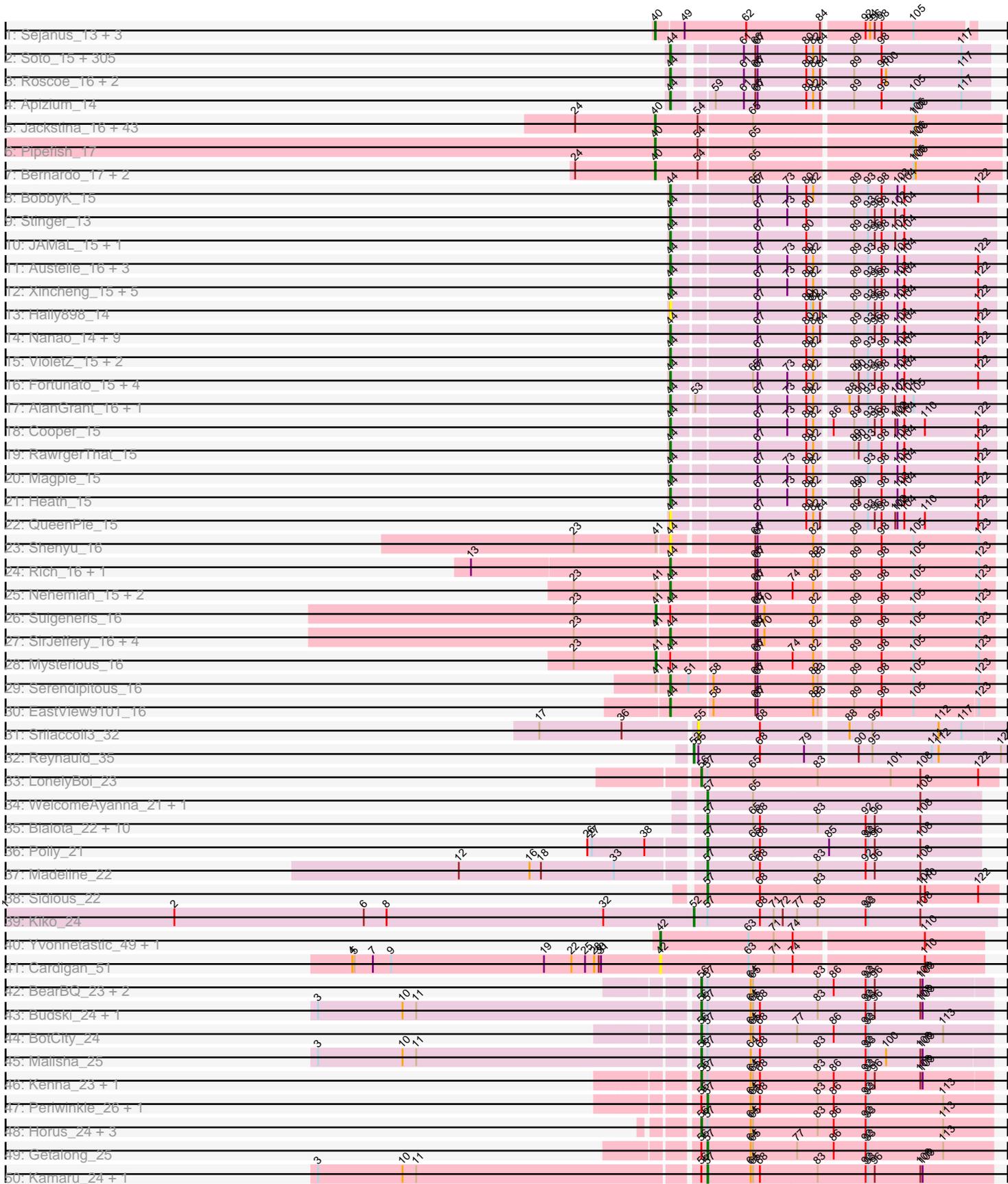
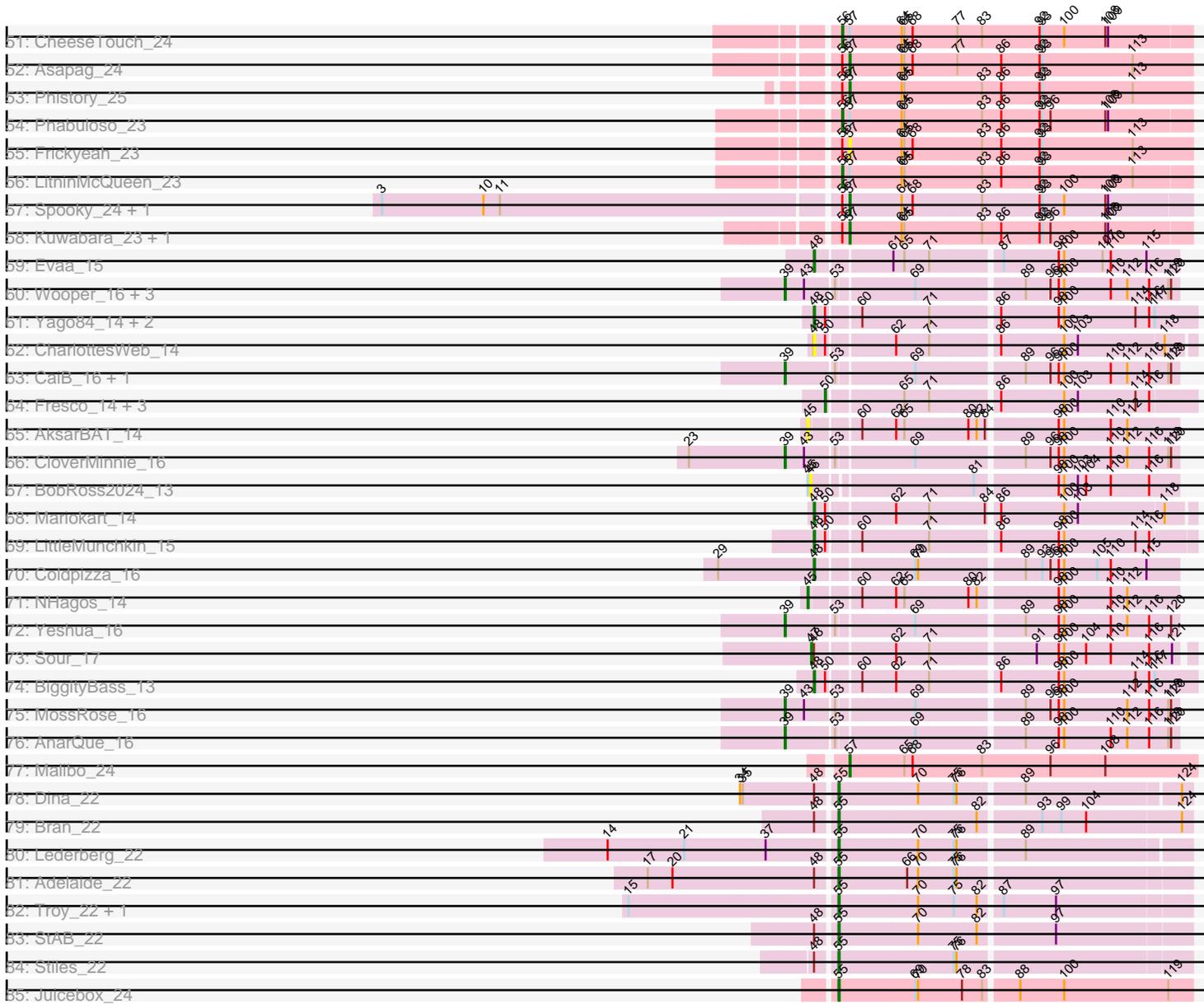


Pham 283365





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 283365 Report

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

Pham number 283365 has 505 members, 62 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_13, Mao1_12, Dori_13, Mask_13
- Track 2 : Soto_15, TallGrassMM_15, HSavage_15, Zaider_16, Simielle_14, Puhltonio_15, HenryJackson_14, Gyarad_0015, Struggle_14, Cornobble_14, Fringe_15, Ashraf_14, Vaishali24_14, Numberten_15, JacAttac_15, Orfeu_14, Carthage_14, Phamished_15, OliverWalter_15, Andre_15, Doddsville_15, OSmaximus_15, Mesmerelda_14, Dione_14, Gwilliam_15, Phergie_14, Yoshand_15, Etaye_15, Virgeve_14, Toni_14, Vivaldi_15, Plmatters_15, Melc17_15, Mcshane_14, Banjo_14, Hocus_14, Khan1_15, Karn_14, Nacho_0015, Hartsy_15, CheetO_15, JakeO_14, Piglet_0014, Spartan300_15, Chuni_14, CamL_15, Morty_15, Antonia_14, DelRivs_14, Mosaic_14, Serpentine_0015, ABU_15, BlueHusk_15, SallyH_15, Vista_15, KlimbOn_15, Hamish_15, Larson_16, ShadowBud_15, Suffolk_15, Mikota_15, PhenghisKhan_14, Rimu_15, ThreeOh3D2_15, Grand2040_14, Sophia_14, Badfish_15, FugateOSU_14, ImtiyazSitla_14, PhatLouie_15, Kikipoo_15, Jesabah_15, Solosis_14, Vortex_15, Mutante_14, Keitherie_15, PhrankReynolds_14, Crownjwl_15, Roy17_15, Serendipity_15, Aelin_14, BlackBerry_14, Maskar_14, Inchworm_15, Labeouficaum_14, CharlieGBrown_14, Placalicious_14, MrPhizzler_15, BatteryCK_14, Swish_15, Dati_15, Flake_16, Haimas_15, Gwennie1_15, DirtJuice_15, DonSanchon_14, Oline_14, DuchessDung_14, Riverton_14, Jillium_14, Nicole21_15, Surely_15, Hetaeria_15, Chorkpop_15, Slatt_15, Phleuron_14, Derpp_14, Pinkman_14, KLucky39_15, Burr_14, Selr12_15, Chipette_16, DaddyDaniels_15, Valjean_15, Pipsqueak_15, Virapocalypse_15, UncleHowie_15, Childish_14, Basato_16, MiniBoss_15, Ricotta_14, Soile_15, Mulan_14, Prickles_15, Duggie_14, Aonishiki_15, MichaelPhcott_14, Gophee_15, Schueller_14, AngelCake_15, Iridessa_15, Horchata_15, PallasAthena_15, RedRaider89_15, Magic8_15, Mana_14, Morgushi_15, True_14, Zonia_15, MitKao_15, Timmi_14, Maru_14, FleetyMac_14, Olak_14, Thunderbird_14, JangoPhett_15, PinheadLarry_15, DoesntMatter_15, Sigman_15, Durga_15, BlackStallion_15, SDcharge11_15, MelsMeow_14, Riggan_15, Bishoperium_14, Mecca_14, Mesh1_15, UAch1_15, AbsoluteMadLad_14, Fang_15, Happabalu_15, Quisquiliae_15, TomBombadil_15, Wallhey_14, Cher_14, Craff_15, Phipps_15, Kwadwo_14, Waterdiva_15, Manad_14, Weher20_15, PhrodoBaggins_14, Gareth_14, Kwksand96_14, Chute_14, JDog_14, GreenChile_15, Beaglebox_14, Mag7_14, Bluephacebaby_14, FriarPreacher_15, Cannibal_15, Scoot17C_15, Lasso_15, Sheila_15, Lopsy_14, LostAndPhound_14, Tooj_15, Schadenfreude_14, Freya_14, Haleema_14, Scrick_14, ProfessorX_15, Lulwa_15, Pacifista_14, Dingo_15, Lulumae_14, Chaelin_14, AltPhacts_15, Kailash_15, Newman_15, BoogieWoogie_14, Orion_15, Olive_15, Xavier_14,

Charles1_15, Emiris_15, Podrick_15, PG1_15, Megatron_15, Cobra_15, QueenBeane_15, Telesworld_14, Giraffe_15, LeeLot_15, Omniscient_15, Robyn_14, Murdoc_15, DoOn_16, KingTut_14, Vaticameos_15, IsaacEli_15, ElvisPhasley_15, Potter_14, Chunky_15, Pops_15, Held_15, Longacauda_14, FremontTroll_15, Lego3393_15, CampRoach_15, Kimbrough_15, Lumine_14, Oosterbaan_15, Iridoclysis_15, Roliet_15, Harvey_15, Tomlarah_15, Legolas_14, Nyala_14, Matalotodo_15, GeneCoco_15, LemonSlice_15, TyrionL_14, Anderson_15, Phareon_15, Colbert_15, Pherdinand_15, Chah_15, Triad_15, SilverBell_15, Inverness_15, Caspiboi_14, Hertubise_15, Jiminy_14, Squid_15, Fozzie_14, Jiraiya_14, Samaymay_15, Zelda_15, HogWash_14, EmpTee_15, Daffy_15, SirBeauregard_14, MRabcd_14, Adriana_15, HighStump_14, Thora_15, Windsor_14, LasagnaCat_15, Altwerkus_14, Frankicide_15, Eremos_15, LuckyMarjie_14, Cornbread_14, Daka_15, Katniss_15, Dice_14, Orwigg_14, FluffyNinja_15, Buckeye_15, RedMaple_14, Trypo_15, Aleia_15, TooFast2Furius_16, Brilliant_15, Kloppinator_15, Veritas_14, Skippy_15, Plata_15, Coletti_15, Usavi_15, Kahve_14, LeiMonet_15, Swiphy_15, Phunky_15, Squiggle_15, YouGoGlencoco_15, Eugenia_15, Cosmolli16_14, ShiVal_15, KingVeVeVe_15, Megamind20_15, Lehmann_15, PhatCats2014_15, Nathan_15

- Track 3 : Roscoe_16, Boehler_15, SassyCat97_14
- Track 4 : Apizium_14
- Track 5 : Jackstina_16, SynergyX_17, GlenHope_18, RagingRooster_17, Chentzyk_16, Audrey_17, MmasiCarm_17, Compostia_18, Yinz_17, Ben11_16, Neos5_17, Chalmers_17, Corofin_17, Briakila_17, Heathcliff_17, Baloo_17, Devonte_17, Kronus_16, Halfpint_16, Daisy_17, Athena_18, RomaT_17, Nozo_17, ChaChing_17, Gervas_17, Philly_16, Rita1961_17, Morty007_17, Glubnar_17, Mortcellus_16, Casbah_16, Kamiyu_17, Marley1013_17, OrangeOswald_17, Phlyer_17, Tydolla_17, LestyG_17, TinyTerror_17, Chandler_17, Abinghost_17, Gadget_18, Deenasa_17, Obutu_17, Phayeta_17
- Track 6 : Pipefish_17
- Track 7 : Bernardo_17, Yahalom_17, Akoma_17
- Track 8 : BobbyK_15
- Track 9 : Stinger_13
- Track 10 : JAMaL_15, Nigel_13
- Track 11 : Austelle_16, Hydro_15, Fanaw_15, Hangman_15
- Track 12 : Xincheng_15, JaguarMi_16, JoyceMaria_15, Mithril_15, Lolalove_15, BrownCNA_16
- Track 13 : Hally898_14
- Track 14 : Nanao_14, GinPorsche_14, Lambano_14, ChrisnMich_14, Epah_14, Poster_14, Antihero_14, LittleDigger_14, Renkei_14, Ahwei_14
- Track 15 : VioletZ_15, Waleliano_15, Zemanar_16
- Track 16 : Fortunato_15, Apex_15, Mudslide_15, Frederick_15, Prince_15
- Track 17 : AlanGrant_16, Vincenzo_16
- Track 18 : Cooper_15
- Track 19 : RawrgerThat_15
- Track 20 : Magpie_15
- Track 21 : Heath_15
- Track 22 : QueenPie_15
- Track 23 : Shenyu_16
- Track 24 : Rich_16, Bae_16
- Track 25 : Nehemiah_15, Phelemich_16, Reprobate_16
- Track 26 : Suigeneris_16
- Track 27 : SirJeffery_16, Donny_16, Reccee_17, Acadian_16, Rita130_16
- Track 28 : Mysterious_16

- Track 29 : Serendipitous_16
- Track 30 : EastView9101_16
- Track 31 : Srilaccoli3_32
- Track 32 : Reynauld_35
- Track 33 : LonelyBoi_23
- Track 34 : WelcomeAyanna_21, ThankyouJordi_21
- Track 35 : Bialota_22, Nymphadora_22, Madavieve_22, Bosnia_22, BatStarr_22, TimTam_22, Ohgeesy_22, Eviarto_22, Zirinka_22, Herod_22, Hugley_22
- Track 36 : Polly_21
- Track 37 : Madeline_22
- Track 38 : Sidious_22
- Track 39 : Kiko_24
- Track 40 : Yvonnetastic_49, JonJames_51
- Track 41 : Cardigan_51
- Track 42 : BearBQ_23, MortyNRick_23, Birdsong_23
- Track 43 : Budski_24, Holliday_24
- Track 44 : BotCity_24
- Track 45 : Malisha_25
- Track 46 : Kenna_23, Lutum_24
- Track 47 : Periwinkle_26, ShawBrad_24
- Track 48 : Horus_24, Crater_22, Leroy_24, Apricot_23
- Track 49 : Getalong_25
- Track 50 : Kamaru_24, Whitney_25
- Track 51 : CheeseTouch_24
- Track 52 : Asapag_24
- Track 53 : Phistory_25
- Track 54 : Phabuloso_23
- Track 55 : Frickyeah_23
- Track 56 : LitninMcQueen_23
- Track 57 : Spooky_24, Squiddly_26
- Track 58 : Kuwabara_23, BENtherdunthat_24
- Track 59 : Evaa_15
- Track 60 : Wooper_16, Blackpen_16, MakoManhole_16, FelixTres_16
- Track 61 : Yago84_14, Sisko_14, AnClar_14
- Track 62 : CharlottesWeb_14
- Track 63 : CaiB_16, TraderJ_16
- Track 64 : Fresco_14, Ligma_14, Axumite_14, Shatter_14
- Track 65 : AksarBAT_14
- Track 66 : CloverMinnie_16
- Track 67 : BobRoss2024_13
- Track 68 : Mariokart_14
- Track 69 : LittleMunchkin_15
- Track 70 : Coldpizza_16
- Track 71 : NHagos_14
- Track 72 : Yeshua_16
- Track 73 : Sour_17
- Track 74 : BiggityBass_13
- Track 75 : MossRose_16
- Track 76 : AnarQue_16
- Track 77 : Malibo_24
- Track 78 : Dina_22
- Track 79 : Bran_22
- Track 80 : Lederberg_22

- Track 81 : Adelaide_22
- Track 82 : Troy_22, SamW_22
- Track 83 : StAB_22
- Track 84 : Stiles_22
- Track 85 : Juicebox_24

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

The start number called the most often in the published annotations is 44, it was called in 313 of the 443 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_15, AbsoluteMadLad_14, Acadian_16, Adriana_15, Aelin_14, Ahwei_14, AlanGrant_16, Aleia_15, AltPhacts_15, Altwerkus_14, Anderson_15, Andre_15, AngelCake_15, Antihero_14, Antonia_14, Aonishiki_15, Apex_15, Apizium_14, Ashraf_14, Austelle_16, Badfish_15, Bae_16, Banjo_14, Basato_16, BatteryCK_14, Beaglebox_14, Bishoperium_14, BlackStallion_15, BlacksBerry_14, BlueHusk_15, Bluephacebaby_14, BobbyK_15, Boehler_15, BoogieWoogie_14, Brilliant_15, BrownCNA_16, Buckeye_15, Burr_14, CamL_15, CampRoach_15, Cannibal_15, Carthage_14, Caspiboi_14, Chaelin_14, Chah_15, Charles1_15, CharlieGBrown_14, CheetO_15, Cher_14, Childish_14, Chipette_16, Chorkpop_15, ChrisnMich_14, Chuni_14, Chunky_15, Chute_14, Cobra_15, Colbert_15, Coletti_15, Cooper_15, Cornbread_14, Cornobble_14, Cosmolli16_14, Craff_15, Crownjwl_15, DaddyDaniels_15, Daffy_15, Daka_15, Dati_15, DelRivs_14, Derpp_14, Dice_14, Dingo_15, Dione_14, DirtJuice_15, Doddsville_15, DoesntMatter_15, DolOn_16, DonSanchon_14, Donny_16, DuchessDung_14, Duggie_14, Durga_15, EastView9101_16, ElvisPhasley_15, Emiris_15, EmpTee_15, Epah_14, Eremos_15, Etaye_15, Eugenia_15, Fanaw_15, Fang_15, Flake_16, FleetyMac_14, FluffyNinja_15, Fortunato_15, Fozzie_14, Frankicide_15, Frederick_15, FremontTroll_15, Freya_14, FriarPreacher_15, Fringe_15, FugateOSU_14, Gareth_14, GeneCoco_15, GinPorsche_14, Giraffe_15, Gophee_15, Grand2040_14, GreenChile_15, Gwennie1_15, Gwilliam_15, Gyarad_0015, HSavage_15, Haimas_15, Haleema_14, Hally898_14, Hamish_15, Hangman_15, Happabalu_15, Hartsy_15, Harvey_15, Heath_15, Held_15, HenryJackson_14, Hertubise_15, Hetaeria_15, HighStump_14, Hocus_14, HogWash_14, Horchata_15, Hydro_15, ImtiyazSitla_14, Inchworm_15, Inverness_15, Iridessa_15, Iridoclysis_15, IsaacEli_15, JAMaL_15, JDog_14, JacAttac_15, JaguarMi_16, JakeO_14, JangoPhett_15, Jesabah_15, Jillium_14, Jiminy_14, Jiraiya_14, JoyceMaria_15, KLucky39_15, Kahve_14, Kailash_15, Karn_14, Katniss_15, Keitherie_15, Khan1_15, Kikipoo_15, Kimbrough_15, KingTut_14, KingVeVeVe_15, KlimbOn_15, Kloppinator_15, Kwadwo_14, Kwksand96_14, Labeouficaum_14, Lambano_14, Larson_16, LasagnaCat_15, Lasso_15, LeeLot_15, Lego3393_15, Legolas_14, Lehmann_15, LeiMonet_15, LemonSlice_15, LittleDigger_14, Lolalove_15, Longacauda_14, Lopsy_14, LostAndPhound_14, LuckyMarjie_14, Lulumae_14, Lulwa_15, Lumine_14, MRabcd_14, Mag7_14, Magic8_15, Magpie_15, Mana_14, Manad_14, Maru_14, Maskar_14, Matalotodo_15, Mcshane_14, Mecca_14, Megamind20_15, Megatron_15, Melc17_15, MelsMeow_14, Mesh1_15, Mesmerelda_14, MichaelPhcott_14, Mikota_15, MiniBoss_15, MitKao_15, Mithril_15, Morgushi_15, Morty_15, Mosaic_14, MrPhizzler_15, Mudslide_15, Mulan_14, Murdoc_15, Mutante_14, Nacho_0015, Nanao_14, Nathan_15, Nehemiah_15,

Newman_15, Nicole21_15, Nigel_13, Numberten_15, Nyala_14, OSmaximus_15, Olak_14, Oline_14, Olive_15, OliverWalter_15, Omniscient_15, Oosterbaan_15, Orfeu_14, Orion_15, Orwigg_14, PG1_15, Pacifista_14, PallasAthena_15, Phamished_15, Phareon_15, PhatCats2014_15, PhatLouie_15, Phelemich_16, PhenghisKhan_14, Pherdinand_15, Phergie_14, Phipps_15, Phleuron_14, PhrankReynolds_14, PhrodoBaggins_14, Phunky_15, Piglet_0014, PinheadLarry_15, Pinkman_14, Pipsqueak_15, Placalicious_14, Plata_15, Plmatters_15, Podrick_15, Pops_15, Poster_14, Potter_14, Prickles_15, Prince_15, ProfessorX_15, Puhltonio_15, QueenBeane_15, QueenPie_15, Quisquilliae_15, RawrgerThat_15, Reccee_17, RedMaple_14, RedRaider89_15, Renkei_14, Reprobate_16, Rich_16, Ricotta_14, Riggan_15, Rimu_15, Rita130_16, Riverton_14, Robyn_14, Roliet_15, Roscoe_16, Roy17_15, SDcharge11_15, SallyH_15, Samaymay_15, SassyCat97_14, Schadenfreude_14, Schueller_14, Scoot17C_15, Scrick_14, Selr12_15, Serendipitous_16, Serendipity_15, Serpentine_0015, ShadowBud_15, Sheila_15, Shenyu_16, ShiVal_15, Sigman_15, SilverBell_15, Simielle_14, SirBeauregard_14, SirJeffery_16, Skippy_15, Slatt_15, Soile_15, Solosis_14, Sophia_14, Soto_15, Spartan300_15, Squid_15, Squiggle_15, Stinger_13, Struggle_14, Suffolk_15, Surely_15, Swiphy_15, Swish_15, TallGrassMM_15, Telesworld_14, Thora_15, ThreeOh3D2_15, Thunderbird_14, Timmi_14, TomBombadil_15, Tomlarah_15, Toni_14, TooFast2Furius_16, Tooj_15, Triad_15, True_14, Trypo_15, TyrionL_14, UAch1_15, UncleHowie_15, Usavi_15, Vaishali24_14, Valjean_15, Vaticameos_15, Veritas_14, Vincenzo_16, VioletZ_15, Virapocalypse_15, Virgeve_14, Vista_15, Vivaldi_15, Vortex_15, Waleliano_15, Wallhey_14, Waterdiva_15, Weher20_15, Windsor_14, Xavier_14, Xincheng_15, Yoshand_15, YouGoGlencoco_15, Zaider_16, Zelda_15, Zemanar_16, Zonia_15,

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

- Mysterious_16, Suigeneris_16,

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

- Abinghost_17, Adelaide_22, Akoma_17, AksarBAT_14, AnClar_14, AnarQue_16, Apricot_23, Asapag_24, Athena_18, Audrey_17, Axumite_14, BENtherdunthat_24, Baloo_17, BatStarr_22, BearBQ_23, Ben11_16, Bernardo_17, Bialota_22, BiggityBass_13, Birdsong_23, Blackpen_16, BobRoss2024_13, Bosnia_22, BotCity_24, Bran_22, Briakila_17, Budski_24, CaiB_16, Cardigan_51, Casbah_16, ChaChing_17, Chalmers_17, Chandler_17, CharlottesWeb_14, CheeseTouch_24, Chentzyk_16, CloverMinnie_16, Coldpizza_16, Compostia_18, Corofin_17, Crater_22, Daisy_17, Deenasa_17, Devonte_17, Dina_22, Dori_13, Evaa_15, Eviarto_22, FelixTres_16, Fresco_14, Frickyeah_23, Gadget_18, Gervas_17, Getalong_25, GlenHope_18, Glubnar_17, Halfpint_16, Heathcliff_17, Herod_22, Holliday_24, Horus_24, Hugley_22, Jackstina_16, JonJames_51, Juicebox_24, Kamaru_24, Kamiyu_17, Kenna_23, Kiko_24, Kronus_16, Kuwabara_23, Lederberg_22, Leroy_24, LestyG_17, Ligma_14, LitninMcQueen_23, LittleMunchkin_15, LonelyBoi_23, Lutum_24, Madavieve_22, Madeline_22, MakoManhole_16, Malibo_24, Malisha_25, Mao1_12, Mariokart_14, Marley1013_17, Mask_13, MmasiCarm_17, Mortcellus_16, Morty007_17, MortyNRick_23, MossRose_16, NHagos_14, Neos5_17, Nozo_17, Nymphadora_22, Obutu_17, Ohgeesy_22, OrangeOswald_17, Periwinkle_26, Phabuloso_23, Phayeta_17, Philly_16, Phistory_25, Phlyer_17, Pipefish_17, Polly_21, RagingRooster_17, Reynauld_35, Rita1961_17, RomaT_17, SamW_22, Sejanus_13, Shatter_14, ShawBrad_24, Sidious_22, Sisko_14, Sour_17, Spooky_24, Squiddly_26, Srilaccoli3_32, StAB_22, Stiles_22, SynergyX_17, ThankyouJordi_21, TimTam_22, TinyTerror_17, TraderJ_16, Troy_22, Tydolla_17, WelcomeAyanna_21, Whitney_25,

Wooper_16, Yago84_14, Yahalom_17, Yeshua_16, Yinz_17, Yvonnestic_49, Zirinka_22,

Summary by start number:

Start 39:

- Found in 10 of 505 (2.0%) of genes in pham
- Manual Annotations of this start: 7 of 443
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_16 (DR), Blackpen_16 (DR), CaiB_16 (DR), CloverMinnie_16 (DR), FelixTres_16 (DR), MakoManhole_16 (DR), MossRose_16 (DR), TraderJ_16 (DR), Wooper_16 (DR), Yeshua_16 (DR),

Start 40:

- Found in 52 of 505 (10.3%) of genes in pham
- Manual Annotations of this start: 52 of 443
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abinghost_17 (B3), Akoma_17 (B3), Athena_18 (B3), Audrey_17 (B3), Baloo_17 (B3), Ben11_16 (B3), Bernardo_17 (B3), Briakila_17 (B3), Casbah_16 (B3), ChaChing_17 (B3), Chalmers_17 (B3), Chandler_17 (B3), Chentzyk_16 (B3), Compostia_18 (B3), Corofin_17 (B3), Daisy_17 (B3), Deenasa_17 (B3), Devonte_17 (B3), Dori_13 (AD), Gadget_18 (B3), Gervas_17 (B3), GlenHope_18 (B3), Glubnar_17 (B3), Halfpint_16 (B3), Heathcliff_17 (B3), Jackstina_16 (B3), Kamiyu_17 (B3), Kronus_16 (B3), LestyG_17 (B3), Mao1_12 (AD), Marley1013_17 (B3), Mask_13 (AD), MmasiCarm_17 (B3), Mortcellus_16 (B3), Morty007_17 (B3), Neos5_17 (B3), Nozo_17 (B3), Obutu_17 (B3), OrangeOswald_17 (B3), Phayeta_17 (B3), Philly_16 (B3), Phlyer_17 (B3), Pipefish_17 (B3), RagingRooster_17 (B3), Rita1961_17 (B3), RomaT_17 (B3), Sejanus_13 (AD), SynergyX_17 (B3), TinyTerror_17 (B3), Tydolla_17 (B3), Yahalom_17 (B3), Yinz_17 (B3),

Start 41:

- Found in 12 of 505 (2.4%) of genes in pham
- Manual Annotations of this start: 2 of 443
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Mysterious_16 (B5), Suigeneris_16 (B5),

Start 42:

- Found in 3 of 505 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 443
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan_51 (DD), JonJames_51 (DD), Yvonnestic_49 (DD),

Start 44:

- Found in 365 of 505 (72.3%) of genes in pham
- Manual Annotations of this start: 313 of 443
- Called 99.5% of time when present
- Phage (with cluster) where this start called: ABU_15 (B1), AbsoluteMadLad_14 (B1), Acadian_16 (B5), Adriana_15 (B1), Aelin_14 (B1), Ahwei_14 (B4), AlanGrant_16 (B4), Aleia_15 (B1), AltPhacts_15 (B1), Altwerkus_14 (B1), Anderson_15 (B1), Andre_15 (B1), AngelCake_15 (B1), Antihero_14 (B4), Antonia_14 (B1), Aonishiki_15 (B1), Apex_15 (B4), Apizium_14 (B1), Ashraf_14 (B1), Austelle_16 (B4), Badfish_15

(B1), Bae_16 (B5), Banjo_14 (B1), Basato_16 (B1), BatteryCK_14 (B1), Beaglebox_14 (B1), Bishoperium_14 (B1), BlackStallion_15 (B1), BlacksBerry_14 (B1), BlueHusk_15 (B1), Bluephacebaby_14 (B1), BobbyK_15 (B4), Boehler_15 (B1), BoogieWoogie_14 (B1), Brilliant_15 (B1), BrownCNA_16 (B4), Buckeye_15 (B1), Burr_14 (B1), CamL_15 (B1), CampRoach_15 (B1), Cannibal_15 (B1), Carthage_14 (B1), Caspiboi_14 (B1), Chaelin_14 (B1), Chah_15 (B1), Charles1_15 (B1), CharlieGBrown_14 (B1), CheetO_15 (B1), Cher_14 (B1), Childish_14 (B1), Chipette_16 (B1), Chorkpop_15 (B1), ChrisnMich_14 (B4), Chuni_14 (B1), Chunky_15 (B1), Chute_14 (B1), Cobra_15 (B1), Colbert_15 (B1), Coletti_15 (B1), Cooper_15 (B4), Cornbread_14 (B1), Cornobble_14 (B1), Cosmolli16_14 (B1), Craff_15 (B1), Crownjwl_15 (B1), DaddyDaniels_15 (B1), Daffy_15 (B1), Daka_15 (B1), Dati_15 (B1), DelRivs_14 (B1), Derpp_14 (B1), Dice_14 (B1), Dingo_15 (B1), Dione_14 (B1), DirtJuice_15 (B1), Doddsville_15 (B1), DoesntMatter_15 (B1), DolOn_16 (B1), DonSancho_14 (B1), Donny_16 (B5), DuchessDung_14 (B1), Duggie_14 (B1), Durga_15 (B1), EastView9101_16 (B5), ElvisPhasley_15 (B1), Emiris_15 (B1), EmpTee_15 (B1), Epah_14 (B4), Eremos_15 (B1), Etaye_15 (B1), Eugenia_15 (B1), Fanaw_15 (B4), Fang_15 (B1), Flake_16 (B1), FleetyMac_14 (B1), FluffyNinja_15 (B1), Fortunato_15 (B4), Fozzie_14 (B1), Frankicide_15 (B1), Frederick_15 (B4), FremontTroll_15 (B1), Freya_14 (B1), FriarPreacher_15 (B1), Fringe_15 (B1), FugateOSU_14 (B1), Gareth_14 (B1), GeneCoco_15 (B1), GinPorsche_14 (B4), Giraffe_15 (B1), Gophee_15 (B1), Grand2040_14 (B1), GreenChile_15 (B1), Gwennie1_15 (B1), Gwilliam_15 (B1), Gyrad_0015 (B1), HSavage_15 (B1), Haimas_15 (B1), Haleema_14 (B1), Hally898_14 (B4), Hamish_15 (B1), Hangman_15 (B4), Happabalu_15 (B1), Hartsy_15 (B1), Harvey_15 (B1), Heath_15 (B4), Held_15 (B1), HenryJackson_14 (B1), Hertubise_15 (B1), Hetaeria_15 (B1), HighStump_14 (B1), Hocus_14 (B1), HogWash_14 (B1), Horchata_15 (B1), Hydro_15 (B4), ImtiyazSitla_14 (B1), Inchworm_15 (B1), Inverness_15 (B1), Iridessa_15 (B1), Iridoclysis_15 (B1), IsaacEli_15 (B1), JAMaL_15 (B4), JDog_14 (B1), JacAttac_15 (B1), JaguarMi_16 (B4), JakeO_14 (B1), JangoPhett_15 (B1), Jesabah_15 (B1), Jillium_14 (B1), Jiminy_14 (B1), Jiraiya_14 (B1), JoyceMaria_15 (B4), KLucky39_15 (B1), Kahve_14 (B1), Kailash_15 (B1), Karn_14 (B1), Katniss_15 (B1), Keitherie_15 (B1), Khan1_15 (B1), Kikipoo_15 (B1), Kimbrough_15 (B1), KingTut_14 (B1), KingVeVeVe_15 (B1), KlimbOn_15 (B1), Kloppinator_15 (B1), Kwadwo_14 (B1), Kwksand96_14 (B1), Labeoufcaum_14 (B1), Lambano_14 (B4), Larson_16 (B1), LasagnaCat_15 (B1), Lasso_15 (B1), LeeLot_15 (B1), Lego3393_15 (B1), Legolas_14 (B1), Lehmann_15 (B1), LeiMonet_15 (B1), LemonSlice_15 (B1), LittleDigger_14 (B4), Lolalove_15 (B4), Longacauda_14 (B1), Lopsy_14 (B1), LostAndPhound_14 (B1), LuckyMarjie_14 (B1), Lulumae_14 (B1), Lulwa_15 (B1), Lumine_14 (B1), MRabcd_14 (B1), Mag7_14 (B1), Magic8_15 (B1), Magpie_15 (B4), Mana_14 (B1), Manad_14 (B1), Maru_14 (B1), Maskar_14 (B1), Matalotodo_15 (B1), Mcshane_14 (B1), Mecca_14 (B1), Megamind20_15 (B1), Megatron_15 (B1), Melc17_15 (B1), MelsMeow_14 (B1), Mesh1_15 (B1), Mesmerelda_14 (B1), MichaelPhcott_14 (B1), Mikota_15 (B1), MiniBoss_15 (B1), MitKao_15 (B1), Mithril_15 (B4), Morgushi_15 (B1), Morty_15 (B1), Mosaic_14 (B1), MrPhizzler_15 (B1), Mudslide_15 (B4), Mulan_14 (B1), Murdoc_15 (B1), Mutante_14 (B1), Nacho_0015 (B1), Nanao_14 (B4), Nathan_15 (B1), Nehemiah_15 (B5), Newman_15 (B1), Nicole21_15 (B1), Nigel_13 (B4), Numberten_15 (B1), Nyala_14 (B1), OSmaximus_15 (B1), Olak_14 (B1), Oline_14 (B1), Olive_15 (B1), OliverWalter_15 (B1), Omniscient_15 (B1), Oosterbaan_15 (B1), Orfeu_14 (B1), Orion_15 (B1), Orwigg_14 (B1), PG1_15 (B1), Pacifista_14 (B1), PallasAthena_15 (B1), Phamished_15 (B1), Phareon_15 (B1), PhatCats2014_15 (B1), PhatLouie_15 (B1), Phelemich_16 (B5), PhenghisKhan_14 (B1), Pherdinand_15 (B1), Phergie_14 (B1), Phipps_15 (B1), Phleuron_14 (B1), PhrankReynolds_14 (B1),

PhrodoBaggins_14 (B1), Phunky_15 (B1), Piglet_0014 (B1), PinheadLarry_15 (B1), Pinkman_14 (B1), Pipsqueak_15 (B1), Placalicious_14 (B1), Plata_15 (B1), Plmatters_15 (B1), Podrick_15 (B1), Pops_15 (B1), Poster_14 (B4), Potter_14 (B1), Prickles_15 (B1), Prince_15 (B4), ProfessorX_15 (B1), Puhltonio_15 (B1), QueenBeane_15 (B1), QueenPie_15 (B4), Quisquilliae_15 (B1), RawrgerThat_15 (B4), Reccee_17 (B5), RedMaple_14 (B1), RedRaider89_15 (B1), Renkei_14 (B4), Reprobate_16 (B5), Rich_16 (B5), Ricotta_14 (B1), Riggan_15 (B1), Rimu_15 (B1), Rita130_16 (B5), Riverton_14 (B1), Robyn_14 (B1), Roliet_15 (B1), Roscoe_16 (B1), Roy17_15 (B1), SDcharge11_15 (B1), SallyH_15 (B1), Samaymay_15 (B1), SassyCat97_14 (B1), Schadenfreude_14 (B1), Schueller_14 (B1), Scoot17C_15 (B1), Scrick_14 (B1), Selr12_15 (B1), Serendipitous_16 (B5), Serendipity_15 (B1), Serpentine_0015 (B1), ShadowBud_15 (B1), Sheila_15 (B1), Shenyu_16 (B5), ShiVal_15 (B1), Sigman_15 (B1), SilverBell_15 (B1), Simielle_14 (B1), SirBeauregard_14 (B1), SirJeffery_16 (B5), Skippy_15 (B1), Slatt_15 (B1), Soile_15 (B1), Solosis_14 (B1), Sophia_14 (B1), Soto_15 (B1), Spartan300_15 (B1), Squid_15 (B1), Squiggle_15 (B1), Stinger_13 (B4), Struggle_14 (B1), Suffolk_15 (B1), Surely_15 (B1), Swiphy_15 (B1), Swish_15 (B1), TallGrassMM_15 (B1), Telesworld_14 (B1), Thora_15 (B1), ThreeOh3D2_15 (B1), Thunderbird_14 (B1), Timmi_14 (B1), TomBombadil_15 (B1), Tomlarah_15 (B1), Toni_14 (B1), TooFast2Furius_16 (B1), Tooj_15 (B1), Triad_15 (B1), True_14 (B1), Trypo_15 (B1), TyrionL_14 (B1), UAch1_15 (B1), UncleHowie_15 (B1), Usavi_15 (B1), Vaishali24_14 (B1), Valjean_15 (B1), Vaticameos_15 (B1), Veritas_14 (B1), Vincenzo_16 (B4), VioletZ_15 (B4), Virapocalypse_15 (B1), Virgeve_14 (B1), Vista_15 (B1), Vivaldi_15 (B1), Vortex_15 (B1), Waleliano_15 (B4), Wallhey_14 (B1), Waterdiva_15 (B1), Weher20_15 (B1), Windsor_14 (B1), Xavier_14 (B1), Xincheng_15 (B4), Yoshand_15 (B1), YouGoGlencoco_15 (B1), Zaider_16 (B1), Zelda_15 (B1), Zemanar_16 (B4), Zonia_15 (B1),

Start 45:

- Found in 3 of 505 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 443
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AksarBAT_14 (DR), NHagos_14 (DR),

Start 46:

- Found in 1 of 505 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024_13 (DR),

Start 47:

- Found in 1 of 505 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 443
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sour_17 (DR),

Start 48:

- Found in 15 of 505 (3.0%) of genes in pham
- Manual Annotations of this start: 8 of 443
- Called 60.0% of time when present
- Phage (with cluster) where this start called: AnClar_14 (DR), BiggityBass_13 (DR), CharlottesWeb_14 (DR), Coldpizza_16 (DR), Evaa_15 (DR), LittleMunchkin_15 (DR), Mariokart_14 (DR), Sisko_14 (DR), Yago84_14 (DR),

Start 50:

- Found in 11 of 505 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 443
- Called 36.4% of time when present
- Phage (with cluster) where this start called: Axumite_14 (DR), Fresco_14 (DR), Ligma_14 (DR), Shatter_14 (DR),

Start 52:

- Found in 2 of 505 (0.4%) of genes in pham
- Manual Annotations of this start: 2 of 443
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kiko_24 (DB), Reynauld_35 (CH),

Start 55:

- Found in 11 of 505 (2.2%) of genes in pham
- Manual Annotations of this start: 9 of 443
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Adelaide_22 (EP), Bran_22 (EP), Dina_22 (EP), Juicebox_24 (singleton), Lederberg_22 (EP), SamW_22 (EP), Srilaccoli3_32 (CH), StAB_22 (EP), Stiles_22 (EP), Troy_22 (EP),

Start 56:

- Found in 29 of 505 (5.7%) of genes in pham
- Manual Annotations of this start: 17 of 443
- Called 58.6% of time when present
- Phage (with cluster) where this start called: Apricot_23 (DN3), BearBQ_23 (DN), Birdsong_23 (DN), BotCity_24 (DN), Budski_24 (DN), CheeseTouch_24 (DN1), Crater_22 (DN3), Holliday_24 (DN1), Horus_24 (DN1), Kenna_23 (DN1), Leroy_24 (DN1), LitninMcQueen_23 (DN1), LonelyBoi_23 (CY7), Lutum_24 (DN1), Malisha_25 (DN), MortyNRick_23 (DN), Phabuloso_23 (DN1),

Start 57:

- Found in 47 of 505 (9.3%) of genes in pham
- Manual Annotations of this start: 25 of 443
- Called 61.7% of time when present
- Phage (with cluster) where this start called: Asapag_24 (DN1), BENtherdunthat_24 (DN1), BatStarr_22 (CZ1), Bialota_22 (CZ1), Bosnia_22 (CZ1), Eviarto_22 (CZ1), Frickyeah_23 (DN1), Getalong_25 (DN1), Herod_22 (CZ1), Hugley_22 (CZ1), Kamaru_24 (DN1), Kuwabara_23 (DN4), Madavieve_22 (CZ1), Madeline_22 (CZ1), Malibo_24 (DW), Nymphadora_22 (CZ1), Ohgeesy_22 (CZ), Periwinkle_26 (DN1), Phistory_25 (DN1), Polly_21 (CZ1), ShawBrad_24 (DN1), Sidious_22 (CZ7), Spooky_24 (DN2), Squiddly_26 (DN2), ThankyouJordi_21 (CZ1), TimTam_22 (CZ1), WelcomeAyanna_21 (CZ1), Whitney_25 (DN1), Zirinka_22 (CZ1),

Summary by clusters:

There are 21 clusters represented in this pham: DN, singleton, CH, CY7, AD, DN4, DD, CZ1, DB, CZ7, CZ, DN2, B4, B5, DN1, B1, DN3, B3, DW, DR, EP,

Info for manual annotations of cluster AD:

- Start number 40 was manually annotated 4 times for cluster AD.

Info for manual annotations of cluster B1:

- Start number 44 was manually annotated 280 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 40 was manually annotated 48 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 44 was manually annotated 25 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 41 was manually annotated 2 times for cluster B5.
- Start number 44 was manually annotated 8 times for cluster B5.

Info for manual annotations of cluster CH:

- Start number 52 was manually annotated 1 time for cluster CH.

Info for manual annotations of cluster CY7:

- Start number 56 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ1:

- Start number 57 was manually annotated 12 times for cluster CZ1.

Info for manual annotations of cluster CZ7:

- Start number 57 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DB:

- Start number 52 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DD:

- Start number 42 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster DN1:

- Start number 56 was manually annotated 8 times for cluster DN1.
- Start number 57 was manually annotated 7 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 57 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 56 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 57 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DR:

- Start number 39 was manually annotated 7 times for cluster DR.
- Start number 45 was manually annotated 1 time for cluster DR.

- Start number 47 was manually annotated 1 time for cluster DR.
- Start number 48 was manually annotated 8 times for cluster DR.
- Start number 50 was manually annotated 4 times for cluster DR.

Info for manual annotations of cluster DW:

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

Info for manual annotations of cluster EP:

- Start number 55 was manually annotated 8 times for cluster EP.

Gene Information:

Gene: ABU_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for ABU_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Abinghost_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for Abinghost_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: AbsoluteMadLad_14 Start: 13249, Stop: 13638, Start Num: 44

Candidate Starts for AbsoluteMadLad_14:

(Start: 44 @13249 has 313 MA's), (61, 13327), (66, 13342), (67, 13345), (80, 13408), (82, 13417), (84, 13426), (89, 13462), (98, 13498), (117, 13603),

Gene: Acadian_16 Start: 14844, Stop: 15251, Start Num: 44

Candidate Starts for Acadian_16:

(23, 14721), (Start: 41 @14829 has 2 MA's), (Start: 44 @14844 has 313 MA's), (66, 14949), (67, 14952), (70, 14961), (82, 15024), (89, 15069), (98, 15105), (105, 15147), (123, 15231),

Gene: Adelaide_22 Start: 21613, Stop: 21981, Start Num: 55

Candidate Starts for Adelaide_22:

(17, 21418), (20, 21445), (Start: 48 @21595 has 8 MA's), (Start: 55 @21613 has 9 MA's), (66, 21685), (70, 21697), (75, 21736), (76, 21739),

Gene: Adriana_15 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for Adriana_15:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Aelin_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Aelin_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Ahwei_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Ahwei_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Akoma_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for Akoma_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: AksarBAT_14 Start: 12848, Stop: 13225, Start Num: 45

Candidate Starts for AksarBAT_14:

(Start: 45 @12848 has 1 MA's), (60, 12893), (62, 12929), (65, 12938), (80, 13007), (82, 13016), (84, 13025), (98, 13097), (100, 13103), (110, 13154), (112, 13172),

Gene: AlanGrant_16 Start: 15755, Stop: 16156, Start Num: 44

Candidate Starts for AlanGrant_16:

(Start: 44 @15755 has 313 MA's), (53, 15782), (67, 15857), (73, 15896), (80, 15920), (82, 15929), (88, 15968), (90, 15980), (93, 15992), (98, 16010), (102, 16028), (104, 16040), (105, 16052),

Gene: Aleia_15 Start: 12826, Stop: 13215, Start Num: 44

Candidate Starts for Aleia_15:

(Start: 44 @12826 has 313 MA's), (61, 12904), (66, 12919), (67, 12922), (80, 12985), (82, 12994), (84, 13003), (89, 13039), (98, 13075), (117, 13180),

Gene: AltPhacts_15 Start: 13242, Stop: 13631, Start Num: 44

Candidate Starts for AltPhacts_15:

(Start: 44 @13242 has 313 MA's), (61, 13320), (66, 13335), (67, 13338), (80, 13401), (82, 13410), (84, 13419), (89, 13455), (98, 13491), (117, 13596),

Gene: Altwerkus_14 Start: 12942, Stop: 13331, Start Num: 44

Candidate Starts for Altwerkus_14:

(Start: 44 @12942 has 313 MA's), (61, 13020), (66, 13035), (67, 13038), (80, 13101), (82, 13110), (84, 13119), (89, 13155), (98, 13191), (117, 13296),

Gene: AnClar_14 Start: 13769, Stop: 14164, Start Num: 48

Candidate Starts for AnClar_14:

(Start: 48 @13769 has 8 MA's), (Start: 50 @13781 has 4 MA's), (60, 13811), (71, 13883), (86, 13952), (98, 14015), (100, 14021), (114, 14099), (116, 14114), (117, 14120),

Gene: AnarQue_16 Start: 14378, Stop: 14779, Start Num: 39

Candidate Starts for AnarQue_16:

(Start: 39 @14378 has 7 MA's), (53, 14426), (69, 14504), (89, 14615), (98, 14651), (100, 14657), (110, 14708), (112, 14726), (116, 14750), (119, 14768), (120, 14771),

Gene: Anderson_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Anderson_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Andre_15 Start: 13236, Stop: 13625, Start Num: 44

Candidate Starts for Andre_15:

(Start: 44 @13236 has 313 MA's), (61, 13314), (66, 13329), (67, 13332), (80, 13395), (82, 13404), (84, 13413), (89, 13449), (98, 13485), (117, 13590),

Gene: AngelCake_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for AngelCake_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Antihero_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Antihero_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Antonia_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Antonia_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Aonishiki_15 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for Aonishiki_15:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: Apex_15 Start: 15157, Stop: 15558, Start Num: 44

Candidate Starts for Apex_15:

(Start: 44 @15157 has 313 MA's), (65, 15253), (67, 15259), (73, 15298), (80, 15322), (82, 15331), (89, 15376), (90, 15382), (93, 15394), (96, 15403), (98, 15412), (103, 15433), (104, 15442), (122, 15535),

Gene: Apizium_14 Start: 12982, Stop: 13371, Start Num: 44

Candidate Starts for Apizium_14:

(Start: 44 @12982 has 313 MA's), (59, 13024), (61, 13060), (66, 13075), (67, 13078), (80, 13141), (82, 13150), (84, 13159), (89, 13195), (98, 13231), (105, 13273), (117, 13336),

Gene: Apricot_23 Start: 19749, Stop: 20129, Start Num: 56

Candidate Starts for Apricot_23:

(Start: 56 @19749 has 17 MA's), (Start: 57 @19755 has 25 MA's), (64, 19812), (65, 19815), (83, 19899), (86, 19920), (92, 19962), (93, 19965), (113, 20064),

Gene: Asapag_24 Start: 20197, Stop: 20571, Start Num: 57

Candidate Starts for Asapag_24:

(Start: 56 @20191 has 17 MA's), (Start: 57 @20197 has 25 MA's), (64, 20254), (65, 20257), (68, 20266), (77, 20314), (86, 20362), (92, 20404), (93, 20407), (113, 20506),

Gene: Ashraf_14 Start: 12800, Stop: 13189, Start Num: 44

Candidate Starts for Ashraf_14:

(Start: 44 @12800 has 313 MA's), (61, 12878), (66, 12893), (67, 12896), (80, 12959), (82, 12968), (84, 12977), (89, 13013), (98, 13049), (117, 13154),

Gene: Athena_18 Start: 15329, Stop: 15763, Start Num: 40

Candidate Starts for Athena_18:

(24, 15224), (Start: 40 @15329 has 52 MA's), (54, 15383), (65, 15449), (105, 15650), (106, 15653),

Gene: Audrey_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for Audrey_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: Austelle_16 Start: 15613, Stop: 16014, Start Num: 44

Candidate Starts for Austelle_16:

(Start: 44 @15613 has 313 MA's), (67, 15715), (73, 15754), (80, 15778), (82, 15787), (89, 15832), (93, 15850), (98, 15868), (103, 15889), (104, 15898), (122, 15991),

Gene: Axumite_14 Start: 12949, Stop: 13329, Start Num: 50

Candidate Starts for Axumite_14:

(Start: 50 @12949 has 4 MA's), (65, 13024), (71, 13051), (86, 13120), (100, 13189), (103, 13204), (114, 13267), (116, 13282),

Gene: BENtherdunthat_24 Start: 20197, Stop: 20568, Start Num: 57

Candidate Starts for BENtherdunthat_24:

(Start: 56 @20191 has 17 MA's), (Start: 57 @20197 has 25 MA's), (64, 20254), (65, 20257), (83, 20341), (86, 20362), (92, 20404), (93, 20407), (96, 20416), (108, 20476), (109, 20479),

Gene: Badfish_15 Start: 13271, Stop: 13660, Start Num: 44

Candidate Starts for Badfish_15:

(Start: 44 @13271 has 313 MA's), (61, 13349), (66, 13364), (67, 13367), (80, 13430), (82, 13439), (84, 13448), (89, 13484), (98, 13520), (117, 13625),

Gene: Bae_16 Start: 14990, Stop: 15397, Start Num: 44

Candidate Starts for Bae_16:

(13, 14732), (Start: 44 @14990 has 313 MA's), (66, 15095), (67, 15098), (82, 15170), (83, 15176), (89, 15215), (98, 15251), (105, 15293), (123, 15377),

Gene: Baloo_17 Start: 14566, Stop: 14997, Start Num: 40

Candidate Starts for Baloo_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: Banjo_14 Start: 12949, Stop: 13338, Start Num: 44

Candidate Starts for Banjo_14:

(Start: 44 @12949 has 313 MA's), (61, 13027), (66, 13042), (67, 13045), (80, 13108), (82, 13117), (84, 13126), (89, 13162), (98, 13198), (117, 13303),

Gene: Basato_16 Start: 13475, Stop: 13864, Start Num: 44

Candidate Starts for Basato_16:

(Start: 44 @13475 has 313 MA's), (61, 13553), (66, 13568), (67, 13571), (80, 13634), (82, 13643), (84, 13652), (89, 13688), (98, 13724), (117, 13829),

Gene: BatStarr_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for BatStarr_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: BatteryCK_14 Start: 12806, Stop: 13195, Start Num: 44

Candidate Starts for BatteryCK_14:

(Start: 44 @12806 has 313 MA's), (61, 12884), (66, 12899), (67, 12902), (80, 12965), (82, 12974), (84, 12983), (89, 13019), (98, 13055), (117, 13160),

Gene: Beaglebox_14 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Beaglebox_14:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: BearBQ_23 Start: 21031, Stop: 21408, Start Num: 56

Candidate Starts for BearBQ_23:

(Start: 56 @21031 has 17 MA's), (Start: 57 @21037 has 25 MA's), (64, 21094), (65, 21097), (83, 21181), (86, 21202), (92, 21244), (93, 21247), (96, 21256), (108, 21316), (109, 21319),

Gene: Ben11_16 Start: 14390, Stop: 14824, Start Num: 40

Candidate Starts for Ben11_16:

(24, 14285), (Start: 40 @14390 has 52 MA's), (54, 14444), (65, 14510), (105, 14711), (106, 14714),

Gene: Bernardo_17 Start: 14565, Stop: 14999, Start Num: 40

Candidate Starts for Bernardo_17:

(24, 14460), (Start: 40 @14565 has 52 MA's), (54, 14619), (65, 14685), (105, 14886), (106, 14889),

Gene: Bialota_22 Start: 21086, Stop: 21442, Start Num: 57

Candidate Starts for Bialota_22:

(Start: 57 @21086 has 25 MA's), (65, 21146), (68, 21155), (83, 21230), (92, 21293), (96, 21305), (108, 21365),

Gene: BiggityBass_13 Start: 12863, Stop: 13258, Start Num: 48

Candidate Starts for BiggityBass_13:

(Start: 48 @12863 has 8 MA's), (Start: 50 @12875 has 4 MA's), (60, 12905), (62, 12941), (71, 12977), (86, 13046), (98, 13109), (100, 13115), (114, 13193), (116, 13208), (117, 13214),

Gene: Birdsong_23 Start: 19924, Stop: 20301, Start Num: 56

Candidate Starts for Birdsong_23:

(Start: 56 @19924 has 17 MA's), (Start: 57 @19930 has 25 MA's), (64, 19987), (65, 19990), (83, 20074), (86, 20095), (92, 20137), (93, 20140), (96, 20149), (108, 20209), (109, 20212),

Gene: Bishoperium_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Bishoperium_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: BlackStallion_15 Start: 13257, Stop: 13646, Start Num: 44

Candidate Starts for BlackStallion_15:

(Start: 44 @13257 has 313 MA's), (61, 13335), (66, 13350), (67, 13353), (80, 13416), (82, 13425), (84, 13434), (89, 13470), (98, 13506), (117, 13611),

Gene: Blackpen_16 Start: 13795, Stop: 14196, Start Num: 39

Candidate Starts for Blackpen_16:

(Start: 39 @13795 has 7 MA's), (43, 13816), (53, 13843), (69, 13921), (89, 14032), (96, 14059), (98, 14068), (100, 14074), (110, 14125), (112, 14143), (116, 14167), (119, 14185), (120, 14188),

Gene: BlacksBerry_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for BlacksBerry_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: BlueHusk_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for BlueHusk_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Bluephacebaby_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Bluephacebaby_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: BobRoss2024_13 Start: 12784, Stop: 13155, Start Num: 46

Candidate Starts for BobRoss2024_13:

(Start: 45 @12781 has 1 MA's), (46, 12784), (81, 12943), (98, 13027), (100, 13033), (103, 13048), (104, 13057), (110, 13084), (116, 13126),

Gene: BobbyK_15 Start: 14976, Stop: 15377, Start Num: 44

Candidate Starts for BobbyK_15:

(Start: 44 @14976 has 313 MA's), (65, 15072), (67, 15078), (73, 15117), (80, 15141), (82, 15150), (89, 15195), (93, 15213), (98, 15231), (103, 15252), (104, 15261), (122, 15354),

Gene: Boehler_15 Start: 13265, Stop: 13654, Start Num: 44

Candidate Starts for Boehler_15:

(Start: 44 @13265 has 313 MA's), (61, 13343), (66, 13358), (67, 13361), (80, 13424), (82, 13433), (84, 13442), (89, 13478), (98, 13514), (100, 13520), (117, 13619),

Gene: BoogieWoogie_14 Start: 12942, Stop: 13331, Start Num: 44

Candidate Starts for BoogieWoogie_14:

(Start: 44 @12942 has 313 MA's), (61, 13020), (66, 13035), (67, 13038), (80, 13101), (82, 13110), (84, 13119), (89, 13155), (98, 13191), (117, 13296),

Gene: Bosnia_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for Bosnia_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: BotCity_24 Start: 20189, Stop: 20569, Start Num: 56

Candidate Starts for BotCity_24:

(Start: 56 @20189 has 17 MA's), (Start: 57 @20195 has 25 MA's), (64, 20252), (65, 20255), (68, 20264), (77, 20312), (86, 20360), (92, 20402), (93, 20405), (113, 20504),

Gene: Bran_22 Start: 21277, Stop: 21648, Start Num: 55

Candidate Starts for Bran_22:

(Start: 48 @21259 has 8 MA's), (Start: 55 @21277 has 9 MA's), (82, 21424), (93, 21487), (99, 21508), (104, 21535), (124, 21637),

Gene: Briakila_17 Start: 15331, Stop: 15765, Start Num: 40

Candidate Starts for Briakila_17:

(24, 15226), (Start: 40 @15331 has 52 MA's), (54, 15385), (65, 15451), (105, 15652), (106, 15655),

Gene: Brilliant_15 Start: 12959, Stop: 13348, Start Num: 44

Candidate Starts for Brilliant_15:

(Start: 44 @12959 has 313 MA's), (61, 13037), (66, 13052), (67, 13055), (80, 13118), (82, 13127), (84, 13136), (89, 13172), (98, 13208), (117, 13313),

Gene: BrownCNA_16 Start: 15230, Stop: 15631, Start Num: 44

Candidate Starts for BrownCNA_16:

(Start: 44 @15230 has 313 MA's), (67, 15332), (73, 15371), (80, 15395), (82, 15404), (89, 15449), (93, 15467), (96, 15476), (98, 15485), (103, 15506), (104, 15515), (122, 15608),

Gene: Buckeye_15 Start: 13273, Stop: 13662, Start Num: 44

Candidate Starts for Buckeye_15:

(Start: 44 @13273 has 313 MA's), (61, 13351), (66, 13366), (67, 13369), (80, 13432), (82, 13441), (84, 13450), (89, 13486), (98, 13522), (117, 13627),

Gene: Budski_24 Start: 20296, Stop: 20676, Start Num: 56

Candidate Starts for Budski_24:

(3, 19807), (10, 19918), (11, 19936), (Start: 56 @20296 has 17 MA's), (Start: 57 @20302 has 25 MA's), (64, 20359), (65, 20362), (68, 20371), (83, 20446), (92, 20509), (93, 20512), (96, 20521), (108, 20581), (109, 20584),

Gene: Burr_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Burr_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: CaiB_16 Start: 14363, Stop: 14764, Start Num: 39

Candidate Starts for CaiB_16:

(Start: 39 @14363 has 7 MA's), (53, 14411), (69, 14489), (89, 14600), (96, 14627), (98, 14636), (100, 14642), (110, 14693), (112, 14711), (116, 14735), (119, 14753), (120, 14756),

Gene: CamL_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for CamL_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: CampRoach_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for CampRoach_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: Cannibal_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Cannibal_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Cardigan_51 Start: 36197, Stop: 36607, Start Num: 42

Candidate Starts for Cardigan_51:

(4, 35792), (5, 35795), (7, 35819), (9, 35843), (19, 36044), (22, 36080), (25, 36098), (28, 36110), (30, 36116), (31, 36119), (Start: 42 @36197 has 2 MA's), (63, 36308), (71, 36341), (74, 36365), (110, 36530),

Gene: Carthage_14 Start: 12916, Stop: 13305, Start Num: 44

Candidate Starts for Carthage_14:

(Start: 44 @12916 has 313 MA's), (61, 12994), (66, 13009), (67, 13012), (80, 13075), (82, 13084), (84, 13093), (89, 13129), (98, 13165), (117, 13270),

Gene: Casbah_16 Start: 14418, Stop: 14852, Start Num: 40

Candidate Starts for Casbah_16:

(24, 14313), (Start: 40 @14418 has 52 MA's), (54, 14472), (65, 14538), (105, 14739), (106, 14742),

Gene: Caspiboi_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Caspiboi_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: ChaChing_17 Start: 14581, Stop: 14964, Start Num: 40

Candidate Starts for ChaChing_17:

(24, 14476), (Start: 40 @14581 has 52 MA's), (54, 14635), (65, 14701), (105, 14902), (106, 14905),

Gene: Chaelin_14 Start: 12920, Stop: 13309, Start Num: 44

Candidate Starts for Chaelin_14:

(Start: 44 @12920 has 313 MA's), (61, 12998), (66, 13013), (67, 13016), (80, 13079), (82, 13088), (84, 13097), (89, 13133), (98, 13169), (117, 13274),

Gene: Chah_15 Start: 13272, Stop: 13661, Start Num: 44

Candidate Starts for Chah_15:

(Start: 44 @13272 has 313 MA's), (61, 13350), (66, 13365), (67, 13368), (80, 13431), (82, 13440), (84, 13449), (89, 13485), (98, 13521), (117, 13626),

Gene: Chalmers_17 Start: 15374, Stop: 15808, Start Num: 40

Candidate Starts for Chalmers_17:

(24, 15269), (Start: 40 @15374 has 52 MA's), (54, 15428), (65, 15494), (105, 15695), (106, 15698),

Gene: Chandler_17 Start: 15340, Stop: 15774, Start Num: 40

Candidate Starts for Chandler_17:

(24, 15235), (Start: 40 @15340 has 52 MA's), (54, 15394), (65, 15460), (105, 15661), (106, 15664),

Gene: Charles1_15 Start: 13235, Stop: 13624, Start Num: 44

Candidate Starts for Charles1_15:

(Start: 44 @13235 has 313 MA's), (61, 13313), (66, 13328), (67, 13331), (80, 13394), (82, 13403), (84, 13412), (89, 13448), (98, 13484), (117, 13589),

Gene: CharlieGBrown_14 Start: 12824, Stop: 13213, Start Num: 44

Candidate Starts for CharlieGBrown_14:

(Start: 44 @12824 has 313 MA's), (61, 12902), (66, 12917), (67, 12920), (80, 12983), (82, 12992), (84, 13001), (89, 13037), (98, 13073), (117, 13178),

Gene: CharlottesWeb_14 Start: 12853, Stop: 13239, Start Num: 48

Candidate Starts for CharlottesWeb_14:

(Start: 48 @12853 has 8 MA's), (Start: 50 @12865 has 4 MA's), (62, 12931), (71, 12967), (86, 13036), (100, 13105), (103, 13120), (118, 13210),

Gene: CheeseTouch_24 Start: 20185, Stop: 20562, Start Num: 56

Candidate Starts for CheeseTouch_24:

(Start: 56 @20185 has 17 MA's), (Start: 57 @20191 has 25 MA's), (64, 20248), (65, 20251), (68, 20260), (77, 20308), (83, 20335), (92, 20398), (93, 20401), (100, 20425), (108, 20470), (109, 20473),

Gene: CheetO_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for CheetO_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Chentzyk_16 Start: 14436, Stop: 14870, Start Num: 40

Candidate Starts for Chentzyk_16:

(24, 14331), (Start: 40 @14436 has 52 MA's), (54, 14490), (65, 14556), (105, 14757), (106, 14760),

Gene: Cher_14 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for Cher_14:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Childish_14 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Childish_14:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: Chipette_16 Start: 13476, Stop: 13865, Start Num: 44

Candidate Starts for Chipette_16:

(Start: 44 @13476 has 313 MA's), (61, 13554), (66, 13569), (67, 13572), (80, 13635), (82, 13644), (84, 13653), (89, 13689), (98, 13725), (117, 13830),

Gene: Chorkpop_15 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for Chorkpop_15:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: ChrisnMich_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for ChrisnMich_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Chuni_14 Start: 13269, Stop: 13658, Start Num: 44

Candidate Starts for Chuni_14:

(Start: 44 @13269 has 313 MA's), (61, 13347), (66, 13362), (67, 13365), (80, 13428), (82, 13437), (84, 13446), (89, 13482), (98, 13518), (117, 13623),

Gene: Chunky_15 Start: 13265, Stop: 13654, Start Num: 44

Candidate Starts for Chunky_15:

(Start: 44 @13265 has 313 MA's), (61, 13343), (66, 13358), (67, 13361), (80, 13424), (82, 13433), (84, 13442), (89, 13478), (98, 13514), (117, 13619),

Gene: Chute_14 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for Chute_14:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: CloverMinnie_16 Start: 14303, Stop: 14704, Start Num: 39

Candidate Starts for CloverMinnie_16:

(23, 14198), (Start: 39 @14303 has 7 MA's), (43, 14324), (53, 14351), (69, 14429), (89, 14540), (96, 14567), (98, 14576), (100, 14582), (110, 14633), (112, 14651), (116, 14675), (119, 14693), (120, 14696),

Gene: Cobra_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Cobra_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Colbert_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Colbert_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Coldpizza_16 Start: 14928, Stop: 15302, Start Num: 48

Candidate Starts for Coldpizza_16:

(29, 14823), (Start: 48 @14928 has 8 MA's), (69, 15027), (70, 15030), (89, 15138), (93, 15156), (96, 15165), (98, 15174), (100, 15180), (105, 15216), (110, 15231), (115, 15270),

Gene: Coletti_15 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for Coletti_15:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: Compostia_18 Start: 14999, Stop: 15433, Start Num: 40

Candidate Starts for Compostia_18:

(24, 14894), (Start: 40 @14999 has 52 MA's), (54, 15053), (65, 15119), (105, 15320), (106, 15323),

Gene: Cooper_15 Start: 14020, Stop: 14421, Start Num: 44

Candidate Starts for Cooper_15:

(Start: 44 @14020 has 313 MA's), (67, 14122), (73, 14161), (80, 14185), (82, 14194), (86, 14212), (89, 14239), (93, 14257), (96, 14266), (98, 14275), (102, 14293), (103, 14296), (104, 14305), (110, 14332), (122, 14398),

Gene: Cornbread_14 Start: 12969, Stop: 13358, Start Num: 44

Candidate Starts for Cornbread_14:

(Start: 44 @12969 has 313 MA's), (61, 13047), (66, 13062), (67, 13065), (80, 13128), (82, 13137), (84, 13146), (89, 13182), (98, 13218), (117, 13323),

Gene: Cornobble_14 Start: 12813, Stop: 13202, Start Num: 44

Candidate Starts for Cornobble_14:

(Start: 44 @12813 has 313 MA's), (61, 12891), (66, 12906), (67, 12909), (80, 12972), (82, 12981), (84, 12990), (89, 13026), (98, 13062), (117, 13167),

Gene: Corofin_17 Start: 14591, Stop: 15025, Start Num: 40

Candidate Starts for Corofin_17:

(24, 14486), (Start: 40 @14591 has 52 MA's), (54, 14645), (65, 14711), (105, 14912), (106, 14915),

Gene: Cosmolli16_14 Start: 12970, Stop: 13359, Start Num: 44

Candidate Starts for Cosmolli16_14:

(Start: 44 @12970 has 313 MA's), (61, 13048), (66, 13063), (67, 13066), (80, 13129), (82, 13138), (84, 13147), (89, 13183), (98, 13219), (117, 13324),

Gene: Craff_15 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for Craff_15:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Crater_22 Start: 19749, Stop: 20129, Start Num: 56

Candidate Starts for Crater_22:

(Start: 56 @19749 has 17 MA's), (Start: 57 @19755 has 25 MA's), (64, 19812), (65, 19815), (83, 19899), (86, 19920), (92, 19962), (93, 19965), (113, 20064),

Gene: Crownjwl_15 Start: 13026, Stop: 13415, Start Num: 44

Candidate Starts for Crownjwl_15:

(Start: 44 @13026 has 313 MA's), (61, 13104), (66, 13119), (67, 13122), (80, 13185), (82, 13194), (84, 13203), (89, 13239), (98, 13275), (117, 13380),

Gene: DaddyDaniels_15 Start: 12962, Stop: 13351, Start Num: 44

Candidate Starts for DaddyDaniels_15:

(Start: 44 @12962 has 313 MA's), (61, 13040), (66, 13055), (67, 13058), (80, 13121), (82, 13130), (84, 13139), (89, 13175), (98, 13211), (117, 13316),

Gene: Daffy_15 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for Daffy_15:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Daisy_17 Start: 14587, Stop: 15021, Start Num: 40

Candidate Starts for Daisy_17:

(24, 14482), (Start: 40 @14587 has 52 MA's), (54, 14641), (65, 14707), (105, 14908), (106, 14911),

Gene: Daka_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Daka_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Dati_15 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Dati_15:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: Deenasa_17 Start: 15329, Stop: 15763, Start Num: 40

Candidate Starts for Deenasa_17:

(24, 15224), (Start: 40 @15329 has 52 MA's), (54, 15383), (65, 15449), (105, 15650), (106, 15653),

Gene: DelRivs_14 Start: 12965, Stop: 13354, Start Num: 44

Candidate Starts for DelRivs_14:

(Start: 44 @12965 has 313 MA's), (61, 13043), (66, 13058), (67, 13061), (80, 13124), (82, 13133), (84, 13142), (89, 13178), (98, 13214), (117, 13319),

Gene: Derpp_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Derpp_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Devonte_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for Devonte_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: Dice_14 Start: 12953, Stop: 13342, Start Num: 44

Candidate Starts for Dice_14:

(Start: 44 @12953 has 313 MA's), (61, 13031), (66, 13046), (67, 13049), (80, 13112), (82, 13121), (84, 13130), (89, 13166), (98, 13202), (117, 13307),

Gene: Dina_22 Start: 21114, Stop: 21479, Start Num: 55

Candidate Starts for Dina_22:

(34, 21018), (35, 21021), (Start: 48 @21096 has 8 MA's), (Start: 55 @21114 has 9 MA's), (70, 21198), (75, 21237), (76, 21240), (89, 21306), (124, 21468),

Gene: Dingo_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Dingo_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Dione_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for Dione_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: DirtJuice_15 Start: 13241, Stop: 13630, Start Num: 44

Candidate Starts for DirtJuice_15:

(Start: 44 @13241 has 313 MA's), (61, 13319), (66, 13334), (67, 13337), (80, 13400), (82, 13409), (84, 13418), (89, 13454), (98, 13490), (117, 13595),

Gene: Doddsville_15 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Doddsville_15:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: DoesntMatter_15 Start: 13235, Stop: 13624, Start Num: 44

Candidate Starts for DoesntMatter_15:

(Start: 44 @13235 has 313 MA's), (61, 13313), (66, 13328), (67, 13331), (80, 13394), (82, 13403), (84, 13412), (89, 13448), (98, 13484), (117, 13589),

Gene: DolOn_16 Start: 13488, Stop: 13877, Start Num: 44

Candidate Starts for DolOn_16:

(Start: 44 @13488 has 313 MA's), (61, 13566), (66, 13581), (67, 13584), (80, 13647), (82, 13656), (84, 13665), (89, 13701), (98, 13737), (117, 13842),

Gene: DonSanchon_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for DonSanchon_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: Donny_16 Start: 14846, Stop: 15253, Start Num: 44

Candidate Starts for Donny_16:

(23, 14723), (Start: 41 @14831 has 2 MA's), (Start: 44 @14846 has 313 MA's), (66, 14951), (67, 14954), (70, 14963), (82, 15026), (89, 15071), (98, 15107), (105, 15149), (123, 15233),

Gene: Dori_13 Start: 11588, Stop: 11983, Start Num: 40

Candidate Starts for Dori_13:

(Start: 40 @11588 has 52 MA's), (49, 11621), (62, 11699), (84, 11795), (92, 11846), (94, 11852), (96, 11858), (98, 11867), (105, 11909),

Gene: DuchessDung_14 Start: 12806, Stop: 13195, Start Num: 44

Candidate Starts for DuchessDung_14:

(Start: 44 @12806 has 313 MA's), (61, 12884), (66, 12899), (67, 12902), (80, 12965), (82, 12974), (84, 12983), (89, 13019), (98, 13055), (117, 13160),

Gene: Duggie_14 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for Duggie_14:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: Durga_15 Start: 13267, Stop: 13656, Start Num: 44

Candidate Starts for Durga_15:

(Start: 44 @13267 has 313 MA's), (61, 13345), (66, 13360), (67, 13363), (80, 13426), (82, 13435), (84, 13444), (89, 13480), (98, 13516), (117, 13621),

Gene: EastView9101_16 Start: 14852, Stop: 15256, Start Num: 44

Candidate Starts for EastView9101_16:

(Start: 44 @14852 has 313 MA's), (58, 14903), (66, 14957), (67, 14960), (82, 15032), (83, 15038), (89, 15077), (98, 15113), (105, 15155), (123, 15236),

Gene: ElvisPhasley_15 Start: 13266, Stop: 13655, Start Num: 44

Candidate Starts for ElvisPhasley_15:

(Start: 44 @13266 has 313 MA's), (61, 13344), (66, 13359), (67, 13362), (80, 13425), (82, 13434), (84, 13443), (89, 13479), (98, 13515), (117, 13620),

Gene: Emiris_15 Start: 13248, Stop: 13637, Start Num: 44

Candidate Starts for Emiris_15:

(Start: 44 @13248 has 313 MA's), (61, 13326), (66, 13341), (67, 13344), (80, 13407), (82, 13416), (84, 13425), (89, 13461), (98, 13497), (117, 13602),

Gene: EmpTee_15 Start: 13254, Stop: 13643, Start Num: 44

Candidate Starts for EmpTee_15:

(Start: 44 @13254 has 313 MA's), (61, 13332), (66, 13347), (67, 13350), (80, 13413), (82, 13422), (84, 13431), (89, 13467), (98, 13503), (117, 13608),

Gene: Epah_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Epah_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Eremos_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Eremos_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Etaye_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Etaye_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Eugenia_15 Start: 13266, Stop: 13655, Start Num: 44

Candidate Starts for Eugenia_15:

(Start: 44 @13266 has 313 MA's), (61, 13344), (66, 13359), (67, 13362), (80, 13425), (82, 13434), (84, 13443), (89, 13479), (98, 13515), (117, 13620),

Gene: Evaa_15 Start: 14245, Stop: 14619, Start Num: 48

Candidate Starts for Evaa_15:

(Start: 48 @14245 has 8 MA's), (61, 14320), (65, 14332), (71, 14359), (87, 14431), (98, 14491), (100, 14497), (107, 14539), (110, 14548), (115, 14587),

Gene: Eviarto_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for Eviarto_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: Fanaw_15 Start: 15006, Stop: 15407, Start Num: 44

Candidate Starts for Fanaw_15:

(Start: 44 @15006 has 313 MA's), (67, 15108), (73, 15147), (80, 15171), (82, 15180), (89, 15225), (93, 15243), (98, 15261), (103, 15282), (104, 15291), (122, 15384),

Gene: Fang_15 Start: 13269, Stop: 13658, Start Num: 44

Candidate Starts for Fang_15:

(Start: 44 @13269 has 313 MA's), (61, 13347), (66, 13362), (67, 13365), (80, 13428), (82, 13437), (84, 13446), (89, 13482), (98, 13518), (117, 13623),

Gene: FelixTres_16 Start: 14366, Stop: 14767, Start Num: 39

Candidate Starts for FelixTres_16:

(Start: 39 @14366 has 7 MA's), (43, 14387), (53, 14414), (69, 14492), (89, 14603), (96, 14630), (98, 14639), (100, 14645), (110, 14696), (112, 14714), (116, 14738), (119, 14756), (120, 14759),

Gene: Flake_16 Start: 13270, Stop: 13659, Start Num: 44

Candidate Starts for Flake_16:

(Start: 44 @13270 has 313 MA's), (61, 13348), (66, 13363), (67, 13366), (80, 13429), (82, 13438), (84, 13447), (89, 13483), (98, 13519), (117, 13624),

Gene: FleetyMac_14 Start: 13251, Stop: 13640, Start Num: 44

Candidate Starts for FleetyMac_14:

(Start: 44 @13251 has 313 MA's), (61, 13329), (66, 13344), (67, 13347), (80, 13410), (82, 13419), (84, 13428), (89, 13464), (98, 13500), (117, 13605),

Gene: FluffyNinja_15 Start: 13257, Stop: 13646, Start Num: 44

Candidate Starts for FluffyNinja_15:

(Start: 44 @13257 has 313 MA's), (61, 13335), (66, 13350), (67, 13353), (80, 13416), (82, 13425), (84, 13434), (89, 13470), (98, 13506), (117, 13611),

Gene: Fortunato_15 Start: 14970, Stop: 15371, Start Num: 44

Candidate Starts for Fortunato_15:

(Start: 44 @14970 has 313 MA's), (65, 15066), (67, 15072), (73, 15111), (80, 15135), (82, 15144), (89, 15189), (90, 15195), (93, 15207), (96, 15216), (98, 15225), (103, 15246), (104, 15255), (122, 15348),

Gene: Fozzie_14 Start: 13263, Stop: 13652, Start Num: 44

Candidate Starts for Fozzie_14:

(Start: 44 @13263 has 313 MA's), (61, 13341), (66, 13356), (67, 13359), (80, 13422), (82, 13431), (84, 13440), (89, 13476), (98, 13512), (117, 13617),

Gene: Frankicide_15 Start: 13255, Stop: 13644, Start Num: 44

Candidate Starts for Frankicide_15:

(Start: 44 @13255 has 313 MA's), (61, 13333), (66, 13348), (67, 13351), (80, 13414), (82, 13423), (84, 13432), (89, 13468), (98, 13504), (117, 13609),

Gene: Frederick_15 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for Frederick_15:

(Start: 44 @14979 has 313 MA's), (65, 15075), (67, 15081), (73, 15120), (80, 15144), (82, 15153), (89, 15198), (90, 15204), (93, 15216), (96, 15225), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: FremontTroll_15 Start: 12952, Stop: 13341, Start Num: 44

Candidate Starts for FremontTroll_15:

(Start: 44 @12952 has 313 MA's), (61, 13030), (66, 13045), (67, 13048), (80, 13111), (82, 13120), (84, 13129), (89, 13165), (98, 13201), (117, 13306),

Gene: Fresco_14 Start: 12949, Stop: 13329, Start Num: 50

Candidate Starts for Fresco_14:

(Start: 50 @12949 has 4 MA's), (65, 13024), (71, 13051), (86, 13120), (100, 13189), (103, 13204), (114, 13267), (116, 13282),

Gene: Freya_14 Start: 12949, Stop: 13338, Start Num: 44

Candidate Starts for Freya_14:

(Start: 44 @12949 has 313 MA's), (61, 13027), (66, 13042), (67, 13045), (80, 13108), (82, 13117), (84, 13126), (89, 13162), (98, 13198), (117, 13303),

Gene: FriarPreacher_15 Start: 13274, Stop: 13663, Start Num: 44

Candidate Starts for FriarPreacher_15:

(Start: 44 @13274 has 313 MA's), (61, 13352), (66, 13367), (67, 13370), (80, 13433), (82, 13442), (84, 13451), (89, 13487), (98, 13523), (117, 13628),

Gene: Frickyeah_23 Start: 19960, Stop: 20334, Start Num: 57

Candidate Starts for Frickyeah_23:

(Start: 56 @19954 has 17 MA's), (Start: 57 @19960 has 25 MA's), (64, 20017), (65, 20020), (68, 20029), (83, 20104), (86, 20125), (92, 20167), (93, 20170), (113, 20269),

Gene: Fringe_15 Start: 13236, Stop: 13625, Start Num: 44

Candidate Starts for Fringe_15:

(Start: 44 @13236 has 313 MA's), (61, 13314), (66, 13329), (67, 13332), (80, 13395), (82, 13404), (84, 13413), (89, 13449), (98, 13485), (117, 13590),

Gene: FugateOSU_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for FugateOSU_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Gadget_18 Start: 14570, Stop: 15004, Start Num: 40

Candidate Starts for Gadget_18:

(24, 14465), (Start: 40 @14570 has 52 MA's), (54, 14624), (65, 14690), (105, 14891), (106, 14894),

Gene: Gareth_14 Start: 12957, Stop: 13346, Start Num: 44

Candidate Starts for Gareth_14:

(Start: 44 @12957 has 313 MA's), (61, 13035), (66, 13050), (67, 13053), (80, 13116), (82, 13125), (84, 13134), (89, 13170), (98, 13206), (117, 13311),

Gene: GeneCoco_15 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for GeneCoco_15:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Gervas_17 Start: 14549, Stop: 14983, Start Num: 40

Candidate Starts for Gervas_17:

(24, 14444), (Start: 40 @14549 has 52 MA's), (54, 14603), (65, 14669), (105, 14870), (106, 14873),

Gene: Getalong_25 Start: 20997, Stop: 21371, Start Num: 57

Candidate Starts for Getalong_25:

(Start: 56 @20991 has 17 MA's), (Start: 57 @20997 has 25 MA's), (64, 21054), (65, 21057), (77, 21114), (86, 21162), (92, 21204), (93, 21207), (113, 21306),

Gene: GinPorsche_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for GinPorsche_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Giraffe_15 Start: 12961, Stop: 13350, Start Num: 44

Candidate Starts for Giraffe_15:

(Start: 44 @12961 has 313 MA's), (61, 13039), (66, 13054), (67, 13057), (80, 13120), (82, 13129), (84, 13138), (89, 13174), (98, 13210), (117, 13315),

Gene: GlenHope_18 Start: 14556, Stop: 14990, Start Num: 40

Candidate Starts for GlenHope_18:

(24, 14451), (Start: 40 @14556 has 52 MA's), (54, 14610), (65, 14676), (105, 14877), (106, 14880),

Gene: Glubnar_17 Start: 14570, Stop: 15004, Start Num: 40

Candidate Starts for Glubnar_17:

(24, 14465), (Start: 40 @14570 has 52 MA's), (54, 14624), (65, 14690), (105, 14891), (106, 14894),

Gene: Gophee_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Gophee_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Grand2040_14 Start: 12976, Stop: 13365, Start Num: 44

Candidate Starts for Grand2040_14:

(Start: 44 @12976 has 313 MA's), (61, 13054), (66, 13069), (67, 13072), (80, 13135), (82, 13144), (84, 13153), (89, 13189), (98, 13225), (117, 13330),

Gene: GreenChile_15 Start: 13255, Stop: 13644, Start Num: 44

Candidate Starts for GreenChile_15:

(Start: 44 @13255 has 313 MA's), (61, 13333), (66, 13348), (67, 13351), (80, 13414), (82, 13423), (84, 13432), (89, 13468), (98, 13504), (117, 13609),

Gene: Gwennie1_15 Start: 13277, Stop: 13666, Start Num: 44

Candidate Starts for Gwennie1_15:

(Start: 44 @13277 has 313 MA's), (61, 13355), (66, 13370), (67, 13373), (80, 13436), (82, 13445), (84, 13454), (89, 13490), (98, 13526), (117, 13631),

Gene: Gwilliam_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Gwilliam_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Gyarad_0015 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Gyarad_0015:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: HSavage_15 Start: 13261, Stop: 13650, Start Num: 44

Candidate Starts for HSavage_15:

(Start: 44 @13261 has 313 MA's), (61, 13339), (66, 13354), (67, 13357), (80, 13420), (82, 13429), (84, 13438), (89, 13474), (98, 13510), (117, 13615),

Gene: Haimas_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Haimas_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Haleema_14 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for Haleema_14:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Halfpint_16 Start: 14391, Stop: 14825, Start Num: 40

Candidate Starts for Halfpint_16:

(24, 14286), (Start: 40 @14391 has 52 MA's), (54, 14445), (65, 14511), (105, 14712), (106, 14715),

Gene: Hally898_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Hally898_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (81, 14083), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Hamish_15 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for Hamish_15:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Hangman_15 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for Hangman_15:

(Start: 44 @14979 has 313 MA's), (67, 15081), (73, 15120), (80, 15144), (82, 15153), (89, 15198), (93, 15216), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: Happabalu_15 Start: 12947, Stop: 13336, Start Num: 44

Candidate Starts for Happabalu_15:

(Start: 44 @12947 has 313 MA's), (61, 13025), (66, 13040), (67, 13043), (80, 13106), (82, 13115), (84, 13124), (89, 13160), (98, 13196), (117, 13301),

Gene: Hartsy_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Hartsy_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Harvey_15 Start: 13275, Stop: 13664, Start Num: 44

Candidate Starts for Harvey_15:

(Start: 44 @13275 has 313 MA's), (61, 13353), (66, 13368), (67, 13371), (80, 13434), (82, 13443), (84, 13452), (89, 13488), (98, 13524), (117, 13629),

Gene: Heath_15 Start: 14976, Stop: 15377, Start Num: 44

Candidate Starts for Heath_15:

(Start: 44 @14976 has 313 MA's), (67, 15078), (73, 15117), (80, 15141), (82, 15150), (89, 15195), (90, 15201), (98, 15231), (103, 15252), (104, 15261), (122, 15354),

Gene: Heathcliff_17 Start: 14528, Stop: 14962, Start Num: 40

Candidate Starts for Heathcliff_17:

(24, 14423), (Start: 40 @14528 has 52 MA's), (54, 14582), (65, 14648), (105, 14849), (106, 14852),

Gene: Held_15 Start: 12961, Stop: 13350, Start Num: 44

Candidate Starts for Held_15:

(Start: 44 @12961 has 313 MA's), (61, 13039), (66, 13054), (67, 13057), (80, 13120), (82, 13129), (84, 13138), (89, 13174), (98, 13210), (117, 13315),

Gene: HenryJackson_14 Start: 12975, Stop: 13364, Start Num: 44

Candidate Starts for HenryJackson_14:

(Start: 44 @12975 has 313 MA's), (61, 13053), (66, 13068), (67, 13071), (80, 13134), (82, 13143), (84, 13152), (89, 13188), (98, 13224), (117, 13329),

Gene: Herod_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for Herod_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: Hertubise_15 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for Hertubise_15:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: Hetaeria_15 Start: 13271, Stop: 13660, Start Num: 44

Candidate Starts for Hetaeria_15:

(Start: 44 @13271 has 313 MA's), (61, 13349), (66, 13364), (67, 13367), (80, 13430), (82, 13439), (84, 13448), (89, 13484), (98, 13520), (117, 13625),

Gene: HighStump_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for HighStump_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Hocus_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Hocus_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: HogWash_14 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for HogWash_14:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Holliday_24 Start: 20296, Stop: 20676, Start Num: 56

Candidate Starts for Holliday_24:

(3, 19807), (10, 19918), (11, 19936), (Start: 56 @20296 has 17 MA's), (Start: 57 @20302 has 25 MA's), (64, 20359), (65, 20362), (68, 20371), (83, 20446), (92, 20509), (93, 20512), (96, 20521), (108, 20581), (109, 20584),

Gene: Horchata_15 Start: 13240, Stop: 13629, Start Num: 44

Candidate Starts for Horchata_15:

(Start: 44 @13240 has 313 MA's), (61, 13318), (66, 13333), (67, 13336), (80, 13399), (82, 13408), (84, 13417), (89, 13453), (98, 13489), (117, 13594),

Gene: Horus_24 Start: 20213, Stop: 20593, Start Num: 56

Candidate Starts for Horus_24:

(Start: 56 @20213 has 17 MA's), (Start: 57 @20219 has 25 MA's), (64, 20276), (65, 20279), (83, 20363), (86, 20384), (92, 20426), (93, 20429), (113, 20528),

Gene: Hugley_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for Hugley_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: Hydro_15 Start: 14976, Stop: 15377, Start Num: 44

Candidate Starts for Hydro_15:

(Start: 44 @14976 has 313 MA's), (67, 15078), (73, 15117), (80, 15141), (82, 15150), (89, 15195), (93, 15213), (98, 15231), (103, 15252), (104, 15261), (122, 15354),

Gene: ImtiyazSitla_14 Start: 12800, Stop: 13189, Start Num: 44

Candidate Starts for ImtiyazSitla_14:

(Start: 44 @12800 has 313 MA's), (61, 12878), (66, 12893), (67, 12896), (80, 12959), (82, 12968), (84, 12977), (89, 13013), (98, 13049), (117, 13154),

Gene: Inchworm_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Inchworm_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: Inverness_15 Start: 13261, Stop: 13650, Start Num: 44

Candidate Starts for Inverness_15:

(Start: 44 @13261 has 313 MA's), (61, 13339), (66, 13354), (67, 13357), (80, 13420), (82, 13429), (84, 13438), (89, 13474), (98, 13510), (117, 13615),

Gene: Iridessa_15 Start: 12929, Stop: 13318, Start Num: 44

Candidate Starts for Iridessa_15:

(Start: 44 @12929 has 313 MA's), (61, 13007), (66, 13022), (67, 13025), (80, 13088), (82, 13097), (84, 13106), (89, 13142), (98, 13178), (117, 13283),

Gene: Iridoclysis_15 Start: 13233, Stop: 13622, Start Num: 44

Candidate Starts for Iridoclysis_15:

(Start: 44 @13233 has 313 MA's), (61, 13311), (66, 13326), (67, 13329), (80, 13392), (82, 13401), (84, 13410), (89, 13446), (98, 13482), (117, 13587),

Gene: IsaacEli_15 Start: 13265, Stop: 13654, Start Num: 44

Candidate Starts for IsaacEli_15:

(Start: 44 @13265 has 313 MA's), (61, 13343), (66, 13358), (67, 13361), (80, 13424), (82, 13433), (84, 13442), (89, 13478), (98, 13514), (117, 13619),

Gene: JAMaL_15 Start: 15160, Stop: 15561, Start Num: 44

Candidate Starts for JAMaL_15:

(Start: 44 @15160 has 313 MA's), (67, 15262), (80, 15325), (89, 15379), (93, 15397), (96, 15406), (98, 15415), (102, 15433), (104, 15445),

Gene: JDog_14 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for JDog_14:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: JacAttac_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for JacAttac_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: Jackstina_16 Start: 14492, Stop: 14926, Start Num: 40

Candidate Starts for Jackstina_16:

(24, 14387), (Start: 40 @14492 has 52 MA's), (54, 14546), (65, 14612), (105, 14813), (106, 14816),

Gene: JaguarMi_16 Start: 14806, Stop: 15207, Start Num: 44

Candidate Starts for JaguarMi_16:

(Start: 44 @14806 has 313 MA's), (67, 14908), (73, 14947), (80, 14971), (82, 14980), (89, 15025), (93, 15043), (96, 15052), (98, 15061), (103, 15082), (104, 15091), (122, 15184),

Gene: JakeO_14 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for JakeO_14:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: JangoPhett_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for JangoPhett_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Jesabah_15 Start: 12973, Stop: 13362, Start Num: 44

Candidate Starts for Jesabah_15:

(Start: 44 @12973 has 313 MA's), (61, 13051), (66, 13066), (67, 13069), (80, 13132), (82, 13141), (84, 13150), (89, 13186), (98, 13222), (117, 13327),

Gene: Jillium_14 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Jillium_14:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: Jiminy_14 Start: 12808, Stop: 13197, Start Num: 44

Candidate Starts for Jiminy_14:

(Start: 44 @12808 has 313 MA's), (61, 12886), (66, 12901), (67, 12904), (80, 12967), (82, 12976), (84, 12985), (89, 13021), (98, 13057), (117, 13162),

Gene: Jiraiya_14 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for Jiraiya_14:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: JonJames_51 Start: 37099, Stop: 37509, Start Num: 42

Candidate Starts for JonJames_51:

(Start: 42 @37099 has 2 MA's), (63, 37210), (71, 37243), (74, 37267), (110, 37432),

Gene: JoyceMaria_15 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for JoyceMaria_15:

(Start: 44 @14979 has 313 MA's), (67, 15081), (73, 15120), (80, 15144), (82, 15153), (89, 15198), (93, 15216), (96, 15225), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: Juicebox_24 Start: 22590, Stop: 22964, Start Num: 55

Candidate Starts for Juicebox_24:

(Start: 55 @22590 has 9 MA's), (69, 22671), (70, 22674), (78, 22722), (83, 22743), (88, 22776), (100, 22824), (119, 22938),

Gene: KLucky39_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for KLucky39_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Kahve_14 Start: 12975, Stop: 13364, Start Num: 44

Candidate Starts for Kahve_14:

(Start: 44 @12975 has 313 MA's), (61, 13053), (66, 13068), (67, 13071), (80, 13134), (82, 13143), (84, 13152), (89, 13188), (98, 13224), (117, 13329),

Gene: Kailash_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Kailash_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Kamaru_24 Start: 20302, Stop: 20676, Start Num: 57

Candidate Starts for Kamaru_24:

(3, 19807), (10, 19918), (11, 19936), (Start: 56 @20296 has 17 MA's), (Start: 57 @20302 has 25 MA's), (64, 20359), (65, 20362), (68, 20371), (83, 20446), (92, 20509), (93, 20512), (96, 20521), (108, 20581), (109, 20584),

Gene: Kamiyu_17 Start: 14537, Stop: 14971, Start Num: 40

Candidate Starts for Kamiyu_17:

(24, 14432), (Start: 40 @14537 has 52 MA's), (54, 14591), (65, 14657), (105, 14858), (106, 14861),

Gene: Karn_14 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for Karn_14:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: Katniss_15 Start: 13272, Stop: 13661, Start Num: 44

Candidate Starts for Katniss_15:

(Start: 44 @13272 has 313 MA's), (61, 13350), (66, 13365), (67, 13368), (80, 13431), (82, 13440), (84, 13449), (89, 13485), (98, 13521), (117, 13626),

Gene: Keitherie_15 Start: 13273, Stop: 13662, Start Num: 44

Candidate Starts for Keitherie_15:

(Start: 44 @13273 has 313 MA's), (61, 13351), (66, 13366), (67, 13369), (80, 13432), (82, 13441), (84, 13450), (89, 13486), (98, 13522), (117, 13627),

Gene: Kenna_23 Start: 20192, Stop: 20569, Start Num: 56

Candidate Starts for Kenna_23:

(Start: 56 @20192 has 17 MA's), (Start: 57 @20198 has 25 MA's), (64, 20255), (65, 20258), (68, 20267), (83, 20342), (86, 20363), (92, 20405), (93, 20408), (96, 20417), (108, 20477), (109, 20480),

Gene: Khan1_15 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for Khan1_15:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: Kikipoo_15 Start: 13265, Stop: 13654, Start Num: 44

Candidate Starts for Kikipoo_15:

(Start: 44 @13265 has 313 MA's), (61, 13343), (66, 13358), (67, 13361), (80, 13424), (82, 13433), (84, 13442), (89, 13478), (98, 13514), (117, 13619),

Gene: Kiko_24 Start: 20229, Stop: 20624, Start Num: 52

Candidate Starts for Kiko_24:

(1, 19326), (2, 19548), (6, 19797), (8, 19827), (32, 20112), (Start: 52 @20229 has 2 MA's), (Start: 57 @20247 has 25 MA's), (68, 20316), (71, 20334), (72, 20346), (77, 20364), (83, 20391), (92, 20454), (93, 20457), (108, 20526),

Gene: Kimbrough_15 Start: 12963, Stop: 13352, Start Num: 44

Candidate Starts for Kimbrough_15:

(Start: 44 @12963 has 313 MA's), (61, 13041), (66, 13056), (67, 13059), (80, 13122), (82, 13131), (84, 13140), (89, 13176), (98, 13212), (117, 13317),

Gene: KingTut_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for KingTut_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: KingVeVeVe_15 Start: 13242, Stop: 13631, Start Num: 44

Candidate Starts for KingVeVeVe_15:

(Start: 44 @13242 has 313 MA's), (61, 13320), (66, 13335), (67, 13338), (80, 13401), (82, 13410), (84, 13419), (89, 13455), (98, 13491), (117, 13596),

Gene: KlimbOn_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for KlimbOn_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Kloppinator_15 Start: 13269, Stop: 13658, Start Num: 44

Candidate Starts for Kloppinator_15:

(Start: 44 @13269 has 313 MA's), (61, 13347), (66, 13362), (67, 13365), (80, 13428), (82, 13437), (84, 13446), (89, 13482), (98, 13518), (117, 13623),

Gene: Kronus_16 Start: 15149, Stop: 15583, Start Num: 40

Candidate Starts for Kronus_16:

(24, 15044), (Start: 40 @15149 has 52 MA's), (54, 15203), (65, 15269), (105, 15470), (106, 15473),

Gene: Kuwabara_23 Start: 19624, Stop: 19995, Start Num: 57

Candidate Starts for Kuwabara_23:

(Start: 56 @19618 has 17 MA's), (Start: 57 @19624 has 25 MA's), (64, 19681), (65, 19684), (83, 19768), (86, 19789), (92, 19831), (93, 19834), (96, 19843), (108, 19903), (109, 19906),

Gene: Kwadwo_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for Kwadwo_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: Kwksand96_14 Start: 12818, Stop: 13207, Start Num: 44

Candidate Starts for Kwksand96_14:

(Start: 44 @12818 has 313 MA's), (61, 12896), (66, 12911), (67, 12914), (80, 12977), (82, 12986), (84, 12995), (89, 13031), (98, 13067), (117, 13172),

Gene: Labeouficaum_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Labeouficaum_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Lambano_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Lambano_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Larson_16 Start: 13270, Stop: 13659, Start Num: 44

Candidate Starts for Larson_16:

(Start: 44 @13270 has 313 MA's), (61, 13348), (66, 13363), (67, 13366), (80, 13429), (82, 13438), (84, 13447), (89, 13483), (98, 13519), (117, 13624),

Gene: LasagnaCat_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for LasagnaCat_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Lasso_15 Start: 13232, Stop: 13621, Start Num: 44

Candidate Starts for Lasso_15:

(Start: 44 @13232 has 313 MA's), (61, 13310), (66, 13325), (67, 13328), (80, 13391), (82, 13400), (84, 13409), (89, 13445), (98, 13481), (117, 13586),

Gene: Lederberg_22 Start: 21495, Stop: 21860, Start Num: 55

Candidate Starts for Lederberg_22:

(14, 21255), (21, 21339), (37, 21426), (Start: 55 @21495 has 9 MA's), (70, 21579), (75, 21618), (76, 21621), (89, 21687),

Gene: LeeLot_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for LeeLot_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Lego3393_15 Start: 13269, Stop: 13658, Start Num: 44

Candidate Starts for Lego3393_15:

(Start: 44 @13269 has 313 MA's), (61, 13347), (66, 13362), (67, 13365), (80, 13428), (82, 13437), (84, 13446), (89, 13482), (98, 13518), (117, 13623),

Gene: Legolas_14 Start: 12970, Stop: 13359, Start Num: 44

Candidate Starts for Legolas_14:

(Start: 44 @12970 has 313 MA's), (61, 13048), (66, 13063), (67, 13066), (80, 13129), (82, 13138), (84, 13147), (89, 13183), (98, 13219), (117, 13324),

Gene: Lehmann_15 Start: 12797, Stop: 13186, Start Num: 44

Candidate Starts for Lehmann_15:

(Start: 44 @12797 has 313 MA's), (61, 12875), (66, 12890), (67, 12893), (80, 12956), (82, 12965), (84, 12974), (89, 13010), (98, 13046), (117, 13151),

Gene: LeiMonet_15 Start: 12962, Stop: 13351, Start Num: 44

Candidate Starts for LeiMonet_15:

(Start: 44 @12962 has 313 MA's), (61, 13040), (66, 13055), (67, 13058), (80, 13121), (82, 13130), (84, 13139), (89, 13175), (98, 13211), (117, 13316),

Gene: LemonSlice_15 Start: 12964, Stop: 13353, Start Num: 44

Candidate Starts for LemonSlice_15:

(Start: 44 @12964 has 313 MA's), (61, 13042), (66, 13057), (67, 13060), (80, 13123), (82, 13132), (84, 13141), (89, 13177), (98, 13213), (117, 13318),

Gene: Leroy_24 Start: 20214, Stop: 20594, Start Num: 56

Candidate Starts for Leroy_24:

(Start: 56 @20214 has 17 MA's), (Start: 57 @20220 has 25 MA's), (64, 20277), (65, 20280), (83, 20364), (86, 20385), (92, 20427), (93, 20430), (113, 20529),

Gene: LestyG_17 Start: 14570, Stop: 15004, Start Num: 40

Candidate Starts for LestyG_17:

(24, 14465), (Start: 40 @14570 has 52 MA's), (54, 14624), (65, 14690), (105, 14891), (106, 14894),

Gene: Ligma_14 Start: 12949, Stop: 13329, Start Num: 50

Candidate Starts for Ligma_14:

(Start: 50 @12949 has 4 MA's), (65, 13024), (71, 13051), (86, 13120), (100, 13189), (103, 13204), (114, 13267), (116, 13282),

Gene: LitninMcQueen_23 Start: 19948, Stop: 20325, Start Num: 56

Candidate Starts for LitninMcQueen_23:

(Start: 56 @19948 has 17 MA's), (Start: 57 @19954 has 25 MA's), (64, 20011), (65, 20014), (83, 20098), (86, 20119), (92, 20161), (93, 20164), (113, 20263),

Gene: LittleDigger_14 Start: 13919, Stop: 14320, Start Num: 44

Candidate Starts for LittleDigger_14:

(Start: 44 @13919 has 313 MA's), (67, 14021), (80, 14084), (82, 14093), (84, 14102), (89, 14138), (93, 14156), (96, 14165), (98, 14174), (103, 14195), (104, 14204), (122, 14297),

Gene: LittleMunchkin_15 Start: 14381, Stop: 14770, Start Num: 48

Candidate Starts for LittleMunchkin_15:

(Start: 48 @14381 has 8 MA's), (Start: 50 @14393 has 4 MA's), (60, 14423), (71, 14495), (86, 14564), (98, 14627), (100, 14633), (114, 14711), (116, 14726),

Gene: Lolalove_15 Start: 14976, Stop: 15377, Start Num: 44

Candidate Starts for Lolalove_15:

(Start: 44 @14976 has 313 MA's), (67, 15078), (73, 15117), (80, 15141), (82, 15150), (89, 15195), (93, 15213), (96, 15222), (98, 15231), (103, 15252), (104, 15261), (122, 15354),

Gene: LonelyBoi_23 Start: 20872, Stop: 21258, Start Num: 56

Candidate Starts for LonelyBoi_23:

(Start: 56 @20872 has 17 MA's), (Start: 57 @20878 has 25 MA's), (65, 20938), (83, 21022), (101, 21118), (108, 21157), (122, 21232),

Gene: Longacauda_14 Start: 12956, Stop: 13345, Start Num: 44

Candidate Starts for Longacauda_14:

(Start: 44 @12956 has 313 MA's), (61, 13034), (66, 13049), (67, 13052), (80, 13115), (82, 13124), (84, 13133), (89, 13169), (98, 13205), (117, 13310),

Gene: Lopsy_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Lopsy_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: LostAndPhound_14 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for LostAndPhound_14:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: LuckyMarjie_14 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for LuckyMarjie_14:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Lulumae_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Lulumae_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: Lulwa_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Lulwa_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: Lumine_14 Start: 12948, Stop: 13337, Start Num: 44

Candidate Starts for Lumine_14:

(Start: 44 @12948 has 313 MA's), (61, 13026), (66, 13041), (67, 13044), (80, 13107), (82, 13116), (84, 13125), (89, 13161), (98, 13197), (117, 13302),

Gene: Lutum_24 Start: 20192, Stop: 20569, Start Num: 56

Candidate Starts for Lutum_24:

(Start: 56 @20192 has 17 MA's), (Start: 57 @20198 has 25 MA's), (64, 20255), (65, 20258), (68, 20267), (83, 20342), (86, 20363), (92, 20405), (93, 20408), (96, 20417), (108, 20477), (109, 20480),

Gene: MRabcd_14 Start: 12957, Stop: 13346, Start Num: 44

Candidate Starts for MRabcd_14:

(Start: 44 @12957 has 313 MA's), (61, 13035), (66, 13050), (67, 13053), (80, 13116), (82, 13125), (84, 13134), (89, 13170), (98, 13206), (117, 13311),

Gene: Madavieve_22 Start: 21354, Stop: 21710, Start Num: 57

Candidate Starts for Madavieve_22:

(Start: 57 @21354 has 25 MA's), (65, 21414), (68, 21423), (83, 21498), (92, 21561), (96, 21573), (108, 21633),

Gene: Madeline_22 Start: 21372, Stop: 21728, Start Num: 57

Candidate Starts for Madeline_22:

(12, 21066), (16, 21159), (18, 21174), (33, 21270), (Start: 57 @21372 has 25 MA's), (65, 21432), (68, 21441), (83, 21516), (92, 21579), (96, 21591), (108, 21651),

Gene: Mag7_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Mag7_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Magic8_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Magic8_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Magpie_15 Start: 15161, Stop: 15562, Start Num: 44

Candidate Starts for Magpie_15:

(Start: 44 @15161 has 313 MA's), (67, 15263), (73, 15302), (80, 15326), (82, 15335), (93, 15398), (98, 15416), (103, 15437), (104, 15446), (122, 15539),

Gene: MakoManhole_16 Start: 14381, Stop: 14782, Start Num: 39

Candidate Starts for MakoManhole_16:

(Start: 39 @14381 has 7 MA's), (43, 14402), (53, 14429), (69, 14507), (89, 14618), (96, 14645), (98, 14654), (100, 14660), (110, 14711), (112, 14729), (116, 14753), (119, 14771), (120, 14774),

Gene: Malibo_24 Start: 20256, Stop: 20633, Start Num: 57

Candidate Starts for Malibo_24:

(Start: 57 @20256 has 25 MA's), (65, 20316), (68, 20325), (83, 20400), (96, 20475), (108, 20535),

Gene: Malisha_25 Start: 22077, Stop: 22454, Start Num: 56

Candidate Starts for Malisha_25:

(3, 21588), (10, 21699), (11, 21717), (Start: 56 @22077 has 17 MA's), (Start: 57 @22083 has 25 MA's), (64, 22140), (68, 22152), (83, 22227), (92, 22290), (93, 22293), (100, 22317), (108, 22362), (109, 22365),

Gene: Mana_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Mana_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Manad_14 Start: 12810, Stop: 13199, Start Num: 44

Candidate Starts for Manad_14:

(Start: 44 @12810 has 313 MA's), (61, 12888), (66, 12903), (67, 12906), (80, 12969), (82, 12978), (84, 12987), (89, 13023), (98, 13059), (117, 13164),

Gene: Mao1_12 Start: 11984, Stop: 12379, Start Num: 40

Candidate Starts for Mao1_12:

(Start: 40 @11984 has 52 MA's), (49, 12017), (62, 12095), (84, 12191), (92, 12242), (94, 12248), (96, 12254), (98, 12263), (105, 12305),

Gene: Mariokart_14 Start: 12852, Stop: 13238, Start Num: 48

Candidate Starts for Mariokart_14:

(Start: 48 @12852 has 8 MA's), (Start: 50 @12864 has 4 MA's), (62, 12930), (71, 12966), (84, 13026), (86, 13035), (100, 13104), (103, 13119), (118, 13209),

Gene: Marley1013_17 Start: 15350, Stop: 15784, Start Num: 40

Candidate Starts for Marley1013_17:

(24, 15245), (Start: 40 @15350 has 52 MA's), (54, 15404), (65, 15470), (105, 15671), (106, 15674),

Gene: Maru_14 Start: 12958, Stop: 13347, Start Num: 44

Candidate Starts for Maru_14:

(Start: 44 @12958 has 313 MA's), (61, 13036), (66, 13051), (67, 13054), (80, 13117), (82, 13126), (84, 13135), (89, 13171), (98, 13207), (117, 13312),

Gene: Mask_13 Start: 11985, Stop: 12380, Start Num: 40

Candidate Starts for Mask_13:

(Start: 40 @11985 has 52 MA's), (49, 12018), (62, 12096), (84, 12192), (92, 12243), (94, 12249), (96, 12255), (98, 12264), (105, 12306),

Gene: Maskar_14 Start: 12800, Stop: 13189, Start Num: 44

Candidate Starts for Maskar_14:

(Start: 44 @12800 has 313 MA's), (61, 12878), (66, 12893), (67, 12896), (80, 12959), (82, 12968), (84, 12977), (89, 13013), (98, 13049), (117, 13154),

Gene: Matalotodo_15 Start: 13248, Stop: 13637, Start Num: 44

Candidate Starts for Matalotodo_15:

(Start: 44 @13248 has 313 MA's), (61, 13326), (66, 13341), (67, 13344), (80, 13407), (82, 13416), (84, 13425), (89, 13461), (98, 13497), (117, 13602),

Gene: Mcshane_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for Mcshane_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: Mecca_14 Start: 12951, Stop: 13340, Start Num: 44

Candidate Starts for Mecca_14:

(Start: 44 @12951 has 313 MA's), (61, 13029), (66, 13044), (67, 13047), (80, 13110), (82, 13119), (84, 13128), (89, 13164), (98, 13200), (117, 13305),

Gene: Megamind20_15 Start: 12973, Stop: 13362, Start Num: 44

Candidate Starts for Megamind20_15:

(Start: 44 @12973 has 313 MA's), (61, 13051), (66, 13066), (67, 13069), (80, 13132), (82, 13141), (84, 13150), (89, 13186), (98, 13222), (117, 13327),

Gene: Megatron_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Megatron_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Melc17_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Melc17_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: MelsMeow_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for MelsMeow_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Mesh1_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Mesh1_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Mesmerelda_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for Mesmerelda_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: MichaelPhcott_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for MichaelPhcott_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Mikota_15 Start: 13239, Stop: 13628, Start Num: 44

Candidate Starts for Mikota_15:

(Start: 44 @13239 has 313 MA's), (61, 13317), (66, 13332), (67, 13335), (80, 13398), (82, 13407), (84, 13416), (89, 13452), (98, 13488), (117, 13593),

Gene: MiniBoss_15 Start: 13241, Stop: 13630, Start Num: 44

Candidate Starts for MiniBoss_15:

(Start: 44 @13241 has 313 MA's), (61, 13319), (66, 13334), (67, 13337), (80, 13400), (82, 13409), (84, 13418), (89, 13454), (98, 13490), (117, 13595),

Gene: MitKao_15 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for MitKao_15:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Mithril_15 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for Mithril_15:

(Start: 44 @14979 has 313 MA's), (67, 15081), (73, 15120), (80, 15144), (82, 15153), (89, 15198), (93, 15216), (96, 15225), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: MmasiCarm_17 Start: 14563, Stop: 14997, Start Num: 40

Candidate Starts for MmasiCarm_17:

(24, 14458), (Start: 40 @14563 has 52 MA's), (54, 14617), (65, 14683), (105, 14884), (106, 14887),

Gene: Morgushi_15 Start: 12964, Stop: 13353, Start Num: 44

Candidate Starts for Morgushi_15:

(Start: 44 @12964 has 313 MA's), (61, 13042), (66, 13057), (67, 13060), (80, 13123), (82, 13132), (84, 13141), (89, 13177), (98, 13213), (117, 13318),

Gene: Mortcellus_16 Start: 15204, Stop: 15638, Start Num: 40

Candidate Starts for Mortcellus_16:

(24, 15099), (Start: 40 @15204 has 52 MA's), (54, 15258), (65, 15324), (105, 15525), (106, 15528),

Gene: Morty_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Morty_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Morty007_17 Start: 15350, Stop: 15784, Start Num: 40

Candidate Starts for Morty007_17:

(24, 15245), (Start: 40 @15350 has 52 MA's), (54, 15404), (65, 15470), (105, 15671), (106, 15674),

Gene: MortyNRick_23 Start: 19924, Stop: 20301, Start Num: 56

Candidate Starts for MortyNRick_23:

(Start: 56 @19924 has 17 MA's), (Start: 57 @19930 has 25 MA's), (64, 19987), (65, 19990), (83, 20074), (86, 20095), (92, 20137), (93, 20140), (96, 20149), (108, 20209), (109, 20212),

Gene: Mosaic_14 Start: 12967, Stop: 13356, Start Num: 44

Candidate Starts for Mosaic_14:

(Start: 44 @12967 has 313 MA's), (61, 13045), (66, 13060), (67, 13063), (80, 13126), (82, 13135), (84, 13144), (89, 13180), (98, 13216), (117, 13321),

Gene: MossRose_16 Start: 14360, Stop: 14761, Start Num: 39

Candidate Starts for MossRose_16:

(Start: 39 @14360 has 7 MA's), (43, 14381), (53, 14408), (69, 14486), (89, 14597), (96, 14624), (98, 14633), (100, 14639), (112, 14708), (116, 14732), (119, 14750), (120, 14753),

Gene: MrPhizzler_15 Start: 12965, Stop: 13354, Start Num: 44

Candidate Starts for MrPhizzler_15:

(Start: 44 @12965 has 313 MA's), (61, 13043), (66, 13058), (67, 13061), (80, 13124), (82, 13133), (84, 13142), (89, 13178), (98, 13214), (117, 13319),

Gene: Mudslide_15 Start: 15224, Stop: 15625, Start Num: 44

Candidate Starts for Mudslide_15:

(Start: 44 @15224 has 313 MA's), (65, 15320), (67, 15326), (73, 15365), (80, 15389), (82, 15398), (89, 15443), (90, 15449), (93, 15461), (96, 15470), (98, 15479), (103, 15500), (104, 15509), (122, 15602),

Gene: Mulan_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Mulan_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Murdoc_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Murdoc_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Mutante_14 Start: 12963, Stop: 13352, Start Num: 44

Candidate Starts for Mutante_14:

(Start: 44 @12963 has 313 MA's), (61, 13041), (66, 13056), (67, 13059), (80, 13122), (82, 13131), (84, 13140), (89, 13176), (98, 13212), (117, 13317),

Gene: Mysterious_16 Start: 15072, Stop: 15494, Start Num: 41

Candidate Starts for Mysterious_16:

(23, 14964), (Start: 41 @15072 has 2 MA's), (Start: 44 @15087 has 313 MA's), (66, 15192), (67, 15195), (74, 15240), (82, 15267), (89, 15312), (98, 15348), (105, 15390), (123, 15474),

Gene: NHagos_14 Start: 12851, Stop: 13228, Start Num: 45

Candidate Starts for NHagos_14:

(Start: 45 @12851 has 1 MA's), (60, 12896), (62, 12932), (65, 12941), (80, 13010), (82, 13019), (98, 13100), (100, 13106), (110, 13157), (112, 13175),

Gene: Nacho_0015 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Nacho_0015:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Nanao_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Nanao_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Nathan_15 Start: 13263, Stop: 13652, Start Num: 44

Candidate Starts for Nathan_15:

(Start: 44 @13263 has 313 MA's), (61, 13341), (66, 13356), (67, 13359), (80, 13422), (82, 13431), (84, 13440), (89, 13476), (98, 13512), (117, 13617),

Gene: Nehemiah_15 Start: 15087, Stop: 15494, Start Num: 44

Candidate Starts for Nehemiah_15:

(23, 14964), (Start: 41 @15072 has 2 MA's), (Start: 44 @15087 has 313 MA's), (66, 15192), (67, 15195), (74, 15240), (82, 15267), (89, 15312), (98, 15348), (105, 15390), (123, 15474),

Gene: Neos5_17 Start: 15356, Stop: 15790, Start Num: 40

Candidate Starts for Neos5_17:

(24, 15251), (Start: 40 @15356 has 52 MA's), (54, 15410), (65, 15476), (105, 15677), (106, 15680),

Gene: Newman_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Newman_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Nicole21_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for Nicole21_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Nigel_13 Start: 13828, Stop: 14229, Start Num: 44

Candidate Starts for Nigel_13:

(Start: 44 @13828 has 313 MA's), (67, 13930), (80, 13993), (89, 14047), (93, 14065), (96, 14074), (98, 14083), (102, 14101), (104, 14113),

Gene: Nozo_17 Start: 15331, Stop: 15762, Start Num: 40

Candidate Starts for Nozo_17:

(24, 15226), (Start: 40 @15331 has 52 MA's), (54, 15385), (65, 15451), (105, 15652), (106, 15655),

Gene: Numberten_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Numberten_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Nyala_14 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Nyala_14:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: Nymphadora_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for Nymphadora_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: OSmaximus_15 Start: 13263, Stop: 13652, Start Num: 44

Candidate Starts for OSmaximus_15:

(Start: 44 @13263 has 313 MA's), (61, 13341), (66, 13356), (67, 13359), (80, 13422), (82, 13431), (84, 13440), (89, 13476), (98, 13512), (117, 13617),

Gene: Obutu_17 Start: 14561, Stop: 14995, Start Num: 40

Candidate Starts for Obutu_17:

(24, 14456), (Start: 40 @14561 has 52 MA's), (54, 14615), (65, 14681), (105, 14882), (106, 14885),

Gene: Ohgeesy_22 Start: 20697, Stop: 21053, Start Num: 57

Candidate Starts for Ohgeesy_22:

(Start: 57 @20697 has 25 MA's), (65, 20757), (68, 20766), (83, 20841), (92, 20904), (96, 20916), (108, 20976),

Gene: Olak_14 Start: 12952, Stop: 13341, Start Num: 44

Candidate Starts for Olak_14:

(Start: 44 @12952 has 313 MA's), (61, 13030), (66, 13045), (67, 13048), (80, 13111), (82, 13120), (84, 13129), (89, 13165), (98, 13201), (117, 13306),

Gene: Oline_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Oline_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Olive_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Olive_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: OliverWalter_15 Start: 13261, Stop: 13650, Start Num: 44

Candidate Starts for OliverWalter_15:

(Start: 44 @13261 has 313 MA's), (61, 13339), (66, 13354), (67, 13357), (80, 13420), (82, 13429), (84, 13438), (89, 13474), (98, 13510), (117, 13615),

Gene: Omniscient_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Omniscient_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Oosterbaan_15 Start: 13254, Stop: 13643, Start Num: 44

Candidate Starts for Oosterbaan_15:

(Start: 44 @13254 has 313 MA's), (61, 13332), (66, 13347), (67, 13350), (80, 13413), (82, 13422), (84, 13431), (89, 13467), (98, 13503), (117, 13608),

Gene: OrangeOswald_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for OrangeOswald_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: Orfeu_14 Start: 12953, Stop: 13342, Start Num: 44

Candidate Starts for Orfeu_14:

(Start: 44 @12953 has 313 MA's), (61, 13031), (66, 13046), (67, 13049), (80, 13112), (82, 13121), (84, 13130), (89, 13166), (98, 13202), (117, 13307),

Gene: Orion_15 Start: 13254, Stop: 13643, Start Num: 44

Candidate Starts for Orion_15:

(Start: 44 @13254 has 313 MA's), (61, 13332), (66, 13347), (67, 13350), (80, 13413), (82, 13422), (84, 13431), (89, 13467), (98, 13503), (117, 13608),

Gene: Orwigg_14 Start: 12946, Stop: 13335, Start Num: 44

Candidate Starts for Orwigg_14:

(Start: 44 @12946 has 313 MA's), (61, 13024), (66, 13039), (67, 13042), (80, 13105), (82, 13114), (84, 13123), (89, 13159), (98, 13195), (117, 13300),

Gene: PG1_15 Start: 13266, Stop: 13655, Start Num: 44

Candidate Starts for PG1_15:

(Start: 44 @13266 has 313 MA's), (61, 13344), (66, 13359), (67, 13362), (80, 13425), (82, 13434), (84, 13443), (89, 13479), (98, 13515), (117, 13620),

Gene: Pacifista_14 Start: 12957, Stop: 13346, Start Num: 44

Candidate Starts for Pacifista_14:

(Start: 44 @12957 has 313 MA's), (61, 13035), (66, 13050), (67, 13053), (80, 13116), (82, 13125), (84, 13134), (89, 13170), (98, 13206), (117, 13311),

Gene: PallasAthena_15 Start: 12961, Stop: 13350, Start Num: 44

Candidate Starts for PallasAthena_15:

(Start: 44 @12961 has 313 MA's), (61, 13039), (66, 13054), (67, 13057), (80, 13120), (82, 13129), (84, 13138), (89, 13174), (98, 13210), (117, 13315),

Gene: Periwinkle_26 Start: 20664, Stop: 21038, Start Num: 57

Candidate Starts for Periwinkle_26:

(Start: 56 @20658 has 17 MA's), (Start: 57 @20664 has 25 MA's), (64, 20721), (65, 20724), (68, 20733), (83, 20808), (86, 20829), (92, 20871), (93, 20874), (113, 20973),

Gene: Phabuloso_23 Start: 19948, Stop: 20325, Start Num: 56

Candidate Starts for Phabuloso_23:

(Start: 56 @19948 has 17 MA's), (Start: 57 @19954 has 25 MA's), (64, 20011), (65, 20014), (83, 20098), (86, 20119), (92, 20161), (93, 20164), (96, 20173), (108, 20233), (109, 20236),

Gene: Phamished_15 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for Phamished_15:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Phareon_15 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Phareon_15:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: PhatCats2014_15 Start: 13269, Stop: 13658, Start Num: 44

Candidate Starts for PhatCats2014_15:

(Start: 44 @13269 has 313 MA's), (61, 13347), (66, 13362), (67, 13365), (80, 13428), (82, 13437), (84, 13446), (89, 13482), (98, 13518), (117, 13623),

Gene: PhatLouie_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for PhatLouie_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Phayeta_17 Start: 14442, Stop: 14876, Start Num: 40

Candidate Starts for Phayeta_17:

(24, 14337), (Start: 40 @14442 has 52 MA's), (54, 14496), (65, 14562), (105, 14763), (106, 14766),

Gene: Phelemich_16 Start: 15091, Stop: 15498, Start Num: 44

Candidate Starts for Phelemich_16:

(23, 14968), (Start: 41 @15076 has 2 MA's), (Start: 44 @15091 has 313 MA's), (66, 15196), (67, 15199), (74, 15244), (82, 15271), (89, 15316), (98, 15352), (105, 15394), (123, 15478),

Gene: PhenghisKhan_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for PhenghisKhan_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Pherdinand_15 Start: 13257, Stop: 13646, Start Num: 44

Candidate Starts for Pherdinand_15:

(Start: 44 @13257 has 313 MA's), (61, 13335), (66, 13350), (67, 13353), (80, 13416), (82, 13425), (84, 13434), (89, 13470), (98, 13506), (117, 13611),

Gene: Phergie_14 Start: 12806, Stop: 13195, Start Num: 44

Candidate Starts for Phergie_14:

(Start: 44 @12806 has 313 MA's), (61, 12884), (66, 12899), (67, 12902), (80, 12965), (82, 12974), (84, 12983), (89, 13019), (98, 13055), (117, 13160),

Gene: Philly_16 Start: 14432, Stop: 14866, Start Num: 40

Candidate Starts for Philly_16:

(24, 14327), (Start: 40 @14432 has 52 MA's), (54, 14486), (65, 14552), (105, 14753), (106, 14756),

Gene: Phipps_15 Start: 13232, Stop: 13621, Start Num: 44

Candidate Starts for Phipps_15:

(Start: 44 @13232 has 313 MA's), (61, 13310), (66, 13325), (67, 13328), (80, 13391), (82, 13400), (84, 13409), (89, 13445), (98, 13481), (117, 13586),

Gene: Phistory_25 Start: 20985, Stop: 21359, Start Num: 57

Candidate Starts for Phistory_25:

(Start: 56 @20979 has 17 MA's), (Start: 57 @20985 has 25 MA's), (64, 21042), (65, 21045), (83, 21129), (86, 21150), (92, 21192), (93, 21195), (113, 21294),

Gene: Phleuron_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Phleuron_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Phlyer_17 Start: 15300, Stop: 15734, Start Num: 40

Candidate Starts for Phlyer_17:

(24, 15195), (Start: 40 @15300 has 52 MA's), (54, 15354), (65, 15420), (105, 15621), (106, 15624),

Gene: PhrankReynolds_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for PhrankReynolds_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: PhrodoBaggins_14 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for PhrodoBaggins_14:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Phunky_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Phunky_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Piglet_0014 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Piglet_0014:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: PinheadLarry_15 Start: 12972, Stop: 13361, Start Num: 44

Candidate Starts for PinheadLarry_15:

(Start: 44 @12972 has 313 MA's), (61, 13050), (66, 13065), (67, 13068), (80, 13131), (82, 13140), (84, 13149), (89, 13185), (98, 13221), (117, 13326),

Gene: Pinkman_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for Pinkman_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: Pipefish_17 Start: 15450, Stop: 15884, Start Num: 40

Candidate Starts for Pipefish_17:

(Start: 40 @15450 has 52 MA's), (54, 15504), (65, 15570), (105, 15771), (106, 15774),

Gene: Pipsqueak_15 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for Pipsqueak_15:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Placalicious_14 Start: 12954, Stop: 13343, Start Num: 44

Candidate Starts for Placalicious_14:

(Start: 44 @12954 has 313 MA's), (61, 13032), (66, 13047), (67, 13050), (80, 13113), (82, 13122), (84, 13131), (89, 13167), (98, 13203), (117, 13308),

Gene: Plata_15 Start: 12968, Stop: 13357, Start Num: 44

Candidate Starts for Plata_15:

(Start: 44 @12968 has 313 MA's), (61, 13046), (66, 13061), (67, 13064), (80, 13127), (82, 13136), (84, 13145), (89, 13181), (98, 13217), (117, 13322),

Gene: Plmatters_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Plmatters_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Podrick_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Podrick_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: Polly_21 Start: 20514, Stop: 20870, Start Num: 57

Candidate Starts for Polly_21:

(26, 20373), (27, 20379), (38, 20448), (Start: 57 @20514 has 25 MA's), (65, 20574), (68, 20583), (85, 20673), (92, 20721), (93, 20724), (96, 20733), (108, 20793),

Gene: Pops_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Pops_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Poster_14 Start: 13912, Stop: 14313, Start Num: 44

Candidate Starts for Poster_14:

(Start: 44 @13912 has 313 MA's), (67, 14014), (80, 14077), (82, 14086), (84, 14095), (89, 14131), (93, 14149), (96, 14158), (98, 14167), (103, 14188), (104, 14197), (122, 14290),

Gene: Potter_14 Start: 12967, Stop: 13356, Start Num: 44

Candidate Starts for Potter_14:

(Start: 44 @12967 has 313 MA's), (61, 13045), (66, 13060), (67, 13063), (80, 13126), (82, 13135), (84, 13144), (89, 13180), (98, 13216), (117, 13321),

Gene: Prickles_15 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for Prickles_15:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Prince_15 Start: 15136, Stop: 15537, Start Num: 44

Candidate Starts for Prince_15:

(Start: 44 @15136 has 313 MA's), (65, 15232), (67, 15238), (73, 15277), (80, 15301), (82, 15310), (89, 15355), (90, 15361), (93, 15373), (96, 15382), (98, 15391), (103, 15412), (104, 15421), (122, 15514),

Gene: ProfessorX_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for ProfessorX_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Puhltonio_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Puhltonio_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: QueenBeane_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for QueenBeane_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: QueenPie_15 Start: 15510, Stop: 15911, Start Num: 44

Candidate Starts for QueenPie_15:

(Start: 44 @15510 has 313 MA's), (67, 15612), (80, 15675), (82, 15684), (84, 15693), (89, 15729), (93, 15747), (96, 15756), (98, 15765), (102, 15783), (103, 15786), (104, 15795), (110, 15822), (122, 15888),

Gene: Quisquilliae_15 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for Quisquilliae_15:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: RagingRooster_17 Start: 14567, Stop: 15001, Start Num: 40

Candidate Starts for RagingRooster_17:

(24, 14462), (Start: 40 @14567 has 52 MA's), (54, 14621), (65, 14687), (105, 14888), (106, 14891),

Gene: RawrgerThat_15 Start: 14973, Stop: 15374, Start Num: 44

Candidate Starts for RawrgerThat_15:

(Start: 44 @14973 has 313 MA's), (67, 15075), (80, 15138), (82, 15147), (89, 15192), (90, 15198), (93, 15210), (98, 15228), (103, 15249), (104, 15258), (122, 15351),

Gene: Reccee_17 Start: 15025, Stop: 15432, Start Num: 44

Candidate Starts for Reccee_17:

(23, 14902), (Start: 41 @15010 has 2 MA's), (Start: 44 @15025 has 313 MA's), (66, 15130), (67, 15133), (70, 15142), (82, 15205), (89, 15250), (98, 15286), (105, 15328), (123, 15412),

Gene: RedMaple_14 Start: 13265, Stop: 13654, Start Num: 44

Candidate Starts for RedMaple_14:

(Start: 44 @13265 has 313 MA's), (61, 13343), (66, 13358), (67, 13361), (80, 13424), (82, 13433), (84, 13442), (89, 13478), (98, 13514), (117, 13619),

Gene: RedRaider89_15 Start: 13485, Stop: 13874, Start Num: 44

Candidate Starts for RedRaider89_15:

(Start: 44 @13485 has 313 MA's), (61, 13563), (66, 13578), (67, 13581), (80, 13644), (82, 13653), (84, 13662), (89, 13698), (98, 13734), (117, 13839),

Gene: Renkei_14 Start: 13919, Stop: 14320, Start Num: 44

Candidate Starts for Renkei_14:

(Start: 44 @13919 has 313 MA's), (67, 14021), (80, 14084), (82, 14093), (84, 14102), (89, 14138), (93, 14156), (96, 14165), (98, 14174), (103, 14195), (104, 14204), (122, 14297),

Gene: Reprobate_16 Start: 15088, Stop: 15495, Start Num: 44

Candidate Starts for Reprobate_16:

(23, 14965), (Start: 41 @15073 has 2 MA's), (Start: 44 @15088 has 313 MA's), (66, 15193), (67, 15196), (74, 15241), (82, 15268), (89, 15313), (98, 15349), (105, 15391), (123, 15475),

Gene: Reynauld_35 Start: 36999, Stop: 37397, Start Num: 52

Candidate Starts for Reynauld_35:

(Start: 52 @36999 has 2 MA's), (Start: 55 @37005 has 9 MA's), (68, 37083), (79, 37140), (90, 37203), (95, 37221), (111, 37299), (112, 37308), (125, 37389),

Gene: Rich_16 Start: 14987, Stop: 15394, Start Num: 44

Candidate Starts for Rich_16:

(13, 14729), (Start: 44 @14987 has 313 MA's), (66, 15092), (67, 15095), (82, 15167), (83, 15173), (89, 15212), (98, 15248), (105, 15290), (123, 15374),

Gene: Ricotta_14 Start: 12977, Stop: 13366, Start Num: 44

Candidate Starts for Ricotta_14:

(Start: 44 @12977 has 313 MA's), (61, 13055), (66, 13070), (67, 13073), (80, 13136), (82, 13145), (84, 13154), (89, 13190), (98, 13226), (117, 13331),

Gene: Riggan_15 Start: 13233, Stop: 13622, Start Num: 44

Candidate Starts for Riggan_15:

(Start: 44 @13233 has 313 MA's), (61, 13311), (66, 13326), (67, 13329), (80, 13392), (82, 13401), (84, 13410), (89, 13446), (98, 13482), (117, 13587),

Gene: Rimu_15 Start: 12965, Stop: 13354, Start Num: 44

Candidate Starts for Rimu_15:

(Start: 44 @12965 has 313 MA's), (61, 13043), (66, 13058), (67, 13061), (80, 13124), (82, 13133), (84, 13142), (89, 13178), (98, 13214), (117, 13319),

Gene: Rita130_16 Start: 14845, Stop: 15252, Start Num: 44

Candidate Starts for Rita130_16:

(23, 14722), (Start: 41 @14830 has 2 MA's), (Start: 44 @14845 has 313 MA's), (66, 14950), (67, 14953), (70, 14962), (82, 15025), (89, 15070), (98, 15106), (105, 15148), (123, 15232),

Gene: Rita1961_17 Start: 14562, Stop: 14996, Start Num: 40

Candidate Starts for Rita1961_17:

(24, 14457), (Start: 40 @14562 has 52 MA's), (54, 14616), (65, 14682), (105, 14883), (106, 14886),

Gene: Riverton_14 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for Riverton_14:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Robyn_14 Start: 12826, Stop: 13215, Start Num: 44

Candidate Starts for Robyn_14:

(Start: 44 @12826 has 313 MA's), (61, 12904), (66, 12919), (67, 12922), (80, 12985), (82, 12994), (84, 13003), (89, 13039), (98, 13075), (117, 13180),

Gene: Roliet_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Roliet_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: RomaT_17 Start: 15347, Stop: 15781, Start Num: 40

Candidate Starts for RomaT_17:

(24, 15242), (Start: 40 @15347 has 52 MA's), (54, 15401), (65, 15467), (105, 15668), (106, 15671),

Gene: Roscoe_16 Start: 13494, Stop: 13883, Start Num: 44

Candidate Starts for Roscoe_16:

(Start: 44 @13494 has 313 MA's), (61, 13572), (66, 13587), (67, 13590), (80, 13653), (82, 13662), (84, 13671), (89, 13707), (98, 13743), (100, 13749), (117, 13848),

Gene: Roy17_15 Start: 12955, Stop: 13344, Start Num: 44

Candidate Starts for Roy17_15:

(Start: 44 @12955 has 313 MA's), (61, 13033), (66, 13048), (67, 13051), (80, 13114), (82, 13123), (84, 13132), (89, 13168), (98, 13204), (117, 13309),

Gene: SDcharge11_15 Start: 13234, Stop: 13623, Start Num: 44

Candidate Starts for SDcharge11_15:

(Start: 44 @13234 has 313 MA's), (61, 13312), (66, 13327), (67, 13330), (80, 13393), (82, 13402), (84, 13411), (89, 13447), (98, 13483), (117, 13588),

Gene: SallyH_15 Start: 13263, Stop: 13652, Start Num: 44

Candidate Starts for SallyH_15:

(Start: 44 @13263 has 313 MA's), (61, 13341), (66, 13356), (67, 13359), (80, 13422), (82, 13431), (84, 13440), (89, 13476), (98, 13512), (117, 13617),

Gene: SamW_22 Start: 21107, Stop: 21475, Start Num: 55

Candidate Starts for SamW_22:

(15, 20891), (Start: 55 @21107 has 9 MA's), (70, 21191), (75, 21230), (82, 21254), (87, 21275), (97, 21332),

Gene: Samaymay_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Samaymay_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: SassyCat97_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for SassyCat97_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (100, 13215), (117, 13314),

Gene: Schadenfreude_14 Start: 12810, Stop: 13199, Start Num: 44

Candidate Starts for Schadenfreude_14:

(Start: 44 @12810 has 313 MA's), (61, 12888), (66, 12903), (67, 12906), (80, 12969), (82, 12978), (84, 12987), (89, 13023), (98, 13059), (117, 13164),

Gene: Schueller_14 Start: 12951, Stop: 13340, Start Num: 44

Candidate Starts for Schueller_14:

(Start: 44 @12951 has 313 MA's), (61, 13029), (66, 13044), (67, 13047), (80, 13110), (82, 13119), (84, 13128), (89, 13164), (98, 13200), (117, 13305),

Gene: Scoot17C_15 Start: 13254, Stop: 13643, Start Num: 44

Candidate Starts for Scoot17C_15:

(Start: 44 @13254 has 313 MA's), (61, 13332), (66, 13347), (67, 13350), (80, 13413), (82, 13422), (84, 13431), (89, 13467), (98, 13503), (117, 13608),

Gene: Scrick_14 Start: 12973, Stop: 13362, Start Num: 44

Candidate Starts for Scrick_14:

(Start: 44 @12973 has 313 MA's), (61, 13051), (66, 13066), (67, 13069), (80, 13132), (82, 13141), (84, 13150), (89, 13186), (98, 13222), (117, 13327),

Gene: Sejanus_13 Start: 12918, Stop: 13313, Start Num: 40

Candidate Starts for Sejanus_13:

(Start: 40 @12918 has 52 MA's), (49, 12951), (62, 13029), (84, 13125), (92, 13176), (94, 13182), (96, 13188), (98, 13197), (105, 13239),

Gene: Selr12_15 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for Selr12_15:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Serendipitous_16 Start: 15034, Stop: 15441, Start Num: 44

Candidate Starts for Serendipitous_16:

(Start: 41 @15019 has 2 MA's), (Start: 44 @15034 has 313 MA's), (51, 15058), (58, 15085), (66, 15139), (67, 15142), (82, 15214), (83, 15220), (89, 15259), (98, 15295), (105, 15337), (123, 15421),

Gene: Serendipity_15 Start: 13274, Stop: 13663, Start Num: 44

Candidate Starts for Serendipity_15:

(Start: 44 @13274 has 313 MA's), (61, 13352), (66, 13367), (67, 13370), (80, 13433), (82, 13442), (84, 13451), (89, 13487), (98, 13523), (117, 13628),

Gene: Serpentine_0015 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Serpentine_0015:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: ShadowBud_15 Start: 13268, Stop: 13657, Start Num: 44

Candidate Starts for ShadowBud_15:

(Start: 44 @13268 has 313 MA's), (61, 13346), (66, 13361), (67, 13364), (80, 13427), (82, 13436), (84, 13445), (89, 13481), (98, 13517), (117, 13622),

Gene: Shatter_14 Start: 12949, Stop: 13329, Start Num: 50

Candidate Starts for Shatter_14:

(Start: 50 @12949 has 4 MA's), (65, 13024), (71, 13051), (86, 13120), (100, 13189), (103, 13204), (114, 13267), (116, 13282),

Gene: ShawBrad_24 Start: 20207, Stop: 20581, Start Num: 57

Candidate Starts for ShawBrad_24:

(Start: 56 @20201 has 17 MA's), (Start: 57 @20207 has 25 MA's), (64, 20264), (65, 20267), (68, 20276), (83, 20351), (86, 20372), (92, 20414), (93, 20417), (113, 20516),

Gene: Sheila_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for Sheila_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Shenyu_16 Start: 14829, Stop: 15227, Start Num: 44

Candidate Starts for Shenyu_16:

(23, 14706), (Start: 41 @14814 has 2 MA's), (Start: 44 @14829 has 313 MA's), (66, 14925), (67, 14928), (82, 15000), (89, 15045), (98, 15081), (105, 15123), (123, 15207),

Gene: ShiVal_15 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for ShiVal_15:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Sidious_22 Start: 20529, Stop: 20909, Start Num: 57

Candidate Starts for Sidious_22:

(Start: 57 @20529 has 25 MA's), (68, 20598), (83, 20673), (108, 20808), (110, 20814), (122, 20883),

Gene: Sigman_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Sigman_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: SilverBell_15 Start: 13259, Stop: 13648, Start Num: 44

Candidate Starts for SilverBell_15:

(Start: 44 @13259 has 313 MA's), (61, 13337), (66, 13352), (67, 13355), (80, 13418), (82, 13427), (84, 13436), (89, 13472), (98, 13508), (117, 13613),

Gene: Simielle_14 Start: 12945, Stop: 13334, Start Num: 44

Candidate Starts for Simielle_14:

(Start: 44 @12945 has 313 MA's), (61, 13023), (66, 13038), (67, 13041), (80, 13104), (82, 13113), (84, 13122), (89, 13158), (98, 13194), (117, 13299),

Gene: SirBeauregard_14 Start: 12920, Stop: 13309, Start Num: 44

Candidate Starts for SirBeauregard_14:

(Start: 44 @12920 has 313 MA's), (61, 12998), (66, 13013), (67, 13016), (80, 13079), (82, 13088), (84, 13097), (89, 13133), (98, 13169), (117, 13274),

Gene: SirJeffery_16 Start: 14846, Stop: 15253, Start Num: 44

Candidate Starts for SirJeffery_16:

(23, 14723), (Start: 41 @14831 has 2 MA's), (Start: 44 @14846 has 313 MA's), (66, 14951), (67, 14954), (70, 14963), (82, 15026), (89, 15071), (98, 15107), (105, 15149), (123, 15233),

Gene: Sisko_14 Start: 13277, Stop: 13672, Start Num: 48

Candidate Starts for Sisko_14:

(Start: 48 @13277 has 8 MA's), (Start: 50 @13289 has 4 MA's), (60, 13319), (71, 13391), (86, 13460), (98, 13523), (100, 13529), (114, 13607), (116, 13622), (117, 13628),

Gene: Skippy_15 Start: 13238, Stop: 13627, Start Num: 44

Candidate Starts for Skippy_15:

(Start: 44 @13238 has 313 MA's), (61, 13316), (66, 13331), (67, 13334), (80, 13397), (82, 13406), (84, 13415), (89, 13451), (98, 13487), (117, 13592),

Gene: Slatt_15 Start: 13270, Stop: 13659, Start Num: 44

Candidate Starts for Slatt_15:

(Start: 44 @13270 has 313 MA's), (61, 13348), (66, 13363), (67, 13366), (80, 13429), (82, 13438), (84, 13447), (89, 13483), (98, 13519), (117, 13624),

Gene: Soile_15 Start: 12965, Stop: 13354, Start Num: 44

Candidate Starts for Soile_15:

(Start: 44 @12965 has 313 MA's), (61, 13043), (66, 13058), (67, 13061), (80, 13124), (82, 13133), (84, 13142), (89, 13178), (98, 13214), (117, 13319),

Gene: Solosis_14 Start: 12972, Stop: 13361, Start Num: 44

Candidate Starts for Solosis_14:

(Start: 44 @12972 has 313 MA's), (61, 13050), (66, 13065), (67, 13068), (80, 13131), (82, 13140), (84, 13149), (89, 13185), (98, 13221), (117, 13326),

Gene: Sophia_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Sophia_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Soto_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Soto_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Sour_17 Start: 14711, Stop: 15097, Start Num: 47

Candidate Starts for Sour_17:

(Start: 47 @14711 has 1 MA's), (Start: 48 @14714 has 8 MA's), (62, 14792), (71, 14828), (91, 14936), (98, 14960), (100, 14966), (104, 14990), (110, 15017), (116, 15059), (121, 15080),

Gene: Spartan300_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Spartan300_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Spooky_24 Start: 20292, Stop: 20663, Start Num: 57

Candidate Starts for Spooky_24:

(3, 19797), (10, 19908), (11, 19926), (Start: 56 @20286 has 17 MA's), (Start: 57 @20292 has 25 MA's), (64, 20349), (68, 20361), (83, 20436), (92, 20499), (93, 20502), (100, 20526), (108, 20571), (109, 20574),

Gene: Squid_15 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Squid_15:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Squiddly_26 Start: 21704, Stop: 22075, Start Num: 57

Candidate Starts for Squiddly_26:

(3, 21209), (10, 21320), (11, 21338), (Start: 56 @21698 has 17 MA's), (Start: 57 @21704 has 25 MA's), (64, 21761), (68, 21773), (83, 21848), (92, 21911), (93, 21914), (100, 21938), (108, 21983), (109, 21986),

Gene: Squiggle_15 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Squiggle_15:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Srilaccoli3_32 Start: 35928, Stop: 36317, Start Num: 55

Candidate Starts for Srilaccoli3_32:

(17, 35727), (36, 35835), (Start: 55 @35928 has 9 MA's), (68, 36006), (88, 36114), (95, 36144), (112, 36231), (117, 36261),

Gene: StAB_22 Start: 21542, Stop: 21910, Start Num: 55

Candidate Starts for StAB_22:

(Start: 48 @21524 has 8 MA's), (Start: 55 @21542 has 9 MA's), (70, 21626), (82, 21689), (97, 21767),

Gene: Stiles_22 Start: 21096, Stop: 21464, Start Num: 55

Candidate Starts for Stiles_22:

(Start: 48 @21078 has 8 MA's), (Start: 55 @21096 has 9 MA's), (75, 21219), (76, 21222),

Gene: Stinger_13 Start: 13475, Stop: 13876, Start Num: 44

Candidate Starts for Stinger_13:

(Start: 44 @13475 has 313 MA's), (67, 13577), (73, 13616), (80, 13640), (89, 13694), (93, 13712), (96, 13721), (98, 13730), (102, 13748), (104, 13760),

Gene: Struggle_14 Start: 12806, Stop: 13195, Start Num: 44

Candidate Starts for Struggle_14:

(Start: 44 @12806 has 313 MA's), (61, 12884), (66, 12899), (67, 12902), (80, 12965), (82, 12974), (84, 12983), (89, 13019), (98, 13055), (117, 13160),

Gene: Suffolk_15 Start: 13252, Stop: 13641, Start Num: 44

Candidate Starts for Suffolk_15:

(Start: 44 @13252 has 313 MA's), (61, 13330), (66, 13345), (67, 13348), (80, 13411), (82, 13420), (84, 13429), (89, 13465), (98, 13501), (117, 13606),

Gene: Suigeneris_16 Start: 14831, Stop: 15253, Start Num: 41

Candidate Starts for Suigeneris_16:

(23, 14723), (Start: 41 @14831 has 2 MA's), (Start: 44 @14846 has 313 MA's), (66, 14951), (67, 14954), (70, 14963), (82, 15026), (89, 15071), (98, 15107), (105, 15149), (123, 15233),

Gene: Surely_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Surely_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Swiphy_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Swiphy_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Swish_15 Start: 13248, Stop: 13637, Start Num: 44

Candidate Starts for Swish_15:

(Start: 44 @13248 has 313 MA's), (61, 13326), (66, 13341), (67, 13344), (80, 13407), (82, 13416), (84, 13425), (89, 13461), (98, 13497), (117, 13602),

Gene: SynergyX_17 Start: 14567, Stop: 15001, Start Num: 40

Candidate Starts for SynergyX_17:

(24, 14462), (Start: 40 @14567 has 52 MA's), (54, 14621), (65, 14687), (105, 14888), (106, 14891),

Gene: TallGrassMM_15 Start: 12978, Stop: 13367, Start Num: 44

Candidate Starts for TallGrassMM_15:

(Start: 44 @12978 has 313 MA's), (61, 13056), (66, 13071), (67, 13074), (80, 13137), (82, 13146), (84, 13155), (89, 13191), (98, 13227), (117, 13332),

Gene: Telesworld_14 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for Telesworld_14:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: ThankyouJordi_21 Start: 21049, Stop: 21405, Start Num: 57

Candidate Starts for ThankyouJordi_21:

(Start: 57 @21049 has 25 MA's), (65, 21109), (108, 21328),

Gene: Thora_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Thora_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: ThreeOh3D2_15 Start: 13263, Stop: 13652, Start Num: 44

Candidate Starts for ThreeOh3D2_15:

(Start: 44 @13263 has 313 MA's), (61, 13341), (66, 13356), (67, 13359), (80, 13422), (82, 13431), (84, 13440), (89, 13476), (98, 13512), (117, 13617),

Gene: Thunderbird_14 Start: 12962, Stop: 13351, Start Num: 44

Candidate Starts for Thunderbird_14:

(Start: 44 @12962 has 313 MA's), (61, 13040), (66, 13055), (67, 13058), (80, 13121), (82, 13130), (84, 13139), (89, 13175), (98, 13211), (117, 13316),

Gene: TimTam_22 Start: 21074, Stop: 21430, Start Num: 57

Candidate Starts for TimTam_22:

(Start: 57 @21074 has 25 MA's), (65, 21134), (68, 21143), (83, 21218), (92, 21281), (96, 21293), (108, 21353),

Gene: Timmi_14 Start: 12972, Stop: 13361, Start Num: 44

Candidate Starts for Timmi_14:

(Start: 44 @12972 has 313 MA's), (61, 13050), (66, 13065), (67, 13068), (80, 13131), (82, 13140), (84, 13149), (89, 13185), (98, 13221), (117, 13326),

Gene: TinyTerror_17 Start: 14566, Stop: 15000, Start Num: 40

Candidate Starts for TinyTerror_17:

(24, 14461), (Start: 40 @14566 has 52 MA's), (54, 14620), (65, 14686), (105, 14887), (106, 14890),

Gene: TomBombadil_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for TomBombadil_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Tomlarah_15 Start: 13247, Stop: 13636, Start Num: 44

Candidate Starts for Tomlarah_15:

(Start: 44 @13247 has 313 MA's), (61, 13325), (66, 13340), (67, 13343), (80, 13406), (82, 13415), (84, 13424), (89, 13460), (98, 13496), (117, 13601),

Gene: Toni_14 Start: 12958, Stop: 13347, Start Num: 44

Candidate Starts for Toni_14:

(Start: 44 @12958 has 313 MA's), (61, 13036), (66, 13051), (67, 13054), (80, 13117), (82, 13126), (84, 13135), (89, 13171), (98, 13207), (117, 13312),

Gene: TooFast2Furius_16 Start: 13494, Stop: 13883, Start Num: 44

Candidate Starts for TooFast2Furius_16:

(Start: 44 @13494 has 313 MA's), (61, 13572), (66, 13587), (67, 13590), (80, 13653), (82, 13662), (84, 13671), (89, 13707), (98, 13743), (117, 13848),

Gene: Tooj_15 Start: 13260, Stop: 13649, Start Num: 44

Candidate Starts for Tooj_15:

(Start: 44 @13260 has 313 MA's), (61, 13338), (66, 13353), (67, 13356), (80, 13419), (82, 13428), (84, 13437), (89, 13473), (98, 13509), (117, 13614),

Gene: TraderJ_16 Start: 14363, Stop: 14764, Start Num: 39

Candidate Starts for TraderJ_16:

(Start: 39 @14363 has 7 MA's), (53, 14411), (69, 14489), (89, 14600), (96, 14627), (98, 14636), (100, 14642), (110, 14693), (112, 14711), (116, 14735), (119, 14753), (120, 14756),

Gene: Triad_15 Start: 12797, Stop: 13186, Start Num: 44

Candidate Starts for Triad_15:

(Start: 44 @12797 has 313 MA's), (61, 12875), (66, 12890), (67, 12893), (80, 12956), (82, 12965), (84, 12974), (89, 13010), (98, 13046), (117, 13151),

Gene: Troy_22 Start: 21107, Stop: 21475, Start Num: 55

Candidate Starts for Troy_22:

(15, 20891), (Start: 55 @21107 has 9 MA's), (70, 21191), (75, 21230), (82, 21254), (87, 21275), (97, 21332),

Gene: True_14 Start: 12961, Stop: 13350, Start Num: 44

Candidate Starts for True_14:

(Start: 44 @12961 has 313 MA's), (61, 13039), (66, 13054), (67, 13057), (80, 13120), (82, 13129), (84, 13138), (89, 13174), (98, 13210), (117, 13315),

Gene: Trypo_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for Trypo_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Tydolla_17 Start: 15304, Stop: 15738, Start Num: 40

Candidate Starts for Tydolla_17:

(24, 15199), (Start: 40 @15304 has 52 MA's), (54, 15358), (65, 15424), (105, 15625), (106, 15628),

Gene: TyrionL_14 Start: 12812, Stop: 13201, Start Num: 44

Candidate Starts for TyrionL_14:

(Start: 44 @12812 has 313 MA's), (61, 12890), (66, 12905), (67, 12908), (80, 12971), (82, 12980), (84, 12989), (89, 13025), (98, 13061), (117, 13166),

Gene: UAch1_15 Start: 13271, Stop: 13660, Start Num: 44

Candidate Starts for UAch1_15:

(Start: 44 @13271 has 313 MA's), (61, 13349), (66, 13364), (67, 13367), (80, 13430), (82, 13439), (84, 13448), (89, 13484), (98, 13520), (117, 13625),

Gene: UncleHowie_15 Start: 12960, Stop: 13349, Start Num: 44

Candidate Starts for UncleHowie_15:

(Start: 44 @12960 has 313 MA's), (61, 13038), (66, 13053), (67, 13056), (80, 13119), (82, 13128), (84, 13137), (89, 13173), (98, 13209), (117, 13314),

Gene: Usavi_15 Start: 13262, Stop: 13651, Start Num: 44

Candidate Starts for Usavi_15:

(Start: 44 @13262 has 313 MA's), (61, 13340), (66, 13355), (67, 13358), (80, 13421), (82, 13430), (84, 13439), (89, 13475), (98, 13511), (117, 13616),

Gene: Vaishali24_14 Start: 12913, Stop: 13302, Start Num: 44

Candidate Starts for Vaishali24_14:

(Start: 44 @12913 has 313 MA's), (61, 12991), (66, 13006), (67, 13009), (80, 13072), (82, 13081), (84, 13090), (89, 13126), (98, 13162), (117, 13267),

Gene: Valjean_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Valjean_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Vaticameos_15 Start: 12951, Stop: 13340, Start Num: 44

Candidate Starts for Vaticameos_15:

(Start: 44 @12951 has 313 MA's), (61, 13029), (66, 13044), (67, 13047), (80, 13110), (82, 13119), (84, 13128), (89, 13164), (98, 13200), (117, 13305),

Gene: Veritas_14 Start: 12800, Stop: 13189, Start Num: 44

Candidate Starts for Veritas_14:

(Start: 44 @12800 has 313 MA's), (61, 12878), (66, 12893), (67, 12896), (80, 12959), (82, 12968), (84, 12977), (89, 13013), (98, 13049), (117, 13154),

Gene: Vincenzo_16 Start: 15755, Stop: 16156, Start Num: 44

Candidate Starts for Vincenzo_16:

(Start: 44 @15755 has 313 MA's), (53, 15782), (67, 15857), (73, 15896), (80, 15920), (82, 15929), (88, 15968), (90, 15980), (93, 15992), (98, 16010), (102, 16028), (104, 16040), (105, 16052),

Gene: VioletZ_15 Start: 15009, Stop: 15410, Start Num: 44

Candidate Starts for VioletZ_15:

(Start: 44 @15009 has 313 MA's), (67, 15111), (80, 15174), (82, 15183), (89, 15228), (93, 15246), (98, 15264), (103, 15285), (104, 15294), (122, 15387),

Gene: Virapocalypse_15 Start: 13245, Stop: 13634, Start Num: 44

Candidate Starts for Virapocalypse_15:

(Start: 44 @13245 has 313 MA's), (61, 13323), (66, 13338), (67, 13341), (80, 13404), (82, 13413), (84, 13422), (89, 13458), (98, 13494), (117, 13599),

Gene: Virgeve_14 Start: 12966, Stop: 13355, Start Num: 44

Candidate Starts for Virgeve_14:

(Start: 44 @12966 has 313 MA's), (61, 13044), (66, 13059), (67, 13062), (80, 13125), (82, 13134), (84, 13143), (89, 13179), (98, 13215), (117, 13320),

Gene: Vista_15 Start: 13256, Stop: 13645, Start Num: 44

Candidate Starts for Vista_15:

(Start: 44 @13256 has 313 MA's), (61, 13334), (66, 13349), (67, 13352), (80, 13415), (82, 13424), (84, 13433), (89, 13469), (98, 13505), (117, 13610),

Gene: Vivaldi_15 Start: 13287, Stop: 13676, Start Num: 44

Candidate Starts for Vivaldi_15:

(Start: 44 @13287 has 313 MA's), (61, 13365), (66, 13380), (67, 13383), (80, 13446), (82, 13455), (84, 13464), (89, 13500), (98, 13536), (117, 13641),

Gene: Vortex_15 Start: 12967, Stop: 13356, Start Num: 44

Candidate Starts for Vortex_15:

(Start: 44 @12967 has 313 MA's), (61, 13045), (66, 13060), (67, 13063), (80, 13126), (82, 13135), (84, 13144), (89, 13180), (98, 13216), (117, 13321),

Gene: Waleliano_15 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for Waleliano_15:

(Start: 44 @14979 has 313 MA's), (67, 15081), (80, 15144), (82, 15153), (89, 15198), (93, 15216), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: Wallhey_14 Start: 12818, Stop: 13207, Start Num: 44

Candidate Starts for Wallhey_14:

(Start: 44 @12818 has 313 MA's), (61, 12896), (66, 12911), (67, 12914), (80, 12977), (82, 12986), (84, 12995), (89, 13031), (98, 13067), (117, 13172),

Gene: Waterdiva_15 Start: 13254, Stop: 13643, Start Num: 44

Candidate Starts for Waterdiva_15:

(Start: 44 @13254 has 313 MA's), (61, 13332), (66, 13347), (67, 13350), (80, 13413), (82, 13422), (84, 13431), (89, 13467), (98, 13503), (117, 13608),

Gene: Weher20_15 Start: 13244, Stop: 13633, Start Num: 44

Candidate Starts for Weher20_15:

(Start: 44 @13244 has 313 MA's), (61, 13322), (66, 13337), (67, 13340), (80, 13403), (82, 13412), (84, 13421), (89, 13457), (98, 13493), (117, 13598),

Gene: WelcomeAyanna_21 Start: 21049, Stop: 21405, Start Num: 57

Candidate Starts for WelcomeAyanna_21:

(Start: 57 @21049 has 25 MA's), (65, 21109), (108, 21328),

Gene: Whitney_25 Start: 21106, Stop: 21480, Start Num: 57

Candidate Starts for Whitney_25:

(3, 20611), (10, 20722), (11, 20740), (Start: 56 @21100 has 17 MA's), (Start: 57 @21106 has 25 MA's), (64, 21163), (65, 21166), (68, 21175), (83, 21250), (92, 21313), (93, 21316), (96, 21325), (108, 21385), (109, 21388),

Gene: Windsor_14 Start: 12920, Stop: 13309, Start Num: 44

Candidate Starts for Windsor_14:

(Start: 44 @12920 has 313 MA's), (61, 12998), (66, 13013), (67, 13016), (80, 13079), (82, 13088), (84, 13097), (89, 13133), (98, 13169), (117, 13274),

Gene: Wooper_16 Start: 14369, Stop: 14770, Start Num: 39

Candidate Starts for Wooper_16:

(Start: 39 @14369 has 7 MA's), (43, 14390), (53, 14417), (69, 14495), (89, 14606), (96, 14633), (98, 14642), (100, 14648), (110, 14699), (112, 14717), (116, 14741), (119, 14759), (120, 14762),

Gene: Xavier_14 Start: 12972, Stop: 13361, Start Num: 44

Candidate Starts for Xavier_14:

(Start: 44 @12972 has 313 MA's), (61, 13050), (66, 13065), (67, 13068), (80, 13131), (82, 13140), (84, 13149), (89, 13185), (98, 13221), (117, 13326),

Gene: Xincheng_15 Start: 14800, Stop: 15201, Start Num: 44

Candidate Starts for Xincheng_15:

(Start: 44 @14800 has 313 MA's), (67, 14902), (73, 14941), (80, 14965), (82, 14974), (89, 15019), (93, 15037), (96, 15046), (98, 15055), (103, 15076), (104, 15085), (122, 15178),

Gene: Yago84_14 Start: 13286, Stop: 13681, Start Num: 48

Candidate Starts for Yago84_14:

(Start: 48 @13286 has 8 MA's), (Start: 50 @13298 has 4 MA's), (60, 13328), (71, 13400), (86, 13469), (98, 13532), (100, 13538), (114, 13616), (116, 13631), (117, 13637),

Gene: Yahalom_17 Start: 14578, Stop: 15012, Start Num: 40

Candidate Starts for Yahalom_17:

(24, 14473), (Start: 40 @14578 has 52 MA's), (54, 14632), (65, 14698), (105, 14899), (106, 14902),

Gene: Yeshua_16 Start: 14346, Stop: 14747, Start Num: 39

Candidate Starts for Yeshua_16:

(Start: 39 @14346 has 7 MA's), (53, 14394), (69, 14472), (89, 14583), (98, 14619), (100, 14625), (110, 14676), (112, 14694), (116, 14718), (120, 14739),

Gene: Yinz_17 Start: 14605, Stop: 15039, Start Num: 40

Candidate Starts for Yinz_17:

(24, 14500), (Start: 40 @14605 has 52 MA's), (54, 14659), (65, 14725), (105, 14926), (106, 14929),

Gene: Yoshand_15 Start: 13257, Stop: 13646, Start Num: 44

Candidate Starts for Yoshand_15:

(Start: 44 @13257 has 313 MA's), (61, 13335), (66, 13350), (67, 13353), (80, 13416), (82, 13425), (84, 13434), (89, 13470), (98, 13506), (117, 13611),

Gene: YouGoGlencoco_15 Start: 13250, Stop: 13639, Start Num: 44

Candidate Starts for YouGoGlencoco_15:

(Start: 44 @13250 has 313 MA's), (61, 13328), (66, 13343), (67, 13346), (80, 13409), (82, 13418), (84, 13427), (89, 13463), (98, 13499), (117, 13604),

Gene: Yvonnetastic_49 Start: 34634, Stop: 35044, Start Num: 42

Candidate Starts for Yvonnetastic_49:

(Start: 42 @34634 has 2 MA's), (63, 34745), (71, 34778), (74, 34802), (110, 34967),

Gene: Zaider_16 Start: 13483, Stop: 13872, Start Num: 44

Candidate Starts for Zaider_16:

(Start: 44 @13483 has 313 MA's), (61, 13561), (66, 13576), (67, 13579), (80, 13642), (82, 13651), (84, 13660), (89, 13696), (98, 13732), (117, 13837),

Gene: Zelda_15 Start: 13253, Stop: 13642, Start Num: 44

Candidate Starts for Zelda_15:

(Start: 44 @13253 has 313 MA's), (61, 13331), (66, 13346), (67, 13349), (80, 13412), (82, 13421), (84, 13430), (89, 13466), (98, 13502), (117, 13607),

Gene: Zemanar_16 Start: 14979, Stop: 15380, Start Num: 44

Candidate Starts for Zemanar_16:

(Start: 44 @14979 has 313 MA's), (67, 15081), (80, 15144), (82, 15153), (89, 15198), (93, 15216), (98, 15234), (103, 15255), (104, 15264), (122, 15357),

Gene: Zirinka_22 Start: 21086, Stop: 21442, Start Num: 57

Candidate Starts for Zirinka_22:

(Start: 57 @21086 has 25 MA's), (65, 21146), (68, 21155), (83, 21230), (92, 21293), (96, 21305), (108, 21365),

Gene: Zonia_15 Start: 13267, Stop: 13656, Start Num: 44

Candidate Starts for Zonia_15:

(Start: 44 @13267 has 313 MA's), (61, 13345), (66, 13360), (67, 13363), (80, 13426), (82, 13435), (84, 13444), (89, 13480), (98, 13516), (117, 13621),