalletts_58, GigiOuiOui_52, PhlipPhlop_56
- Track 48 : Latretium_58, Grimmer_66
- Track 49 : DaWorst_57, Doug_58
- Track 50 : RedBird_54, Dorothy_54
- Track 51 : Violac_58, Madiba_54
- Track 52 : Nitzel_54
- Track 53 : Royals2015_59, Beakin_58, Slim_57, VRedHorse_56, Rialto_62, Emmaloid_57
- Track 54 : Nichirin_63
- Track 55 : Aubs_57, DillTech15_53, Fastidio_56
- Track 56 : BlueCrab_56
- Track 57 : James_60
- Track 58 : Hlubikazi_52, Mandlovu_52, Strokeseat_52
- Track 59 : Juice456_57
- Track 60 : Peridot_57
- Track 61 : Mahavrat_54
- Track 62 : Whouxphf_53
- Track 63 : DaddyRickover_55
- Track 64 : Beanstalk_56
- Track 65 : DoRead_58
- Track 66 : SwagPigglett_61
- Track 67 : Spikelee_63
- Track 68 : Jabbawokkie_70, Zapner_69, Blarby_68
- Track 69 : Soul22_62, Che8_61, EleanorGeorge_57
- Track 70 : Demsculpinboyz_66
- Track 71 : Yoshi_68, JalFarm20_69, Topiatin_63, Harley_59

- Track 72 : Che9d_64
- Track 73 : Avani_64
- Track 74 : ThetaBob_60
- Track 75 : LunaStella_54, TChen_56
- Track 76 : Cornie_51, CheesePuff_62
- Track 77 : Brujita_39, Island3_39
- Track 78 : Babsiella_40, HC_38
- Track 79 : QueenHazel_35, Xula_34
- Track 80 : PaintedDog_44
- Track 81 : Che9c_54
- Track 82 : Constella_112, Marker_58
- Track 83 : Fishburne_38, Bartholomew_37, Venti_38, Dynamo_38, Mangethe_38, BronnyJr_38, Phineas_38, Majeke_38, Arib1_38, Vidya_38, Necropolis_38, Jebeks_39, Chubbello_38, HUHilltop_38, FirstPlacePfu_38, Kari_38, Etoile_38, GaloreK_38, Techage_38, Sonah_38, Zilizebeth_38, Phegasus_38, Langerak_38
- Track 84 : Brusacoram_38, Xeno_40, Atcoo_38, GreaseLightnin_38, Thespis_38
- Track 85 : Polkaroo_38, StevieRay_38, Bhagsy_38, KilKor_38, Phalm_38, PeanutPie_38, Willsammy_37, Gavriela_38, CactusJack_38, Juniormint_38, Bunnies_38, Ksquared_38, Jung_37, StressBall_38, Megiddo_38, Glaske_38
- Track 86 : Pygmy_40, Bogie_40, Shipwreck_40, Camster_38, Malithi_38
- Track 87 : Donovan_38
- Track 88 : Nazo_42
- Track 89 : BigNuz_41
- Track 90 : ThulaThula_44
- Track 91 : Phayonce_40
- Track 92 : Purky_45

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

The start number called the most often in the published annotations is 26, it was called in 171 of the 275 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_48, Alexphander_60, AlpineSix_61, ArcusAngelus_59, Aubs_57, Beanstalk_56, BigPhil_52, Bipolar_55, BobaPhett_60, Boomer_61, Brocalys_51, Brookers_53, Brushbloom_59, Burwell21_54, BuzzLyseyear_62, ByChance_48, Cabrinians_57, CaptainTrips_53, Cerasum_52, Chevrolet_62, Chuckly_59, Clank_61, Clifton_51, Coco12_55, Cornucopia_58, Crumble_51, DRBy19_59, DaWorst_57, DaddyRickover_55, Daenerys_50, Dante_57, DeadP_62, Deb65_51, DillTech15_53, DirtMcGirt_55, Donkeykong_60, Doomslug_65, DosHalletts_58, Doug_58, Drago_54, EmiMonkey_54, Enby_57, Enzomatic_62, Eradicator_49, Estave1_59, Fancypants_58, Fastidio_56, Florinda_68, FreddyB_57, GUmbie_54, Galactic_55, Gandolph_59, Geralt_51, GigiOuiOui_52, Girafales_66, Girr_54, Gorge_60, Grimmer_66, Guppsters_57, Hades_57, Hegedechwinu_56, Hlubikazi_52, IMpilo_52, IbOuu_55, Ibhubesi_56, Inventum_51, James_60, Jant_60, Jarcob_56, Jennelsea_53, Jinglebell_61, Job42_58, JoeyJr_51, Juice456_57, Juniper1_54, Karhdo_53, Kersh_58, KingMidas_55, Kingsley_53, Koella_50, KristaRAM_59, LastJedi_50, Latretium_58, Leozinho_55, Leperchaun_48, LilMoolah_54, LittleShirley_55, Lizziana_62, Llama_61, Llij_52, Lorde_56, Lucia_55, LunaBlu_58, LunaStella_54, MadMen_54, Madiba_54, Mahavrat_54, Mandlovu_52, Mantra_52,

Maravista_57, Martik_56, Mattes_60, Medindi_53, MilanaBonita_47, MilleniumForce_60, MinionDave_55, Minnie_60, MisterCuddles_54, Modragons_60, Mova_57, Mozy_65, Mwanjiwa_62, NewHope4_57, Nimbo_50, Nivrat_52, NormanBulbieJr_56, Ochi17_59, OfUltron_61, Oksu_60, OldBen_53, OlympiaSaint_58, Ovechkin_55, OwlsT2W_56, PHappiness_51, PMC_53, Pacc40_50, Peridot_57, Phanphagia_54, Phatniss_54, PhesterPhotato_57, Philus_59, PhlipPhlop_56, Pippy_54, Plumbus_58, Pollywog_57, Polo2Bam_61, Priscilla_56, Quico_65, Radiance_55, Ramsey_56, Renaud18_61, RitaG_51, Rita_57, Rockne_57, Ruby_52, SG4_53, Saal_58, Sabbb_60, Sarma624_54, Sassafras_54, Scottish_54, SeaLumen_60, Seabastian_61, Seagreen_56, Shauna1_55, ShiLan_55, ShowerHandel_59, ShroomBoi_58, SiSi_54, SilverChicken_67, SimranZ1_56, Sparkdehlily_64, Spartacus_58, Spikelee_63, Squirty_59, StAnnes_55, Starcevich_55, Strokeseat_52, SuperGrey_60, SwagPiggett_61, TChen_56, TDanisky_64, Taj_60, Tchotchke_57, Tootsieroll_57, Totinger_55, Tweety_56, UncleRicky_55, Velveteen_51, Veteran_53, Violac_58, Vivum_57, Wachhund_58, Wee_59, Whatsapiecost_57, Whouxphf_53, Yorick_55, Zizzle_60,

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

-

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

- Ardmore_49, Arib1_38, Atcoo_38, Avani_64, Babsiella_40, Bartholomew_37, Batiatus_55, Beakin_58, Bhagsy_38, BigNuz_41, Blarby_68, BlueCrab_56, Bobi_62, Bogie_40, BronnyJr_38, Brujita_39, Brusacoram_38, Bubbles123_53, Bunnies_38, CactusJack_38, Camster_38, Che8_61, Che9c_54, Che9d_64, Cheesepuff_62, Chubbello_38, Constella_112, Corium_53, Cornie_51, DLane_52, Demsculpinboyz_66, DoRead_58, Donovan_38, Dorothy_54, Dynamo_38, EleanorGeorge_57, Emma_58, Emmaloid_57, Etoile_38, Filuzino_55, FirstPlacePfu_38, Fishburne_38, Fruitloop_54, GaloreK_38, Gavriela_38, Glaske_38, GreaseLightnin_38, HC_38, HUHilltop_38, Hamulus_58, Harley_59, Island3_39, Jabbawokkie_70, JalFarm20_69, Jebeks_39, Jung_37, Juniormint_38, Kari_38, Kenuha5_54, KilKor_38, KingJulian_56, Krakatau_54, Ksquared_38, Langerak_38, Majeke_38, Malithi_38, Mangethe_38, Marker_58, Megiddo_38, Melissauren88_55, Moonbeam_55, Ms6_52, Nazo_42, Necropolis_38, Nichirin_63, Nitzel_54, Ogopogo_62, Okabe_52, PaintedDog_44, PatoPoderoso_53, PeanutPie_38, Phalconet_55, Phalm_38, Phayonce_40, Phegasus_38, Phineas_38, Polkaroo_38, PopTart_51, Purky_45, Pygmy_40, QueenHazel_35, RedBird_54, Rialto_62, RockyHorror_57, Royals2015_59, Sandalphon_58, SassyB_51, Shipwreck_40, Slim_57, Sonah_38, Soul22_62, StevieRay_38, StressBall_38, Techage_38, Thespis_38, ThetaBob_60, ThulaThula_44, Topiatin_63, VRedHorse_56, Venti_38, Vidya_38, Willsammy_37, XFactor_55, Xeno_40, Xula_34, Yoshi_68, Zapner_69, Zerg_56, Zilizebeth_38,

Summary by start number:

Start 4:

- Found in 1 of 307 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nichirin_63 (F1),

Start 15:

- Found in 63 of 307 (20.5%) of genes in pham
- Manual Annotations of this start: 56 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arib1_38 (P1), Atcoo_38 (P1), Babsiella_40 (I1), Bartholomew_37 (P1), Bhagsy_38 (P1), BigNuz_41 (P4), Bogie_40 (P1), BronnyJr_38 (P1), Brujita_39 (I1), Brusacoram_38 (P1), Bunnies_38 (P1), CactusJack_38 (P1), Camster_38 (P1), Che9c_54 (I2), Chubbello_38 (P1), Donovan_38 (P1), Dynamo_38 (P1), Etoile_38 (P1), FirstPlacePfu_38 (P1), Fishburne_38 (P1), GaloreK_38 (P1), Gavriela_38 (P1), Glaske_38 (P1), GreaseLightnin_38 (P1), HC_38 (I1), HUHilltop_38 (P1), Island3_39 (I1), Jebeks_39 (P1), Jung_37 (P1), Juniormint_38 (P1), Kari_38 (P1), KilKor_38 (P1), Ksquared_38 (P1), Langerak_38 (P1), Majeke_38 (P1), Malithi_38 (P1), Mangethe_38 (P1), Megiddo_38 (P1), Nazo_42 (P4), Necropolis_38 (P1), PaintedDog_44 (I1), PeanutPie_38 (P1), Phalm_38 (P1), Phayonce_40 (P5), Phegasus_38 (P1), Phineas_38 (P1), Polkaroo_38 (P1), Purky_45 (P6), Pygmy_40 (P1), QueenHazel_35 (I1), Shipwreck_40 (P1), Sonah_38 (P1), StevieRay_38 (P1), StressBall_38 (P1), Techage_38 (P1), Thespis_38 (P1), ThulaThula_44 (P5), Venti_38 (P1), Vidya_38 (P1), Willsammy_37 (P1), Xeno_40 (N), Xula_34 (I1), Zilizebeth_38 (P1),

Start 21:

- Found in 8 of 307 (2.6%) of genes in pham
- Manual Annotations of this start: 8 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beakin_58 (F1), BlueCrab_56 (F1), Bubbles123_53 (F1), Emmaloid_57 (F1), Rialto_62 (F1), Royals2015_59 (F1), Slim_57 (F1), VRedHorse_56 (F1),

Start 22:

- Found in 7 of 307 (2.3%) of genes in pham
- Manual Annotations of this start: 6 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani_64 (F2), Blarby_68 (F), CheesePuff_62 (F1), Cornie_51 (F5), DoRead_58 (F1), Jabbawokkie_70 (F2), Zapner_69 (F2),

Start 25:

- Found in 1 of 307 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThetaBob_60 (F4),

Start 26:

- Found in 188 of 307 (61.2%) of genes in pham
- Manual Annotations of this start: 171 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akhila_48 (F1), Alexphander_60 (F1), AlpineSix_61 (F1), ArcusAngelus_59 (F1), Aubs_57 (F1), Beanstalk_56 (F1), BigPhil_52 (F1), Bipolar_55 (F1), BobaPhett_60 (F1), Boomer_61 (F1), Brocalys_51 (F1), Brookers_53 (F1), Brushbloom_59 (F1), Burwell21_54 (F1), BuzzLyseyear_62 (F1), ByChance_48 (F1), Cabrinians_57 (F1), CaptainTrips_53 (F1), Cerasum_52 (F1), Chevrolet_62 (F1), Chuckly_59 (F1), Clank_61 (F), Clifton_51 (F1), Coco12_55 (F1), Cornucopia_58 (F1), Crumble_51 (F1), DRBy19_59 (F1), DaWorst_57 (F1), DaddyRickover_55 (F1), Daenerys_50 (F1), Dante_57 (F1), DeadP_62 (F1),

Deb65_51 (F1), DillTech15_53 (F1), DirtMcgirt_55 (F1), Donkeykong_60 (F1),
 Doomslug_65 (F), DosHalletts_58 (F1), Doug_58 (F1), Drago_54 (F1),
 EmiMonkey_54 (F1), Enby_57 (F1), Enzomatic_62 (F1), Eradicator_49 (F1),
 Estave1_59 (F1), Fancypants_58 (F1), Fastidio_56 (F1), Florinda_68 (F1),
 FreddyB_57 (F1), GUmbie_54 (F1), Galactic_55 (F1), Gandalph_59 (F1), Geralt_51
 (F1), GigiOuiOui_52 (F1), Girafales_66 (F1), Girr_54 (F1), Gorge_60 (F1),
 Grimmer_66 (F1), Guppsters_57 (F1), Hades_57 (F1), Hegedechwinu_56 (F1),
 Hlubikazi_52 (F1), IMpilo_52 (F1), IbOuu_55 (F1), Ibhubesi_56 (F1), Inventum_51
 (F1), James_60 (F1), Jant_60 (F1), Jarcob_56 (F1), Jennelsea_53 (F1), Jinglebell_61
 (F1), Job42_58 (F1), JoeyJr_51 (F1), Juice456_57 (F1), Juniper1_54 (F1),
 Karhdo_53 (F1), Kersh_58 (F1), KingMidas_55 (F1), Kingsley_53 (F1), Koella_50
 (F1), KristaRAM_59 (F1), LastJedi_50 (F1), Latretium_58 (F1), Leozinho_55 (F1),
 Leperchaun_48 (F1), LilMoolah_54 (F1), LittleShirley_55 (F1), Lizziana_62 (F1),
 Llama_61 (F1), Llij_52 (F1), Lorde_56 (F1), Lucia_55 (F1), LunaBlu_58 (F1),
 LunaStella_54 (F4), MadMen_54 (F1), Madiba_54 (F1), Mahavrat_54 (F1),
 Mandlovu_52 (F1), Mantra_52 (F1), Maravista_57 (F1), Martik_56 (F1), Mattes_60
 (F1), Medindi_53 (F1), MilanaBonita_47 (F1), MilleniumForce_60 (F1),
 MinionDave_55 (F1), Minnie_60 (F1), MisterCuddles_54 (F1), Modragons_60 (F1),
 Mova_57 (F1), Mozy_65 (F1), Mwanjiwa_62 (F1), NewHope4_57 (F1), Nimbo_50
 (F1), Nivrat_52 (F1), NormanBulbieJr_56 (F1), Ochi17_59 (F1), OfUltron_61 (F1),
 Oksu_60 (F1), OldBen_53 (F1), OlympiaSaint_58 (F1), Ovechkin_55 (F1),
 OwlsT2W_56 (F1), PHappiness_51 (F1), PMC_53 (F1), Pacc40_50 (F1), Peridot_57
 (F1), Phanphagia_54 (F1), Phatniss_54 (F1), PhesterPotato_57 (F1), Philus_59
 (F1), PhlipPhlop_56 (F1), Pippy_54 (F1), Plumbus_58 (F1), Pollywog_57 (F1),
 Polo2Bam_61 (F1), Priscilla_56 (F1), Quico_65 (F1), Radiance_55 (F1), Ramsey_56
 (F1), Renaud18_61 (F4), RitaG_51 (F1), Rita_57 (F1), Rockne_57 (F1), Ruby_52
 (F1), SG4_53 (F1), Saal_58 (F1), Sabbb_60 (F1), Sarma624_54 (F1), Sassafra_54
 (F1), Scottish_54 (F1), SeaLumen_60 (F1), Seabastian_61 (F1), Seagreen_56 (F1),
 Shauna1_55 (F1), ShiLan_55 (F1), ShowerHandel_59 (F1), ShroomBoi_58 (F1),
 SiSi_54 (F1), SilverChicken_67 (F2), SimranZ1_56 (F1), Sparkdehlily_64 (F1),
 Spartacus_58 (F1), Spikelee_63 (F1), Squirty_59 (F3), StAnnes_55 (F1),
 Starceвич_55 (F1), Strokeseat_52 (F1), SuperGrey_60 (F1), SwagPigglett_61 (F1),
 TChen_56 (F4), TDanisky_64 (F1), Taj_60 (F1), Tchotchke_57 (F1), Tootsieroll_57
 (F1), Totinger_55 (F1), Tweety_56 (F1), UncleRicky_55 (F1), Velveteen_51 (F1),
 Veteran_53 (F1), Violac_58 (F1), Vivum_57 (F1), Wachhund_58 (F1), Wee_59 (F1),
 Whatsapiecost_57 (F1), Whouxphf_53 (F1), Yorick_55 (F1), Zizzle_60 (F1),

Start 27:

- Found in 3 of 307 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che8_61 (F1), EleanorGeorge_57 (F1), Soul22_62 (F2),

Start 28:

- Found in 2 of 307 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Che9d_64 (F2),

Start 29:

- Found in 1 of 307 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 275

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nitzel_54 (F1),

Start 30:

- Found in 3 of 307 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Constella_112 (J), Krakatau_54 (F1), Marker_58 (F1),

Start 31:

- Found in 7 of 307 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 275
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Demsculpinboyz_66 (F2),

Start 32:

- Found in 8 of 307 (2.6%) of genes in pham
- Manual Annotations of this start: 7 of 275
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Harley_59 (F1), JalFarm20_69 (F1), Kenuha5_54 (F1), Ogopogo_62 (F1), RockyHorror_57 (F1), Topiatin_63 (F1), Yoshi_68 (F2), Zerg_56 (F1),

Start 34:

- Found in 25 of 307 (8.1%) of genes in pham
- Manual Annotations of this start: 17 of 275
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Ardmore_49 (F1), Batiatus_55 (F1), Bobi_62 (F1), Corium_53 (F1), DLane_52 (F1), Dorothy_54 (F1), Emma_58 (F1), Filuzino_55 (F1), Fruitloop_54 (F1), Hamulus_58 (F1), KingJulian_56 (F1), Melissauren88_55 (F1), Moonbeam_55 (F1), Ms6_52 (F1), Okabe_52 (F8), PatoPoderoso_53 (F1), Phalconet_55 (F1), PopTart_51 (F1), RedBird_54 (F1), Sandalphon_58 (F1), SassyB_51 (F1), XFactor_55 (F1),

Summary by clusters:

There are 15 clusters represented in this pham: F1, F2, P1, F4, F5, P4, P5, I1, J, N, F8, F3, F, P6, I2,

Info for manual annotations of cluster F1:

- Start number 21 was manually annotated 8 times for cluster F1.
- Start number 22 was manually annotated 2 times for cluster F1.
- Start number 26 was manually annotated 167 times for cluster F1.
- Start number 27 was manually annotated 2 times for cluster F1.
- Start number 29 was manually annotated 1 time for cluster F1.
- Start number 30 was manually annotated 2 times for cluster F1.
- Start number 32 was manually annotated 6 times for cluster F1.
- Start number 34 was manually annotated 17 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 22 was manually annotated 3 times for cluster F2.

- Start number 27 was manually annotated 1 time for cluster F2.
- Start number 28 was manually annotated 1 time for cluster F2.
- Start number 31 was manually annotated 1 time for cluster F2.
- Start number 32 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F3:

- Start number 26 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 25 was manually annotated 1 time for cluster F4.
- Start number 26 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 22 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster I1:

- Start number 15 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 15 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster J:

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

Info for manual annotations of cluster N:

- Start number 15 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

- Start number 15 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 15 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 15 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 15 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Akhila_48 Start: 35145, Stop: 35492, Start Num: 26

Candidate Starts for Akhila_48:

(Start: 26 @35145 has 171 MA's), (36, 35184), (38, 35193), (44, 35271), (53, 35367), (54, 35388), (59, 35433), (62, 35469),

Gene: Alexphander_60 Start: 39102, Stop: 39449, Start Num: 26

Candidate Starts for Alexphander_60:

(Start: 26 @39102 has 171 MA's), (36, 39141), (44, 39228), (53, 39324), (54, 39345), (59, 39390), (65, 39444),

Gene: AlpineSix_61 Start: 41221, Stop: 41568, Start Num: 26

Candidate Starts for AlpineSix_61:

(Start: 26 @41221 has 171 MA's), (36, 41260), (40, 41299), (43, 41344), (44, 41347), (53, 41443), (54, 41464), (59, 41509),

Gene: ArcusAngelus_59 Start: 39698, Stop: 40045, Start Num: 26

Candidate Starts for ArcusAngelus_59:

(Start: 26 @39698 has 171 MA's), (36, 39737), (43, 39821), (44, 39824), (53, 39920), (54, 39941), (59, 39986), (65, 40040),

Gene: Ardmore_49 Start: 37243, Stop: 37578, Start Num: 34

Candidate Starts for Ardmore_49:

(Start: 34 @37243 has 17 MA's), (36, 37270), (44, 37357), (53, 37453), (54, 37474), (59, 37519), (62, 37555), (65, 37573),

Gene: Arib1_38 Start: 29810, Stop: 30316, Start Num: 15

Candidate Starts for Arib1_38:

(Start: 15 @29810 has 56 MA's), (33, 29903), (41, 30008), (47, 30053), (66, 30299),

Gene: Atcoo_38 Start: 30284, Stop: 30787, Start Num: 15

Candidate Starts for Atcoo_38:

(2, 30197), (Start: 15 @30284 has 56 MA's), (33, 30377), (41, 30479), (47, 30524), (48, 30539), (66, 30770),

Gene: Aubs_57 Start: 39395, Stop: 39742, Start Num: 26

Candidate Starts for Aubs_57:

(11, 39299), (Start: 26 @39395 has 171 MA's), (36, 39434), (44, 39521), (53, 39617), (54, 39638), (59, 39683), (62, 39719), (65, 39737),

Gene: Avani_64 Start: 39374, Stop: 39766, Start Num: 22

Candidate Starts for Avani_64:

(20, 39362), (Start: 22 @39374 has 6 MA's), (24, 39392), (Start: 31 @39425 has 1 MA's), (36, 39455), (57, 39695), (61, 39725), (64, 39758), (65, 39761),

Gene: Babsiella_40 Start: 30786, Stop: 31223, Start Num: 15

Candidate Starts for Babsiella_40:

(5, 30729), (Start: 15 @30786 has 56 MA's), (50, 31065), (52, 31077), (59, 31161),

Gene: Bartholomew_37 Start: 29807, Stop: 30310, Start Num: 15

Candidate Starts for Bartholomew_37:

(Start: 15 @29807 has 56 MA's), (33, 29900), (41, 30002), (47, 30047), (66, 30293),

Gene: Batiatus_55 Start: 39111, Stop: 39446, Start Num: 34

Candidate Starts for Batiatus_55:

(Start: 34 @39111 has 17 MA's), (36, 39138), (38, 39147), (44, 39225), (53, 39321), (54, 39342), (59, 39387), (62, 39423), (65, 39441),

Gene: Beakin_58 Start: 38189, Stop: 38581, Start Num: 21

Candidate Starts for Beakin_58:

(Start: 21 @38189 has 8 MA's), (24, 38207), (36, 38273), (44, 38360), (53, 38456), (54, 38477), (59, 38522), (62, 38558), (65, 38576),

Gene: Beanstalk_56 Start: 37421, Stop: 37768, Start Num: 26

Candidate Starts for Beanstalk_56:

(7, 37301), (12, 37331), (Start: 26 @37421 has 171 MA's), (36, 37460), (38, 37469), (44, 37547), (53, 37643), (59, 37709),

Gene: Bhagsy_38 Start: 29796, Stop: 30302, Start Num: 15

Candidate Starts for Bhagsy_38:

(2, 29709), (Start: 15 @29796 has 56 MA's), (33, 29889), (41, 29994), (47, 30039), (63, 30213), (66, 30285),

Gene: BigNuz_41 Start: 31916, Stop: 32428, Start Num: 15

Candidate Starts for BigNuz_41:

(Start: 15 @31916 has 56 MA's), (33, 32009), (39, 32048), (47, 32162), (48, 32177), (51, 32198), (59, 32297), (67, 32417),

Gene: BigPhil_52 Start: 34814, Stop: 35161, Start Num: 26

Candidate Starts for BigPhil_52:

(Start: 26 @34814 has 171 MA's), (36, 34853), (40, 34892), (43, 34937), (44, 34940), (53, 35036), (59, 35102),

Gene: Bipolar_55 Start: 38855, Stop: 39202, Start Num: 26

Candidate Starts for Bipolar_55:

(Start: 26 @38855 has 171 MA's), (36, 38894), (38, 38903), (44, 38981), (53, 39077), (54, 39098), (59, 39143), (62, 39179), (65, 39197),

Gene: Blarby_68 Start: 40472, Stop: 40861, Start Num: 22

Candidate Starts for Blarby_68:

(20, 40460), (Start: 22 @40472 has 6 MA's), (24, 40490), (Start: 31 @40523 has 1 MA's), (36, 40553), (59, 40802), (61, 40820), (64, 40853), (65, 40856),

Gene: BlueCrab_56 Start: 39335, Stop: 39727, Start Num: 21

Candidate Starts for BlueCrab_56:

(Start: 21 @39335 has 8 MA's), (24, 39353), (36, 39419), (44, 39506), (53, 39602), (59, 39668),

Gene: BobaPhett_60 Start: 41331, Stop: 41678, Start Num: 26

Candidate Starts for BobaPhett_60:

(11, 41235), (12, 41241), (Start: 26 @41331 has 171 MA's), (36, 41370), (40, 41409), (43, 41454), (44, 41457), (53, 41553), (59, 41619), (65, 41673),

Gene: Bobi_62 Start: 40720, Stop: 41055, Start Num: 34

Candidate Starts for Bobi_62:

(Start: 34 @40720 has 17 MA's), (36, 40747), (44, 40834), (53, 40930), (54, 40951), (59, 40996), (62, 41032), (65, 41050),

Gene: Bogie_40 Start: 31583, Stop: 32086, Start Num: 15

Candidate Starts for Bogie_40:

(2, 31496), (Start: 15 @31583 has 56 MA's), (33, 31676), (41, 31778), (47, 31823), (66, 32069),

Gene: Boomer_61 Start: 41006, Stop: 41353, Start Num: 26

Candidate Starts for Boomer_61:

(11, 40910), (Start: 26 @41006 has 171 MA's), (36, 41045), (43, 41129), (44, 41132), (53, 41228), (54, 41249), (59, 41294), (65, 41348),

Gene: Brocalys_51 Start: 35516, Stop: 35863, Start Num: 26

Candidate Starts for Brocalys_51:

(11, 35420), (Start: 26 @35516 has 171 MA's), (36, 35555), (43, 35639), (44, 35642), (53, 35738), (59, 35804), (65, 35858),

Gene: BronnyJr_38 Start: 30304, Stop: 30807, Start Num: 15

Candidate Starts for BronnyJr_38:

(Start: 15 @30304 has 56 MA's), (33, 30397), (41, 30499), (47, 30544), (66, 30790),

Gene: Brookers_53 Start: 37765, Stop: 38112, Start Num: 26

Candidate Starts for Brookers_53:

(Start: 26 @37765 has 171 MA's), (36, 37804), (40, 37843), (43, 37888), (44, 37891), (53, 37987), (59, 38053),

Gene: Brujita_39 Start: 31520, Stop: 31951, Start Num: 15

Candidate Starts for Brujita_39:

(Start: 15 @31520 has 56 MA's), (33, 31613), (37, 31643), (50, 31793), (52, 31805), (59, 31889),

Gene: Brusacoram_38 Start: 29790, Stop: 30293, Start Num: 15

Candidate Starts for Brusacoram_38:

(2, 29703), (Start: 15 @29790 has 56 MA's), (33, 29883), (41, 29985), (47, 30030), (48, 30045), (66, 30276),

Gene: Brushbloom_59 Start: 40031, Stop: 40378, Start Num: 26

Candidate Starts for Brushbloom_59:

(Start: 26 @40031 has 171 MA's), (36, 40070), (38, 40079), (44, 40157), (53, 40253), (59, 40319), (65, 40373),

Gene: Bubbles123_53 Start: 38975, Stop: 39367, Start Num: 21

Candidate Starts for Bubbles123_53:

(18, 38963), (Start: 21 @38975 has 8 MA's), (24, 38993), (Start: 31 @39029 has 1 MA's), (36, 39059), (44, 39146), (53, 39242), (54, 39263), (59, 39308), (62, 39344), (65, 39362),

Gene: Bunnies_38 Start: 29814, Stop: 30317, Start Num: 15

Candidate Starts for Bunnies_38:

(2, 29727), (Start: 15 @29814 has 56 MA's), (33, 29907), (41, 30009), (47, 30054), (63, 30228), (66, 30300),

Gene: Burwell21_54 Start: 38614, Stop: 38961, Start Num: 26

Candidate Starts for Burwell21_54:

(11, 38518), (Start: 26 @38614 has 171 MA's), (36, 38653), (43, 38737), (44, 38740), (53, 38836), (59, 38902), (65, 38956),

Gene: BuzzLyseyear_62 Start: 40038, Stop: 40385, Start Num: 26

Candidate Starts for BuzzLyseyear_62:

(Start: 26 @40038 has 171 MA's), (36, 40077), (38, 40086), (44, 40164), (53, 40260), (54, 40281), (59, 40326), (62, 40362), (65, 40380),

Gene: ByChance_48 Start: 34305, Stop: 34652, Start Num: 26

Candidate Starts for ByChance_48:

(7, 34185), (12, 34215), (Start: 26 @34305 has 171 MA's), (36, 34344), (43, 34428), (44, 34431), (53, 34527), (59, 34593),

Gene: Cabrinians_57 Start: 38692, Stop: 39039, Start Num: 26

Candidate Starts for Cabrinians_57:

(11, 38596), (Start: 26 @38692 has 171 MA's), (36, 38731), (43, 38815), (44, 38818), (53, 38914), (59, 38980), (65, 39034),

Gene: CactusJack_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for CactusJack_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Camster_38 Start: 29830, Stop: 30333, Start Num: 15

Candidate Starts for Camster_38:

(2, 29743), (Start: 15 @29830 has 56 MA's), (33, 29923), (41, 30025), (47, 30070), (66, 30316),

Gene: CaptainTrips_53 Start: 38188, Stop: 38535, Start Num: 26

Candidate Starts for CaptainTrips_53:

(Start: 26 @38188 has 171 MA's), (36, 38227), (38, 38236), (44, 38314), (53, 38410), (54, 38431), (59, 38476), (62, 38512), (65, 38530),

Gene: Cerasum_52 Start: 34832, Stop: 35179, Start Num: 26

Candidate Starts for Cerasum_52:

(Start: 26 @34832 has 171 MA's), (36, 34871), (40, 34910), (43, 34955), (44, 34958), (53, 35054), (59, 35120),

Gene: Che8_61 Start: 41323, Stop: 41667, Start Num: 27

Candidate Starts for Che8_61:

(14, 41236), (Start: 27 @41323 has 3 MA's), (36, 41356), (57, 41596), (61, 41626), (64, 41659), (65, 41662),

Gene: Che9c_54 Start: 41194, Stop: 41610, Start Num: 15

Candidate Starts for Che9c_54:

(Start: 15 @41194 has 56 MA's), (33, 41287), (37, 41317), (42, 41398), (46, 41416), (49, 41455), (51, 41464), (59, 41563),

Gene: Che9d_64 Start: 38405, Stop: 38749, Start Num: 28

Candidate Starts for Che9d_64:

(Start: 28 @38405 has 1 MA's), (Start: 31 @38411 has 1 MA's), (36, 38438), (57, 38678), (61, 38708), (64, 38741), (65, 38744),

Gene: Cheesepuff_62 Start: 40396, Stop: 40791, Start Num: 22

Candidate Starts for Cheesepuff_62:

(Start: 22 @40396 has 6 MA's), (24, 40414), (36, 40480), (57, 40720), (61, 40750), (64, 40783), (65, 40786),

Gene: Chevrolet_62 Start: 39699, Stop: 40046, Start Num: 26

Candidate Starts for Chevrolet_62:

(Start: 26 @39699 has 171 MA's), (36, 39738), (43, 39822), (44, 39825), (53, 39921), (54, 39942), (59, 39987), (65, 40041),

Gene: Chubbello_38 Start: 29803, Stop: 30306, Start Num: 15

Candidate Starts for Chubbello_38:

(Start: 15 @29803 has 56 MA's), (33, 29896), (41, 29998), (47, 30043), (66, 30289),

Gene: Chuckly_59 Start: 39334, Stop: 39681, Start Num: 26

Candidate Starts for Chuckly_59:

(11, 39238), (12, 39244), (Start: 26 @39334 has 171 MA's), (36, 39373), (40, 39412), (43, 39457), (44, 39460), (53, 39556), (59, 39622), (65, 39676),

Gene: Clank_61 Start: 39664, Stop: 40011, Start Num: 26

Candidate Starts for Clank_61:

(11, 39568), (12, 39574), (Start: 26 @39664 has 171 MA's), (36, 39703), (40, 39742), (43, 39787), (44, 39790), (53, 39886), (54, 39907), (59, 39952), (62, 39988), (65, 40006),

Gene: Clifton_51 Start: 35867, Stop: 36214, Start Num: 26

Candidate Starts for Clifton_51:

(11, 35771), (Start: 26 @35867 has 171 MA's), (36, 35906), (43, 35990), (44, 35993), (53, 36089), (59, 36155), (65, 36209),

Gene: Coco12_55 Start: 38889, Stop: 39236, Start Num: 26

Candidate Starts for Coco12_55:

(Start: 26 @38889 has 171 MA's), (36, 38928), (40, 38967), (43, 39012), (44, 39015), (53, 39111), (59, 39177),

Gene: Constella_112 Start: 64955, Stop: 65296, Start Num: 30

Candidate Starts for Constella_112:

(Start: 30 @64955 has 3 MA's), (Start: 34 @64961 has 17 MA's), (36, 64988), (40, 65027), (43, 65072), (44, 65075), (53, 65171), (54, 65192), (59, 65237), (62, 65273), (65, 65291),

Gene: Corium_53 Start: 37743, Stop: 38078, Start Num: 34

Candidate Starts for Corium_53:

(Start: 34 @37743 has 17 MA's), (36, 37770), (38, 37779), (44, 37857), (53, 37953), (54, 37974), (59, 38019), (62, 38055), (65, 38073),

Gene: Cornie_51 Start: 36858, Stop: 37253, Start Num: 22

Candidate Starts for Cornie_51:

(Start: 22 @36858 has 6 MA's), (24, 36876), (36, 36942), (57, 37182), (61, 37212), (64, 37245), (65, 37248),

Gene: Cornucopia_58 Start: 39344, Stop: 39694, Start Num: 26

Candidate Starts for Cornucopia_58:

(Start: 26 @39344 has 171 MA's), (36, 39383), (57, 39623), (61, 39653), (64, 39686), (65, 39689),

Gene: Crumble_51 Start: 34628, Stop: 34975, Start Num: 26

Candidate Starts for Crumble_51:

(11, 34532), (Start: 26 @34628 has 171 MA's), (36, 34667), (43, 34751), (44, 34754), (53, 34850), (59, 34916), (65, 34970),

Gene: DLane_52 Start: 37767, Stop: 38102, Start Num: 34

Candidate Starts for DLane_52:

(Start: 34 @37767 has 17 MA's), (36, 37794), (44, 37881), (53, 37977), (54, 37998), (59, 38043), (62, 38079), (65, 38097),

Gene: DRBy19_59 Start: 39792, Stop: 40139, Start Num: 26

Candidate Starts for DRBy19_59:

(7, 39672), (12, 39702), (Start: 26 @39792 has 171 MA's), (36, 39831), (38, 39840), (43, 39915), (44, 39918), (53, 40014), (59, 40080),

Gene: DaWorst_57 Start: 39093, Stop: 39440, Start Num: 26

Candidate Starts for DaWorst_57:

(Start: 26 @39093 has 171 MA's), (36, 39132), (38, 39141), (44, 39219), (53, 39315), (59, 39381), (65, 39435),

Gene: DaddyRickover_55 Start: 38831, Stop: 39178, Start Num: 26

Candidate Starts for DaddyRickover_55:

(11, 38735), (12, 38741), (Start: 26 @38831 has 171 MA's), (36, 38870), (43, 38954), (44, 38957), (53, 39053), (59, 39119),

Gene: Daenerys_50 Start: 36947, Stop: 37294, Start Num: 26

Candidate Starts for Daenerys_50:

(11, 36851), (Start: 26 @36947 has 171 MA's), (36, 36986), (43, 37070), (44, 37073), (53, 37169), (54, 37190), (59, 37235), (65, 37289),

Gene: Dante_57 Start: 38616, Stop: 38963, Start Num: 26

Candidate Starts for Dante_57:

(Start: 26 @38616 has 171 MA's), (36, 38655), (40, 38694), (43, 38739), (44, 38742), (53, 38838), (59, 38904), (65, 38958),

Gene: DeadP_62 Start: 41268, Stop: 41615, Start Num: 26

Candidate Starts for DeadP_62:

(7, 41148), (Start: 26 @41268 has 171 MA's), (36, 41307), (40, 41346), (43, 41391), (44, 41394), (53, 41490), (54, 41511), (59, 41556), (62, 41592), (65, 41610),

Gene: Deb65_51 Start: 36916, Stop: 37263, Start Num: 26

Candidate Starts for Deb65_51:

(11, 36820), (Start: 26 @36916 has 171 MA's), (36, 36955), (43, 37039), (44, 37042), (53, 37138), (54, 37159), (59, 37204), (65, 37258),

Gene: Demsculpinboyz_66 Start: 38415, Stop: 38750, Start Num: 31

Candidate Starts for Demsculpinboyz_66:

(Start: 28 @38409 has 1 MA's), (Start: 31 @38415 has 1 MA's), (36, 38442), (54, 38646), (61, 38709), (64, 38742), (65, 38745),

Gene: DillTech15_53 Start: 37281, Stop: 37628, Start Num: 26

Candidate Starts for DillTech15_53:

(11, 37185), (Start: 26 @37281 has 171 MA's), (36, 37320), (44, 37407), (53, 37503), (54, 37524), (59, 37569), (62, 37605), (65, 37623),

Gene: DirtMcgirt_55 Start: 37356, Stop: 37703, Start Num: 26

Candidate Starts for DirtMcgirt_55:

(11, 37260), (12, 37266), (Start: 26 @37356 has 171 MA's), (36, 37395), (43, 37479), (44, 37482), (53, 37578),

Gene: DoRead_58 Start: 37770, Stop: 38162, Start Num: 22

Candidate Starts for DoRead_58:

(Start: 22 @37770 has 6 MA's), (24, 37788), (36, 37854), (54, 38058), (61, 38121), (64, 38154), (65, 38157),

Gene: Donkeykong_60 Start: 41650, Stop: 41997, Start Num: 26

Candidate Starts for Donkeykong_60:

(Start: 26 @41650 has 171 MA's), (36, 41689), (38, 41698), (44, 41776), (53, 41872), (54, 41893), (59, 41938), (62, 41974),

Gene: Donovan_38 Start: 29827, Stop: 30333, Start Num: 15

Candidate Starts for Donovan_38:

(Start: 15 @29827 has 56 MA's), (33, 29920), (41, 30025), (47, 30070), (66, 30316),

Gene: Doomslug_65 Start: 39212, Stop: 39559, Start Num: 26

Candidate Starts for Doomslug_65:

(Start: 26 @39212 has 171 MA's), (36, 39251), (38, 39260), (44, 39338), (53, 39434), (54, 39455), (59, 39500), (62, 39536), (65, 39554),

Gene: Dorothy_54 Start: 38023, Stop: 38358, Start Num: 34

Candidate Starts for Dorothy_54:

(Start: 34 @38023 has 17 MA's), (36, 38050), (44, 38137), (53, 38233), (54, 38254), (59, 38299), (65, 38353),

Gene: DosHalletts_58 Start: 40147, Stop: 40494, Start Num: 26

Candidate Starts for DosHalletts_58:

(Start: 26 @40147 has 171 MA's), (36, 40186), (38, 40195), (44, 40273), (53, 40369), (54, 40390), (59, 40435), (65, 40489),

Gene: Doug_58 Start: 39359, Stop: 39706, Start Num: 26

Candidate Starts for Doug_58:

(Start: 26 @39359 has 171 MA's), (36, 39398), (38, 39407), (44, 39485), (53, 39581), (59, 39647), (65, 39701),

Gene: Drago_54 Start: 37359, Stop: 37706, Start Num: 26

Candidate Starts for Drago_54:

(11, 37263), (12, 37269), (Start: 26 @37359 has 171 MA's), (36, 37398), (43, 37482), (44, 37485), (53, 37581),

Gene: Dynamo_38 Start: 30215, Stop: 30718, Start Num: 15

Candidate Starts for Dynamo_38:

(Start: 15 @30215 has 56 MA's), (33, 30308), (41, 30410), (47, 30455), (66, 30701),

Gene: EleanorGeorge_57 Start: 39477, Stop: 39821, Start Num: 27

Candidate Starts for EleanorGeorge_57:

(14, 39390), (Start: 27 @39477 has 3 MA's), (36, 39510), (57, 39750), (61, 39780), (64, 39813), (65, 39816),

Gene: EmiMonkey_54 Start: 40322, Stop: 40669, Start Num: 26

Candidate Starts for EmiMonkey_54:

(Start: 26 @40322 has 171 MA's), (36, 40361), (38, 40370), (44, 40448), (53, 40544), (54, 40565), (59, 40610), (65, 40664),

Gene: Emma_58 Start: 38779, Stop: 39114, Start Num: 34

Candidate Starts for Emma_58:

(Start: 34 @38779 has 17 MA's), (36, 38806), (44, 38893), (53, 38989), (54, 39010), (59, 39055), (62, 39091), (65, 39109),

Gene: Emmaloid_57 Start: 39373, Stop: 39765, Start Num: 21

Candidate Starts for Emmaloid_57:

(Start: 21 @39373 has 8 MA's), (24, 39391), (36, 39457), (44, 39544), (53, 39640), (54, 39661), (59, 39706), (62, 39742), (65, 39760),

Gene: Enby_57 Start: 37635, Stop: 37982, Start Num: 26

Candidate Starts for Enby_57:

(Start: 26 @37635 has 171 MA's), (36, 37674), (38, 37683), (44, 37761), (53, 37857), (54, 37878), (59, 37923), (62, 37959), (65, 37977),

Gene: Enzomatic_62 Start: 38465, Stop: 38812, Start Num: 26

Candidate Starts for Enzomatic_62:

(7, 38345), (12, 38375), (16, 38396), (Start: 26 @38465 has 171 MA's), (36, 38504), (43, 38588), (44, 38591), (53, 38687), (54, 38708), (59, 38753), (62, 38789), (65, 38807),

Gene: Eradicator_49 Start: 36888, Stop: 37235, Start Num: 26

Candidate Starts for Eradicator_49:

(Start: 26 @36888 has 171 MA's), (36, 36927), (38, 36936), (44, 37014), (53, 37110), (54, 37131), (59, 37176), (62, 37212), (65, 37230),

Gene: Estave1_59 Start: 39812, Stop: 40159, Start Num: 26

Candidate Starts for Estave1_59:

(11, 39716), (Start: 26 @39812 has 171 MA's), (36, 39851), (43, 39935), (44, 39938), (53, 40034), (59, 40100), (65, 40154),

Gene: Etoile_38 Start: 29807, Stop: 30310, Start Num: 15

Candidate Starts for Etoile_38:

(Start: 15 @29807 has 56 MA's), (33, 29900), (41, 30002), (47, 30047), (66, 30293),

Gene: Fancypants_58 Start: 39326, Stop: 39673, Start Num: 26

Candidate Starts for Fancypants_58:

(7, 39206), (12, 39236), (16, 39257), (Start: 26 @39326 has 171 MA's), (36, 39365), (43, 39449), (44, 39452), (53, 39548), (54, 39569), (59, 39614), (62, 39650), (65, 39668),

Gene: Fastidio_56 Start: 37428, Stop: 37775, Start Num: 26

Candidate Starts for Fastidio_56:

(11, 37332), (Start: 26 @37428 has 171 MA's), (36, 37467), (44, 37554), (53, 37650), (54, 37671), (59, 37716), (62, 37752), (65, 37770),

Gene: Filuzino_55 Start: 38069, Stop: 38404, Start Num: 34

Candidate Starts for Filuzino_55:

(Start: 34 @38069 has 17 MA's), (36, 38096), (44, 38183), (53, 38279), (54, 38300), (59, 38345), (62, 38381), (65, 38399),

Gene: FirstPlacePfu_38 Start: 29839, Stop: 30342, Start Num: 15

Candidate Starts for FirstPlacePfu_38:

(Start: 15 @29839 has 56 MA's), (33, 29932), (41, 30034), (47, 30079), (66, 30325),

Gene: Fishburne_38 Start: 29807, Stop: 30310, Start Num: 15

Candidate Starts for Fishburne_38:

(Start: 15 @29807 has 56 MA's), (33, 29900), (41, 30002), (47, 30047), (66, 30293),

Gene: Florinda_68 Start: 41148, Stop: 41495, Start Num: 26

Candidate Starts for Florinda_68:

(7, 41028), (16, 41079), (Start: 26 @41148 has 171 MA's), (36, 41187), (43, 41271), (44, 41274), (53, 41370), (54, 41391), (59, 41436), (65, 41490),

Gene: FreddyB_57 Start: 37540, Stop: 37887, Start Num: 26

Candidate Starts for FreddyB_57:

(11, 37444), (Start: 26 @37540 has 171 MA's), (36, 37579), (43, 37663), (44, 37666), (53, 37762), (59, 37828), (65, 37882),

Gene: Fruitloop_54 Start: 39383, Stop: 39718, Start Num: 34

Candidate Starts for Fruitloop_54:

(Start: 34 @39383 has 17 MA's), (36, 39410), (44, 39497), (53, 39593), (54, 39614), (59, 39659), (62, 39695), (65, 39713),

Gene: GUmbie_54 Start: 38115, Stop: 38462, Start Num: 26

Candidate Starts for GUmbie_54:

(Start: 26 @38115 has 171 MA's), (36, 38154), (38, 38163), (44, 38241), (53, 38337), (54, 38358), (59, 38403), (62, 38439), (65, 38457),

Gene: Galactic_55 Start: 38581, Stop: 38928, Start Num: 26

Candidate Starts for Galactic_55:

(7, 38461), (12, 38491), (16, 38512), (Start: 26 @38581 has 171 MA's), (36, 38620), (43, 38704), (44, 38707), (53, 38803), (54, 38824), (59, 38869), (62, 38905), (65, 38923),

Gene: GaloreK_38 Start: 29800, Stop: 30306, Start Num: 15

Candidate Starts for GaloreK_38:

(Start: 15 @29800 has 56 MA's), (33, 29893), (41, 29998), (47, 30043), (66, 30289),

Gene: Gandalph_59 Start: 38933, Stop: 39283, Start Num: 26

Candidate Starts for Gandalph_59:

(Start: 26 @38933 has 171 MA's), (36, 38972), (57, 39212), (61, 39242), (64, 39275), (65, 39278),

Gene: Gavriela_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for Gavriela_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Geralt_51 Start: 36915, Stop: 37262, Start Num: 26

Candidate Starts for Geralt_51:

(11, 36819), (Start: 26 @36915 has 171 MA's), (36, 36954), (43, 37038), (44, 37041), (53, 37137), (54, 37158), (59, 37203), (65, 37257),

Gene: GigiOuiOui_52 Start: 37555, Stop: 37902, Start Num: 26

Candidate Starts for GigiOuiOui_52:

(Start: 26 @37555 has 171 MA's), (36, 37594), (38, 37603), (44, 37681), (53, 37777), (54, 37798), (59, 37843), (65, 37897),

Gene: Girafales_66 Start: 40939, Stop: 41286, Start Num: 26

Candidate Starts for Girafales_66:

(7, 40819), (12, 40849), (16, 40870), (Start: 26 @40939 has 171 MA's), (36, 40978), (43, 41062), (44, 41065), (53, 41161), (54, 41182), (59, 41227), (65, 41281),

Gene: Girr_54 Start: 38422, Stop: 38769, Start Num: 26

Candidate Starts for Girr_54:

(7, 38299), (16, 38350), (Start: 26 @38422 has 171 MA's), (36, 38461), (38, 38470), (40, 38500), (44, 38548), (53, 38644), (54, 38665), (59, 38710), (62, 38746), (65, 38764),

Gene: Glaske_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for Glaske_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Gorge_60 Start: 40057, Stop: 40404, Start Num: 26

Candidate Starts for Gorge_60:

(11, 39961), (Start: 26 @40057 has 171 MA's), (36, 40096), (43, 40180), (44, 40183), (53, 40279), (59, 40345), (65, 40399),

Gene: GreaseLightnin_38 Start: 30043, Stop: 30546, Start Num: 15

Candidate Starts for GreaseLightnin_38:

(2, 29956), (Start: 15 @30043 has 56 MA's), (33, 30136), (41, 30238), (47, 30283), (48, 30298), (66, 30529),

Gene: Grimmer_66 Start: 40217, Stop: 40564, Start Num: 26

Candidate Starts for Grimmer_66:

(Start: 26 @40217 has 171 MA's), (36, 40256), (43, 40340), (44, 40343), (53, 40439), (54, 40460), (59, 40505), (62, 40541), (65, 40559),

Gene: Guppsters_57 Start: 38245, Stop: 38592, Start Num: 26

Candidate Starts for Guppsters_57:

(Start: 26 @38245 has 171 MA's), (36, 38284), (38, 38293), (43, 38368), (44, 38371), (53, 38467), (59, 38533), (65, 38587),

Gene: HC_38 Start: 29567, Stop: 30004, Start Num: 15

Candidate Starts for HC_38:

(5, 29510), (Start: 15 @29567 has 56 MA's), (50, 29846), (52, 29858), (59, 29942),

Gene: HUHilltop_38 Start: 29837, Stop: 30343, Start Num: 15

Candidate Starts for HUHilltop_38:

(Start: 15 @29837 has 56 MA's), (33, 29930), (41, 30035), (47, 30080), (66, 30326),

Gene: Hades_57 Start: 39513, Stop: 39860, Start Num: 26

Candidate Starts for Hades_57:

(Start: 26 @39513 has 171 MA's), (36, 39552), (38, 39561), (44, 39639), (53, 39735), (54, 39756), (59, 39801), (62, 39837), (65, 39855),

Gene: Hamulus_58 Start: 39523, Stop: 39858, Start Num: 34

Candidate Starts for Hamulus_58:

(Start: 34 @39523 has 17 MA's), (36, 39550), (38, 39559), (44, 39637), (53, 39733), (54, 39754), (59, 39799), (62, 39835), (65, 39853),

Gene: Harley_59 Start: 39484, Stop: 39822, Start Num: 32

Candidate Starts for Harley_59:

(Start: 32 @39484 has 7 MA's), (36, 39511), (57, 39751), (61, 39781), (64, 39814), (65, 39817),

Gene: Hegedechwinu_56 Start: 37727, Stop: 38074, Start Num: 26

Candidate Starts for Hegedechwinu_56:

(Start: 26 @37727 has 171 MA's), (36, 37766), (38, 37775), (44, 37853), (53, 37949), (59, 38015), (62, 38051), (65, 38069),

Gene: Hlubikazi_52 Start: 36733, Stop: 37080, Start Num: 26

Candidate Starts for Hlubikazi_52:

(7, 36613), (Start: 26 @36733 has 171 MA's), (36, 36772), (40, 36811), (43, 36856), (44, 36859), (53, 36955), (59, 37021),

Gene: IMpilo_52 Start: 36571, Stop: 36918, Start Num: 26

Candidate Starts for IMpilo_52:

(7, 36451), (12, 36481), (16, 36502), (Start: 26 @36571 has 171 MA's), (36, 36610), (44, 36697), (53, 36793), (54, 36814), (59, 36859),

Gene: IbOuu_55 Start: 39092, Stop: 39439, Start Num: 26

Candidate Starts for IbOuu_55:

(Start: 26 @39092 has 171 MA's), (36, 39131), (38, 39140), (44, 39218), (53, 39314), (59, 39380), (62, 39416), (65, 39434),

Gene: Ibhubesi_56 Start: 38705, Stop: 39052, Start Num: 26

Candidate Starts for Ibhubesi_56:

(7, 38585), (12, 38615), (16, 38636), (Start: 26 @38705 has 171 MA's), (36, 38744), (40, 38783), (43, 38828), (44, 38831), (53, 38927), (54, 38948), (59, 38993), (62, 39029), (65, 39047),

Gene: Inventum_51 Start: 38209, Stop: 38556, Start Num: 26

Candidate Starts for Inventum_51:

(Start: 26 @38209 has 171 MA's), (36, 38248), (38, 38257), (44, 38335), (53, 38431), (54, 38452), (59, 38497), (62, 38533), (65, 38551),

Gene: Island3_39 Start: 31520, Stop: 31951, Start Num: 15

Candidate Starts for Island3_39:

(Start: 15 @31520 has 56 MA's), (33, 31613), (37, 31643), (50, 31793), (52, 31805), (59, 31889),

Gene: Jabbawokkie_70 Start: 40392, Stop: 40781, Start Num: 22

Candidate Starts for Jabbawokkie_70:

(20, 40380), (Start: 22 @40392 has 6 MA's), (24, 40410), (Start: 31 @40443 has 1 MA's), (36, 40473), (59, 40722), (61, 40740), (64, 40773), (65, 40776),

Gene: JalFarm20_69 Start: 42632, Stop: 42970, Start Num: 32

Candidate Starts for JalFarm20_69:

(Start: 32 @42632 has 7 MA's), (36, 42659), (57, 42899), (61, 42929), (64, 42962), (65, 42965),

Gene: James_60 Start: 40182, Stop: 40529, Start Num: 26

Candidate Starts for James_60:

(7, 40062), (Start: 26 @40182 has 171 MA's), (36, 40221), (43, 40305), (44, 40308), (53, 40404), (59, 40470),

Gene: Jant_60 Start: 40202, Stop: 40549, Start Num: 26

Candidate Starts for Jant_60:

(Start: 26 @40202 has 171 MA's), (36, 40241), (38, 40250), (43, 40325), (44, 40328), (53, 40424), (59, 40490), (65, 40544),

Gene: Jacob_56 Start: 38660, Stop: 39007, Start Num: 26

Candidate Starts for Jacob_56:

(11, 38564), (Start: 26 @38660 has 171 MA's), (36, 38699), (43, 38783), (44, 38786), (53, 38882), (59, 38948), (65, 39002),

Gene: Jebeks_39 Start: 29792, Stop: 30295, Start Num: 15

Candidate Starts for Jebeks_39:

(Start: 15 @29792 has 56 MA's), (33, 29885), (41, 29987), (47, 30032), (66, 30278),

Gene: Jennelsea_53 Start: 37345, Stop: 37692, Start Num: 26

Candidate Starts for Jennelsea_53:

(11, 37249), (Start: 26 @37345 has 171 MA's), (36, 37384), (43, 37468), (44, 37471), (53, 37567), (59, 37633), (65, 37687),

Gene: Jinglebell_61 Start: 41220, Stop: 41567, Start Num: 26

Candidate Starts for Jinglebell_61:

(Start: 26 @41220 has 171 MA's), (36, 41259), (40, 41298), (43, 41343), (44, 41346), (53, 41442), (54, 41463), (59, 41508),

Gene: Job42_58 Start: 40600, Stop: 40947, Start Num: 26

Candidate Starts for Job42_58:

(7, 40480), (16, 40531), (Start: 26 @40600 has 171 MA's), (36, 40639), (38, 40648), (44, 40726), (53, 40822), (59, 40888),

Gene: JoeyJr_51 Start: 37115, Stop: 37462, Start Num: 26

Candidate Starts for JoeyJr_51:

(11, 37019), (Start: 26 @37115 has 171 MA's), (36, 37154), (43, 37238), (44, 37241), (53, 37337), (54, 37358), (59, 37403), (65, 37457),

Gene: Juice456_57 Start: 40576, Stop: 40926, Start Num: 26

Candidate Starts for Juice456_57:

(8, 40456), (13, 40486), (Start: 26 @40576 has 171 MA's), (36, 40615), (57, 40855), (61, 40885), (64, 40918), (65, 40921),

Gene: Jung_37 Start: 29761, Stop: 30264, Start Num: 15

Candidate Starts for Jung_37:

(2, 29674), (Start: 15 @29761 has 56 MA's), (33, 29854), (41, 29956), (47, 30001), (63, 30175), (66, 30247),

Gene: Juniormint_38 Start: 29836, Stop: 30339, Start Num: 15

Candidate Starts for Juniormint_38:

(2, 29749), (Start: 15 @29836 has 56 MA's), (33, 29929), (41, 30031), (47, 30076), (63, 30250), (66, 30322),

Gene: Juniper1_54 Start: 38516, Stop: 38863, Start Num: 26

Candidate Starts for Juniper1_54:

(Start: 26 @38516 has 171 MA's), (36, 38555), (38, 38564), (44, 38642), (53, 38738), (54, 38759), (59, 38804), (62, 38840), (65, 38858),

Gene: Karhdo_53 Start: 38205, Stop: 38552, Start Num: 26

Candidate Starts for Karhdo_53:

(7, 38085), (Start: 26 @38205 has 171 MA's), (36, 38244), (43, 38328), (44, 38331), (53, 38427), (59, 38493), (65, 38547),

Gene: Kari_38 Start: 29804, Stop: 30307, Start Num: 15

Candidate Starts for Kari_38:

(Start: 15 @29804 has 56 MA's), (33, 29897), (41, 29999), (47, 30044), (66, 30290),

Gene: Kenuha5_54 Start: 37650, Stop: 37985, Start Num: 32

Candidate Starts for Kenuha5_54:

(Start: 32 @37650 has 7 MA's), (36, 37677), (44, 37764), (53, 37860), (54, 37881), (59, 37926), (62, 37962), (65, 37980),

Gene: Kersh_58 Start: 40958, Stop: 41305, Start Num: 26

Candidate Starts for Kersh_58:

(7, 40838), (12, 40868), (Start: 26 @40958 has 171 MA's), (36, 40997), (40, 41036), (43, 41081), (44, 41084), (53, 41180), (59, 41246), (65, 41300),

Gene: KilKor_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for KilKor_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: KingJulian_56 Start: 37743, Stop: 38078, Start Num: 34

Candidate Starts for KingJulian_56:

(Start: 34 @37743 has 17 MA's), (36, 37770), (38, 37779), (44, 37857), (53, 37953), (54, 37974), (59, 38019), (62, 38055), (65, 38073),

Gene: KingMidas_55 Start: 38777, Stop: 39124, Start Num: 26

Candidate Starts for KingMidas_55:

(11, 38681), (Start: 26 @38777 has 171 MA's), (36, 38816), (43, 38900), (44, 38903), (53, 38999), (54, 39020), (59, 39065), (65, 39119),

Gene: Kingsley_53 Start: 37622, Stop: 37969, Start Num: 26

Candidate Starts for Kingsley_53:

(Start: 26 @37622 has 171 MA's), (36, 37661), (40, 37700), (43, 37745), (44, 37748), (53, 37844), (59, 37910),

Gene: Koella_50 Start: 34590, Stop: 34937, Start Num: 26

Candidate Starts for Koella_50:

(11, 34494), (Start: 26 @34590 has 171 MA's), (36, 34629), (43, 34713), (44, 34716), (53, 34812), (59, 34878), (65, 34932),

Gene: Krakatau_54 Start: 38333, Stop: 38674, Start Num: 30

Candidate Starts for Krakatau_54:

(Start: 30 @38333 has 3 MA's), (Start: 34 @38339 has 17 MA's), (36, 38366), (44, 38453), (53, 38549), (54, 38570), (59, 38615), (62, 38651), (65, 38669),

Gene: KristaRAM_59 Start: 41162, Stop: 41509, Start Num: 26

Candidate Starts for KristaRAM_59:

(7, 41042), (Start: 26 @41162 has 171 MA's), (36, 41201), (40, 41240), (43, 41285), (44, 41288), (53, 41384), (54, 41405), (59, 41450), (62, 41486), (65, 41504),

Gene: Ksquared_38 Start: 29814, Stop: 30317, Start Num: 15

Candidate Starts for Ksquared_38:

(2, 29727), (Start: 15 @29814 has 56 MA's), (33, 29907), (41, 30009), (47, 30054), (63, 30228), (66, 30300),

Gene: Langerak_38 Start: 29820, Stop: 30326, Start Num: 15

Candidate Starts for Langerak_38:

(Start: 15 @29820 has 56 MA's), (33, 29913), (41, 30018), (47, 30063), (66, 30309),

Gene: LastJedi_50 Start: 35910, Stop: 36257, Start Num: 26

Candidate Starts for LastJedi_50:

(11, 35814), (Start: 26 @35910 has 171 MA's), (36, 35949), (43, 36033), (44, 36036), (53, 36132), (59, 36198), (65, 36252),

Gene: Latretium_58 Start: 39236, Stop: 39583, Start Num: 26

Candidate Starts for Latretium_58:

(Start: 26 @39236 has 171 MA's), (36, 39275), (43, 39359), (44, 39362), (53, 39458), (54, 39479), (59, 39524), (62, 39560), (65, 39578),

Gene: Leozinho_55 Start: 37995, Stop: 38342, Start Num: 26

Candidate Starts for Leozinho_55:

(7, 37872), (16, 37923), (Start: 26 @37995 has 171 MA's), (36, 38034), (38, 38043), (44, 38121), (53, 38217), (54, 38238), (59, 38283), (65, 38337),

Gene: Leperchaun_48 Start: 36345, Stop: 36692, Start Num: 26

Candidate Starts for Leperchaun_48:

(11, 36249), (Start: 26 @36345 has 171 MA's), (36, 36384), (43, 36468), (44, 36471), (53, 36567), (54, 36588), (59, 36633), (65, 36687),

Gene: LilMoolah_54 Start: 38105, Stop: 38452, Start Num: 26

Candidate Starts for LilMoolah_54:

(7, 37985), (16, 38036), (Start: 26 @38105 has 171 MA's), (36, 38144), (44, 38231), (53, 38327), (59, 38393),

Gene: LittleShirley_55 Start: 39149, Stop: 39496, Start Num: 26

Candidate Starts for LittleShirley_55:

(7, 39029), (12, 39059), (Start: 26 @39149 has 171 MA's), (36, 39188), (43, 39272), (44, 39275), (53, 39371), (59, 39437),

Gene: Lizziana_62 Start: 39663, Stop: 40010, Start Num: 26

Candidate Starts for Lizziana_62:

(11, 39567), (Start: 26 @39663 has 171 MA's), (36, 39702), (43, 39786), (44, 39789), (53, 39885), (59, 39951), (65, 40005),

Gene: Llama_61 Start: 41074, Stop: 41421, Start Num: 26

Candidate Starts for Llama_61:

(Start: 26 @41074 has 171 MA's), (36, 41113), (40, 41152), (43, 41197), (44, 41200), (53, 41296), (54, 41317), (59, 41362),

Gene: Llij_52 Start: 37513, Stop: 37860, Start Num: 26

Candidate Starts for Llij_52:

(11, 37417), (12, 37423), (Start: 26 @37513 has 171 MA's), (36, 37552), (43, 37636), (44, 37639), (53, 37735),

Gene: Lorde_56 Start: 36800, Stop: 37147, Start Num: 26

Candidate Starts for Lorde_56:

(11, 36704), (12, 36710), (Start: 26 @36800 has 171 MA's), (36, 36839), (43, 36923), (44, 36926), (53, 37022),

Gene: Lucia_55 Start: 37657, Stop: 38004, Start Num: 26

Candidate Starts for Lucia_55:

(11, 37561), (12, 37567), (Start: 26 @37657 has 171 MA's), (36, 37696), (43, 37780), (44, 37783), (53, 37879),

Gene: LunaBlu_58 Start: 39240, Stop: 39587, Start Num: 26

Candidate Starts for LunaBlu_58:

(7, 39120), (12, 39150), (16, 39171), (Start: 26 @39240 has 171 MA's), (36, 39279), (43, 39363), (44, 39366), (53, 39462), (54, 39483), (59, 39528), (62, 39564), (65, 39582),

Gene: LunaStella_54 Start: 37871, Stop: 38221, Start Num: 26

Candidate Starts for LunaStella_54:

(Start: 26 @37871 has 171 MA's), (36, 37910), (61, 38180), (64, 38213), (65, 38216),

Gene: MadMen_54 Start: 38437, Stop: 38784, Start Num: 26

Candidate Starts for MadMen_54:

(11, 38341), (12, 38347), (Start: 26 @38437 has 171 MA's), (36, 38476), (40, 38515), (43, 38560), (44, 38563), (53, 38659), (59, 38725), (65, 38779),

Gene: Madiba_54 Start: 37686, Stop: 38033, Start Num: 26

Candidate Starts for Madiba_54:

(7, 37566), (12, 37596), (Start: 26 @37686 has 171 MA's), (36, 37725), (40, 37764), (43, 37809), (44, 37812), (53, 37908), (59, 37974),

Gene: Mahavrat_54 Start: 38065, Stop: 38412, Start Num: 26

Candidate Starts for Mahavrat_54:

(Start: 26 @38065 has 171 MA's), (43, 38188), (44, 38191), (53, 38287), (54, 38308), (59, 38353), (62, 38389), (65, 38407),

Gene: Majeke_38 Start: 29845, Stop: 30351, Start Num: 15

Candidate Starts for Majeke_38:

(Start: 15 @29845 has 56 MA's), (33, 29938), (41, 30043), (47, 30088), (66, 30334),

Gene: Malithi_38 Start: 29723, Stop: 30226, Start Num: 15

Candidate Starts for Malithi_38:

(2, 29636), (Start: 15 @29723 has 56 MA's), (33, 29816), (41, 29918), (47, 29963), (66, 30209),

Gene: Mandlovu_52 Start: 36675, Stop: 37022, Start Num: 26

Candidate Starts for Mandlovu_52:

(7, 36555), (Start: 26 @36675 has 171 MA's), (36, 36714), (40, 36753), (43, 36798), (44, 36801), (53, 36897), (59, 36963),

Gene: Mangethe_38 Start: 29845, Stop: 30351, Start Num: 15

Candidate Starts for Mangethe_38:

(Start: 15 @29845 has 56 MA's), (33, 29938), (41, 30043), (47, 30088), (66, 30334),

Gene: Mantra_52 Start: 37558, Stop: 37905, Start Num: 26

Candidate Starts for Mantra_52:

(Start: 26 @37558 has 171 MA's), (36, 37597), (44, 37684), (53, 37780), (54, 37801), (59, 37846), (65, 37900),

Gene: Maravista_57 Start: 40112, Stop: 40459, Start Num: 26

Candidate Starts for Maravista_57:

(Start: 26 @40112 has 171 MA's), (36, 40151), (43, 40235), (44, 40238), (53, 40334), (59, 40400), (65, 40454),

Gene: Marker_58 Start: 38786, Stop: 39127, Start Num: 30

Candidate Starts for Marker_58:

(Start: 30 @38786 has 3 MA's), (Start: 34 @38792 has 17 MA's), (36, 38819), (40, 38858), (43, 38903), (44, 38906), (53, 39002), (54, 39023), (59, 39068), (62, 39104), (65, 39122),

Gene: Martik_56 Start: 38616, Stop: 38963, Start Num: 26

Candidate Starts for Martik_56:

(11, 38520), (Start: 26 @38616 has 171 MA's), (36, 38655), (43, 38739), (44, 38742), (53, 38838), (59, 38904), (65, 38958),

Gene: Mattes_60 Start: 40182, Stop: 40529, Start Num: 26

Candidate Starts for Mattes_60:

(7, 40062), (16, 40113), (Start: 26 @40182 has 171 MA's), (36, 40221), (38, 40230), (44, 40308), (53, 40404), (59, 40470), (65, 40524),

Gene: Medindi_53 Start: 36409, Stop: 36756, Start Num: 26

Candidate Starts for Medindi_53:

(Start: 26 @36409 has 171 MA's), (36, 36448), (44, 36535), (53, 36631), (54, 36652), (59, 36697), (62, 36733), (65, 36751),

Gene: Megiddo_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for Megiddo_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Melissauren88_55 Start: 38564, Stop: 38899, Start Num: 34

Candidate Starts for Melissauren88_55:

(Start: 34 @38564 has 17 MA's), (36, 38591), (44, 38678), (53, 38774), (54, 38795), (59, 38840), (62, 38876), (65, 38894),

Gene: MilanaBonita_47 Start: 35145, Stop: 35492, Start Num: 26

Candidate Starts for MilanaBonita_47:

(Start: 26 @35145 has 171 MA's), (36, 35184), (38, 35193), (44, 35271), (53, 35367), (54, 35388), (59, 35433), (62, 35469),

Gene: MilleniumForce_60 Start: 41234, Stop: 41581, Start Num: 26

Candidate Starts for MilleniumForce_60:

(Start: 26 @41234 has 171 MA's), (36, 41273), (38, 41282), (44, 41360), (53, 41456), (59, 41522), (65, 41576),

Gene: MinionDave_55 Start: 38963, Stop: 39310, Start Num: 26

Candidate Starts for MinionDave_55:

(Start: 26 @38963 has 171 MA's), (36, 39002), (38, 39011), (44, 39089), (53, 39185), (54, 39206), (59, 39251), (62, 39287), (65, 39305),

Gene: Minnie_60 Start: 40536, Stop: 40883, Start Num: 26

Candidate Starts for Minnie_60:

(Start: 26 @40536 has 171 MA's), (36, 40575), (38, 40584), (44, 40662), (53, 40758), (59, 40824), (65, 40878),

Gene: MisterCuddles_54 Start: 38422, Stop: 38769, Start Num: 26

Candidate Starts for MisterCuddles_54:

(7, 38299), (16, 38350), (Start: 26 @38422 has 171 MA's), (36, 38461), (38, 38470), (40, 38500), (44, 38548), (53, 38644), (54, 38665), (59, 38710), (62, 38746), (65, 38764),

Gene: Modragons_60 Start: 41064, Stop: 41411, Start Num: 26

Candidate Starts for Modragons_60:

(Start: 26 @41064 has 171 MA's), (36, 41103), (40, 41142), (43, 41187), (44, 41190), (53, 41286), (54, 41307), (59, 41352),

Gene: Moonbeam_55 Start: 38708, Stop: 39043, Start Num: 34

Candidate Starts for Moonbeam_55:

(Start: 34 @38708 has 17 MA's), (36, 38735), (44, 38822), (53, 38918), (54, 38939), (59, 38984), (62, 39020), (65, 39038),

Gene: Mova_57 Start: 38190, Stop: 38537, Start Num: 26

Candidate Starts for Mova_57:

(Start: 26 @38190 has 171 MA's), (36, 38229), (38, 38238), (44, 38316), (53, 38412), (59, 38478), (65, 38532),

Gene: Mozy_65 Start: 41197, Stop: 41544, Start Num: 26

Candidate Starts for Mozy_65:

(Start: 26 @41197 has 171 MA's), (36, 41236), (44, 41323), (53, 41419), (54, 41440), (59, 41485), (65, 41539),

Gene: Ms6_52 Start: 34295, Stop: 34630, Start Num: 34

Candidate Starts for Ms6_52:

(Start: 34 @34295 has 17 MA's), (36, 34322), (38, 34331), (44, 34409), (53, 34505), (54, 34526), (59, 34571), (62, 34607), (65, 34625),

Gene: Mwanjiwa_62 Start: 39297, Stop: 39644, Start Num: 26

Candidate Starts for Mwanjiwa_62:

(Start: 26 @39297 has 171 MA's), (36, 39336), (38, 39345), (44, 39423), (53, 39519), (54, 39540), (59, 39585), (62, 39621), (65, 39639),

Gene: Nazo_42 Start: 32113, Stop: 32625, Start Num: 15

Candidate Starts for Nazo_42:

(Start: 15 @32113 has 56 MA's), (33, 32206), (39, 32245), (47, 32359), (48, 32374), (51, 32395), (59, 32494), (67, 32614),

Gene: Necropolis_38 Start: 29804, Stop: 30307, Start Num: 15

Candidate Starts for Necropolis_38:

(Start: 15 @29804 has 56 MA's), (33, 29897), (41, 29999), (47, 30044), (66, 30290),

Gene: NewHope4_57 Start: 38611, Stop: 38958, Start Num: 26

Candidate Starts for NewHope4_57:

(7, 38491), (12, 38521), (16, 38542), (Start: 26 @38611 has 171 MA's), (36, 38650), (43, 38734), (44, 38737), (53, 38833), (54, 38854), (59, 38899), (62, 38935), (65, 38953),

Gene: Nichirin_63 Start: 42452, Stop: 42952, Start Num: 4

Candidate Starts for Nichirin_63:

(3, 42425), (4, 42452), (6, 42467), (9, 42491), (17, 42533), (19, 42542), (23, 42569), (24, 42578), (36, 42644), (44, 42731), (53, 42827), (54, 42848), (59, 42893),

Gene: Nimbo_50 Start: 36918, Stop: 37265, Start Num: 26

Candidate Starts for Nimbo_50:

(11, 36822), (Start: 26 @36918 has 171 MA's), (36, 36957), (43, 37041), (44, 37044), (53, 37140), (54, 37161), (59, 37206), (65, 37260),

Gene: Nitzel_54 Start: 37977, Stop: 38318, Start Num: 29

Candidate Starts for Nitzel_54:

(Start: 29 @37977 has 1 MA's), (36, 38010), (40, 38049), (43, 38094), (44, 38097), (53, 38193), (59, 38259), (65, 38313),

Gene: Nivrat_52 Start: 37978, Stop: 38325, Start Num: 26

Candidate Starts for Nivrat_52:

(7, 37858), (16, 37909), (Start: 26 @37978 has 171 MA's), (36, 38017), (44, 38104), (53, 38200), (59, 38266),

Gene: NormanBulbieJr_56 Start: 38603, Stop: 38950, Start Num: 26

Candidate Starts for NormanBulbieJr_56:

(11, 38507), (Start: 26 @38603 has 171 MA's), (36, 38642), (43, 38726), (44, 38729), (53, 38825), (59, 38891), (65, 38945),

Gene: Ochi17_59 Start: 40671, Stop: 41018, Start Num: 26

Candidate Starts for Ochi17_59:

(Start: 26 @40671 has 171 MA's), (36, 40710), (40, 40749), (43, 40794), (44, 40797), (53, 40893), (54, 40914), (59, 40959),

Gene: OfUltron_61 Start: 41220, Stop: 41567, Start Num: 26

Candidate Starts for OfUltron_61:

(Start: 26 @41220 has 171 MA's), (36, 41259), (40, 41298), (43, 41343), (44, 41346), (53, 41442), (54, 41463), (59, 41508),

Gene: Ogopogo_62 Start: 39554, Stop: 39889, Start Num: 32

Candidate Starts for Ogopogo_62:

(Start: 32 @39554 has 7 MA's), (36, 39581), (44, 39668), (53, 39764), (54, 39785), (59, 39830), (62, 39866), (65, 39884),

Gene: Okabe_52 Start: 35477, Stop: 35812, Start Num: 34

Candidate Starts for Okabe_52:

(Start: 34 @35477 has 17 MA's), (36, 35504), (44, 35591), (53, 35687), (54, 35708), (59, 35753), (62, 35789), (65, 35807),

Gene: Oksu_60 Start: 41483, Stop: 41830, Start Num: 26

Candidate Starts for Oksu_60:

(Start: 26 @41483 has 171 MA's), (36, 41522), (40, 41561), (43, 41606), (44, 41609), (53, 41705), (54, 41726), (59, 41771),

Gene: OldBen_53 Start: 38528, Stop: 38875, Start Num: 26

Candidate Starts for OldBen_53:

(Start: 26 @38528 has 171 MA's), (36, 38567), (40, 38606), (43, 38651), (44, 38654), (53, 38750), (54, 38771), (59, 38816), (65, 38870),

Gene: OlympiaSaint_58 Start: 39124, Stop: 39471, Start Num: 26

Candidate Starts for OlympiaSaint_58:

(11, 39028), (Start: 26 @39124 has 171 MA's), (36, 39163), (43, 39247), (44, 39250), (53, 39346), (59, 39412), (65, 39466),

Gene: Ovechkin_55 Start: 39124, Stop: 39471, Start Num: 26

Candidate Starts for Ovechkin_55:

(Start: 26 @39124 has 171 MA's), (36, 39163), (40, 39202), (43, 39247), (44, 39250), (53, 39346), (59, 39412), (65, 39466),

Gene: OwlsT2W_56 Start: 38846, Stop: 39193, Start Num: 26

Candidate Starts for OwlsT2W_56:

(Start: 26 @38846 has 171 MA's), (36, 38885), (38, 38894), (44, 38972), (53, 39068), (54, 39089), (59, 39134), (62, 39170), (65, 39188),

Gene: PHappiness_51 Start: 36891, Stop: 37238, Start Num: 26

Candidate Starts for PHappiness_51:

(11, 36795), (Start: 26 @36891 has 171 MA's), (36, 36930), (43, 37014), (44, 37017), (53, 37113), (54, 37134), (59, 37179), (65, 37233),

Gene: PMC_53 Start: 39230, Stop: 39577, Start Num: 26

Candidate Starts for PMC_53:

(11, 39134), (Start: 26 @39230 has 171 MA's), (36, 39269), (43, 39353), (44, 39356), (53, 39452), (54, 39473), (59, 39518), (65, 39572),

Gene: Pacc40_50 Start: 36965, Stop: 37312, Start Num: 26

Candidate Starts for Pacc40_50:

(11, 36869), (Start: 26 @36965 has 171 MA's), (36, 37004), (43, 37088), (44, 37091), (53, 37187), (54, 37208), (59, 37253), (65, 37307),

Gene: PaintedDog_44 Start: 32418, Stop: 32921, Start Num: 15

Candidate Starts for PaintedDog_44:

(Start: 15 @32418 has 56 MA's), (33, 32511), (35, 32529), (36, 32535), (37, 32541), (47, 32658), (66, 32904),

Gene: PatoPoderoso_53 Start: 37743, Stop: 38078, Start Num: 34

Candidate Starts for PatoPoderoso_53:

(Start: 34 @37743 has 17 MA's), (36, 37770), (38, 37779), (44, 37857), (53, 37953), (54, 37974), (59, 38019), (62, 38055), (65, 38073),

Gene: PeanutPie_38 Start: 29796, Stop: 30302, Start Num: 15

Candidate Starts for PeanutPie_38:

(2, 29709), (Start: 15 @29796 has 56 MA's), (33, 29889), (41, 29994), (47, 30039), (63, 30213), (66, 30285),

Gene: Peridot_57 Start: 38068, Stop: 38415, Start Num: 26

Candidate Starts for Peridot_57:

(7, 37948), (12, 37978), (16, 37999), (Start: 26 @38068 has 171 MA's), (36, 38107), (43, 38191), (44, 38194), (53, 38290), (59, 38356),

Gene: Phalconet_55 Start: 37835, Stop: 38170, Start Num: 34

Candidate Starts for Phalconet_55:

(Start: 34 @37835 has 17 MA's), (36, 37862), (44, 37949), (53, 38045), (54, 38066), (59, 38111), (62, 38147), (65, 38165),

Gene: Phalm_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for Phalm_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Phanphagia_54 Start: 39414, Stop: 39761, Start Num: 26

Candidate Starts for Phanphagia_54:

(Start: 26 @39414 has 171 MA's), (36, 39453), (38, 39462), (44, 39540), (53, 39636), (54, 39657), (59, 39702), (62, 39738),

Gene: Phatniss_54 Start: 38608, Stop: 38955, Start Num: 26

Candidate Starts for Phatniss_54:

(11, 38512), (12, 38518), (Start: 26 @38608 has 171 MA's), (36, 38647), (43, 38731), (44, 38734), (53, 38830),

Gene: Phayonce_40 Start: 32024, Stop: 32536, Start Num: 15

Candidate Starts for Phayonce_40:

(Start: 15 @32024 has 56 MA's), (33, 32117), (35, 32135), (37, 32147), (39, 32156), (45, 32237), (47, 32270), (51, 32306), (59, 32405), (67, 32525),

Gene: Phegasus_38 Start: 29812, Stop: 30318, Start Num: 15

Candidate Starts for Phegasus_38:

(Start: 15 @29812 has 56 MA's), (33, 29905), (41, 30010), (47, 30055), (66, 30301),

Gene: PhesterPhotato_57 Start: 38640, Stop: 38987, Start Num: 26

Candidate Starts for PhesterPhotato_57:

(Start: 26 @38640 has 171 MA's), (36, 38679), (38, 38688), (44, 38766), (53, 38862), (54, 38883), (59, 38928), (62, 38964), (65, 38982),

Gene: Philus_59 Start: 39768, Stop: 40115, Start Num: 26

Candidate Starts for Philus_59:

(7, 39648), (12, 39678), (Start: 26 @39768 has 171 MA's), (36, 39807), (38, 39816), (43, 39891), (44, 39894), (53, 39990), (59, 40056),

Gene: Phineas_38 Start: 30175, Stop: 30678, Start Num: 15

Candidate Starts for Phineas_38:

(Start: 15 @30175 has 56 MA's), (33, 30268), (41, 30370), (47, 30415), (66, 30661),

Gene: PhlipPhlop_56 Start: 40322, Stop: 40669, Start Num: 26

Candidate Starts for PhlipPhlop_56:

(Start: 26 @40322 has 171 MA's), (36, 40361), (38, 40370), (44, 40448), (53, 40544), (54, 40565), (59, 40610), (65, 40664),

Gene: Pippy_54 Start: 37474, Stop: 37821, Start Num: 26

Candidate Starts for Pippy_54:

(11, 37378), (Start: 26 @37474 has 171 MA's), (36, 37513), (43, 37597), (44, 37600), (53, 37696), (59, 37762), (65, 37816),

Gene: Plumbus_58 Start: 38935, Stop: 39282, Start Num: 26

Candidate Starts for Plumbus_58:

(Start: 26 @38935 has 171 MA's), (36, 38974), (44, 39061), (53, 39157), (54, 39178), (59, 39223), (65, 39277),

Gene: Polkaroo_38 Start: 29811, Stop: 30314, Start Num: 15

Candidate Starts for Polkaroo_38:

(2, 29724), (Start: 15 @29811 has 56 MA's), (33, 29904), (41, 30006), (47, 30051), (63, 30225), (66, 30297),

Gene: Pollywog_57 Start: 39439, Stop: 39786, Start Num: 26

Candidate Starts for Pollywog_57:

(7, 39319), (12, 39349), (Start: 26 @39439 has 171 MA's), (36, 39478), (43, 39562), (44, 39565), (53, 39661), (54, 39682), (59, 39727), (65, 39781),

Gene: Polo2Bam_61 Start: 38465, Stop: 38812, Start Num: 26

Candidate Starts for Polo2Bam_61:

(7, 38345), (12, 38375), (16, 38396), (Start: 26 @38465 has 171 MA's), (36, 38504), (43, 38588), (44, 38591), (53, 38687), (54, 38708), (59, 38753), (62, 38789), (65, 38807),

Gene: PopTart_51 Start: 37460, Stop: 37795, Start Num: 34

Candidate Starts for PopTart_51:

(Start: 34 @37460 has 17 MA's), (36, 37487), (43, 37571), (44, 37574), (53, 37670), (54, 37691), (59, 37736), (62, 37772), (65, 37790),

Gene: Priscilla_56 Start: 38702, Stop: 39049, Start Num: 26

Candidate Starts for Priscilla_56:

(11, 38606), (Start: 26 @38702 has 171 MA's), (36, 38741), (43, 38825), (44, 38828), (53, 38924), (59, 38990), (65, 39044),

Gene: Purky_45 Start: 32598, Stop: 33014, Start Num: 15

Candidate Starts for Purky_45:

(Start: 15 @32598 has 56 MA's), (33, 32691), (37, 32721), (42, 32802), (46, 32820), (49, 32859), (51, 32868), (58, 32958), (59, 32967),

Gene: Pygmy_40 Start: 31639, Stop: 32142, Start Num: 15

Candidate Starts for Pygmy_40:

(2, 31552), (Start: 15 @31639 has 56 MA's), (33, 31732), (41, 31834), (47, 31879), (66, 32125),

Gene: QueenHazel_35 Start: 29560, Stop: 29997, Start Num: 15

Candidate Starts for QueenHazel_35:

(10, 29536), (Start: 15 @29560 has 56 MA's), (50, 29839), (52, 29851), (59, 29935),

Gene: Quico_65 Start: 40968, Stop: 41315, Start Num: 26

Candidate Starts for Quico_65:

(7, 40848), (16, 40899), (Start: 26 @40968 has 171 MA's), (36, 41007), (43, 41091), (44, 41094), (53, 41190), (54, 41211), (59, 41256), (65, 41310),

Gene: Radiance_55 Start: 38727, Stop: 39074, Start Num: 26

Candidate Starts for Radiance_55:

(Start: 26 @38727 has 171 MA's), (36, 38766), (38, 38775), (44, 38853), (53, 38949), (59, 39015), (62, 39051), (65, 39069),

Gene: Ramsey_56 Start: 39390, Stop: 39737, Start Num: 26

Candidate Starts for Ramsey_56:

(Start: 26 @39390 has 171 MA's), (36, 39429), (40, 39468), (43, 39513), (44, 39516), (53, 39612), (59, 39678), (65, 39732),

Gene: RedBird_54 Start: 38035, Stop: 38370, Start Num: 34

Candidate Starts for RedBird_54:

(Start: 34 @38035 has 17 MA's), (36, 38062), (44, 38149), (53, 38245), (54, 38266), (59, 38311), (65, 38365),

Gene: Renaud18_61 Start: 39280, Stop: 39627, Start Num: 26

Candidate Starts for Renaud18_61:

(Start: 26 @39280 has 171 MA's), (36, 39319), (38, 39328), (44, 39406), (53, 39502), (59, 39568), (62, 39604), (65, 39622),

Gene: Rialto_62 Start: 41461, Stop: 41853, Start Num: 21

Candidate Starts for Rialto_62:

(Start: 21 @41461 has 8 MA's), (24, 41479), (36, 41545), (44, 41632), (53, 41728), (54, 41749), (59, 41794), (62, 41830), (65, 41848),

Gene: Rita_57 Start: 37333, Stop: 37680, Start Num: 26

Candidate Starts for Rita_57:

(11, 37237), (12, 37243), (Start: 26 @37333 has 171 MA's), (36, 37372), (40, 37411), (43, 37456), (44, 37459), (53, 37555), (59, 37621), (65, 37675),

Gene: RitaG_51 Start: 37236, Stop: 37583, Start Num: 26

Candidate Starts for RitaG_51:

(11, 37140), (Start: 26 @37236 has 171 MA's), (36, 37275), (43, 37359), (44, 37362), (53, 37458), (54, 37479), (59, 37524), (65, 37578),

Gene: Rockne_57 Start: 39242, Stop: 39589, Start Num: 26

Candidate Starts for Rockne_57:

(11, 39146), (Start: 26 @39242 has 171 MA's), (36, 39281), (43, 39365), (44, 39368), (53, 39464), (54, 39485), (59, 39530), (65, 39584),

Gene: RockyHorror_57 Start: 38303, Stop: 38638, Start Num: 32

Candidate Starts for RockyHorror_57:

(Start: 32 @38303 has 7 MA's), (36, 38330), (44, 38417), (53, 38513), (54, 38534), (59, 38579), (62, 38615), (65, 38633),

Gene: Royals2015_59 Start: 38599, Stop: 38991, Start Num: 21

Candidate Starts for Royals2015_59:

(Start: 21 @38599 has 8 MA's), (24, 38617), (36, 38683), (44, 38770), (53, 38866), (54, 38887), (59, 38932), (62, 38968), (65, 38986),

Gene: Ruby_52 Start: 38423, Stop: 38770, Start Num: 26

Candidate Starts for Ruby_52:

(7, 38300), (16, 38351), (Start: 26 @38423 has 171 MA's), (36, 38462), (38, 38471), (40, 38501), (44, 38549), (53, 38645), (54, 38666), (59, 38711), (62, 38747), (65, 38765),

Gene: SG4_53 Start: 38120, Stop: 38467, Start Num: 26

Candidate Starts for SG4_53:

(Start: 26 @38120 has 171 MA's), (36, 38159), (38, 38168), (44, 38246), (53, 38342), (54, 38363), (59, 38408), (62, 38444), (65, 38462),

Gene: Saal_58 Start: 39876, Stop: 40223, Start Num: 26

Candidate Starts for Saal_58:

(11, 39780), (Start: 26 @39876 has 171 MA's), (36, 39915), (43, 39999), (44, 40002), (53, 40098), (59, 40164), (65, 40218),

Gene: Sabbb_60 Start: 39564, Stop: 39911, Start Num: 26

Candidate Starts for Sabbb_60:

(7, 39444), (Start: 26 @39564 has 171 MA's), (36, 39603), (44, 39690), (53, 39786), (59, 39852), (65, 39906),

Gene: Sandalphon_58 Start: 39526, Stop: 39861, Start Num: 34

Candidate Starts for Sandalphon_58:

(Start: 34 @39526 has 17 MA's), (36, 39553), (40, 39592), (43, 39637), (44, 39640), (53, 39736), (54, 39757), (59, 39802), (65, 39856),

Gene: Sarma624_54 Start: 34814, Stop: 35161, Start Num: 26

Candidate Starts for Sarma624_54:

(Start: 26 @34814 has 171 MA's), (36, 34853), (40, 34892), (43, 34937), (44, 34940), (53, 35036), (59, 35102),

Gene: Sassafras_54 Start: 38208, Stop: 38555, Start Num: 26

Candidate Starts for Sassafras_54:

(Start: 26 @38208 has 171 MA's), (36, 38247), (38, 38256), (44, 38334), (53, 38430), (54, 38451), (59, 38496), (62, 38532), (65, 38550),

Gene: SassyB_51 Start: 37460, Stop: 37795, Start Num: 34

Candidate Starts for SassyB_51:

(Start: 34 @37460 has 17 MA's), (36, 37487), (43, 37571), (44, 37574), (53, 37670), (54, 37691), (59, 37736), (62, 37772), (65, 37790),

Gene: Scottish_54 Start: 38248, Stop: 38595, Start Num: 26

Candidate Starts for Scottish_54:

(11, 38152), (Start: 26 @38248 has 171 MA's), (36, 38287), (43, 38371), (44, 38374), (53, 38470), (54, 38491), (59, 38536), (65, 38590),

Gene: SeaLumen_60 Start: 38465, Stop: 38812, Start Num: 26

Candidate Starts for SeaLumen_60:

(7, 38345), (12, 38375), (16, 38396), (Start: 26 @38465 has 171 MA's), (36, 38504), (43, 38588), (44, 38591), (53, 38687), (54, 38708), (59, 38753), (62, 38789), (65, 38807),

Gene: Seabastian_61 Start: 41221, Stop: 41568, Start Num: 26

Candidate Starts for Seabastian_61:

(Start: 26 @41221 has 171 MA's), (36, 41260), (40, 41299), (43, 41344), (44, 41347), (53, 41443), (54, 41464), (59, 41509),

Gene: Seagreen_56 Start: 38212, Stop: 38559, Start Num: 26

Candidate Starts for Seagreen_56:

(Start: 26 @38212 has 171 MA's), (36, 38251), (54, 38455), (61, 38518), (64, 38551), (65, 38554),

Gene: Shauna1_55 Start: 39323, Stop: 39670, Start Num: 26

Candidate Starts for Shauna1_55:

(Start: 26 @39323 has 171 MA's), (36, 39362), (38, 39371), (44, 39449), (53, 39545), (54, 39566), (59, 39611), (62, 39647),

Gene: ShiLan_55 Start: 38649, Stop: 38996, Start Num: 26

Candidate Starts for ShiLan_55:

(11, 38553), (Start: 26 @38649 has 171 MA's), (36, 38688), (43, 38772), (44, 38775), (53, 38871), (59, 38937), (65, 38991),

Gene: Shipwreck_40 Start: 31614, Stop: 32117, Start Num: 15

Candidate Starts for Shipwreck_40:

(2, 31527), (Start: 15 @31614 has 56 MA's), (33, 31707), (41, 31809), (47, 31854), (66, 32100),

Gene: ShowerHandel_59 Start: 38616, Stop: 38963, Start Num: 26

Candidate Starts for ShowerHandel_59:

(11, 38520), (Start: 26 @38616 has 171 MA's), (36, 38655), (43, 38739), (44, 38742), (53, 38838), (59, 38904), (65, 38958),

Gene: ShroomBoi_58 Start: 39576, Stop: 39923, Start Num: 26

Candidate Starts for ShroomBoi_58:

(7, 39456), (12, 39486), (Start: 26 @39576 has 171 MA's), (36, 39615), (40, 39654), (43, 39699), (44, 39702), (53, 39798), (59, 39864), (65, 39918),

Gene: SiSi_54 Start: 38022, Stop: 38369, Start Num: 26

Candidate Starts for SiSi_54:

(Start: 26 @38022 has 171 MA's), (36, 38061), (44, 38148), (53, 38244), (54, 38265), (59, 38310), (65, 38364),

Gene: SilverChicken_67 Start: 39103, Stop: 39450, Start Num: 26

Candidate Starts for SilverChicken_67:

(Start: 26 @39103 has 171 MA's), (36, 39142), (38, 39151), (44, 39229), (53, 39325), (54, 39346), (59, 39391), (62, 39427), (65, 39445),

Gene: SimranZ1_56 Start: 38802, Stop: 39149, Start Num: 26

Candidate Starts for SimranZ1_56:

(Start: 26 @38802 has 171 MA's), (36, 38841), (44, 38928), (53, 39024), (54, 39045), (59, 39090), (62, 39126), (65, 39144),

Gene: Slim_57 Start: 39364, Stop: 39756, Start Num: 21

Candidate Starts for Slim_57:

(Start: 21 @39364 has 8 MA's), (24, 39382), (36, 39448), (44, 39535), (53, 39631), (54, 39652), (59, 39697), (62, 39733), (65, 39751),

Gene: Sonah_38 Start: 29793, Stop: 30296, Start Num: 15

Candidate Starts for Sonah_38:

(Start: 15 @29793 has 56 MA's), (33, 29886), (41, 29988), (47, 30033), (66, 30279),

Gene: Soul22_62 Start: 40209, Stop: 40553, Start Num: 27

Candidate Starts for Soul22_62:

(14, 40122), (Start: 27 @40209 has 3 MA's), (36, 40242), (57, 40482), (61, 40512), (64, 40545), (65, 40548),

Gene: Sparkdehlily_64 Start: 40334, Stop: 40681, Start Num: 26

Candidate Starts for Sparkdehlily_64:

(Start: 26 @40334 has 171 MA's), (36, 40373), (38, 40382), (44, 40460), (53, 40556), (54, 40577), (59, 40622), (62, 40658), (65, 40676),

Gene: Spartacus_58 Start: 39286, Stop: 39633, Start Num: 26

Candidate Starts for Spartacus_58:

(Start: 26 @39286 has 171 MA's), (36, 39325), (38, 39334), (44, 39412), (53, 39508), (59, 39574),

Gene: Spikelee_63 Start: 40906, Stop: 41253, Start Num: 26

Candidate Starts for Spikelee_63:

(Start: 26 @40906 has 171 MA's), (36, 40945), (38, 40954), (43, 41029), (44, 41032), (53, 41128), (54, 41149), (59, 41194), (62, 41230), (65, 41248),

Gene: Squirty_59 Start: 40095, Stop: 40442, Start Num: 26

Candidate Starts for Squirty_59:

(Start: 26 @40095 has 171 MA's), (36, 40134), (38, 40143), (44, 40221), (53, 40317), (59, 40383), (65, 40437),

Gene: StAnnes_55 Start: 39501, Stop: 39848, Start Num: 26

Candidate Starts for StAnnes_55:

(Start: 26 @39501 has 171 MA's), (36, 39540), (44, 39627), (53, 39723), (54, 39744), (59, 39789), (62, 39825), (65, 39843),

Gene: Starcevich_55 Start: 38573, Stop: 38920, Start Num: 26

Candidate Starts for Starcevich_55:

(11, 38477), (Start: 26 @38573 has 171 MA's), (36, 38612), (43, 38696), (44, 38699), (53, 38795), (59, 38861), (65, 38915),

Gene: StevieRay_38 Start: 29756, Stop: 30259, Start Num: 15

Candidate Starts for StevieRay_38:

(2, 29669), (Start: 15 @29756 has 56 MA's), (33, 29849), (41, 29951), (47, 29996), (63, 30170), (66, 30242),

Gene: StressBall_38 Start: 30054, Stop: 30557, Start Num: 15

Candidate Starts for StressBall_38:

(2, 29967), (Start: 15 @30054 has 56 MA's), (33, 30147), (41, 30249), (47, 30294), (63, 30468), (66, 30540),

Gene: Strokeseat_52 Start: 36732, Stop: 37079, Start Num: 26

Candidate Starts for Strokeseat_52:

(7, 36612), (Start: 26 @36732 has 171 MA's), (36, 36771), (40, 36810), (43, 36855), (44, 36858), (53, 36954), (59, 37020),

Gene: SuperGrey_60 Start: 40809, Stop: 41156, Start Num: 26

Candidate Starts for SuperGrey_60:

(Start: 26 @40809 has 171 MA's), (36, 40848), (44, 40935), (53, 41031), (54, 41052), (59, 41097), (65, 41151),

Gene: SwagPiggett_61 Start: 40924, Stop: 41271, Start Num: 26

Candidate Starts for SwagPiggett_61:

(7, 40804), (16, 40855), (Start: 26 @40924 has 171 MA's), (36, 40963), (43, 41047), (44, 41050), (53, 41146), (59, 41212), (65, 41266),

Gene: TChen_56 Start: 39822, Stop: 40172, Start Num: 26

Candidate Starts for TChen_56:

(Start: 26 @39822 has 171 MA's), (36, 39861), (61, 40131), (64, 40164), (65, 40167),

Gene: TDanisky_64 Start: 40334, Stop: 40681, Start Num: 26

Candidate Starts for TDanisky_64:

(Start: 26 @40334 has 171 MA's), (36, 40373), (38, 40382), (44, 40460), (53, 40556), (54, 40577), (59, 40622), (62, 40658), (65, 40676),

Gene: Taj_60 Start: 40382, Stop: 40729, Start Num: 26

Candidate Starts for Taj_60:

(7, 40262), (Start: 26 @40382 has 171 MA's), (36, 40421), (40, 40460), (43, 40505), (44, 40508), (53, 40604), (54, 40625), (59, 40670), (62, 40706), (65, 40724),

Gene: Tchotchke_57 Start: 38726, Stop: 39073, Start Num: 26

Candidate Starts for Tchotchke_57:

(7, 38606), (Start: 26 @38726 has 171 MA's), (36, 38765), (40, 38804), (43, 38849), (44, 38852), (53, 38948), (54, 38969), (59, 39014), (62, 39050), (65, 39068),

Gene: Techage_38 Start: 29830, Stop: 30336, Start Num: 15

Candidate Starts for Techage_38:

(Start: 15 @29830 has 56 MA's), (33, 29923), (41, 30028), (47, 30073), (66, 30319),

Gene: Thespis_38 Start: 29790, Stop: 30293, Start Num: 15

Candidate Starts for Thespis_38:

(2, 29703), (Start: 15 @29790 has 56 MA's), (33, 29883), (41, 29985), (47, 30030), (48, 30045), (66, 30276),

Gene: ThetaBob_60 Start: 39893, Stop: 40246, Start Num: 25

Candidate Starts for ThetaBob_60:

(Start: 25 @39893 has 1 MA's), (36, 39935), (57, 40175), (61, 40205), (64, 40238), (65, 40241),

Gene: ThulaThula_44 Start: 34021, Stop: 34518, Start Num: 15

Candidate Starts for ThulaThula_44:

(1, 33904), (Start: 15 @34021 has 56 MA's), (33, 34114), (35, 34132), (37, 34144), (47, 34255), (55, 34357), (56, 34366), (60, 34405),

Gene: Tootsieroll_57 Start: 37945, Stop: 38292, Start Num: 26

Candidate Starts for Tootsieroll_57:

(Start: 26 @37945 has 171 MA's), (36, 37984), (40, 38023), (43, 38068), (44, 38071), (53, 38167), (59, 38233),

Gene: Topiatin_63 Start: 41073, Stop: 41411, Start Num: 32

Candidate Starts for Topiatin_63:

(Start: 32 @41073 has 7 MA's), (36, 41100), (57, 41340), (61, 41370), (64, 41403), (65, 41406),

Gene: Totinger_55 Start: 37875, Stop: 38222, Start Num: 26

Candidate Starts for Totinger_55:

(7, 37755), (12, 37785), (Start: 26 @37875 has 171 MA's), (36, 37914), (43, 37998), (44, 38001), (53, 38097), (59, 38163),

Gene: Tweety_56 Start: 40125, Stop: 40472, Start Num: 26

Candidate Starts for Tweety_56:

(7, 40005), (Start: 26 @40125 has 171 MA's), (36, 40164), (40, 40203), (43, 40248), (44, 40251), (53, 40347), (54, 40368), (59, 40413), (62, 40449), (65, 40467),

Gene: UncleRicky_55 Start: 38856, Stop: 39203, Start Num: 26

Candidate Starts for UncleRicky_55:

(11, 38760), (12, 38766), (Start: 26 @38856 has 171 MA's), (36, 38895), (43, 38979), (44, 38982), (53, 39078),

Gene: VRedHorse_56 Start: 37887, Stop: 38279, Start Num: 21

Candidate Starts for VRedHorse_56:

(Start: 21 @37887 has 8 MA's), (24, 37905), (36, 37971), (44, 38058), (53, 38154), (54, 38175), (59, 38220), (62, 38256), (65, 38274),

Gene: Velveteen_51 Start: 34814, Stop: 35161, Start Num: 26

Candidate Starts for Velveteen_51:

(Start: 26 @34814 has 171 MA's), (36, 34853), (40, 34892), (43, 34937), (44, 34940), (53, 35036), (59, 35102),

Gene: Venti_38 Start: 29807, Stop: 30310, Start Num: 15

Candidate Starts for Venti_38:

(Start: 15 @29807 has 56 MA's), (33, 29900), (41, 30002), (47, 30047), (66, 30293),

Gene: Veteran_53 Start: 37711, Stop: 38058, Start Num: 26

Candidate Starts for Veteran_53:

(Start: 26 @37711 has 171 MA's), (36, 37750), (38, 37759), (44, 37837), (53, 37933), (54, 37954), (59, 37999), (62, 38035), (65, 38053),

Gene: Vidya_38 Start: 29840, Stop: 30343, Start Num: 15

Candidate Starts for Vidya_38:

(Start: 15 @29840 has 56 MA's), (33, 29933), (41, 30035), (47, 30080), (66, 30326),

Gene: Violac_58 Start: 40002, Stop: 40349, Start Num: 26

Candidate Starts for Violac_58:

(7, 39882), (12, 39912), (Start: 26 @40002 has 171 MA's), (36, 40041), (40, 40080), (43, 40125), (44, 40128), (53, 40224), (59, 40290),

Gene: Vivum_57 Start: 38934, Stop: 39281, Start Num: 26

Candidate Starts for Vivum_57:

(Start: 26 @38934 has 171 MA's), (36, 38973), (38, 38982), (40, 39012), (43, 39057), (44, 39060), (53, 39156), (54, 39177), (59, 39222), (65, 39276),

Gene: Wachhund_58 Start: 38925, Stop: 39272, Start Num: 26

Candidate Starts for Wachhund_58:

(Start: 26 @38925 has 171 MA's), (36, 38964), (38, 38973), (44, 39051), (53, 39147), (54, 39168), (59, 39213), (62, 39249), (65, 39267),

Gene: Wee_59 Start: 40451, Stop: 40798, Start Num: 26

Candidate Starts for Wee_59:

(7, 40331), (Start: 26 @40451 has 171 MA's), (36, 40490), (40, 40529), (43, 40574), (44, 40577), (53, 40673), (54, 40694), (59, 40739), (62, 40775), (65, 40793),

Gene: Whatsapiecost_57 Start: 38209, Stop: 38556, Start Num: 26

Candidate Starts for Whatsapiecost_57:

(Start: 26 @38209 has 171 MA's), (36, 38248), (38, 38257), (44, 38335), (53, 38431), (59, 38497), (65, 38551),

Gene: Whouxphf_53 Start: 38528, Stop: 38875, Start Num: 26

Candidate Starts for Whouxphf_53:

(7, 38408), (12, 38438), (16, 38459), (Start: 26 @38528 has 171 MA's), (36, 38567), (43, 38651), (44, 38654), (53, 38750), (54, 38771), (65, 38870),

Gene: Willsammy_37 Start: 29537, Stop: 30040, Start Num: 15

Candidate Starts for Willsammy_37:

(2, 29450), (Start: 15 @29537 has 56 MA's), (33, 29630), (41, 29732), (47, 29777), (63, 29951), (66, 30023),

Gene: XFactor_55 Start: 38026, Stop: 38361, Start Num: 34

Candidate Starts for XFactor_55:

(Start: 34 @38026 has 17 MA's), (36, 38053), (38, 38062), (44, 38140), (53, 38236), (54, 38257), (59, 38302), (62, 38338), (65, 38356),

Gene: Xeno_40 Start: 29132, Stop: 29635, Start Num: 15

Candidate Starts for Xeno_40:

(2, 29045), (Start: 15 @29132 has 56 MA's), (33, 29225), (41, 29327), (47, 29372), (48, 29387), (66, 29618),

Gene: Xula_34 Start: 29084, Stop: 29521, Start Num: 15

Candidate Starts for Xula_34:

(10, 29060), (Start: 15 @29084 has 56 MA's), (50, 29363), (52, 29375), (59, 29459),

Gene: Yorick_55 Start: 38990, Stop: 39337, Start Num: 26

Candidate Starts for Yorick_55:

(11, 38894), (Start: 26 @38990 has 171 MA's), (36, 39029), (43, 39113), (44, 39116), (53, 39212), (59, 39278), (65, 39332),

Gene: Yoshi_68 Start: 40172, Stop: 40510, Start Num: 32

Candidate Starts for Yoshi_68:

(Start: 32 @40172 has 7 MA's), (36, 40199), (57, 40439), (61, 40469), (64, 40502), (65, 40505),

Gene: Zapner_69 Start: 40486, Stop: 40875, Start Num: 22

Candidate Starts for Zapner_69:

(20, 40474), (Start: 22 @40486 has 6 MA's), (24, 40504), (Start: 31 @40537 has 1 MA's), (36, 40567), (59, 40816), (61, 40834), (64, 40867), (65, 40870),

Gene: Zerg_56 Start: 38412, Stop: 38747, Start Num: 32

Candidate Starts for Zerg_56:

(Start: 32 @38412 has 7 MA's), (36, 38439), (44, 38526), (53, 38622), (54, 38643), (59, 38688), (62, 38724), (65, 38742),

Gene: Zilizabeth_38 Start: 29839, Stop: 30342, Start Num: 15

Candidate Starts for Zilizabeth_38:

(Start: 15 @29839 has 56 MA's), (33, 29932), (41, 30034), (47, 30079), (66, 30325),

Gene: Zizzle_60 Start: 40243, Stop: 40590, Start Num: 26

Candidate Starts for Zizzle_60:

(7, 40123), (16, 40174), (Start: 26 @40243 has 171 MA's), (36, 40282), (38, 40291), (44, 40369), (53, 40465), (59, 40531), (65, 40585),