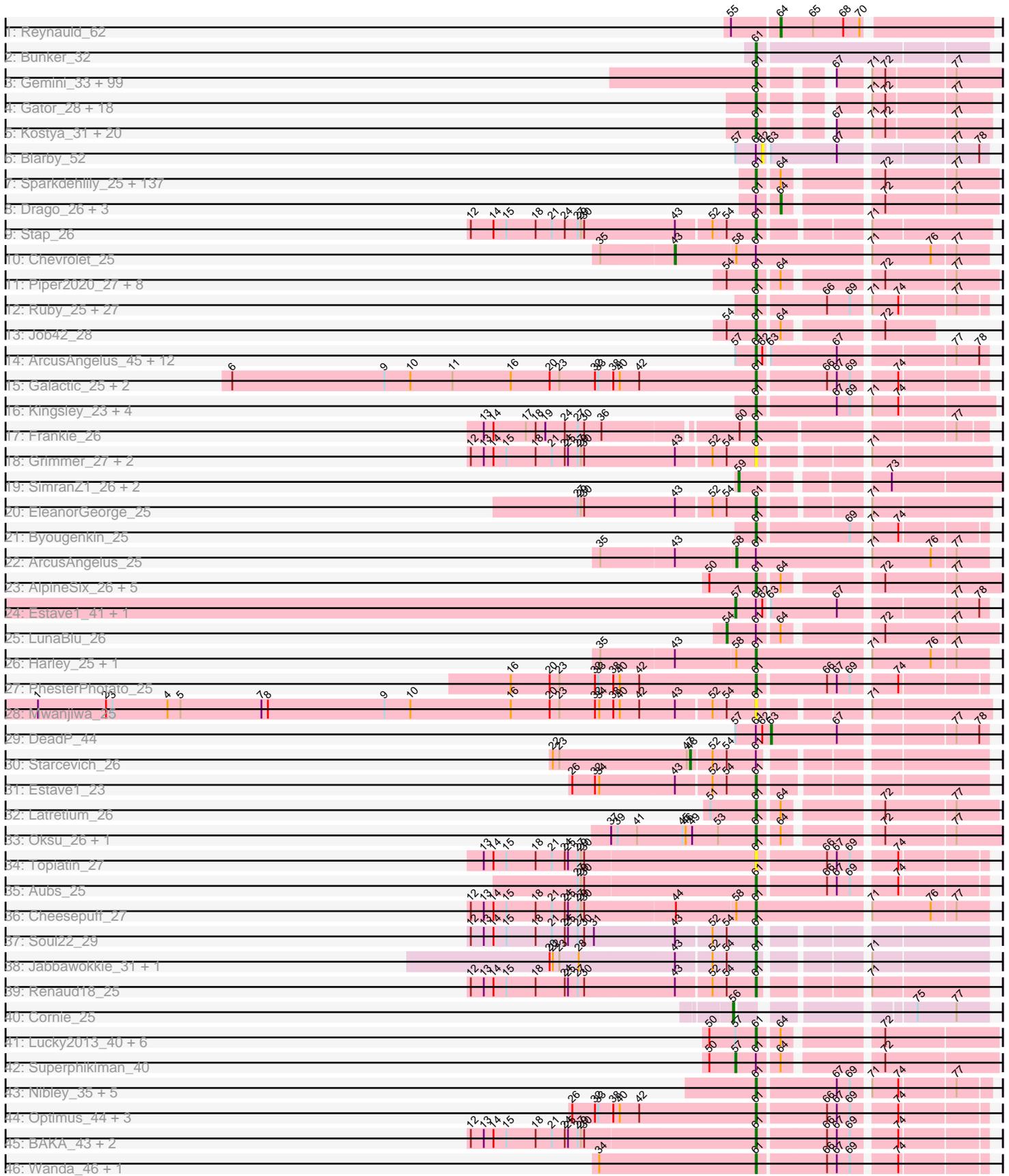# Pham 283384

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 283384 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283384 has 406 members, 44 are drafts.

Phages represented in each track:
• Track 1 : Reynauld_62
• Track 2 : Bunker_32
• Track 3 : Gemini_33, HufflyPuff_29, Elph10_31, Maxxinista_31, Moldemort_31, Tarkin_32, Gage_32, StormChicken_30, Petra64142_32, FireRed_30, MollyToe_30, StellaBean_30, Willez_29, Bogg_30, Emmina_31, Kanye_32, Buck_29, GoldenSpark_32, Thresher_31, MPhalcon_29, BaboJay_29, 244_32, Murica_29, ChotaBhai_30, Inca_29, Simpliphy_31, HanKaySha_31, Contagion_29, Argent26_32, Nimrod_30, Ukulele_30, Mosby_29, MadamMonkfish_30, Phaux_29, Manda_31, Dumbo_30, TeamEdward_30, Becksu_30, YassJohnny_31, SophKB_30, Tomaszewski_29, Adnama_33, Elite2014_29, GooberAzure_32, Hopey_32, Miniwave_30, PhatBacter_30, JeTaime_32, Saints25_31, Kimchi_32, ShereKhan_32, Stank_33, Lilpickle_29, Quallification_31, StolenFromERC_32, Easy2Say_32, NonchalantPear_30, Palpatine_30, MISSy_29, Hoonter_32, Lilac_32, Filch_31, Czyszczon1_31, RiverMonster_30, BigBubba_31, AmericanBeauty_32, Terminus_30, Goldilocks_31, Stark_31, Brewer_30, Murphy_31, Phrux_30, Cjw1_30, Misfit_30, Ptowny_31, BugsBunny_28, ChosenOne_30, DoctorDiddles_30, Bruin_30, Xandras_32, Wiggin_33, Paperbeatsrock_32, DrDrey_31, Holt_31, Thimble_30, PaddyBaddy_31, Rimmer_29, FoghornLeghorn_29, Cookies_30, Porky_30, Teaspoon_31, Pumpkin_32, Highbury_31, NoSleep_31, xkcd_31, Sassay_29, Greep_31, Lilizi_32, OrionPax_31, Pharsalus_31
• Track 4 : Gator_28, ABCat_29, Icee_29, SirDuracell_29, BadStone_29, Myrale_30, Cactus_31, Budgie_32, FairyPath_30, Bask21_30, Tuco_31, Sotrice96_30, Eureka_30, NelitzaMV_30, Command613_31, Dusk_29, Goku_30, Policronamos_30, Marshmallow_30
• Track 5 : Kostya_31, Pat3_29, Asriel_29, Harella_29, Rakim_31, Flypotenuse_28, Barbarian_29, BilboSwaggins_30, Youngblood_30, Glexan_28, Daikon_29, Mindy_30, Amao_30, CrystalP_30, Balomoji_29, Henry_31, Nala_30, ShamWow_30, Traaww1_28, TeardropMSU_29, Toto_30
• Track 6 : Blarby_52
• Track 7 : Sparkdehlily_25, ByChance_25, Karhdo_25, Enby_26, BobaPhett_25, EmiMonkey_25, Cabrinians_25, Emma_25, Daenerys_25, Alexphander_27, James_25, Medindi_25, FreddyB_25, Rialto_27, Mandlovu_25, Fancypants_25, PhlipPhlop_25, Marker_26, Philus_25, Whouxphf_25, Sabbb_26, Gaia_28, Geralt_25, Ramsey_26, SG4_25, BlueCrab_25, Nimbo_25, Totinger_26, Priscilla_25, Tootsieroll_26, PHappiness_25, Lizziana_25, Zerg_25, VRedHorse_25, DosHalletts_26, Chuckly_25, LittleShirley_26, Polka14_26, Guppsters_26, Lorde_26, Filuzino_25, TDanisky_25, Doomslug_27, Slim_26, Rockne_25, Phatniss_26,

Eish_25, DoRead_25, Peridot_27, Blarby_33, Firehouse51_26, Mattes_25, IMpilo_25, NewHope4_27, Hlubikazi_25, OwlsT2W_27, Aloeri_27, TootsiePop_26, Spikelee_26, Moonbeam_26, Nitzel_26, JoeyJr_25, Hamulus_25, Phasih_26, DirtMcgirt_26, Quico_26, Yorick_25, Jarcob_25, IbOuu_26, Che8_26, Lucia_26, Ovechkin_25, BuzzLyseyear_27, Saal_25, Cornucopia_26, Leperchaun_25, DillTech15_25, Veteran_25, Fruitloop_25, OlympiaSaint_25, DaWorst_27, Nivrat_25, Deb65_25, DRBy19_25, ShowerHandel_25, DaddyRickover_25, Beanstalk_28, Minnie_26, Burwell21_25, Minerva_46, DocMcStuffins_27, Phalconet_25, Fastidio_25, Leozinho_26, Mantra_25, KristaRAM_26, LilMoolah_25, NormanBulbieJr_25, ShiLan_25, SwagPigglett_25, Emmaloid_26, GigiOuiOui_25, Gorge_25, Awesomesauce_26, Royals2015_25, Pacc40_25, Doug_26, Florinda_25, DLane_25, Dorothy_25, MooMoo_22, Plumbus_26, Scottish_26, RitaG_25, Eradicator_25, Nebkiss_29, Melissauren88_25, Zizzle_25, Maravista_25, SilverChicken_31, Violac_26, Beakin_26, Strokeseat_25, SiSi_25, UncleRicky_28, RockyHorror_26, Martik_25, Mova_26, GUmbie_25, Misha28_26, Mozy_26, Radiance_25, KingMidas_26, Girafales_26, ChickenDinner_27, Gandalph_25, Llij_25, Spoonbill_25
• Track 8 : Drago_26, Jant_25, PMC_25, Hades_25
• Track 9 : Stap_26
• Track 10 : Chevrolet_25
• Track 11 : Piper2020_27, Rita_25, Bubbles123_26, QuickMath_26, Kimberlium_27, Dante_25, Mahavrat_25, Juniper1_25, MulchExplorer_28
• Track 12 : Ruby_25, BodEinwohner17_25, Brushbloom_26, Taj_25, Wee_26, Donkeykong_25, MisterCuddles_25, CaptainTrips_26, KingJulian_25, MilleniumForce_26, Empress_26, SassyB_25, Whatsapiecost_25, PopTart_25, Gonephishing_41, Bobi_27, Tweety_26, MinionDave_26, Mutaforma13_25, Juice456_27, Sassafras_25, JalFarm20_27, Wachhund_25, Hegedechwinu_26, Flathead_26, Seagreen_26, OldBen_25, Girr_25
• Track 13 : Job42_28
• Track 14 : ArcusAngelus_45, Ochi17_42, OfUltron_44, Chevrolet_48, Oksu_44, Llama_44, Seabastian_44, Avani_48, AlpineSix_44, Jinglebell_43, Wee_44, Renaud18_44, Modragons_43
• Track 15 : Galactic_25, Batiatus_25, Krakatau_26
• Track 16 : Kingsley_23, Coco12_24, Shauna1_22, Brookers_23, Phanphagia_22
• Track 17 : Frankie_26
• Track 18 : Grimmer_27, Polo2Bam_29, Enzomatic_29
• Track 19 : SimranZ1_26, TChen_23, LunaStella_25
• Track 20 : EleanorGeorge_25
• Track 21 : Byougenkin_25
• Track 22 : ArcusAngelus_25
• Track 23 : AlpineSix_26, Seabastian_25, Jinglebell_24, Modragons_25, Sandalphon_26, OfUltron_25
• Track 24 : Estave1_41, Taj_43
• Track 25 : LunaBlu_26
• Track 26 : Harley_25, Ibhubesi_25
• Track 27 : PhesterPhotato_25
• Track 28 : Mwanjiwa_25
• Track 29 : DeadP_44
• Track 30 : Starcevich_26
• Track 31 : Estave1_23
• Track 32 : Latretium_26
• Track 33 : Oksu_26, Llama_25
• Track 34 : Topiatin_27

- Track 35 : Aubs_25
- Track 36 : Cheesepuff_27
- Track 37 : Soul22_29
- Track 38 : Jabbawokkie_31, Zapner_30
- Track 39 : Renaud18_25
- Track 40 : Cornie_25
- Track 41 : Lucky2013_40, Courthouse_40, DmpstrDiver_41, Ariel_40, Squint_39, Porcelain_39, MiaZeal_40
- Track 42 : Superphikiman_40
- Track 43 : Nibley_35, Clank_22, Shaboozey_34, Hannaconda_37, KashFlow_34, BronnyJames_34
- Track 44 : Optimus_44, Vivum_25, WillSterrel_26, IrishSherpFalk_26
- Track 45 : BAKA_43, LittleE_46, RedBird_25
- Track 46 : Wanda_46, Duke13_43

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

The start number called the most often in the published annotations is 61, it was called in 346 of the 362 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- 244_32, ABCat_29, Adnama_33, Alexphander_27, Aloeri_27, AlpineSix_26, AlpineSix_44, Amao_30, AmericanBeauty_32, ArcusAngelus_45, Argent26_32, Ariel_40, Asriel_29, Aubs_25, Avani_48, Awesomesauce_26, BAKA_43, BaboJay_29, BadStone_29, Balomoji_29, Barbarian_29, Bask21_30, Batiatus_25, Beakin_26, Beanstalk_28, Becksu_30, BigBubba_31, BilboSwaggins_30, Blarby_33, BlueCrab_25, BobaPhett_25, Bobi_27, BodEinwohner17_25, Bogg_30, Brewer_30, BronnyJames_34, Brookers_23, Bruin_30, Brushbloom_26, Bubbles123_26, Buck_29, Budgie_32, BugsBunny_28, Bunker_32, Burwell21_25, BuzzLyseyear_27, ByChance_25, Byougenkin_25, Cabrinians_25, Cactus_31, CaptainTrips_26, Che8_26, Cheesepuff_27, Chevrolet_48, ChickenDinner_27, ChosenOne_30, ChotaBhai_30, Chuckly_25, Cjw1_30, Clank_22, Coco12_24, Command613_31, Contagion_29, Cookies_30, Cornucopia_26, Courthouse_40, CrystalP_30, Czyszczon1_31, DLane_25, DRBy19_25, DaWorst_27, DaddyRickover_25, Daenerys_25, Daikon_29, Dante_25, Deb65_25, DillTech15_25, DirtMcgirt_26, DmpstrDiver_41, DoRead_25, DocMcStuffins_27, DoctorDiddles_30, Donkeykong_25, Doomslug_27, Dorothy_25, DosHalletts_26, Doug_26, DrDrey_31, Duke13_43, Dumbo_30, Dusk_29, Easy2Say_32, Eish_25, EleanorGeorge_25, Elite2014_29, Elph10_31, EmiMonkey_25, Emma_25, Emmaloid_26, Emmina_31, Empress_26, Enby_26, Enzomatic_29, Eradicator_25, Estave1_23, Eureka_30, FairyPath_30, Fancypants_25, Fastidio_25, Filch_31, Filuzino_25, FireRed_30, Firehouse51_26, Flathead_26, Florinda_25, Flypotenuse_28, FoghornLeghorn_29, Frankie_26, FreddyB_25, Fruitloop_25, GUmbie_25, Gage_32, Gaia_28, Galactic_25, Gandalph_25, Gator_28, Gemini_33, Geralt_25, GigiOuiOui_25, Girafales_26, Girr_25, Glexan_28, Goku_30, GoldenSpark_32, Goldilocks_31, Gonephishing_41, GooberAzure_32, Gorge_25, Greep_31, Grimmer_27, Guppsters_26, Hamulus_25, HanKaySha_31, Hannaconda_37, Harella_29, Harley_25, Hegedechwinu_26, Henry_31, Highbury_31, Hlubikazi_25, Holt_31, Hoonter_32, Hopey_32, HufflyPuff_29, IMpilo_25, IbOuu_26, Ibhubesi_25, Icee_29, Inca_29, IrishSherpFalk_26, Jabbawokkie_31, JalFarm20_27, James_25, Jarcob_25,

JeTaime_32, Jinglebell_24, Jinglebell_43, Job42_28, JoeyJr_25, Juice456_27, Juniper1_25, Kanye_32, Karhdo_25, KashFlow_34, Kimberlium_27, Kimchi_32, KingJulian_25, KingMidas_26, Kingsley_23, Kostya_31, Krakatau_26, KristaRAM_26, Latretium_26, Leozinho_26, Leperchaun_25, LilMoolah_25, Lilac_32, Lilizi_32, Lilpickle_29, LittleE_46, LittleShirley_26, Lizziana_25, Llama_25, Llama_44, Llij_25, Lorde_26, Lucia_26, Lucky2013_40, MISSy_29, MPhalcon_29, MadamMonkfish_30, Mahavrat_25, Manda_31, Mandlovu_25, Mantra_25, Maravista_25, Marker_26, Marshmallow_30, Martik_25, Mattes_25, Maxxinista_31, Medindi_25, Melissauren88_25, MiaZeal_40, MilleniumForce_26, Mindy_30, Minerva_46, MinionDave_26, Miniwave_30, Minnie_26, Misfit_30, Misha28_26, MisterCuddles_25, Modragons_25, Modragons_43, Moldemort_31, MollyToe_30, MooMoo_22, Moonbeam_26, Mosby_29, Mova_26, Mozy_26, MulchExplorer_28, Murica_29, Murphy_31, Mutaforma13_25, Mwanjiwa_25, Myrale_30, Nala_30, Nebkiss_29, NelitzaMV_30, NewHope4_27, Nibley_35, Nimbo_25, Nimrod_30, Nitzel_26, Nivrat_25, NoSleep_31, NonchalantPear_30, NormanBulbieJr_25, Ochi17_42, OfUltron_25, OfUltron_44, Oksu_26, Oksu_44, OldBen_25, OlympiaSaint_25, Optimus_44, OrionPax_31, Ovechkin_25, OwlsT2W_27, PHappiness_25, Pacc40_25, PaddyBaddy_31, Palpatine_30, Paperbeatsrock_32, Pat3_29, Peridot_27, Petra64142_32, Phalconet_25, Phanphagia_22, Pharsalus_31, Phasih_26, PhatBacter_30, Phatniss_26, Phaux_29, PhesterPhotato_25, Philus_25, PhlipPhlop_25, Phrux_30, Piper2020_27, Plumbus_26, Policronamos_30, Polka14_26, Polo2Bam_29, PopTart_25, Porcelain_39, Porky_30, Priscilla_25, Ptowny_31, Pumpkin_32, Quallification_31, QuickMath_26, Quico_26, Radiance_25, Rakim_31, Ramsey_26, RedBird_25, Renaud18_25, Renaud18_44, Rialto_27, Rimmer_29, RitaG_25, Rita_25, RiverMonster_30, Rockne_25, RockyHorror_26, Royals2015_25, Ruby_25, SG4_25, Saal_25, Sabbb_26, Saints25_31, Sandalphon_26, Sassafras_25, Sassay_29, SassyB_25, Scottish_26, Seabastian_25, Seabastian_44, Seagreen_26, Shaboozey_34, ShamWow_30, Shauna1_22, ShereKhan_32, ShiLan_25, ShowerHandel_25, SiSi_25, SilverChicken_31, Simpliphy_31, SirDuracell_29, Slim_26, SophKB_30, Sotrice96_30, Soul22_29, Sparkdehlily_25, Spikelee_26, Spoonbill_25, Squint_39, Stank_33, Stap_26, Stark_31, StellaBean_30, StolenFromERC_32, StormChicken_30, Strokeseat_25, SwagPigglett_25, TDanisky_25, Taj_25, Tarkin_32, TeamEdward_30, TeardropMSU_29, Teaspoon_31, Terminus_30, Thimble_30, Thresher_31, Tomaszewski_29, TootsiePop_26, Tootsieroll_26, Topiatin_27, Totinger_26, Toto_30, Traaww1_28, Tuco_31, Tweety_26, Ukulele_30, UncleRicky_28, VRedHorse_25, Veteran_25, Violac_26, Vivum_25, Wachhund_25, Wanda_46, Wee_26, Wee_44, Whatsapiecost_25, Whouxphf_25, Wiggin_33, WillSterrel_26, Willez_29, Xandras_32, YassJohnny_31, Yorick_25, Youngblood_30, Zapner_30, Zerg_25, Zizzle_25, xkcd_31,

Genes that have the "Most Annotated" start but do not call it:
• ArcusAngelus_25, Blarby_52, Chevrolet_25, DeadP_44, Drago_26, Estave1_41, Hades_25, Jant_25, LunaBlu_26, PMC_25, Starcevich_26, Superphikiman_40, Taj_43,

Genes that do not have the "Most Annotated" start:
• Cornie_25, LunaStella_25, Reynauld_62, SimranZ1_26, TChen_23,

Summary by start number:

Start 43:
• Found in 15 of 406 (3.7%) of genes in pham

- Manual Annotations of this start: 1 of 362
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Chevrolet_25 (F1),

Start 48:
- Found in 1 of 406 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Starcevich_26 (F1),

Start 54:
- Found in 23 of 406 (5.7%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 4.3% of time when present
- Phage (with cluster) where this start called: LunaBlu_26 (F1),

Start 56:
- Found in 1 of 406 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cornie_25 (F5),

Start 57:
- Found in 25 of 406 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 362
- Called 12.0% of time when present
- Phage (with cluster) where this start called: Estave1_41 (F1), Superphikiman_40 (J), Taj_43 (F1),

Start 58:
- Found in 5 of 406 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 20.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_25 (F1),

Start 59:
- Found in 3 of 406 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LunaStella_25 (F4), SimranZ1_26 (F1), TChen_23 (F4),

Start 61:
- Found in 401 of 406 (98.8%) of genes in pham
- Manual Annotations of this start: 346 of 362
- Called 96.8% of time when present
- Phage (with cluster) where this start called: 244_32 (E), ABCat_29 (E), Adnama_33 (E), Alexphander_27 (F1), Aloeri_27 (F1), AlpineSix_26 (F1), AlpineSix_44 (F1), Amao_30 (E), AmericanBeauty_32 (E), ArcusAngelus_45 (F1), Argent26_32 (E), Ariel_40 (J), Asriel_29 (E), Aubs_25 (F1), Avani_48 (F2), Awesomesauce_26 (F1), BAKA_43 (J), BaboJay_29 (E), BadStone_29 (E), Balomoji_29 (E), Barbarian_29 (E), Bask21_30 (E), Batiatus_25 (F1), Beakin_26 (F1), Beanstalk_28 (F1), Becksu_30 (E), BigBubba_31 (E), BilboSwaggins_30 (E), Blarby_33 (F), BlueCrab_25 (F1),

BobaPhett_25 (F1), Bobi_27 (F1), BodEinwohner17_25 (F1), Bogg_30 (E), Brewer_30 (E), BronnyJames_34 (J), Brookers_23 (F1), Bruin_30 (E), Brushbloom_26 (F1), Bubbles123_26 (F1), Buck_29 (E), Budgie_32 (E), BugsBunny_28 (E), Bunker_32 (DB), Burwell21_25 (F1), BuzzLyseyear_27 (F1), ByChance_25 (F1), Byougenkin_25 (F1), Cabrinians_25 (F1), Cactus_31 (E), CaptainTrips_26 (F1), Che8_26 (F1), Cheesepuff_27 (F1), Chevrolet_48 (F1), ChickenDinner_27 (F1), ChosenOne_30 (E), ChotaBhai_30 (E), Chuckly_25 (F1), Cjw1_30 (E), Clank_22 (F), Coco12_24 (F1), Command613_31 (E), Contagion_29 (E), Cookies_30 (E), Cornucopia_26 (F1), Courthouse_40 (J), CrystalP_30 (E), Czyszczon1_31 (E), DLane_25 (F1), DRBy19_25 (F1), DaWorst_27 (F1), DaddyRickover_25 (F1), Daenerys_25 (F1), Daikon_29 (E), Dante_25 (F1), Deb65_25 (F1), DillTech15_25 (F1), DirtMcgirt_26 (F1), DmpstrDiver_41 (J), DoRead_25 (F1), DocMcStuffins_27 (F1), DoctorDiddles_30 (E), Donkeykong_25 (F1), Doomslug_27 (F), Dorothy_25 (F1), DosHalletts_26 (F1), Doug_26 (F1), DrDrey_31 (E), Duke13_43 (J), Dumbo_30 (E), Dusk_29 (E), Easy2Say_32 (E), Eish_25 (F1), EleanorGeorge_25 (F1), Elite2014_29 (E), Elph10_31 (E), EmiMonkey_25 (F1), Emma_25 (F1), Emmaloid_26 (F1), Emmina_31 (E), Empress_26 (F1), Enby_26 (F1), Enzomatic_29 (F1), Eradicator_25 (F1), Estave1_23 (F1), Eureka_30 (E), FairyPath_30 (E), Fancypants_25 (F1), Fastidio_25 (F1), Filch_31 (E), Filuzino_25 (F1), FireRed_30 (E), Firehouse51_26 (F1), Flathead_26 (F1), Florinda_25 (F1), Flypotenuse_28 (E), FoghornLeghorn_29 (E), Frankie_26 (F1), FreddyB_25 (F1), Fruitloop_25 (F1), GUmbie_25 (F1), Gage_32 (E), Gaia_28 (X), Galactic_25 (F1), Gandalph_25 (F1), Gator_28 (E), Gemini_33 (E), Geralt_25 (F1), GigiOuiOui_25 (F1), Girafales_26 (F1), Girr_25 (F1), Glexan_28 (E), Goku_30 (E), GoldenSpark_32 (E), Goldilocks_31 (E), Gonephishing_41 (J), GooberAzure_32 (E), Gorge_25 (F1), Greep_31 (E), Grimmer_27 (F1), Guppsters_26 (F1), Hamulus_25 (F1), HanKaySha_31 (E), Hannaconda_37 (J), Harella_29 (E), Harley_25 (F1), Hegedechwinu_26 (F1), Henry_31 (E), Highbury_31 (E), Hlubikazi_25 (F1), Holt_31 (E), Hoonter_32 (E), Hopey_32 (E), HufflyPuff_29 (E), IMpilo_25 (F1), IbOuu_26 (F1), Ibhubesi_25 (F1), Icee_29 (E), Inca_29 (E), IrishSherpFalk_26 (F1), Jabbawokkie_31 (F2), JalFarm20_27 (F1), James_25 (F1), Jarcob_25 (F1), JeTaime_32 (E), Jinglebell_24 (F1), Jinglebell_43 (F1), Job42_28 (F1), JoeyJr_25 (F1), Juice456_27 (F1), Juniper1_25 (F1), Kanye_32 (E), Karhdo_25 (F1), KashFlow_34 (J), Kimberlium_27 (F1), Kimchi_32 (E), KingJulian_25 (F1), KingMidas_26 (F1), Kingsley_23 (F1), Kostya_31 (E), Krakatau_26 (F1), KristaRAM_26 (F1), Latretium_26 (F1), Leozinho_26 (F1), Leperchaun_25 (F1), LilMoolah_25 (F1), Lilac_32 (E), Lilizi_32 (E), Lilpickle_29 (E), LittleE_46 (J), LittleShirley_26 (F1), Lizziana_25 (F1), Llama_25 (F1), Llama_44 (F1), Llij_25 (F1), Lorde_26 (F1), Lucia_26 (F1), Lucky2013_40 (J), MISSy_29 (E), MPhalcon_29 (E), MadamMonkfish_30 (E), Mahavrat_25 (F1), Manda_31 (E), Mandlovu_25 (F1), Mantra_25 (F1), Maravista_25 (F1), Marker_26 (F1), Marshmallow_30 (E), Martik_25 (F1), Mattes_25 (F1), Maxxinista_31 (E), Medindi_25 (F1), Melissauren88_25 (F1), MiaZeal_40 (J), MilleniumForce_26 (F1), Mindy_30 (E), Minerva_46 (J), MinionDave_26 (F1), Miniwave_30 (E), Minnie_26 (F1), Misfit_30 (E), Misha28_26 (F1), MisterCuddles_25 (F1), Modragons_25 (F1), Modragons_43 (F1), Moldemort_31 (E), MollyToe_30 (E), MooMoo_22 (singleton), Moonbeam_26 (F1), Mosby_29 (E), Mova_26 (F1), Mozy_26 (F1), MulchExplorer_28 (F1), Murica_29 (E), Murphy_31 (E), Mutaforma13_25 (F1), Mwanjiwa_25 (F1), Myrale_30 (E), Nala_30 (E), Nebkiss_29 (X), NelitzaMV_30 (E), NewHope4_27 (F1), Nibley_35 (J), Nimbo_25 (F1), Nimrod_30 (E), Nitzel_26 (F1), Nivrat_25 (F1), NoSleep_31 (E), NonchalantPear_30 (E), NormanBulbieJr_25 (F1), Ochi17_42 (F1), OfUltron_25 (F1), OfUltron_44 (F1), Oksu_26 (F1), Oksu_44 (F1), OldBen_25 (F1), OlympiaSaint_25 (F1), Optimus_44 (J), OrionPax_31 (E), Ovechkin_25 (F1), OwlsT2W_27 (F1),

PHappiness_25 (F1), Pacc40_25 (F1), PaddyBaddy_31 (E), Palpatine_30 (E), Paperbeatsrock_32 (E), Pat3_29 (E), Peridot_27 (F1), Petra64142_32 (E), Phalconet_25 (F1), Phanphagia_22 (F1), Pharsalus_31 (E), Phasih_26 (F1), PhatBacter_30 (E), Phatniss_26 (F1), Phaux_29 (E), PhesterPhotato_25 (F1), Philus_25 (F1), PhlipPhlop_25 (F1), Phrux_30 (E), Piper2020_27 (F1), Plumbus_26 (F1), Policronamos_30 (E), Polka14_26 (F1), Polo2Bam_29 (F1), PopTart_25 (F1), Porcelain_39 (J), Porky_30 (E), Priscilla_25 (F1), Ptowny_31 (E), Pumpkin_32 (E), Quallification_31 (E), QuickMath_26 (F1), Quico_26 (F1), Radiance_25 (F1), Rakim_31 (E), Ramsey_26 (F1), RedBird_25 (F1), Renaud18_25 (F4), Renaud18_44 (F4), Rialto_27 (F1), Rimmer_29 (E), RitaG_25 (F1), Rita_25 (F1), RiverMonster_30 (E), Rockne_25 (F1), RockyHorror_26 (F1), Royals2015_25 (F1), Ruby_25 (F1), SG4_25 (F1), Saal_25 (F1), Sabbb_26 (F1), Saints25_31 (E), Sandalphon_26 (F1), Sassafras_25 (F1), Sassay_29 (E), SassyB_25 (F1), Scottish_26 (F1), Seabastian_25 (F1), Seabastian_44 (F1), Seagreen_26 (F1), Shaboozey_34 (J), ShamWow_30 (E), Shauna1_22 (F1), ShereKhan_32 (E), ShiLan_25 (F1), ShowerHandel_25 (F1), SiSi_25 (F1), SilverChicken_31 (F2), Simpliphy_31 (E), SirDuracell_29 (E), Slim_26 (F1), SophKB_30 (E), Sotrice96_30 (E), Soul22_29 (F2), Sparkdehlily_25 (F1), Spikelee_26 (F1), Spoonbill_25 (F1), Squint_39 (J), Stank_33 (E), Stap_26 (F1), Stark_31 (E), StellaBean_30 (E), StolenFromERC_32 (E), StormChicken_30 (E), Strokeseat_25 (F1), SwagPigglett_25 (F1), TDanisky_25 (F1), Taj_25 (F1), Tarkin_32 (E), TeamEdward_30 (E), TeardropMSU_29 (E), Teaspoon_31 (E), Terminus_30 (E), Thimble_30 (E), Thresher_31 (E), Tomaszewski_29 (E), TootsiePop_26 (F1), Tootsieroll_26 (F1), Topiatin_27 (F1), Totinger_26 (F1), Toto_30 (E), Traaww1_28 (E), Tuco_31 (E), Tweety_26 (F1), Ukulele_30 (E), UncleRicky_28 (F1), VRedHorse_25 (F1), Veteran_25 (F1), Violac_26 (F1), Vivum_25 (F1), Wachhund_25 (F1), Wanda_46 (J), Wee_26 (F1), Wee_44 (F1), Whatsapiecost_25 (F1), Whouxphf_25 (F1), Wiggin_33 (E), WillSterrel_26 (F1), Willez_29 (E), Xandras_32 (E), YassJohnny_31 (E), Yorick_25 (F1), Youngblood_30 (E), Zapner_30 (F2), Zerg_25 (F1), Zizzle_25 (F1), xkcd_31 (E),

Start 62:
• Found in 17 of 406 (4.2%) of genes in pham
• No Manual Annotations of this start.
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Blarby_52 (F),

Start 63:
• Found in 17 of 406 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 362
• Called 5.9% of time when present
• Phage (with cluster) where this start called: DeadP_44 (F1),

Start 64:
• Found in 171 of 406 (42.1%) of genes in pham
• Manual Annotations of this start: 4 of 362
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Drago_26 (F1), Hades_25 (F1), Jant_25 (F1), PMC_25 (F1), Reynauld_62 (CH),

Summary by clusters:

There are 11 clusters represented in this pham: F1, F2, CH, F4, F5, F, J, DB, singleton, X, E,

Info for manual annotations of cluster CH:
•Start number 64 was manually annotated 1 time for cluster CH.

Info for manual annotations of cluster DB:
•Start number 61 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster E:
•Start number 61 was manually annotated 123 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 43 was manually annotated 1 time for cluster F1.
•Start number 48 was manually annotated 1 time for cluster F1.
•Start number 54 was manually annotated 1 time for cluster F1.
•Start number 57 was manually annotated 2 times for cluster F1.
•Start number 58 was manually annotated 1 time for cluster F1.
•Start number 59 was manually annotated 1 time for cluster F1.
•Start number 61 was manually annotated 198 times for cluster F1.
•Start number 63 was manually annotated 1 time for cluster F1.
•Start number 64 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 61 was manually annotated 4 times for cluster F2.

Info for manual annotations of cluster F4:
•Start number 59 was manually annotated 2 times for cluster F4.
•Start number 61 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 56 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster J:
•Start number 57 was manually annotated 1 time for cluster J.
•Start number 61 was manually annotated 15 times for cluster J.

Info for manual annotations of cluster X:
•Start number 61 was manually annotated 2 times for cluster X.

Gene Information:

Gene: 244_32 Start: 29430, Stop: 29245, Start Num: 61
Candidate Starts for 244_32:
(Start: 61 @29430 has 346 MA's), (67, 29382), (71, 29358), (72, 29346), (77, 29286),

Gene: ABCat_29 Start: 29142, Stop: 28966, Start Num: 61
Candidate Starts for ABCat_29:
(Start: 61 @29142 has 346 MA's), (71, 29070), (72, 29058), (77, 28998),

Gene: Adnama_33 Start: 29657, Stop: 29472, Start Num: 61
Candidate Starts for Adnama_33:

(Start: 61 @29657 has 346 MA's), (67, 29609), (71, 29585), (72, 29573), (77, 29513),

Gene: Alexphander_27 Start: 25816, Stop: 25619, Start Num: 61
Candidate Starts for Alexphander_27:
(Start: 61 @25816 has 346 MA's), (Start: 64 @25798 has 4 MA's), (72, 25720), (77, 25657),

Gene: Aloeri_27 Start: 25884, Stop: 25687, Start Num: 61
Candidate Starts for Aloeri_27:
(Start: 61 @25884 has 346 MA's), (Start: 64 @25866 has 4 MA's), (72, 25788), (77, 25725),

Gene: AlpineSix_26 Start: 25513, Stop: 25313, Start Num: 61
Candidate Starts for AlpineSix_26:
(50, 25555), (Start: 61 @25513 has 346 MA's), (Start: 64 @25495 has 4 MA's), (72, 25417), (77, 25354),

Gene: AlpineSix_44 Start: 32759, Stop: 32565, Start Num: 61
Candidate Starts for AlpineSix_44:
(Start: 57 @32777 has 3 MA's), (Start: 61 @32759 has 346 MA's), (62, 32753), (Start: 63 @32750 has 1 MA's), (67, 32690), (77, 32594), (78, 32573),

Gene: Amao_30 Start: 28354, Stop: 28169, Start Num: 61
Candidate Starts for Amao_30:
(Start: 61 @28354 has 346 MA's), (67, 28306), (71, 28282), (72, 28270), (77, 28210),

Gene: AmericanBeauty_32 Start: 29137, Stop: 28952, Start Num: 61
Candidate Starts for AmericanBeauty_32:
(Start: 61 @29137 has 346 MA's), (67, 29089), (71, 29065), (72, 29053), (77, 28993),

Gene: ArcusAngelus_45 Start: 33793, Stop: 33599, Start Num: 61
Candidate Starts for ArcusAngelus_45:
(Start: 57 @33811 has 3 MA's), (Start: 61 @33793 has 346 MA's), (62, 33787), (Start: 63 @33784 has 1 MA's), (67, 33724), (77, 33628), (78, 33607),

Gene: ArcusAngelus_25 Start: 25301, Stop: 25080, Start Num: 58
Candidate Starts for ArcusAngelus_25:
(35, 25421), (Start: 43 @25355 has 1 MA's), (Start: 58 @25301 has 1 MA's), (Start: 61 @25283 has 346 MA's), (71, 25184), (76, 25130), (77, 25109),

Gene: Argent26_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for Argent26_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: Ariel_40 Start: 34342, Stop: 34145, Start Num: 61
Candidate Starts for Ariel_40:
(50, 34384), (Start: 57 @34360 has 3 MA's), (Start: 61 @34342 has 346 MA's), (Start: 64 @34324 has 4 MA's), (72, 34246),

Gene: Asriel_29 Start: 28011, Stop: 27835, Start Num: 61
Candidate Starts for Asriel_29:
(Start: 61 @28011 has 346 MA's), (67, 27963), (71, 27939), (72, 27927), (77, 27867),

Gene: Aubs_25 Start: 25430, Stop: 25239, Start Num: 61
Candidate Starts for Aubs_25:

(27, 25589), (29, 25586), (30, 25583), (Start: 61 @25430 has 346 MA's), (66, 25370), (67, 25361), (69, 25349), (74, 25313),

Gene: Avani_48 Start: 31594, Stop: 31400, Start Num: 61
Candidate Starts for Avani_48:
(Start: 57 @31612 has 3 MA's), (Start: 61 @31594 has 346 MA's), (62, 31588), (Start: 63 @31585 has 1 MA's), (67, 31525), (77, 31429), (78, 31408),

Gene: Awesomesauce_26 Start: 25158, Stop: 24961, Start Num: 61
Candidate Starts for Awesomesauce_26:
(Start: 61 @25158 has 346 MA's), (Start: 64 @25140 has 4 MA's), (72, 25062), (77, 24999),

Gene: BAKA_43 Start: 37783, Stop: 37592, Start Num: 61
Candidate Starts for BAKA_43:
(12, 38041), (13, 38029), (14, 38020), (15, 38008), (18, 37981), (21, 37966), (24, 37954), (25, 37951), (27, 37942), (29, 37939), (30, 37936), (Start: 61 @37783 has 346 MA's), (66, 37723), (67, 37714), (69, 37702), (74, 37666),

Gene: BaboJay_29 Start: 28700, Stop: 28515, Start Num: 61
Candidate Starts for BaboJay_29:
(Start: 61 @28700 has 346 MA's), (67, 28652), (71, 28628), (72, 28616), (77, 28556),

Gene: BadStone_29 Start: 29142, Stop: 28966, Start Num: 61
Candidate Starts for BadStone_29:
(Start: 61 @29142 has 346 MA's), (71, 29070), (72, 29058), (77, 28998),

Gene: Balomoji_29 Start: 28876, Stop: 28700, Start Num: 61
Candidate Starts for Balomoji_29:
(Start: 61 @28876 has 346 MA's), (67, 28828), (71, 28804), (72, 28792), (77, 28732),

Gene: Barbarian_29 Start: 28011, Stop: 27835, Start Num: 61
Candidate Starts for Barbarian_29:
(Start: 61 @28011 has 346 MA's), (67, 27963), (71, 27939), (72, 27927), (77, 27867),

Gene: Bask21_30 Start: 28328, Stop: 28152, Start Num: 61
Candidate Starts for Bask21_30:
(Start: 61 @28328 has 346 MA's), (71, 28256), (72, 28244), (77, 28184),

Gene: Batiatus_25 Start: 25321, Stop: 25130, Start Num: 61
Candidate Starts for Batiatus_25:
(6, 25801), (9, 25660), (10, 25636), (11, 25597), (16, 25543), (20, 25507), (23, 25498), (32, 25465), (33, 25462), (38, 25450), (40, 25444), (42, 25426), (Start: 61 @25321 has 346 MA's), (66, 25261), (67, 25252), (69, 25240), (74, 25204),

Gene: Beakin_26 Start: 25173, Stop: 24976, Start Num: 61
Candidate Starts for Beakin_26:
(Start: 61 @25173 has 346 MA's), (Start: 64 @25155 has 4 MA's), (72, 25077), (77, 25014),

Gene: Beanstalk_28 Start: 25446, Stop: 25249, Start Num: 61
Candidate Starts for Beanstalk_28:
(Start: 61 @25446 has 346 MA's), (Start: 64 @25428 has 4 MA's), (72, 25350), (77, 25287),

Gene: Becksu_30 Start: 29333, Stop: 29148, Start Num: 61

Candidate Starts for Becksu_30:
(Start: 61 @29333 has 346 MA's), (67, 29285), (71, 29261), (72, 29249), (77, 29189),

Gene: BigBubba_31 Start: 28913, Stop: 28728, Start Num: 61
Candidate Starts for BigBubba_31:
(Start: 61 @28913 has 346 MA's), (67, 28865), (71, 28841), (72, 28829), (77, 28769),

Gene: BilboSwaggins_30 Start: 29150, Stop: 28974, Start Num: 61
Candidate Starts for BilboSwaggins_30:
(Start: 61 @29150 has 346 MA's), (67, 29102), (71, 29078), (72, 29066), (77, 29006),

Gene: Blarby_33 Start: 25724, Stop: 25527, Start Num: 61
Candidate Starts for Blarby_33:
(Start: 61 @25724 has 346 MA's), (Start: 64 @25706 has 4 MA's), (72, 25628), (77, 25565),

Gene: Blarby_52 Start: 32425, Stop: 32237, Start Num: 62
Candidate Starts for Blarby_52:
(Start: 57 @32449 has 3 MA's), (Start: 61 @32431 has 346 MA's), (62, 32425), (Start: 63 @32422 has 1 MA's), (67, 32362), (77, 32266), (78, 32245),

Gene: BlueCrab_25 Start: 25459, Stop: 25262, Start Num: 61
Candidate Starts for BlueCrab_25:
(Start: 61 @25459 has 346 MA's), (Start: 64 @25441 has 4 MA's), (72, 25363), (77, 25300),

Gene: BobaPhett_25 Start: 25447, Stop: 25250, Start Num: 61
Candidate Starts for BobaPhett_25:
(Start: 61 @25447 has 346 MA's), (Start: 64 @25429 has 4 MA's), (72, 25351), (77, 25288),

Gene: Bobi_27 Start: 26029, Stop: 25838, Start Num: 61
Candidate Starts for Bobi_27:
(Start: 61 @26029 has 346 MA's), (66, 25969), (69, 25948), (71, 25936), (74, 25912), (77, 25864),

Gene: BodEinwohner17_25 Start: 25613, Stop: 25422, Start Num: 61
Candidate Starts for BodEinwohner17_25:
(Start: 61 @25613 has 346 MA's), (66, 25553), (69, 25532), (71, 25520), (74, 25496), (77, 25448),

Gene: Bogg_30 Start: 28050, Stop: 27865, Start Num: 61
Candidate Starts for Bogg_30:
(Start: 61 @28050 has 346 MA's), (67, 28002), (71, 27978), (72, 27966), (77, 27906),

Gene: Brewer_30 Start: 29398, Stop: 29213, Start Num: 61
Candidate Starts for Brewer_30:
(Start: 61 @29398 has 346 MA's), (67, 29350), (71, 29326), (72, 29314), (77, 29254),

Gene: BronnyJames_34 Start: 32872, Stop: 32678, Start Num: 61
Candidate Starts for BronnyJames_34:
(Start: 61 @32872 has 346 MA's), (67, 32803), (69, 32791), (71, 32779), (74, 32755), (77, 32707),

Gene: Brookers_23 Start: 24248, Stop: 24048, Start Num: 61
Candidate Starts for Brookers_23:
(Start: 61 @24248 has 346 MA's), (67, 24179), (69, 24167), (71, 24155), (74, 24131),

Gene: Bruin_30 Start: 29170, Stop: 28985, Start Num: 61

Candidate Starts for Bruin_30:
(Start: 61 @29170 has 346 MA's), (67, 29122), (71, 29098), (72, 29086), (77, 29026),

Gene: Brushbloom_26 Start: 25324, Stop: 25133, Start Num: 61
Candidate Starts for Brushbloom_26:
(Start: 61 @25324 has 346 MA's), (66, 25264), (69, 25243), (71, 25231), (74, 25207), (77, 25159),

Gene: Bubbles123_26 Start: 25994, Stop: 25794, Start Num: 61
Candidate Starts for Bubbles123_26:
(Start: 54 @26021 has 1 MA's), (Start: 61 @25994 has 346 MA's), (Start: 64 @25976 has 4 MA's), (72, 25898), (77, 25835),

Gene: Buck_29 Start: 29106, Stop: 28921, Start Num: 61
Candidate Starts for Buck_29:
(Start: 61 @29106 has 346 MA's), (67, 29058), (71, 29034), (72, 29022), (77, 28962),

Gene: Budgie_32 Start: 28536, Stop: 28360, Start Num: 61
Candidate Starts for Budgie_32:
(Start: 61 @28536 has 346 MA's), (71, 28464), (72, 28452), (77, 28392),

Gene: BugsBunny_28 Start: 28739, Stop: 28554, Start Num: 61
Candidate Starts for BugsBunny_28:
(Start: 61 @28739 has 346 MA's), (67, 28691), (71, 28667), (72, 28655), (77, 28595),

Gene: Bunker_32 Start: 28246, Stop: 28043, Start Num: 61
Candidate Starts for Bunker_32:
(Start: 61 @28246 has 346 MA's),

Gene: Burwell21_25 Start: 25481, Stop: 25284, Start Num: 61
Candidate Starts for Burwell21_25:
(Start: 61 @25481 has 346 MA's), (Start: 64 @25463 has 4 MA's), (72, 25385), (77, 25322),

Gene: BuzzLyseyear_27 Start: 25827, Stop: 25630, Start Num: 61
Candidate Starts for BuzzLyseyear_27:
(Start: 61 @25827 has 346 MA's), (Start: 64 @25809 has 4 MA's), (72, 25731), (77, 25668),

Gene: ByChance_25 Start: 25458, Stop: 25261, Start Num: 61
Candidate Starts for ByChance_25:
(Start: 61 @25458 has 346 MA's), (Start: 64 @25440 has 4 MA's), (72, 25362), (77, 25299),

Gene: Byougenkin_25 Start: 25308, Stop: 25117, Start Num: 61
Candidate Starts for Byougenkin_25:
(Start: 61 @25308 has 346 MA's), (69, 25227), (71, 25215), (74, 25191),

Gene: Cabrinians_25 Start: 25475, Stop: 25278, Start Num: 61
Candidate Starts for Cabrinians_25:
(Start: 61 @25475 has 346 MA's), (Start: 64 @25457 has 4 MA's), (72, 25379), (77, 25316),

Gene: Cactus_31 Start: 28361, Stop: 28185, Start Num: 61
Candidate Starts for Cactus_31:
(Start: 61 @28361 has 346 MA's), (71, 28289), (72, 28277), (77, 28217),

Gene: CaptainTrips_26 Start: 25686, Stop: 25495, Start Num: 61

Candidate Starts for CaptainTrips_26:
(Start: 61 @25686 has 346 MA's), (66, 25626), (69, 25605), (71, 25593), (74, 25569), (77, 25521),

Gene: Che8_26 Start: 25451, Stop: 25254, Start Num: 61
Candidate Starts for Che8_26:
(Start: 61 @25451 has 346 MA's), (Start: 64 @25433 has 4 MA's), (72, 25355), (77, 25292),

Gene: Cheesepuff_27 Start: 26296, Stop: 26093, Start Num: 61
Candidate Starts for Cheesepuff_27:
(12, 26554), (13, 26542), (14, 26533), (15, 26521), (18, 26494), (21, 26479), (24, 26467), (25, 26464), (27, 26455), (29, 26452), (30, 26449), (44, 26368), (Start: 58 @26314 has 1 MA's), (Start: 61 @26296 has 346 MA's), (71, 26197), (76, 26143), (77, 26122),

Gene: Chevrolet_25 Start: 25356, Stop: 25081, Start Num: 43
Candidate Starts for Chevrolet_25:
(35, 25422), (Start: 43 @25356 has 1 MA's), (Start: 58 @25302 has 1 MA's), (Start: 61 @25284 has 346 MA's), (71, 25185), (76, 25131), (77, 25110),

Gene: Chevrolet_48 Start: 33794, Stop: 33600, Start Num: 61
Candidate Starts for Chevrolet_48:
(Start: 57 @33812 has 3 MA's), (Start: 61 @33794 has 346 MA's), (62, 33788), (Start: 63 @33785 has 1 MA's), (67, 33725), (77, 33629), (78, 33608),

Gene: ChickenDinner_27 Start: 25884, Stop: 25687, Start Num: 61
Candidate Starts for ChickenDinner_27:
(Start: 61 @25884 has 346 MA's), (Start: 64 @25866 has 4 MA's), (72, 25788), (77, 25725),

Gene: ChosenOne_30 Start: 28358, Stop: 28173, Start Num: 61
Candidate Starts for ChosenOne_30:
(Start: 61 @28358 has 346 MA's), (67, 28310), (71, 28286), (72, 28274), (77, 28214),

Gene: ChotaBhai_30 Start: 28396, Stop: 28211, Start Num: 61
Candidate Starts for ChotaBhai_30:
(Start: 61 @28396 has 346 MA's), (67, 28348), (71, 28324), (72, 28312), (77, 28252),

Gene: Chuckly_25 Start: 25457, Stop: 25260, Start Num: 61
Candidate Starts for Chuckly_25:
(Start: 61 @25457 has 346 MA's), (Start: 64 @25439 has 4 MA's), (72, 25361), (77, 25298),

Gene: Cjw1_30 Start: 29910, Stop: 29725, Start Num: 61
Candidate Starts for Cjw1_30:
(Start: 61 @29910 has 346 MA's), (67, 29862), (71, 29838), (72, 29826), (77, 29766),

Gene: Clank_22 Start: 24484, Stop: 24290, Start Num: 61
Candidate Starts for Clank_22:
(Start: 61 @24484 has 346 MA's), (67, 24415), (69, 24403), (71, 24391), (74, 24367), (77, 24319),

Gene: Coco12_24 Start: 24789, Stop: 24589, Start Num: 61
Candidate Starts for Coco12_24:
(Start: 61 @24789 has 346 MA's), (67, 24720), (69, 24708), (71, 24696), (74, 24672),

Gene: Command613_31 Start: 29417, Stop: 29241, Start Num: 61
Candidate Starts for Command613_31:

(Start: 61 @29417 has 346 MA's), (71, 29345), (72, 29333), (77, 29273),

Gene: Contagion_29 Start: 28654, Stop: 28469, Start Num: 61
Candidate Starts for Contagion_29:
(Start: 61 @28654 has 346 MA's), (67, 28606), (71, 28582), (72, 28570), (77, 28510),

Gene: Cookies_30 Start: 29019, Stop: 28834, Start Num: 61
Candidate Starts for Cookies_30:
(Start: 61 @29019 has 346 MA's), (67, 28971), (71, 28947), (72, 28935), (77, 28875),

Gene: Cornie_25 Start: 25696, Stop: 25502, Start Num: 56
Candidate Starts for Cornie_25:
(Start: 56 @25696 has 1 MA's), (75, 25567), (77, 25531),

Gene: Cornucopia_26 Start: 25343, Stop: 25146, Start Num: 61
Candidate Starts for Cornucopia_26:
(Start: 61 @25343 has 346 MA's), (Start: 64 @25325 has 4 MA's), (72, 25247), (77, 25184),

Gene: Courthouse_40 Start: 34746, Stop: 34549, Start Num: 61
Candidate Starts for Courthouse_40:
(50, 34788), (Start: 57 @34764 has 3 MA's), (Start: 61 @34746 has 346 MA's), (Start: 64 @34728 has 4 MA's), (72, 34650),

Gene: CrystalP_30 Start: 29150, Stop: 28974, Start Num: 61
Candidate Starts for CrystalP_30:
(Start: 61 @29150 has 346 MA's), (67, 29102), (71, 29078), (72, 29066), (77, 29006),

Gene: Czyszczon1_31 Start: 28895, Stop: 28710, Start Num: 61
Candidate Starts for Czyszczon1_31:
(Start: 61 @28895 has 346 MA's), (67, 28847), (71, 28823), (72, 28811), (77, 28751),

Gene: DLane_25 Start: 25281, Stop: 25084, Start Num: 61
Candidate Starts for DLane_25:
(Start: 61 @25281 has 346 MA's), (Start: 64 @25263 has 4 MA's), (72, 25185), (77, 25122),

Gene: DRBy19_25 Start: 25317, Stop: 25120, Start Num: 61
Candidate Starts for DRBy19_25:
(Start: 61 @25317 has 346 MA's), (Start: 64 @25299 has 4 MA's), (72, 25221), (77, 25158),

Gene: DaWorst_27 Start: 25823, Stop: 25626, Start Num: 61
Candidate Starts for DaWorst_27:
(Start: 61 @25823 has 346 MA's), (Start: 64 @25805 has 4 MA's), (72, 25727), (77, 25664),

Gene: DaddyRickover_25 Start: 25463, Stop: 25266, Start Num: 61
Candidate Starts for DaddyRickover_25:
(Start: 61 @25463 has 346 MA's), (Start: 64 @25445 has 4 MA's), (72, 25367), (77, 25304),

Gene: Daenerys_25 Start: 25291, Stop: 25094, Start Num: 61
Candidate Starts for Daenerys_25:
(Start: 61 @25291 has 346 MA's), (Start: 64 @25273 has 4 MA's), (72, 25195), (77, 25132),

Gene: Daikon_29 Start: 28888, Stop: 28712, Start Num: 61
Candidate Starts for Daikon_29:

(Start: 61 @28888 has 346 MA's), (67, 28840), (71, 28816), (72, 28804), (77, 28744),

Gene: Dante_25 Start: 25338, Stop: 25141, Start Num: 61
Candidate Starts for Dante_25:
(Start: 54 @25365 has 1 MA's), (Start: 61 @25338 has 346 MA's), (Start: 64 @25320 has 4 MA's), (72, 25242), (77, 25179),

Gene: DeadP_44 Start: 32119, Stop: 31934, Start Num: 63
Candidate Starts for DeadP_44:
(Start: 57 @32146 has 3 MA's), (Start: 61 @32128 has 346 MA's), (62, 32122), (Start: 63 @32119 has 1 MA's), (67, 32059), (77, 31963), (78, 31942),

Gene: Deb65_25 Start: 25288, Stop: 25091, Start Num: 61
Candidate Starts for Deb65_25:
(Start: 61 @25288 has 346 MA's), (Start: 64 @25270 has 4 MA's), (72, 25192), (77, 25129),

Gene: DillTech15_25 Start: 25310, Stop: 25113, Start Num: 61
Candidate Starts for DillTech15_25:
(Start: 61 @25310 has 346 MA's), (Start: 64 @25292 has 4 MA's), (72, 25214), (77, 25151),

Gene: DirtMcgirt_26 Start: 25114, Stop: 24917, Start Num: 61
Candidate Starts for DirtMcgirt_26:
(Start: 61 @25114 has 346 MA's), (Start: 64 @25096 has 4 MA's), (72, 25018), (77, 24955),

Gene: DmpstrDiver_41 Start: 37394, Stop: 37197, Start Num: 61
Candidate Starts for DmpstrDiver_41:
(50, 37436), (Start: 57 @37412 has 3 MA's), (Start: 61 @37394 has 346 MA's), (Start: 64 @37376 has 4 MA's), (72, 37298),

Gene: DoRead_25 Start: 25288, Stop: 25091, Start Num: 61
Candidate Starts for DoRead_25:
(Start: 61 @25288 has 346 MA's), (Start: 64 @25270 has 4 MA's), (72, 25192), (77, 25129),

Gene: DocMcStuffins_27 Start: 25884, Stop: 25687, Start Num: 61
Candidate Starts for DocMcStuffins_27:
(Start: 61 @25884 has 346 MA's), (Start: 64 @25866 has 4 MA's), (72, 25788), (77, 25725),

Gene: DoctorDiddles_30 Start: 28312, Stop: 28127, Start Num: 61
Candidate Starts for DoctorDiddles_30:
(Start: 61 @28312 has 346 MA's), (67, 28264), (71, 28240), (72, 28228), (77, 28168),

Gene: Donkeykong_25 Start: 25459, Stop: 25268, Start Num: 61
Candidate Starts for Donkeykong_25:
(Start: 61 @25459 has 346 MA's), (66, 25399), (69, 25378), (71, 25366), (74, 25342), (77, 25294),

Gene: Doomslug_27 Start: 25149, Stop: 24952, Start Num: 61
Candidate Starts for Doomslug_27:
(Start: 61 @25149 has 346 MA's), (Start: 64 @25131 has 4 MA's), (72, 25053), (77, 24990),

Gene: Dorothy_25 Start: 25248, Stop: 25051, Start Num: 61
Candidate Starts for Dorothy_25:
(Start: 61 @25248 has 346 MA's), (Start: 64 @25230 has 4 MA's), (72, 25152), (77, 25089),

Gene: DosHalletts_26 Start: 25404, Stop: 25207, Start Num: 61
Candidate Starts for DosHalletts_26:
(Start: 61 @25404 has 346 MA's), (Start: 64 @25386 has 4 MA's), (72, 25308), (77, 25245),

Gene: Doug_26 Start: 25840, Stop: 25643, Start Num: 61
Candidate Starts for Doug_26:
(Start: 61 @25840 has 346 MA's), (Start: 64 @25822 has 4 MA's), (72, 25744), (77, 25681),

Gene: DrDrey_31 Start: 29642, Stop: 29457, Start Num: 61
Candidate Starts for DrDrey_31:
(Start: 61 @29642 has 346 MA's), (67, 29594), (71, 29570), (72, 29558), (77, 29498),

Gene: Drago_26 Start: 25095, Stop: 24916, Start Num: 64
Candidate Starts for Drago_26:
(Start: 61 @25113 has 346 MA's), (Start: 64 @25095 has 4 MA's), (72, 25017), (77, 24954),

Gene: Duke13_43 Start: 37672, Stop: 37481, Start Num: 61
Candidate Starts for Duke13_43:
(34, 37813), (Start: 61 @37672 has 346 MA's), (66, 37612), (67, 37603), (69, 37591), (74, 37555),

Gene: Dumbo_30 Start: 28617, Stop: 28432, Start Num: 61
Candidate Starts for Dumbo_30:
(Start: 61 @28617 has 346 MA's), (67, 28569), (71, 28545), (72, 28533), (77, 28473),

Gene: Dusk_29 Start: 28802, Stop: 28626, Start Num: 61
Candidate Starts for Dusk_29:
(Start: 61 @28802 has 346 MA's), (71, 28730), (72, 28718), (77, 28658),

Gene: Easy2Say_32 Start: 30400, Stop: 30215, Start Num: 61
Candidate Starts for Easy2Say_32:
(Start: 61 @30400 has 346 MA's), (67, 30352), (71, 30328), (72, 30316), (77, 30256),

Gene: Eish_25 Start: 25428, Stop: 25231, Start Num: 61
Candidate Starts for Eish_25:
(Start: 61 @25428 has 346 MA's), (Start: 64 @25410 has 4 MA's), (72, 25332), (77, 25269),

Gene: EleanorGeorge_25 Start: 25592, Stop: 25404, Start Num: 61
Candidate Starts for EleanorGeorge_25:
(27, 25748), (29, 25745), (30, 25742), (Start: 43 @25661 has 1 MA's), (52, 25631), (Start: 54 @25619 has 1 MA's), (Start: 61 @25592 has 346 MA's), (71, 25511),

Gene: Elite2014_29 Start: 28357, Stop: 28172, Start Num: 61
Candidate Starts for Elite2014_29:
(Start: 61 @28357 has 346 MA's), (67, 28309), (71, 28285), (72, 28273), (77, 28213),

Gene: Elph10_31 Start: 28620, Stop: 28435, Start Num: 61
Candidate Starts for Elph10_31:
(Start: 61 @28620 has 346 MA's), (67, 28572), (71, 28548), (72, 28536), (77, 28476),

Gene: EmiMonkey_25 Start: 25362, Stop: 25165, Start Num: 61
Candidate Starts for EmiMonkey_25:
(Start: 61 @25362 has 346 MA's), (Start: 64 @25344 has 4 MA's), (72, 25266), (77, 25203),

Gene: Emma_25 Start: 25502, Stop: 25305, Start Num: 61
Candidate Starts for Emma_25:
(Start: 61 @25502 has 346 MA's), (Start: 64 @25484 has 4 MA's), (72, 25406), (77, 25343),

Gene: Emmaloid_26 Start: 25209, Stop: 25012, Start Num: 61
Candidate Starts for Emmaloid_26:
(Start: 61 @25209 has 346 MA's), (Start: 64 @25191 has 4 MA's), (72, 25113), (77, 25050),

Gene: Emmina_31 Start: 28978, Stop: 28793, Start Num: 61
Candidate Starts for Emmina_31:
(Start: 61 @28978 has 346 MA's), (67, 28930), (71, 28906), (72, 28894), (77, 28834),

Gene: Empress_26 Start: 26632, Stop: 26441, Start Num: 61
Candidate Starts for Empress_26:
(Start: 61 @26632 has 346 MA's), (66, 26572), (69, 26551), (71, 26539), (74, 26515), (77, 26467),

Gene: Enby_26 Start: 25113, Stop: 24916, Start Num: 61
Candidate Starts for Enby_26:
(Start: 61 @25113 has 346 MA's), (Start: 64 @25095 has 4 MA's), (72, 25017), (77, 24954),

Gene: Enzomatic_29 Start: 25475, Stop: 25287, Start Num: 61
Candidate Starts for Enzomatic_29:
(12, 25730), (13, 25718), (14, 25709), (15, 25697), (18, 25670), (21, 25655), (24, 25643), (25, 25640), (27, 25631), (29, 25628), (30, 25625), (Start: 43 @25544 has 1 MA's), (52, 25514), (Start: 54 @25502 has 1 MA's), (Start: 61 @25475 has 346 MA's), (71, 25394),

Gene: Eradicator_25 Start: 25336, Stop: 25139, Start Num: 61
Candidate Starts for Eradicator_25:
(Start: 61 @25336 has 346 MA's), (Start: 64 @25318 has 4 MA's), (72, 25240), (77, 25177),

Gene: Estave1_41 Start: 31449, Stop: 31237, Start Num: 57
Candidate Starts for Estave1_41:
(Start: 57 @31449 has 3 MA's), (Start: 61 @31431 has 346 MA's), (62, 31425), (Start: 63 @31422 has 1 MA's), (67, 31362), (77, 31266), (78, 31245),

Gene: Estave1_23 Start: 24737, Stop: 24552, Start Num: 61
Candidate Starts for Estave1_23:
(26, 24899), (32, 24878), (34, 24875), (Start: 43 @24806 has 1 MA's), (52, 24776), (Start: 54 @24764 has 1 MA's), (Start: 61 @24737 has 346 MA's),

Gene: Eureka_30 Start: 29134, Stop: 28958, Start Num: 61
Candidate Starts for Eureka_30:
(Start: 61 @29134 has 346 MA's), (71, 29062), (72, 29050), (77, 28990),

Gene: FairyPath_30 Start: 29346, Stop: 29170, Start Num: 61
Candidate Starts for FairyPath_30:
(Start: 61 @29346 has 346 MA's), (71, 29274), (72, 29262), (77, 29202),

Gene: Fancypants_25 Start: 25296, Stop: 25099, Start Num: 61
Candidate Starts for Fancypants_25:
(Start: 61 @25296 has 346 MA's), (Start: 64 @25278 has 4 MA's), (72, 25200), (77, 25137),

Gene: Fastidio_25 Start: 25419, Stop: 25222, Start Num: 61

Candidate Starts for Fastidio_25:
(Start: 61 @25419 has 346 MA's), (Start: 64 @25401 has 4 MA's), (72, 25323), (77, 25260),

Gene: Filch_31 Start: 28908, Stop: 28723, Start Num: 61
Candidate Starts for Filch_31:
(Start: 61 @28908 has 346 MA's), (67, 28860), (71, 28836), (72, 28824), (77, 28764),

Gene: Filuzino_25 Start: 25285, Stop: 25088, Start Num: 61
Candidate Starts for Filuzino_25:
(Start: 61 @25285 has 346 MA's), (Start: 64 @25267 has 4 MA's), (72, 25189), (77, 25126),

Gene: FireRed_30 Start: 29178, Stop: 28993, Start Num: 61
Candidate Starts for FireRed_30:
(Start: 61 @29178 has 346 MA's), (67, 29130), (71, 29106), (72, 29094), (77, 29034),

Gene: Firehouse51_26 Start: 26007, Stop: 25810, Start Num: 61
Candidate Starts for Firehouse51_26:
(Start: 61 @26007 has 346 MA's), (Start: 64 @25989 has 4 MA's), (72, 25911), (77, 25848),

Gene: Flathead_26 Start: 25308, Stop: 25117, Start Num: 61
Candidate Starts for Flathead_26:
(Start: 61 @25308 has 346 MA's), (66, 25248), (69, 25227), (71, 25215), (74, 25191), (77, 25143),

Gene: Florinda_25 Start: 25306, Stop: 25109, Start Num: 61
Candidate Starts for Florinda_25:
(Start: 61 @25306 has 346 MA's), (Start: 64 @25288 has 4 MA's), (72, 25210), (77, 25147),

Gene: Flypotenuse_28 Start: 28746, Stop: 28561, Start Num: 61
Candidate Starts for Flypotenuse_28:
(Start: 61 @28746 has 346 MA's), (67, 28698), (71, 28674), (72, 28662), (77, 28602),

Gene: FoghornLeghorn_29 Start: 28654, Stop: 28469, Start Num: 61
Candidate Starts for FoghornLeghorn_29:
(Start: 61 @28654 has 346 MA's), (67, 28606), (71, 28582), (72, 28570), (77, 28510),

Gene: Frankie_26 Start: 25328, Stop: 25137, Start Num: 61
Candidate Starts for Frankie_26:
(13, 25565), (14, 25556), (17, 25526), (18, 25517), (19, 25508), (24, 25490), (27, 25478), (30, 25472),
(36, 25457), (60, 25343), (Start: 61 @25328 has 346 MA's), (77, 25163),

Gene: FreddyB_25 Start: 25484, Stop: 25287, Start Num: 61
Candidate Starts for FreddyB_25:
(Start: 61 @25484 has 346 MA's), (Start: 64 @25466 has 4 MA's), (72, 25388), (77, 25325),

Gene: Fruitloop_25 Start: 25479, Stop: 25282, Start Num: 61
Candidate Starts for Fruitloop_25:
(Start: 61 @25479 has 346 MA's), (Start: 64 @25461 has 4 MA's), (72, 25383), (77, 25320),

Gene: GUmbie_25 Start: 25296, Stop: 25099, Start Num: 61
Candidate Starts for GUmbie_25:
(Start: 61 @25296 has 346 MA's), (Start: 64 @25278 has 4 MA's), (72, 25200), (77, 25137),

Gene: Gage_32 Start: 29140, Stop: 28955, Start Num: 61

Candidate Starts for Gage_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: Gaia_28 Start: 27832, Stop: 27635, Start Num: 61
Candidate Starts for Gaia_28:
(Start: 61 @27832 has 346 MA's), (Start: 64 @27814 has 4 MA's), (72, 27736), (77, 27673),

Gene: Galactic_25 Start: 25267, Stop: 25076, Start Num: 61
Candidate Starts for Galactic_25:
(6, 25747), (9, 25606), (10, 25582), (11, 25543), (16, 25489), (20, 25453), (23, 25444), (32, 25411), (33, 25408), (38, 25396), (40, 25390), (42, 25372), (Start: 61 @25267 has 346 MA's), (66, 25207), (67, 25198), (69, 25186), (74, 25150),

Gene: Gandalph_25 Start: 25389, Stop: 25192, Start Num: 61
Candidate Starts for Gandalph_25:
(Start: 61 @25389 has 346 MA's), (Start: 64 @25371 has 4 MA's), (72, 25293), (77, 25230),

Gene: Gator_28 Start: 28758, Stop: 28582, Start Num: 61
Candidate Starts for Gator_28:
(Start: 61 @28758 has 346 MA's), (71, 28686), (72, 28674), (77, 28614),

Gene: Gemini_33 Start: 29657, Stop: 29472, Start Num: 61
Candidate Starts for Gemini_33:
(Start: 61 @29657 has 346 MA's), (67, 29609), (71, 29585), (72, 29573), (77, 29513),

Gene: Geralt_25 Start: 25287, Stop: 25090, Start Num: 61
Candidate Starts for Geralt_25:
(Start: 61 @25287 has 346 MA's), (Start: 64 @25269 has 4 MA's), (72, 25191), (77, 25128),

Gene: GigiOuiOui_25 Start: 25420, Stop: 25223, Start Num: 61
Candidate Starts for GigiOuiOui_25:
(Start: 61 @25420 has 346 MA's), (Start: 64 @25402 has 4 MA's), (72, 25324), (77, 25261),

Gene: Girafales_26 Start: 25114, Stop: 24917, Start Num: 61
Candidate Starts for Girafales_26:
(Start: 61 @25114 has 346 MA's), (Start: 64 @25096 has 4 MA's), (72, 25018), (77, 24955),

Gene: Girr_25 Start: 25258, Stop: 25067, Start Num: 61
Candidate Starts for Girr_25:
(Start: 61 @25258 has 346 MA's), (66, 25198), (69, 25177), (71, 25165), (74, 25141), (77, 25093),

Gene: Glexan_28 Start: 28746, Stop: 28561, Start Num: 61
Candidate Starts for Glexan_28:
(Start: 61 @28746 has 346 MA's), (67, 28698), (71, 28674), (72, 28662), (77, 28602),

Gene: Goku_30 Start: 28863, Stop: 28687, Start Num: 61
Candidate Starts for Goku_30:
(Start: 61 @28863 has 346 MA's), (71, 28791), (72, 28779), (77, 28719),

Gene: GoldenSpark_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for GoldenSpark_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: Goldilocks_31 Start: 28560, Stop: 28375, Start Num: 61
Candidate Starts for Goldilocks_31:
(Start: 61 @28560 has 346 MA's), (67, 28512), (71, 28488), (72, 28476), (77, 28416),

Gene: Gonephishing_41 Start: 35953, Stop: 35762, Start Num: 61
Candidate Starts for Gonephishing_41:
(Start: 61 @35953 has 346 MA's), (66, 35893), (69, 35872), (71, 35860), (74, 35836), (77, 35788),

Gene: GooberAzure_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for GooberAzure_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: Gorge_25 Start: 25451, Stop: 25254, Start Num: 61
Candidate Starts for Gorge_25:
(Start: 61 @25451 has 346 MA's), (Start: 64 @25433 has 4 MA's), (72, 25355), (77, 25292),

Gene: Greep_31 Start: 29470, Stop: 29285, Start Num: 61
Candidate Starts for Greep_31:
(Start: 61 @29470 has 346 MA's), (67, 29422), (71, 29398), (72, 29386), (77, 29326),

Gene: Grimmer_27 Start: 26039, Stop: 25851, Start Num: 61
Candidate Starts for Grimmer_27:
(12, 26294), (13, 26282), (14, 26273), (15, 26261), (18, 26234), (21, 26219), (24, 26207), (25, 26204), (27, 26195), (29, 26192), (30, 26189), (Start: 43 @26108 has 1 MA's), (52, 26078), (Start: 54 @26066 has 1 MA's), (Start: 61 @26039 has 346 MA's), (71, 25958),

Gene: Guppsters_26 Start: 25561, Stop: 25364, Start Num: 61
Candidate Starts for Guppsters_26:
(Start: 61 @25561 has 346 MA's), (Start: 64 @25543 has 4 MA's), (72, 25465), (77, 25402),

Gene: Hades_25 Start: 25363, Stop: 25184, Start Num: 64
Candidate Starts for Hades_25:
(Start: 61 @25381 has 346 MA's), (Start: 64 @25363 has 4 MA's), (72, 25285), (77, 25222),

Gene: Hamulus_25 Start: 25445, Stop: 25245, Start Num: 61
Candidate Starts for Hamulus_25:
(Start: 61 @25445 has 346 MA's), (Start: 64 @25427 has 4 MA's), (72, 25349), (77, 25286),

Gene: HanKaySha_31 Start: 28892, Stop: 28707, Start Num: 61
Candidate Starts for HanKaySha_31:
(Start: 61 @28892 has 346 MA's), (67, 28844), (71, 28820), (72, 28808), (77, 28748),

Gene: Hannaconda_37 Start: 33327, Stop: 33133, Start Num: 61
Candidate Starts for Hannaconda_37:
(Start: 61 @33327 has 346 MA's), (67, 33258), (69, 33246), (71, 33234), (74, 33210), (77, 33162),

Gene: Harella_29 Start: 29262, Stop: 29077, Start Num: 61
Candidate Starts for Harella_29:
(Start: 61 @29262 has 346 MA's), (67, 29214), (71, 29190), (72, 29178), (77, 29118),

Gene: Harley_25 Start: 25240, Stop: 25037, Start Num: 61
Candidate Starts for Harley_25:

(35, 25378), (Start: 43 @25312 has 1 MA's), (Start: 58 @25258 has 1 MA's), (Start: 61 @25240 has 346 MA's), (71, 25141), (76, 25087), (77, 25066),

Gene: Hegedechwinu_26 Start: 25289, Stop: 25098, Start Num: 61
Candidate Starts for Hegedechwinu_26:
(Start: 61 @25289 has 346 MA's), (66, 25229), (69, 25208), (71, 25196), (74, 25172), (77, 25124),

Gene: Henry_31 Start: 29150, Stop: 28974, Start Num: 61
Candidate Starts for Henry_31:
(Start: 61 @29150 has 346 MA's), (67, 29102), (71, 29078), (72, 29066), (77, 29006),

Gene: Highbury_31 Start: 28808, Stop: 28623, Start Num: 61
Candidate Starts for Highbury_31:
(Start: 61 @28808 has 346 MA's), (67, 28760), (71, 28736), (72, 28724), (77, 28664),

Gene: Hlubikazi_25 Start: 25548, Stop: 25351, Start Num: 61
Candidate Starts for Hlubikazi_25:
(Start: 61 @25548 has 346 MA's), (Start: 64 @25530 has 4 MA's), (72, 25452), (77, 25389),

Gene: Holt_31 Start: 28427, Stop: 28242, Start Num: 61
Candidate Starts for Holt_31:
(Start: 61 @28427 has 346 MA's), (67, 28379), (71, 28355), (72, 28343), (77, 28283),

Gene: Hoonter_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for Hoonter_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: Hopey_32 Start: 29427, Stop: 29242, Start Num: 61
Candidate Starts for Hopey_32:
(Start: 61 @29427 has 346 MA's), (67, 29379), (71, 29355), (72, 29343), (77, 29283),

Gene: HufflyPuff_29 Start: 29134, Stop: 28949, Start Num: 61
Candidate Starts for HufflyPuff_29:
(Start: 61 @29134 has 346 MA's), (67, 29086), (71, 29062), (72, 29050), (77, 28990),

Gene: IMpilo_25 Start: 25354, Stop: 25157, Start Num: 61
Candidate Starts for IMpilo_25:
(Start: 61 @25354 has 346 MA's), (Start: 64 @25336 has 4 MA's), (72, 25258), (77, 25195),

Gene: IbOuu_26 Start: 25292, Stop: 25095, Start Num: 61
Candidate Starts for IbOuu_26:
(Start: 61 @25292 has 346 MA's), (Start: 64 @25274 has 4 MA's), (72, 25196), (77, 25133),

Gene: Ibhubesi_25 Start: 25247, Stop: 25044, Start Num: 61
Candidate Starts for Ibhubesi_25:
(35, 25385), (Start: 43 @25319 has 1 MA's), (Start: 58 @25265 has 1 MA's), (Start: 61 @25247 has 346 MA's), (71, 25148), (76, 25094), (77, 25073),

Gene: Icee_29 Start: 28808, Stop: 28632, Start Num: 61
Candidate Starts for Icee_29:
(Start: 61 @28808 has 346 MA's), (71, 28736), (72, 28724), (77, 28664),

Gene: Inca_29 Start: 27829, Stop: 27644, Start Num: 61

Candidate Starts for Inca_29:
(Start: 61 @27829 has 346 MA's), (67, 27781), (71, 27757), (72, 27745), (77, 27685),

Gene: IrishSherpFalk_26 Start: 26630, Stop: 26439, Start Num: 61
Candidate Starts for IrishSherpFalk_26:
(26, 26795), (32, 26774), (33, 26771), (38, 26759), (40, 26753), (42, 26735), (Start: 61 @26630 has 346 MA's), (66, 26570), (67, 26561), (69, 26549), (74, 26513),

Gene: Jabbawokkie_31 Start: 25518, Stop: 25336, Start Num: 61
Candidate Starts for Jabbawokkie_31:
(20, 25701), (22, 25698), (23, 25692), (28, 25674), (Start: 43 @25587 has 1 MA's), (52, 25557), (Start: 54 @25545 has 1 MA's), (Start: 61 @25518 has 346 MA's), (71, 25440),

Gene: JalFarm20_27 Start: 25810, Stop: 25619, Start Num: 61
Candidate Starts for JalFarm20_27:
(Start: 61 @25810 has 346 MA's), (66, 25750), (69, 25729), (71, 25717), (74, 25693), (77, 25645),

Gene: James_25 Start: 25447, Stop: 25250, Start Num: 61
Candidate Starts for James_25:
(Start: 61 @25447 has 346 MA's), (Start: 64 @25429 has 4 MA's), (72, 25351), (77, 25288),

Gene: Jant_25 Start: 25424, Stop: 25245, Start Num: 64
Candidate Starts for Jant_25:
(Start: 61 @25442 has 346 MA's), (Start: 64 @25424 has 4 MA's), (72, 25346), (77, 25283),

Gene: Jarcob_25 Start: 25482, Stop: 25285, Start Num: 61
Candidate Starts for Jarcob_25:
(Start: 61 @25482 has 346 MA's), (Start: 64 @25464 has 4 MA's), (72, 25386), (77, 25323),

Gene: JeTaime_32 Start: 29951, Stop: 29766, Start Num: 61
Candidate Starts for JeTaime_32:
(Start: 61 @29951 has 346 MA's), (67, 29903), (71, 29879), (72, 29867), (77, 29807),

Gene: Jinglebell_24 Start: 25512, Stop: 25312, Start Num: 61
Candidate Starts for Jinglebell_24:
(50, 25554), (Start: 61 @25512 has 346 MA's), (Start: 64 @25494 has 4 MA's), (72, 25416), (77, 25353),

Gene: Jinglebell_43 Start: 32758, Stop: 32564, Start Num: 61
Candidate Starts for Jinglebell_43:
(Start: 57 @32776 has 3 MA's), (Start: 61 @32758 has 346 MA's), (62, 32752), (Start: 63 @32749 has 1 MA's), (67, 32689), (77, 32593), (78, 32572),

Gene: Job42_28 Start: 27005, Stop: 26865, Start Num: 61
Candidate Starts for Job42_28:
(Start: 54 @27032 has 1 MA's), (Start: 61 @27005 has 346 MA's), (Start: 64 @26987 has 4 MA's), (72, 26909),

Gene: JoeyJr_25 Start: 25459, Stop: 25262, Start Num: 61
Candidate Starts for JoeyJr_25:
(Start: 61 @25459 has 346 MA's), (Start: 64 @25441 has 4 MA's), (72, 25363), (77, 25300),

Gene: Juice456_27 Start: 26560, Stop: 26369, Start Num: 61

Candidate Starts for Juice456_27:
(Start: 61 @26560 has 346 MA's), (66, 26500), (69, 26479), (71, 26467), (74, 26443), (77, 26395),

Gene: Juniper1_25 Start: 25272, Stop: 25072, Start Num: 61
Candidate Starts for Juniper1_25:
(Start: 54 @25299 has 1 MA's), (Start: 61 @25272 has 346 MA's), (Start: 64 @25254 has 4 MA's), (72, 25176), (77, 25113),

Gene: Kanye_32 Start: 30136, Stop: 29951, Start Num: 61
Candidate Starts for Kanye_32:
(Start: 61 @30136 has 346 MA's), (67, 30088), (71, 30064), (72, 30052), (77, 29992),

Gene: Karhdo_25 Start: 25422, Stop: 25225, Start Num: 61
Candidate Starts for Karhdo_25:
(Start: 61 @25422 has 346 MA's), (Start: 64 @25404 has 4 MA's), (72, 25326), (77, 25263),

Gene: KashFlow_34 Start: 32948, Stop: 32754, Start Num: 61
Candidate Starts for KashFlow_34:
(Start: 61 @32948 has 346 MA's), (67, 32879), (69, 32867), (71, 32855), (74, 32831), (77, 32783),

Gene: Kimberlium_27 Start: 26414, Stop: 26217, Start Num: 61
Candidate Starts for Kimberlium_27:
(Start: 54 @26441 has 1 MA's), (Start: 61 @26414 has 346 MA's), (Start: 64 @26396 has 4 MA's), (72, 26318), (77, 26255),

Gene: Kimchi_32 Start: 29143, Stop: 28958, Start Num: 61
Candidate Starts for Kimchi_32:
(Start: 61 @29143 has 346 MA's), (67, 29095), (71, 29071), (72, 29059), (77, 28999),

Gene: KingJulian_25 Start: 25480, Stop: 25289, Start Num: 61
Candidate Starts for KingJulian_25:
(Start: 61 @25480 has 346 MA's), (66, 25420), (69, 25399), (71, 25387), (74, 25363), (77, 25315),

Gene: KingMidas_26 Start: 26591, Stop: 26394, Start Num: 61
Candidate Starts for KingMidas_26:
(Start: 61 @26591 has 346 MA's), (Start: 64 @26573 has 4 MA's), (72, 26495), (77, 26432),

Gene: Kingsley_23 Start: 24253, Stop: 24053, Start Num: 61
Candidate Starts for Kingsley_23:
(Start: 61 @24253 has 346 MA's), (67, 24184), (69, 24172), (71, 24160), (74, 24136),

Gene: Kostya_31 Start: 29151, Stop: 28975, Start Num: 61
Candidate Starts for Kostya_31:
(Start: 61 @29151 has 346 MA's), (67, 29103), (71, 29079), (72, 29067), (77, 29007),

Gene: Krakatau_26 Start: 25968, Stop: 25777, Start Num: 61
Candidate Starts for Krakatau_26:
(6, 26448), (9, 26307), (10, 26283), (11, 26244), (16, 26190), (20, 26154), (23, 26145), (32, 26112), (33, 26109), (38, 26097), (40, 26091), (42, 26073), (Start: 61 @25968 has 346 MA's), (66, 25908), (67, 25899), (69, 25887), (74, 25851),

Gene: KristaRAM_26 Start: 26121, Stop: 25924, Start Num: 61
Candidate Starts for KristaRAM_26:

(Start: 61 @26121 has 346 MA's), (Start: 64 @26103 has 4 MA's), (72, 26025), (77, 25962),

Gene: Latretium_26 Start: 25982, Stop: 25785, Start Num: 61
Candidate Starts for Latretium_26:
(51, 26024), (Start: 61 @25982 has 346 MA's), (Start: 64 @25964 has 4 MA's), (72, 25886), (77, 25823),

Gene: Leozinho_26 Start: 25135, Stop: 24938, Start Num: 61
Candidate Starts for Leozinho_26:
(Start: 61 @25135 has 346 MA's), (Start: 64 @25117 has 4 MA's), (72, 25039), (77, 24976),

Gene: Leperchaun_25 Start: 25363, Stop: 25166, Start Num: 61
Candidate Starts for Leperchaun_25:
(Start: 61 @25363 has 346 MA's), (Start: 64 @25345 has 4 MA's), (72, 25267), (77, 25204),

Gene: LilMoolah_25 Start: 25581, Stop: 25384, Start Num: 61
Candidate Starts for LilMoolah_25:
(Start: 61 @25581 has 346 MA's), (Start: 64 @25563 has 4 MA's), (72, 25485), (77, 25422),

Gene: Lilac_32 Start: 28647, Stop: 28462, Start Num: 61
Candidate Starts for Lilac_32:
(Start: 61 @28647 has 346 MA's), (67, 28599), (71, 28575), (72, 28563), (77, 28503),

Gene: Lilizi_32 Start: 28855, Stop: 28670, Start Num: 61
Candidate Starts for Lilizi_32:
(Start: 61 @28855 has 346 MA's), (67, 28807), (71, 28783), (72, 28771), (77, 28711),

Gene: Lilpickle_29 Start: 28357, Stop: 28172, Start Num: 61
Candidate Starts for Lilpickle_29:
(Start: 61 @28357 has 346 MA's), (67, 28309), (71, 28285), (72, 28273), (77, 28213),

Gene: LittleE_46 Start: 38863, Stop: 38672, Start Num: 61
Candidate Starts for LittleE_46:
(12, 39121), (13, 39109), (14, 39100), (15, 39088), (18, 39061), (21, 39046), (24, 39034), (25, 39031), (27, 39022), (29, 39019), (30, 39016), (Start: 61 @38863 has 346 MA's), (66, 38803), (67, 38794), (69, 38782), (74, 38746),

Gene: LittleShirley_26 Start: 25229, Stop: 25032, Start Num: 61
Candidate Starts for LittleShirley_26:
(Start: 61 @25229 has 346 MA's), (Start: 64 @25211 has 4 MA's), (72, 25133), (77, 25070),

Gene: Lizziana_25 Start: 25456, Stop: 25259, Start Num: 61
Candidate Starts for Lizziana_25:
(Start: 61 @25456 has 346 MA's), (Start: 64 @25438 has 4 MA's), (72, 25360), (77, 25297),

Gene: Llama_44 Start: 32756, Stop: 32562, Start Num: 61
Candidate Starts for Llama_44:
(Start: 57 @32774 has 3 MA's), (Start: 61 @32756 has 346 MA's), (62, 32750), (Start: 63 @32747 has 1 MA's), (67, 32687), (77, 32591), (78, 32570),

Gene: Llama_25 Start: 25512, Stop: 25312, Start Num: 61
Candidate Starts for Llama_25:

(37, 25644), (39, 25638), (41, 25620), (45, 25578), (46, 25575), (49, 25569), (53, 25545), (Start: 61 @25512 has 346 MA's), (Start: 64 @25494 has 4 MA's), (72, 25416), (77, 25353),

Gene: Llij_25 Start: 25277, Stop: 25080, Start Num: 61
Candidate Starts for Llij_25:
(Start: 61 @25277 has 346 MA's), (Start: 64 @25259 has 4 MA's), (72, 25181), (77, 25118),

Gene: Lorde_26 Start: 25113, Stop: 24916, Start Num: 61
Candidate Starts for Lorde_26:
(Start: 61 @25113 has 346 MA's), (Start: 64 @25095 has 4 MA's), (72, 25017), (77, 24954),

Gene: Lucia_26 Start: 25397, Stop: 25200, Start Num: 61
Candidate Starts for Lucia_26:
(Start: 61 @25397 has 346 MA's), (Start: 64 @25379 has 4 MA's), (72, 25301), (77, 25238),

Gene: Lucky2013_40 Start: 34873, Stop: 34676, Start Num: 61
Candidate Starts for Lucky2013_40:
(50, 34915), (Start: 57 @34891 has 3 MA's), (Start: 61 @34873 has 346 MA's), (Start: 64 @34855 has 4 MA's), (72, 34777),

Gene: LunaBlu_26 Start: 25542, Stop: 25318, Start Num: 54
Candidate Starts for LunaBlu_26:
(Start: 54 @25542 has 1 MA's), (Start: 61 @25515 has 346 MA's), (Start: 64 @25497 has 4 MA's), (72, 25419), (77, 25356),

Gene: LunaStella_25 Start: 25485, Stop: 25285, Start Num: 59
Candidate Starts for LunaStella_25:
(Start: 59 @25485 has 3 MA's), (73, 25371),

Gene: MISSy_29 Start: 28662, Stop: 28477, Start Num: 61
Candidate Starts for MISSy_29:
(Start: 61 @28662 has 346 MA's), (67, 28614), (71, 28590), (72, 28578), (77, 28518),

Gene: MPhalcon_29 Start: 28656, Stop: 28471, Start Num: 61
Candidate Starts for MPhalcon_29:
(Start: 61 @28656 has 346 MA's), (67, 28608), (71, 28584), (72, 28572), (77, 28512),

Gene: MadamMonkfish_30 Start: 28568, Stop: 28383, Start Num: 61
Candidate Starts for MadamMonkfish_30:
(Start: 61 @28568 has 346 MA's), (67, 28520), (71, 28496), (72, 28484), (77, 28424),

Gene: Mahavrat_25 Start: 25267, Stop: 25067, Start Num: 61
Candidate Starts for Mahavrat_25:
(Start: 54 @25294 has 1 MA's), (Start: 61 @25267 has 346 MA's), (Start: 64 @25249 has 4 MA's), (72, 25171), (77, 25108),

Gene: Manda_31 Start: 29635, Stop: 29450, Start Num: 61
Candidate Starts for Manda_31:
(Start: 61 @29635 has 346 MA's), (67, 29587), (71, 29563), (72, 29551), (77, 29491),

Gene: Mandlovu_25 Start: 25490, Stop: 25293, Start Num: 61
Candidate Starts for Mandlovu_25:
(Start: 61 @25490 has 346 MA's), (Start: 64 @25472 has 4 MA's), (72, 25394), (77, 25331),

Gene: Mantra_25 Start: 25389, Stop: 25192, Start Num: 61
Candidate Starts for Mantra_25:
(Start: 61 @25389 has 346 MA's), (Start: 64 @25371 has 4 MA's), (72, 25293), (77, 25230),

Gene: Maravista_25 Start: 25238, Stop: 25041, Start Num: 61
Candidate Starts for Maravista_25:
(Start: 61 @25238 has 346 MA's), (Start: 64 @25220 has 4 MA's), (72, 25142), (77, 25079),

Gene: Marker_26 Start: 25142, Stop: 24945, Start Num: 61
Candidate Starts for Marker_26:
(Start: 61 @25142 has 346 MA's), (Start: 64 @25124 has 4 MA's), (72, 25046), (77, 24983),

Gene: Marshmallow_30 Start: 29148, Stop: 28972, Start Num: 61
Candidate Starts for Marshmallow_30:
(Start: 61 @29148 has 346 MA's), (71, 29076), (72, 29064), (77, 29004),

Gene: Martik_25 Start: 25483, Stop: 25286, Start Num: 61
Candidate Starts for Martik_25:
(Start: 61 @25483 has 346 MA's), (Start: 64 @25465 has 4 MA's), (72, 25387), (77, 25324),

Gene: Mattes_25 Start: 25447, Stop: 25250, Start Num: 61
Candidate Starts for Mattes_25:
(Start: 61 @25447 has 346 MA's), (Start: 64 @25429 has 4 MA's), (72, 25351), (77, 25288),

Gene: Maxxinista_31 Start: 28617, Stop: 28432, Start Num: 61
Candidate Starts for Maxxinista_31:
(Start: 61 @28617 has 346 MA's), (67, 28569), (71, 28545), (72, 28533), (77, 28473),

Gene: Medindi_25 Start: 25289, Stop: 25092, Start Num: 61
Candidate Starts for Medindi_25:
(Start: 61 @25289 has 346 MA's), (Start: 64 @25271 has 4 MA's), (72, 25193), (77, 25130),

Gene: Melissauren88_25 Start: 25475, Stop: 25278, Start Num: 61
Candidate Starts for Melissauren88_25:
(Start: 61 @25475 has 346 MA's), (Start: 64 @25457 has 4 MA's), (72, 25379), (77, 25316),

Gene: MiaZeal_40 Start: 34557, Stop: 34360, Start Num: 61
Candidate Starts for MiaZeal_40:
(50, 34599), (Start: 57 @34575 has 3 MA's), (Start: 61 @34557 has 346 MA's), (Start: 64 @34539 has 4 MA's), (72, 34461),

Gene: MilleniumForce_26 Start: 26251, Stop: 26060, Start Num: 61
Candidate Starts for MilleniumForce_26:
(Start: 61 @26251 has 346 MA's), (66, 26191), (69, 26170), (71, 26158), (74, 26134), (77, 26086),

Gene: Mindy_30 Start: 28928, Stop: 28752, Start Num: 61
Candidate Starts for Mindy_30:
(Start: 61 @28928 has 346 MA's), (67, 28880), (71, 28856), (72, 28844), (77, 28784),

Gene: Minerva_46 Start: 39217, Stop: 39020, Start Num: 61
Candidate Starts for Minerva_46:
(Start: 61 @39217 has 346 MA's), (Start: 64 @39199 has 4 MA's), (72, 39121), (77, 39058),

Gene: MinionDave_26 Start: 25673, Stop: 25482, Start Num: 61
Candidate Starts for MinionDave_26:
(Start: 61 @25673 has 346 MA's), (66, 25613), (69, 25592), (71, 25580), (74, 25556), (77, 25508),

Gene: Miniwave_30 Start: 29347, Stop: 29162, Start Num: 61
Candidate Starts for Miniwave_30:
(Start: 61 @29347 has 346 MA's), (67, 29299), (71, 29275), (72, 29263), (77, 29203),

Gene: Minnie_26 Start: 25990, Stop: 25793, Start Num: 61
Candidate Starts for Minnie_26:
(Start: 61 @25990 has 346 MA's), (Start: 64 @25972 has 4 MA's), (72, 25894), (77, 25831),

Gene: Misfit_30 Start: 29237, Stop: 29052, Start Num: 61
Candidate Starts for Misfit_30:
(Start: 61 @29237 has 346 MA's), (67, 29189), (71, 29165), (72, 29153), (77, 29093),

Gene: Misha28_26 Start: 25163, Stop: 24966, Start Num: 61
Candidate Starts for Misha28_26:
(Start: 61 @25163 has 346 MA's), (Start: 64 @25145 has 4 MA's), (72, 25067), (77, 25004),

Gene: MisterCuddles_25 Start: 25258, Stop: 25067, Start Num: 61
Candidate Starts for MisterCuddles_25:
(Start: 61 @25258 has 346 MA's), (66, 25198), (69, 25177), (71, 25165), (74, 25141), (77, 25093),

Gene: Modragons_25 Start: 25356, Stop: 25156, Start Num: 61
Candidate Starts for Modragons_25:
(50, 25398), (Start: 61 @25356 has 346 MA's), (Start: 64 @25338 has 4 MA's), (72, 25260), (77,
25197),

Gene: Modragons_43 Start: 32602, Stop: 32408, Start Num: 61
Candidate Starts for Modragons_43:
(Start: 57 @32620 has 3 MA's), (Start: 61 @32602 has 346 MA's), (62, 32596), (Start: 63 @32593 has
1 MA's), (67, 32533), (77, 32437), (78, 32416),

Gene: Moldemort_31 Start: 28892, Stop: 28707, Start Num: 61
Candidate Starts for Moldemort_31:
(Start: 61 @28892 has 346 MA's), (67, 28844), (71, 28820), (72, 28808), (77, 28748),

Gene: MollyToe_30 Start: 29321, Stop: 29136, Start Num: 61
Candidate Starts for MollyToe_30:
(Start: 61 @29321 has 346 MA's), (67, 29273), (71, 29249), (72, 29237), (77, 29177),

Gene: MooMoo_22 Start: 24041, Stop: 23844, Start Num: 61
Candidate Starts for MooMoo_22:
(Start: 61 @24041 has 346 MA's), (Start: 64 @24023 has 4 MA's), (72, 23945), (77, 23882),

Gene: Moonbeam_26 Start: 25942, Stop: 25745, Start Num: 61
Candidate Starts for Moonbeam_26:
(Start: 61 @25942 has 346 MA's), (Start: 64 @25924 has 4 MA's), (72, 25846), (77, 25783),

Gene: Mosby_29 Start: 28654, Stop: 28469, Start Num: 61
Candidate Starts for Mosby_29:

(Start: 61 @28654 has 346 MA's), (67, 28606), (71, 28582), (72, 28570), (77, 28510),

Gene: Mova_26 Start: 25143, Stop: 24946, Start Num: 61
Candidate Starts for Mova_26:
(Start: 61 @25143 has 346 MA's), (Start: 64 @25125 has 4 MA's), (72, 25047), (77, 24984),

Gene: Mozy_26 Start: 25352, Stop: 25155, Start Num: 61
Candidate Starts for Mozy_26:
(Start: 61 @25352 has 346 MA's), (Start: 64 @25334 has 4 MA's), (72, 25256), (77, 25193),

Gene: MulchExplorer_28 Start: 26414, Stop: 26217, Start Num: 61
Candidate Starts for MulchExplorer_28:
(Start: 54 @26441 has 1 MA's), (Start: 61 @26414 has 346 MA's), (Start: 64 @26396 has 4 MA's), (72, 26318), (77, 26255),

Gene: Murica_29 Start: 29134, Stop: 28949, Start Num: 61
Candidate Starts for Murica_29:
(Start: 61 @29134 has 346 MA's), (67, 29086), (71, 29062), (72, 29050), (77, 28990),

Gene: Murphy_31 Start: 29129, Stop: 28944, Start Num: 61
Candidate Starts for Murphy_31:
(Start: 61 @29129 has 346 MA's), (67, 29081), (71, 29057), (72, 29045), (77, 28985),

Gene: Mutaforma13_25 Start: 25488, Stop: 25297, Start Num: 61
Candidate Starts for Mutaforma13_25:
(Start: 61 @25488 has 346 MA's), (66, 25428), (69, 25407), (71, 25395), (74, 25371), (77, 25323),

Gene: Mwanjiwa_25 Start: 25410, Stop: 25222, Start Num: 61
Candidate Starts for Mwanjiwa_25:
(1, 26067), (2, 26004), (3, 25998), (4, 25947), (5, 25935), (7, 25860), (8, 25854), (9, 25746), (10, 25722), (16, 25629), (20, 25593), (23, 25584), (32, 25551), (34, 25548), (38, 25536), (40, 25530), (42, 25512), (Start: 43 @25479 has 1 MA's), (52, 25449), (Start: 54 @25437 has 1 MA's), (Start: 61 @25410 has 346 MA's), (71, 25329),

Gene: Myrale_30 Start: 29013, Stop: 28837, Start Num: 61
Candidate Starts for Myrale_30:
(Start: 61 @29013 has 346 MA's), (71, 28941), (72, 28929), (77, 28869),

Gene: Nala_30 Start: 29168, Stop: 28983, Start Num: 61
Candidate Starts for Nala_30:
(Start: 61 @29168 has 346 MA's), (67, 29120), (71, 29096), (72, 29084), (77, 29024),

Gene: Nebkiss_29 Start: 27833, Stop: 27636, Start Num: 61
Candidate Starts for Nebkiss_29:
(Start: 61 @27833 has 346 MA's), (Start: 64 @27815 has 4 MA's), (72, 27737), (77, 27674),

Gene: NelitzaMV_30 Start: 29218, Stop: 29042, Start Num: 61
Candidate Starts for NelitzaMV_30:
(Start: 61 @29218 has 346 MA's), (71, 29146), (72, 29134), (77, 29074),

Gene: NewHope4_27 Start: 25493, Stop: 25296, Start Num: 61
Candidate Starts for NewHope4_27:
(Start: 61 @25493 has 346 MA's), (Start: 64 @25475 has 4 MA's), (72, 25397), (77, 25334),

Gene: Nibley_35 Start: 33385, Stop: 33191, Start Num: 61
Candidate Starts for Nibley_35:
(Start: 61 @33385 has 346 MA's), (67, 33316), (69, 33304), (71, 33292), (74, 33268), (77, 33220),

Gene: Nimbo_25 Start: 25295, Stop: 25098, Start Num: 61
Candidate Starts for Nimbo_25:
(Start: 61 @25295 has 346 MA's), (Start: 64 @25277 has 4 MA's), (72, 25199), (77, 25136),

Gene: Nimrod_30 Start: 29392, Stop: 29207, Start Num: 61
Candidate Starts for Nimrod_30:
(Start: 61 @29392 has 346 MA's), (67, 29344), (71, 29320), (72, 29308), (77, 29248),

Gene: Nitzel_26 Start: 26024, Stop: 25827, Start Num: 61
Candidate Starts for Nitzel_26:
(Start: 61 @26024 has 346 MA's), (Start: 64 @26006 has 4 MA's), (72, 25928), (77, 25865),

Gene: Nivrat_25 Start: 25455, Stop: 25258, Start Num: 61
Candidate Starts for Nivrat_25:
(Start: 61 @25455 has 346 MA's), (Start: 64 @25437 has 4 MA's), (72, 25359), (77, 25296),

Gene: NoSleep_31 Start: 28889, Stop: 28704, Start Num: 61
Candidate Starts for NoSleep_31:
(Start: 61 @28889 has 346 MA's), (67, 28841), (71, 28817), (72, 28805), (77, 28745),

Gene: NonchalantPear_30 Start: 28842, Stop: 28657, Start Num: 61
Candidate Starts for NonchalantPear_30:
(Start: 61 @28842 has 346 MA's), (67, 28794), (71, 28770), (72, 28758), (77, 28698),

Gene: NormanBulbieJr_25 Start: 25470, Stop: 25273, Start Num: 61
Candidate Starts for NormanBulbieJr_25:
(Start: 61 @25470 has 346 MA's), (Start: 64 @25452 has 4 MA's), (72, 25374), (77, 25311),

Gene: Ochi17_42 Start: 32209, Stop: 32015, Start Num: 61
Candidate Starts for Ochi17_42:
(Start: 57 @32227 has 3 MA's), (Start: 61 @32209 has 346 MA's), (62, 32203), (Start: 63 @32200 has 1 MA's), (67, 32140), (77, 32044), (78, 32023),

Gene: OfUltron_44 Start: 32758, Stop: 32564, Start Num: 61
Candidate Starts for OfUltron_44:
(Start: 57 @32776 has 3 MA's), (Start: 61 @32758 has 346 MA's), (62, 32752), (Start: 63 @32749 has 1 MA's), (67, 32689), (77, 32593), (78, 32572),

Gene: OfUltron_25 Start: 25512, Stop: 25312, Start Num: 61
Candidate Starts for OfUltron_25:
(50, 25554), (Start: 61 @25512 has 346 MA's), (Start: 64 @25494 has 4 MA's), (72, 25416), (77, 25353),

Gene: Oksu_44 Start: 32602, Stop: 32408, Start Num: 61
Candidate Starts for Oksu_44:
(Start: 57 @32620 has 3 MA's), (Start: 61 @32602 has 346 MA's), (62, 32596), (Start: 63 @32593 has 1 MA's), (67, 32533), (77, 32437), (78, 32416),

Gene: Oksu_26 Start: 25357, Stop: 25157, Start Num: 61
Candidate Starts for Oksu_26:
(37, 25489), (39, 25483), (41, 25465), (45, 25423), (46, 25420), (49, 25414), (53, 25390), (Start: 61 @25357 has 346 MA's), (Start: 64 @25339 has 4 MA's), (72, 25261), (77, 25198),

Gene: OldBen_25 Start: 25253, Stop: 25062, Start Num: 61
Candidate Starts for OldBen_25:
(Start: 61 @25253 has 346 MA's), (66, 25193), (69, 25172), (71, 25160), (74, 25136), (77, 25088),

Gene: OlympiaSaint_25 Start: 25670, Stop: 25473, Start Num: 61
Candidate Starts for OlympiaSaint_25:
(Start: 61 @25670 has 346 MA's), (Start: 64 @25652 has 4 MA's), (72, 25574), (77, 25511),

Gene: Optimus_44 Start: 38666, Stop: 38475, Start Num: 61
Candidate Starts for Optimus_44:
(26, 38831), (32, 38810), (33, 38807), (38, 38795), (40, 38789), (42, 38771), (Start: 61 @38666 has 346 MA's), (66, 38606), (67, 38597), (69, 38585), (74, 38549),

Gene: OrionPax_31 Start: 28895, Stop: 28710, Start Num: 61
Candidate Starts for OrionPax_31:
(Start: 61 @28895 has 346 MA's), (67, 28847), (71, 28823), (72, 28811), (77, 28751),

Gene: Ovechkin_25 Start: 25447, Stop: 25250, Start Num: 61
Candidate Starts for Ovechkin_25:
(Start: 61 @25447 has 346 MA's), (Start: 64 @25429 has 4 MA's), (72, 25351), (77, 25288),

Gene: OwlsT2W_27 Start: 25741, Stop: 25544, Start Num: 61
Candidate Starts for OwlsT2W_27:
(Start: 61 @25741 has 346 MA's), (Start: 64 @25723 has 4 MA's), (72, 25645), (77, 25582),

Gene: PHappiness_25 Start: 25269, Stop: 25072, Start Num: 61
Candidate Starts for PHappiness_25:
(Start: 61 @25269 has 346 MA's), (Start: 64 @25251 has 4 MA's), (72, 25173), (77, 25110),

Gene: PMC_25 Start: 25259, Stop: 25080, Start Num: 64
Candidate Starts for PMC_25:
(Start: 61 @25277 has 346 MA's), (Start: 64 @25259 has 4 MA's), (72, 25181), (77, 25118),

Gene: Pacc40_25 Start: 25459, Stop: 25262, Start Num: 61
Candidate Starts for Pacc40_25:
(Start: 61 @25459 has 346 MA's), (Start: 64 @25441 has 4 MA's), (72, 25363), (77, 25300),

Gene: PaddyBaddy_31 Start: 28905, Stop: 28720, Start Num: 61
Candidate Starts for PaddyBaddy_31:
(Start: 61 @28905 has 346 MA's), (67, 28857), (71, 28833), (72, 28821), (77, 28761),

Gene: Palpatine_30 Start: 29164, Stop: 28979, Start Num: 61
Candidate Starts for Palpatine_30:
(Start: 61 @29164 has 346 MA's), (67, 29116), (71, 29092), (72, 29080), (77, 29020),

Gene: Paperbeatsrock_32 Start: 30130, Stop: 29945, Start Num: 61
Candidate Starts for Paperbeatsrock_32:
(Start: 61 @30130 has 346 MA's), (67, 30082), (71, 30058), (72, 30046), (77, 29986),

Gene: Pat3_29 Start: 27876, Stop: 27691, Start Num: 61
Candidate Starts for Pat3_29:
(Start: 61 @27876 has 346 MA's), (67, 27828), (71, 27804), (72, 27792), (77, 27732),

Gene: Peridot_27 Start: 25103, Stop: 24906, Start Num: 61
Candidate Starts for Peridot_27:
(Start: 61 @25103 has 346 MA's), (Start: 64 @25085 has 4 MA's), (72, 25007), (77, 24944),

Gene: Petra64142_32 Start: 29610, Stop: 29425, Start Num: 61
Candidate Starts for Petra64142_32:
(Start: 61 @29610 has 346 MA's), (67, 29562), (71, 29538), (72, 29526), (77, 29466),

Gene: Phalconet_25 Start: 25366, Stop: 25169, Start Num: 61
Candidate Starts for Phalconet_25:
(Start: 61 @25366 has 346 MA's), (Start: 64 @25348 has 4 MA's), (72, 25270), (77, 25207),

Gene: Phanphagia_22 Start: 24447, Stop: 24247, Start Num: 61
Candidate Starts for Phanphagia_22:
(Start: 61 @24447 has 346 MA's), (67, 24378), (69, 24366), (71, 24354), (74, 24330),

Gene: Pharsalus_31 Start: 29930, Stop: 29745, Start Num: 61
Candidate Starts for Pharsalus_31:
(Start: 61 @29930 has 346 MA's), (67, 29882), (71, 29858), (72, 29846), (77, 29786),

Gene: Phasih_26 Start: 25833, Stop: 25636, Start Num: 61
Candidate Starts for Phasih_26:
(Start: 61 @25833 has 346 MA's), (Start: 64 @25815 has 4 MA's), (72, 25737), (77, 25674),

Gene: PhatBacter_30 Start: 29178, Stop: 28993, Start Num: 61
Candidate Starts for PhatBacter_30:
(Start: 61 @29178 has 346 MA's), (67, 29130), (71, 29106), (72, 29094), (77, 29034),

Gene: Phatniss_26 Start: 25794, Stop: 25597, Start Num: 61
Candidate Starts for Phatniss_26:
(Start: 61 @25794 has 346 MA's), (Start: 64 @25776 has 4 MA's), (72, 25698), (77, 25635),

Gene: Phaux_29 Start: 29176, Stop: 28991, Start Num: 61
Candidate Starts for Phaux_29:
(Start: 61 @29176 has 346 MA's), (67, 29128), (71, 29104), (72, 29092), (77, 29032),

Gene: PhesterPhotato_25 Start: 25291, Stop: 25100, Start Num: 61
Candidate Starts for PhesterPhotato_25:
(16, 25513), (20, 25477), (23, 25468), (32, 25435), (33, 25432), (38, 25420), (40, 25414), (42, 25396),
(Start: 61 @25291 has 346 MA's), (66, 25231), (67, 25222), (69, 25210), (74, 25174),

Gene: Philus_25 Start: 25293, Stop: 25096, Start Num: 61
Candidate Starts for Philus_25:
(Start: 61 @25293 has 346 MA's), (Start: 64 @25275 has 4 MA's), (72, 25197), (77, 25134),

Gene: PhlipPhlop_25 Start: 25362, Stop: 25165, Start Num: 61
Candidate Starts for PhlipPhlop_25:
(Start: 61 @25362 has 346 MA's), (Start: 64 @25344 has 4 MA's), (72, 25266), (77, 25203),

Gene: Phrux_30 Start: 28891, Stop: 28706, Start Num: 61
Candidate Starts for Phrux_30:
(Start: 61 @28891 has 346 MA's), (67, 28843), (71, 28819), (72, 28807), (77, 28747),

Gene: Piper2020_27 Start: 25887, Stop: 25690, Start Num: 61
Candidate Starts for Piper2020_27:
(Start: 54 @25914 has 1 MA's), (Start: 61 @25887 has 346 MA's), (Start: 64 @25869 has 4 MA's), (72, 25791), (77, 25728),

Gene: Plumbus_26 Start: 25121, Stop: 24924, Start Num: 61
Candidate Starts for Plumbus_26:
(Start: 61 @25121 has 346 MA's), (Start: 64 @25103 has 4 MA's), (72, 25025), (77, 24962),

Gene: Policronamos_30 Start: 29177, Stop: 29001, Start Num: 61
Candidate Starts for Policronamos_30:
(Start: 61 @29177 has 346 MA's), (71, 29105), (72, 29093), (77, 29033),

Gene: Polka14_26 Start: 25830, Stop: 25633, Start Num: 61
Candidate Starts for Polka14_26:
(Start: 61 @25830 has 346 MA's), (Start: 64 @25812 has 4 MA's), (72, 25734), (77, 25671),

Gene: Polo2Bam_29 Start: 25475, Stop: 25287, Start Num: 61
Candidate Starts for Polo2Bam_29:
(12, 25730), (13, 25718), (14, 25709), (15, 25697), (18, 25670), (21, 25655), (24, 25643), (25, 25640), (27, 25631), (29, 25628), (30, 25625), (Start: 43 @25544 has 1 MA's), (52, 25514), (Start: 54 @25502 has 1 MA's), (Start: 61 @25475 has 346 MA's), (71, 25394),

Gene: PopTart_25 Start: 25487, Stop: 25296, Start Num: 61
Candidate Starts for PopTart_25:
(Start: 61 @25487 has 346 MA's), (66, 25427), (69, 25406), (71, 25394), (74, 25370), (77, 25322),

Gene: Porcelain_39 Start: 34557, Stop: 34360, Start Num: 61
Candidate Starts for Porcelain_39:
(50, 34599), (Start: 57 @34575 has 3 MA's), (Start: 61 @34557 has 346 MA's), (Start: 64 @34539 has 4 MA's), (72, 34461),

Gene: Porky_30 Start: 28987, Stop: 28802, Start Num: 61
Candidate Starts for Porky_30:
(Start: 61 @28987 has 346 MA's), (67, 28939), (71, 28915), (72, 28903), (77, 28843),

Gene: Priscilla_25 Start: 25484, Stop: 25287, Start Num: 61
Candidate Starts for Priscilla_25:
(Start: 61 @25484 has 346 MA's), (Start: 64 @25466 has 4 MA's), (72, 25388), (77, 25325),

Gene: Ptowny_31 Start: 28532, Stop: 28347, Start Num: 61
Candidate Starts for Ptowny_31:
(Start: 61 @28532 has 346 MA's), (67, 28484), (71, 28460), (72, 28448), (77, 28388),

Gene: Pumpkin_32 Start: 29227, Stop: 29042, Start Num: 61
Candidate Starts for Pumpkin_32:
(Start: 61 @29227 has 346 MA's), (67, 29179), (71, 29155), (72, 29143), (77, 29083),

Gene: Quallification_31 Start: 29356, Stop: 29171, Start Num: 61
Candidate Starts for Quallification_31:
(Start: 61 @29356 has 346 MA's), (67, 29308), (71, 29284), (72, 29272), (77, 29212),

Gene: QuickMath_26 Start: 26638, Stop: 26441, Start Num: 61
Candidate Starts for QuickMath_26:
(Start: 54 @26665 has 1 MA's), (Start: 61 @26638 has 346 MA's), (Start: 64 @26620 has 4 MA's), (72, 26542), (77, 26479),

Gene: Quico_26 Start: 25114, Stop: 24917, Start Num: 61
Candidate Starts for Quico_26:
(Start: 61 @25114 has 346 MA's), (Start: 64 @25096 has 4 MA's), (72, 25018), (77, 24955),

Gene: Radiance_25 Start: 25392, Stop: 25195, Start Num: 61
Candidate Starts for Radiance_25:
(Start: 61 @25392 has 346 MA's), (Start: 64 @25374 has 4 MA's), (72, 25296), (77, 25233),

Gene: Rakim_31 Start: 29256, Stop: 29080, Start Num: 61
Candidate Starts for Rakim_31:
(Start: 61 @29256 has 346 MA's), (67, 29208), (71, 29184), (72, 29172), (77, 29112),

Gene: Ramsey_26 Start: 25323, Stop: 25126, Start Num: 61
Candidate Starts for Ramsey_26:
(Start: 61 @25323 has 346 MA's), (Start: 64 @25305 has 4 MA's), (72, 25227), (77, 25164),

Gene: RedBird_25 Start: 25230, Stop: 25039, Start Num: 61
Candidate Starts for RedBird_25:
(12, 25488), (13, 25476), (14, 25467), (15, 25455), (18, 25428), (21, 25413), (24, 25401), (25, 25398), (27, 25389), (29, 25386), (30, 25383), (Start: 61 @25230 has 346 MA's), (66, 25170), (67, 25161), (69, 25149), (74, 25113),

Gene: Renaud18_25 Start: 25497, Stop: 25315, Start Num: 61
Candidate Starts for Renaud18_25:
(12, 25752), (13, 25740), (14, 25731), (15, 25719), (18, 25692), (24, 25665), (25, 25662), (27, 25653), (30, 25647), (Start: 43 @25566 has 1 MA's), (52, 25536), (Start: 54 @25524 has 1 MA's), (Start: 61 @25497 has 346 MA's), (71, 25419),

Gene: Renaud18_44 Start: 32207, Stop: 32013, Start Num: 61
Candidate Starts for Renaud18_44:
(Start: 57 @32225 has 3 MA's), (Start: 61 @32207 has 346 MA's), (62, 32201), (Start: 63 @32198 has 1 MA's), (67, 32138), (77, 32042), (78, 32021),

Gene: Reynauld_62 Start: 54221, Stop: 54039, Start Num: 64
Candidate Starts for Reynauld_62:
(55, 54263), (Start: 64 @54221 has 4 MA's), (65, 54191), (68, 54164), (70, 54149),

Gene: Rialto_27 Start: 25920, Stop: 25723, Start Num: 61
Candidate Starts for Rialto_27:
(Start: 61 @25920 has 346 MA's), (Start: 64 @25902 has 4 MA's), (72, 25824), (77, 25761),

Gene: Rimmer_29 Start: 28716, Stop: 28531, Start Num: 61
Candidate Starts for Rimmer_29:
(Start: 61 @28716 has 346 MA's), (67, 28668), (71, 28644), (72, 28632), (77, 28572),

Gene: Rita_25 Start: 25290, Stop: 25090, Start Num: 61
Candidate Starts for Rita_25:
(Start: 54 @25317 has 1 MA's), (Start: 61 @25290 has 346 MA's), (Start: 64 @25272 has 4 MA's), (72, 25194), (77, 25131),

Gene: RitaG_25 Start: 25514, Stop: 25317, Start Num: 61
Candidate Starts for RitaG_25:
(Start: 61 @25514 has 346 MA's), (Start: 64 @25496 has 4 MA's), (72, 25418), (77, 25355),

Gene: RiverMonster_30 Start: 28905, Stop: 28720, Start Num: 61
Candidate Starts for RiverMonster_30:
(Start: 61 @28905 has 346 MA's), (67, 28857), (71, 28833), (72, 28821), (77, 28761),

Gene: Rockne_25 Start: 25277, Stop: 25080, Start Num: 61
Candidate Starts for Rockne_25:
(Start: 61 @25277 has 346 MA's), (Start: 64 @25259 has 4 MA's), (72, 25181), (77, 25118),

Gene: RockyHorror_26 Start: 25148, Stop: 24951, Start Num: 61
Candidate Starts for RockyHorror_26:
(Start: 61 @25148 has 346 MA's), (Start: 64 @25130 has 4 MA's), (72, 25052), (77, 24989),

Gene: Royals2015_25 Start: 25370, Stop: 25173, Start Num: 61
Candidate Starts for Royals2015_25:
(Start: 61 @25370 has 346 MA's), (Start: 64 @25352 has 4 MA's), (72, 25274), (77, 25211),

Gene: Ruby_25 Start: 25258, Stop: 25067, Start Num: 61
Candidate Starts for Ruby_25:
(Start: 61 @25258 has 346 MA's), (66, 25198), (69, 25177), (71, 25165), (74, 25141), (77, 25093),

Gene: SG4_25 Start: 25598, Stop: 25401, Start Num: 61
Candidate Starts for SG4_25:
(Start: 61 @25598 has 346 MA's), (Start: 64 @25580 has 4 MA's), (72, 25502), (77, 25439),

Gene: Saal_25 Start: 25271, Stop: 25074, Start Num: 61
Candidate Starts for Saal_25:
(Start: 61 @25271 has 346 MA's), (Start: 64 @25253 has 4 MA's), (72, 25175), (77, 25112),

Gene: Sabbb_26 Start: 25617, Stop: 25420, Start Num: 61
Candidate Starts for Sabbb_26:
(Start: 61 @25617 has 346 MA's), (Start: 64 @25599 has 4 MA's), (72, 25521), (77, 25458),

Gene: Saints25_31 Start: 28808, Stop: 28623, Start Num: 61
Candidate Starts for Saints25_31:
(Start: 61 @28808 has 346 MA's), (67, 28760), (71, 28736), (72, 28724), (77, 28664),

Gene: Sandalphon_26 Start: 26004, Stop: 25807, Start Num: 61
Candidate Starts for Sandalphon_26:
(50, 26046), (Start: 61 @26004 has 346 MA's), (Start: 64 @25986 has 4 MA's), (72, 25908), (77, 25845),

Gene: Sassafras_25 Start: 25414, Stop: 25223, Start Num: 61
Candidate Starts for Sassafras_25:

(Start: 61 @25414 has 346 MA's), (66, 25354), (69, 25333), (71, 25321), (74, 25297), (77, 25249),

Gene: Sassay_29 Start: 28654, Stop: 28469, Start Num: 61
Candidate Starts for Sassay_29:
(Start: 61 @28654 has 346 MA's), (67, 28606), (71, 28582), (72, 28570), (77, 28510),

Gene: SassyB_25 Start: 25487, Stop: 25296, Start Num: 61
Candidate Starts for SassyB_25:
(Start: 61 @25487 has 346 MA's), (66, 25427), (69, 25406), (71, 25394), (74, 25370), (77, 25322),

Gene: Scottish_26 Start: 26592, Stop: 26395, Start Num: 61
Candidate Starts for Scottish_26:
(Start: 61 @26592 has 346 MA's), (Start: 64 @26574 has 4 MA's), (72, 26496), (77, 26433),

Gene: Seabastian_25 Start: 25512, Stop: 25312, Start Num: 61
Candidate Starts for Seabastian_25:
(50, 25554), (Start: 61 @25512 has 346 MA's), (Start: 64 @25494 has 4 MA's), (72, 25416), (77, 25353),

Gene: Seabastian_44 Start: 32758, Stop: 32564, Start Num: 61
Candidate Starts for Seabastian_44:
(Start: 57 @32776 has 3 MA's), (Start: 61 @32758 has 346 MA's), (62, 32752), (Start: 63 @32749 has 1 MA's), (67, 32689), (77, 32593), (78, 32572),

Gene: Seagreen_26 Start: 25284, Stop: 25093, Start Num: 61
Candidate Starts for Seagreen_26:
(Start: 61 @25284 has 346 MA's), (66, 25224), (69, 25203), (71, 25191), (74, 25167), (77, 25119),

Gene: Shaboozey_34 Start: 32872, Stop: 32678, Start Num: 61
Candidate Starts for Shaboozey_34:
(Start: 61 @32872 has 346 MA's), (67, 32803), (69, 32791), (71, 32779), (74, 32755), (77, 32707),

Gene: ShamWow_30 Start: 29150, Stop: 28974, Start Num: 61
Candidate Starts for ShamWow_30:
(Start: 61 @29150 has 346 MA's), (67, 29102), (71, 29078), (72, 29066), (77, 29006),

Gene: Shauna1_22 Start: 24450, Stop: 24250, Start Num: 61
Candidate Starts for Shauna1_22:
(Start: 61 @24450 has 346 MA's), (67, 24381), (69, 24369), (71, 24357), (74, 24333),

Gene: ShereKhan_32 Start: 30133, Stop: 29948, Start Num: 61
Candidate Starts for ShereKhan_32:
(Start: 61 @30133 has 346 MA's), (67, 30085), (71, 30061), (72, 30049), (77, 29989),

Gene: ShiLan_25 Start: 25482, Stop: 25285, Start Num: 61
Candidate Starts for ShiLan_25:
(Start: 61 @25482 has 346 MA's), (Start: 64 @25464 has 4 MA's), (72, 25386), (77, 25323),

Gene: ShowerHandel_25 Start: 25483, Stop: 25286, Start Num: 61
Candidate Starts for ShowerHandel_25:
(Start: 61 @25483 has 346 MA's), (Start: 64 @25465 has 4 MA's), (72, 25387), (77, 25324),

Gene: SiSi_25 Start: 25282, Stop: 25085, Start Num: 61

Candidate Starts for SiSi_25:
(Start: 61 @25282 has 346 MA's), (Start: 64 @25264 has 4 MA's), (72, 25186), (77, 25123),

Gene: SilverChicken_31 Start: 25152, Stop: 24955, Start Num: 61
Candidate Starts for SilverChicken_31:
(Start: 61 @25152 has 346 MA's), (Start: 64 @25134 has 4 MA's), (72, 25056), (77, 24993),

Gene: Simpliphy_31 Start: 28895, Stop: 28710, Start Num: 61
Candidate Starts for Simpliphy_31:
(Start: 61 @28895 has 346 MA's), (67, 28847), (71, 28823), (72, 28811), (77, 28751),

Gene: SimranZ1_26 Start: 25126, Stop: 24914, Start Num: 59
Candidate Starts for SimranZ1_26:
(Start: 59 @25126 has 3 MA's), (73, 25012),

Gene: SirDuracell_29 Start: 27815, Stop: 27639, Start Num: 61
Candidate Starts for SirDuracell_29:
(Start: 61 @27815 has 346 MA's), (71, 27743), (72, 27731), (77, 27671),

Gene: Slim_26 Start: 25200, Stop: 25003, Start Num: 61
Candidate Starts for Slim_26:
(Start: 61 @25200 has 346 MA's), (Start: 64 @25182 has 4 MA's), (72, 25104), (77, 25041),

Gene: SophKB_30 Start: 29149, Stop: 28964, Start Num: 61
Candidate Starts for SophKB_30:
(Start: 61 @29149 has 346 MA's), (67, 29101), (71, 29077), (72, 29065), (77, 29005),

Gene: Sotrice96_30 Start: 29104, Stop: 28928, Start Num: 61
Candidate Starts for Sotrice96_30:
(Start: 61 @29104 has 346 MA's), (71, 29032), (72, 29020), (77, 28960),

Gene: Soul22_29 Start: 24826, Stop: 24644, Start Num: 61
Candidate Starts for Soul22_29:
(12, 25081), (13, 25069), (14, 25060), (15, 25048), (18, 25021), (21, 25006), (24, 24994), (25, 24991), (27, 24982), (30, 24976), (31, 24967), (Start: 43 @24895 has 1 MA's), (52, 24865), (Start: 54 @24853 has 1 MA's), (Start: 61 @24826 has 346 MA's),

Gene: Sparkdehlily_25 Start: 25317, Stop: 25120, Start Num: 61
Candidate Starts for Sparkdehlily_25:
(Start: 61 @25317 has 346 MA's), (Start: 64 @25299 has 4 MA's), (72, 25221), (77, 25158),

Gene: Spikelee_26 Start: 25274, Stop: 25077, Start Num: 61
Candidate Starts for Spikelee_26:
(Start: 61 @25274 has 346 MA's), (Start: 64 @25256 has 4 MA's), (72, 25178), (77, 25115),

Gene: Spoonbill_25 Start: 25481, Stop: 25284, Start Num: 61
Candidate Starts for Spoonbill_25:
(Start: 61 @25481 has 346 MA's), (Start: 64 @25463 has 4 MA's), (72, 25385), (77, 25322),

Gene: Squint_39 Start: 34676, Stop: 34479, Start Num: 61
Candidate Starts for Squint_39:
(50, 34718), (Start: 57 @34694 has 3 MA's), (Start: 61 @34676 has 346 MA's), (Start: 64 @34658 has 4 MA's), (72, 34580),

Gene: Stank_33 Start: 29656, Stop: 29471, Start Num: 61
Candidate Starts for Stank_33:
(Start: 61 @29656 has 346 MA's), (67, 29608), (71, 29584), (72, 29572), (77, 29512),

Gene: Stap_26 Start: 25452, Stop: 25264, Start Num: 61
Candidate Starts for Stap_26:
(12, 25707), (14, 25686), (15, 25674), (18, 25647), (21, 25632), (24, 25620), (27, 25608), (29, 25605), (30, 25602), (Start: 43 @25521 has 1 MA's), (52, 25491), (Start: 54 @25479 has 1 MA's), (Start: 61 @25452 has 346 MA's), (71, 25371),

Gene: Starcevich_26 Start: 25146, Stop: 24907, Start Num: 48
Candidate Starts for Starcevich_26:
(22, 25269), (23, 25263), (47, 25149), (Start: 48 @25146 has 1 MA's), (52, 25128), (Start: 54 @25116 has 1 MA's), (Start: 61 @25089 has 346 MA's),

Gene: Stark_31 Start: 28908, Stop: 28723, Start Num: 61
Candidate Starts for Stark_31:
(Start: 61 @28908 has 346 MA's), (67, 28860), (71, 28836), (72, 28824), (77, 28764),

Gene: StellaBean_30 Start: 29149, Stop: 28964, Start Num: 61
Candidate Starts for StellaBean_30:
(Start: 61 @29149 has 346 MA's), (67, 29101), (71, 29077), (72, 29065), (77, 29005),

Gene: StolenFromERC_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for StolenFromERC_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: StormChicken_30 Start: 29324, Stop: 29139, Start Num: 61
Candidate Starts for StormChicken_30:
(Start: 61 @29324 has 346 MA's), (67, 29276), (71, 29252), (72, 29240), (77, 29180),

Gene: Strokeseat_25 Start: 25547, Stop: 25350, Start Num: 61
Candidate Starts for Strokeseat_25:
(Start: 61 @25547 has 346 MA's), (Start: 64 @25529 has 4 MA's), (72, 25451), (77, 25388),

Gene: Superphikiman_40 Start: 34757, Stop: 34542, Start Num: 57
Candidate Starts for Superphikiman_40:
(50, 34781), (Start: 57 @34757 has 3 MA's), (Start: 61 @34739 has 346 MA's), (Start: 64 @34721 has 4 MA's), (72, 34643),

Gene: SwagPigglett_25 Start: 25294, Stop: 25097, Start Num: 61
Candidate Starts for SwagPigglett_25:
(Start: 61 @25294 has 346 MA's), (Start: 64 @25276 has 4 MA's), (72, 25198), (77, 25135),

Gene: TChen_23 Start: 25486, Stop: 25286, Start Num: 59
Candidate Starts for TChen_23:
(Start: 59 @25486 has 3 MA's), (73, 25372),

Gene: TDanisky_25 Start: 25317, Stop: 25120, Start Num: 61
Candidate Starts for TDanisky_25:
(Start: 61 @25317 has 346 MA's), (Start: 64 @25299 has 4 MA's), (72, 25221), (77, 25158),

Gene: Taj_25 Start: 25474, Stop: 25283, Start Num: 61
Candidate Starts for Taj_25:
(Start: 61 @25474 has 346 MA's), (66, 25414), (69, 25393), (71, 25381), (74, 25357), (77, 25309),

Gene: Taj_43 Start: 32148, Stop: 31936, Start Num: 57
Candidate Starts for Taj_43:
(Start: 57 @32148 has 3 MA's), (Start: 61 @32130 has 346 MA's), (62, 32124), (Start: 63 @32121 has 1 MA's), (67, 32061), (77, 31965), (78, 31944),

Gene: Tarkin_32 Start: 30139, Stop: 29954, Start Num: 61
Candidate Starts for Tarkin_32:
(Start: 61 @30139 has 346 MA's), (67, 30091), (71, 30067), (72, 30055), (77, 29995),

Gene: TeamEdward_30 Start: 29321, Stop: 29136, Start Num: 61
Candidate Starts for TeamEdward_30:
(Start: 61 @29321 has 346 MA's), (67, 29273), (71, 29249), (72, 29237), (77, 29177),

Gene: TeardropMSU_29 Start: 29050, Stop: 28874, Start Num: 61
Candidate Starts for TeardropMSU_29:
(Start: 61 @29050 has 346 MA's), (67, 29002), (71, 28978), (72, 28966), (77, 28906),

Gene: Teaspoon_31 Start: 29103, Stop: 28918, Start Num: 61
Candidate Starts for Teaspoon_31:
(Start: 61 @29103 has 346 MA's), (67, 29055), (71, 29031), (72, 29019), (77, 28959),

Gene: Terminus_30 Start: 29237, Stop: 29052, Start Num: 61
Candidate Starts for Terminus_30:
(Start: 61 @29237 has 346 MA's), (67, 29189), (71, 29165), (72, 29153), (77, 29093),

Gene: Thimble_30 Start: 28100, Stop: 27915, Start Num: 61
Candidate Starts for Thimble_30:
(Start: 61 @28100 has 346 MA's), (67, 28052), (71, 28028), (72, 28016), (77, 27956),

Gene: Thresher_31 Start: 29904, Stop: 29719, Start Num: 61
Candidate Starts for Thresher_31:
(Start: 61 @29904 has 346 MA's), (67, 29856), (71, 29832), (72, 29820), (77, 29760),

Gene: Tomaszewski_29 Start: 28747, Stop: 28562, Start Num: 61
Candidate Starts for Tomaszewski_29:
(Start: 61 @28747 has 346 MA's), (67, 28699), (71, 28675), (72, 28663), (77, 28603),

Gene: TootsiePop_26 Start: 25163, Stop: 24966, Start Num: 61
Candidate Starts for TootsiePop_26:
(Start: 61 @25163 has 346 MA's), (Start: 64 @25145 has 4 MA's), (72, 25067), (77, 25004),

Gene: Tootsieroll_26 Start: 25286, Stop: 25089, Start Num: 61
Candidate Starts for Tootsieroll_26:
(Start: 61 @25286 has 346 MA's), (Start: 64 @25268 has 4 MA's), (72, 25190), (77, 25127),

Gene: Topiatin_27 Start: 25971, Stop: 25780, Start Num: 61
Candidate Starts for Topiatin_27:
(13, 26217), (14, 26208), (15, 26196), (18, 26169), (21, 26154), (24, 26142), (25, 26139), (27, 26130), (29, 26127), (30, 26124), (Start: 61 @25971 has 346 MA's), (66, 25911), (67, 25902), (69, 25890), (74,

25854),

Gene: Totinger_26 Start: 25199, Stop: 25002, Start Num: 61
Candidate Starts for Totinger_26:
(Start: 61 @25199 has 346 MA's), (Start: 64 @25181 has 4 MA's), (72, 25103), (77, 25040),

Gene: Toto_30 Start: 29150, Stop: 28974, Start Num: 61
Candidate Starts for Toto_30:
(Start: 61 @29150 has 346 MA's), (67, 29102), (71, 29078), (72, 29066), (77, 29006),

Gene: Traaww1_28 Start: 28788, Stop: 28612, Start Num: 61
Candidate Starts for Traaww1_28:
(Start: 61 @28788 has 346 MA's), (67, 28740), (71, 28716), (72, 28704), (77, 28644),

Gene: Tuco_31 Start: 29658, Stop: 29482, Start Num: 61
Candidate Starts for Tuco_31:
(Start: 61 @29658 has 346 MA's), (71, 29586), (72, 29574), (77, 29514),

Gene: Tweety_26 Start: 25492, Stop: 25301, Start Num: 61
Candidate Starts for Tweety_26:
(Start: 61 @25492 has 346 MA's), (66, 25432), (69, 25411), (71, 25399), (74, 25375), (77, 25327),

Gene: Ukulele_30 Start: 28908, Stop: 28723, Start Num: 61
Candidate Starts for Ukulele_30:
(Start: 61 @28908 has 346 MA's), (67, 28860), (71, 28836), (72, 28824), (77, 28764),

Gene: UncleRicky_28 Start: 26610, Stop: 26413, Start Num: 61
Candidate Starts for UncleRicky_28:
(Start: 61 @26610 has 346 MA's), (Start: 64 @26592 has 4 MA's), (72, 26514), (77, 26451),

Gene: VRedHorse_25 Start: 25488, Stop: 25291, Start Num: 61
Candidate Starts for VRedHorse_25:
(Start: 61 @25488 has 346 MA's), (Start: 64 @25470 has 4 MA's), (72, 25392), (77, 25329),

Gene: Veteran_25 Start: 25296, Stop: 25099, Start Num: 61
Candidate Starts for Veteran_25:
(Start: 61 @25296 has 346 MA's), (Start: 64 @25278 has 4 MA's), (72, 25200), (77, 25137),

Gene: Violac_26 Start: 25993, Stop: 25796, Start Num: 61
Candidate Starts for Violac_26:
(Start: 61 @25993 has 346 MA's), (Start: 64 @25975 has 4 MA's), (72, 25897), (77, 25834),

Gene: Vivum_25 Start: 25217, Stop: 25026, Start Num: 61
Candidate Starts for Vivum_25:
(26, 25382), (32, 25361), (33, 25358), (38, 25346), (40, 25340), (42, 25322), (Start: 61 @25217 has 346 MA's), (66, 25157), (67, 25148), (69, 25136), (74, 25100),

Gene: Wachhund_25 Start: 25465, Stop: 25274, Start Num: 61
Candidate Starts for Wachhund_25:
(Start: 61 @25465 has 346 MA's), (66, 25405), (69, 25384), (71, 25372), (74, 25348), (77, 25300),

Gene: Wanda_46 Start: 37698, Stop: 37507, Start Num: 61
Candidate Starts for Wanda_46:

(34, 37839), (Start: 61 @37698 has 346 MA's), (66, 37638), (67, 37629), (69, 37617), (74, 37581),

Gene: Wee_26 Start: 26013, Stop: 25822, Start Num: 61
Candidate Starts for Wee_26:
(Start: 61 @26013 has 346 MA's), (66, 25953), (69, 25932), (71, 25920), (74, 25896), (77, 25848),

Gene: Wee_44 Start: 32704, Stop: 32510, Start Num: 61
Candidate Starts for Wee_44:
(Start: 57 @32722 has 3 MA's), (Start: 61 @32704 has 346 MA's), (62, 32698), (Start: 63 @32695 has 1 MA's), (67, 32635), (77, 32539), (78, 32518),

Gene: Whatsapiecost_25 Start: 25487, Stop: 25296, Start Num: 61
Candidate Starts for Whatsapiecost_25:
(Start: 61 @25487 has 346 MA's), (66, 25427), (69, 25406), (71, 25394), (74, 25370), (77, 25322),

Gene: Whouxphf_25 Start: 25538, Stop: 25338, Start Num: 61
Candidate Starts for Whouxphf_25:
(Start: 61 @25538 has 346 MA's), (Start: 64 @25520 has 4 MA's), (72, 25442), (77, 25379),

Gene: Wiggin_33 Start: 29654, Stop: 29469, Start Num: 61
Candidate Starts for Wiggin_33:
(Start: 61 @29654 has 346 MA's), (67, 29606), (71, 29582), (72, 29570), (77, 29510),

Gene: WillSterrel_26 Start: 26663, Stop: 26472, Start Num: 61
Candidate Starts for WillSterrel_26:
(26, 26828), (32, 26807), (33, 26804), (38, 26792), (40, 26786), (42, 26768), (Start: 61 @26663 has 346 MA's), (66, 26603), (67, 26594), (69, 26582), (74, 26546),

Gene: Willez_29 Start: 28654, Stop: 28469, Start Num: 61
Candidate Starts for Willez_29:
(Start: 61 @28654 has 346 MA's), (67, 28606), (71, 28582), (72, 28570), (77, 28510),

Gene: Xandras_32 Start: 29140, Stop: 28955, Start Num: 61
Candidate Starts for Xandras_32:
(Start: 61 @29140 has 346 MA's), (67, 29092), (71, 29068), (72, 29056), (77, 28996),

Gene: YassJohnny_31 Start: 29665, Stop: 29480, Start Num: 61
Candidate Starts for YassJohnny_31:
(Start: 61 @29665 has 346 MA's), (67, 29617), (71, 29593), (72, 29581), (77, 29521),

Gene: Yorick_25 Start: 25481, Stop: 25284, Start Num: 61
Candidate Starts for Yorick_25:
(Start: 61 @25481 has 346 MA's), (Start: 64 @25463 has 4 MA's), (72, 25385), (77, 25322),

Gene: Youngblood_30 Start: 29310, Stop: 29125, Start Num: 61
Candidate Starts for Youngblood_30:
(Start: 61 @29310 has 346 MA's), (67, 29262), (71, 29238), (72, 29226), (77, 29166),

Gene: Zapner_30 Start: 25519, Stop: 25337, Start Num: 61
Candidate Starts for Zapner_30:
(20, 25702), (22, 25699), (23, 25693), (28, 25675), (Start: 43 @25588 has 1 MA's), (52, 25558), (Start: 54 @25546 has 1 MA's), (Start: 61 @25519 has 346 MA's), (71, 25441),

Gene: Zerg_25 Start: 25257, Stop: 25060, Start Num: 61
Candidate Starts for Zerg_25:
(Start: 61 @25257 has 346 MA's), (Start: 64 @25239 has 4 MA's), (72, 25161), (77, 25098),

Gene: Zizzle_25 Start: 25425, Stop: 25228, Start Num: 61
Candidate Starts for Zizzle_25:
(Start: 61 @25425 has 346 MA's), (Start: 64 @25407 has 4 MA's), (72, 25329), (77, 25266),

Gene: xkcd_31 Start: 29319, Stop: 29134, Start Num: 61
Candidate Starts for xkcd_31:
(Start: 61 @29319 has 346 MA's), (67, 29271), (71, 29247), (72, 29235), (77, 29175),