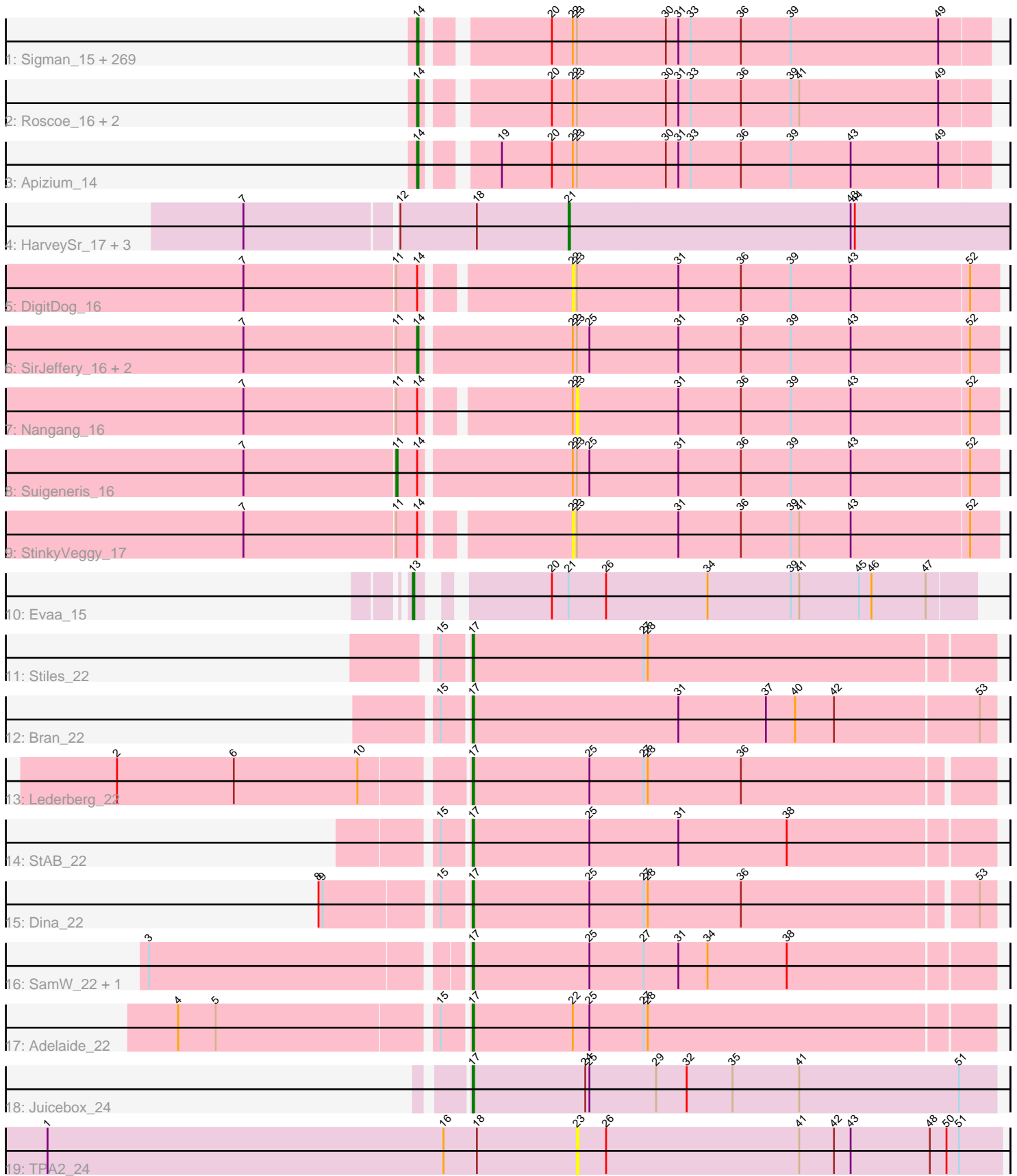


Pham 160085



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 160085 Report

This analysis was run 04/28/24 on database version 559.

Pham number 160085 has 296 members, 34 are drafts.

Phages represented in each track:

- Track 1 : Sigman_15, Durga_15, Chunky_15, BlackStallion_15, Puhltonio_15, MRabcd_14, Inchworm_15, Labeouficaum_14, Soto_15, Riggan_15, TallGrassMM_15, CharlieGBrown_14, HSavage_15, Held_15, Longacauda_14, Bishoperium_14, Phergie_14, Placalicious_14, Pops_15, Étaye_15, Mesh1_15, Zaider_16, Simielle_14, SDcharge11_15, Lego3393_15, Virgeve_14, DaddyDaniels_15, AbsoluteMadLad_14, BatteryCK_14, CampRoach_14, Kimbrough_15, Fang_15, Swish_15, Dati_15, Dingo_15, CheetO_15, Cornobble_14, FugateOSU_14, HighStump_14, Haimas_15, Lumine_14, Vaishali24_14, Numberten_15, Oosterbaan_15, TomBombadil_15, DirtJuice_15, JacAttac_15, Derpp_14, MiniBoss_15, Omniscient_15, Roliet_15, Anderson_15, Oline_14, Craff_15, Orfeu_14, Carthage_14, Harvey_15, Phipps_15, Jiraiya_15, PhatLouie_15, OliverWalter_15, Andre_15, Tomlarah_15, DuchessDung_14, Doddsville_15, Legolas_14, Kwadwo_14, Nyala_14, Matalotodo_14, Orwigg_15, Waterdiva_15, FluffyNinja_15, Manad_14, Jillium_14, Dione_14, LemonSlice_15, TyrionL_14, GeneCoco_15, Wallhey_14, Gwilliam_15, Colbert_15, Pherdinand_15, LuckyMarjie_14, Nicole21_15, Surely_15, Chah_15, Hetaeria_15, Giraffe_15, Chorkpop_15, Slatt_15, Phleuron_14, Inverness_15, Gareth_14, Altwerkus_14, Toni_14, Hertubise_15, Jiminy_14, Mecca_14, Vivaldi_15, Fozzie_14, Kwksand96_14, Chute_14, Plmatters_15, Banjo_14, Ashraf_14, JDog_14, Zelda_15, Phamished_15, Lopsy_14, Olak_14, MitKao_15, EmpTee_15, Melc17_15, UAch1_15, Solosis_14, Selr12_15, Newman_15, KLucky39_15, Beaglebox_14, Burr_14, Mag7_14, Badfish_15, CamL_15, DonSanchon_14, Kikipoo_15, Robyn_14, Bluephacebaby_14, Hocus_14, FriarPreacher_15, Cannibal_15, Pinkman_14, Nacho_0015, Scoot17C_15, Adriana_15, MrPhizzler_14, Valjean_15, Hartsy_14, Lasso_15, JakeO_14, Thora_15, Murdoc_15, LasagnaCat_15, Sheila_15, Piglet_0014, Spartan300_15, Squid_15, Pipsqueak_15, Samaymay_15, Virapocalypse_15, LostAndPhound_14, Daffy_15, UncleHowie_15, Rimu_14, Maskar_14, Morty_15, Tooj_15, Schadenfreude_14, HenryJackson_14, Basato_16, Childish_14, Eremos_15, Antonia_14, Haleema_14, PinheadLarry_15, Scrick_14, RedMaple_14, Frankicide_15, DelRivs_14, Lulwa_15, Daka_15, Katniss_15, Buckeye_15, Dice_15, Serpentine_0015, Weher20_15, ABU_15, Ricotta_15, Soile_15, Pacifista_16, Gyarad_0015, BlueHusk_15, Mulan_14, Vista_15, KlimbOn_15, Freya_14, Prickles_15, Hamish_15, Struggle_14, Lulumae_14, Cher_14, Chaelin_14, MichaelPhcott_14, AltPhacts_15, Suffolk_15, Mikota_15, Orion_15, ProfessorX_15, Trypo_15, PhenghisKhan_14, Olive_15, Xavier_14, Iridoclysis_15, Gophee_15, Schueller_14, Windsor_14, ThreeOh3D2_15, Charles1_15, Kailash_15, Morgushi_15, Emiris_15, PhrodoBaggins_14,

Mcshane_14, Crownjwl_15, Duggie_14, Horchata_15, Podrick_15, Grand2040_14, PG1_15, Mosaic_14, Sophia_14, OSmaximus_15, Skippy_15, Megatron_15, Veritas_14, QueenBeane_15, Magic8_15, Usavi_15, Cobra_15, Kahve_14, Mana_14, Fringe_15, ImtiyazSitla_14, Phareon_15, LeiMonet_15, Potter_14, Swiphy_15, True_14, Coletti_14, LeeLot_15, Zonia_15, Phunky_15, Timmi_14, Squiggle_15, YouGoGlencoco_15, Thunderbird_15, Brilliant_15, Vortex_15, Yoshand_15, Cosmolli16_14, ShiVal_15, Mutante_14, Eugenia_15, JangoPhett_15, Megamind20_15, Keitherie_15, KingTut_14, PhrankReynolds_14, Vaticameos_15, DoesntMatter_15, IsaacEli_15, Quisquilliae_15, KingVeVeVe_15, Kloppinator_15, MelsMeow_14, PhatCats2014_15, Roy17_15, Telesworld_14, Maru_14, Serendipity_15, Aelin_14

- Track 2 : Roscoe_16, SassyCat97_14, Boehler_15
- Track 3 : Apizium_14
- Track 4 : HarveySr_17, SlippinJimmy_17, Ben11_16, Phaedrus_16
- Track 5 : DigitDog_16
- Track 6 : SirJeffery_16, Donny_16, Acadian_16
- Track 7 : Nangang_16
- Track 8 : Suigeneris_16
- Track 9 : StinkyVeggy_17
- Track 10 : Evaa_15
- Track 11 : Stiles_22
- Track 12 : Bran_22
- Track 13 : Lederberg_22
- Track 14 : StAB_22
- Track 15 : Dina_22
- Track 16 : SamW_22, Troy_22
- Track 17 : Adelaide_22
- Track 18 : Juicebox_24
- Track 19 : TPA2_24

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

The start number called the most often in the published annotations is 14, it was called in 249 of the 262 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_15, AbsoluteMadLad_14, Acadian_16, Adriana_15, Aelin_14, AltPhacts_15, Altwerkus_14, Anderson_15, Andre_15, Antonia_14, Apizium_14, Ashraf_14, Badfish_15, Banjo_14, Basato_16, BatteryCK_14, Beaglebox_14, Bishoperium_14, BlackStallion_15, BlueHusk_15, Bluephacebaby_14, Boehler_15, Brilliant_15, Buckeye_15, Burr_14, CamL_15, CampRoach_14, Cannibal_15, Carthage_14, Chaelin_14, Chah_15, Charles1_15, CharlieGBrown_14, CheetO_15, Cher_14, Childish_14, Chorkpop_15, Chunky_15, Chute_14, Cobra_15, Colbert_15, Coletti_14, Cornobble_14, Cosmolli16_14, Craff_15, Crownjwl_15, DaddyDaniels_15, Daffy_15, Daka_15, Dati_15, DelRivs_14, Derpp_14, Dice_15, Dingo_15, Dione_14, DirtJuice_15, Doddsville_15, DoesntMatter_15, DonSanchon_14, Donny_16, DuchessDung_14, Duggie_14, Durga_15, Emiris_15, EmpTee_15, Eremos_15, Etaye_15, Eugenia_15, Fang_15, FluffyNinja_15, Fozzie_14, Frankicide_15, Freya_14, FriarPreacher_15, Fringe_15, FugateOSU_14, Gareth_14, GeneCoco_15, Giraffe_15, Gophee_15, Grand2040_14, Gwilliam_15, Gyarad_0015, HSavage_15,

Haimas_15, Haleema_14, Hamish_15, Hartsy_14, Harvey_15, Held_15, HenryJackson_14, Hertubise_15, Hetaeria_15, HighStump_14, Hocus_14, Horchata_15, ImtiyazSitla_14, Inchworm_15, Inverness_15, Iridoclysis_15, IsaacEli_15, JDog_14, JacAttac_15, JakeO_14, JangoPhett_15, Jillium_14, Jiminy_14, Jiraiya_15, KLucky39_15, Kahve_14, Kailash_15, Katniss_15, Keitherie_15, Kikipoo_15, Kimbrough_15, KingTut_14, KingVeVeVe_15, KlimbOn_15, Kloppinator_15, Kwadwo_14, Kwksand96_14, Labeouficaum_14, LasagnaCat_15, Lasso_15, LeeLot_15, Lego3393_15, Legolas_14, LeiMonet_15, LemonSlice_15, Longacauda_14, Lopsy_14, LostAndPhound_14, LuckyMarjie_14, Lulumae_14, Lulwa_15, Lumine_14, MRabcd_14, Mag7_14, Magic8_15, Mana_14, Manad_14, Maru_14, Maskar_14, Matalotodo_14, Mcshane_14, Mecca_14, Megamind20_15, Megatron_15, Melc17_15, MelsMeow_14, Mesh1_15, MichaelPhcott_14, Mikota_15, MiniBoss_15, MitKao_15, Morgushi_15, Morty_15, Mosaic_14, MrPhizzler_14, Mulan_14, Murdoc_15, Mutante_14, Nacho_0015, Newman_15, Nicole21_15, Numberten_15, Nyala_14, OSmaximus_15, Olak_14, Oline_14, Olive_15, OliverWalter_15, Omniscient_15, Oosterbaan_15, Orfeu_14, Orion_15, Orwigg_15, PG1_15, Pacifista_16, Phamished_15, Phareon_15, PhatCats2014_15, PhatLouie_15, 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, Plmatters_15, Podrick_15, Pops_15, Potter_14, Prickles_15, ProfessorX_15, Puhltonio_15, QueenBeane_15, Quisquilliae_15, RedMaple_14, Ricotta_15, Riggan_15, Rimu_14, Robyn_14, Roliet_15, Roscoe_16, Roy17_15, SDcharge11_15, Samaymay_15, SassyCat97_14, Schadenfreude_14, Schueller_14, Scoot17C_15, Scrick_14, Selr12_15, Serendipity_15, Serpentine_0015, Sheila_15, ShiVal_15, Sigman_15, Simielle_14, SirJeffery_16, Skippy_15, Slatt_15, Soile_15, Solosis_14, Sophia_14, Soto_15, Spartan300_15, Squid_15, Squiggle_15, Struggle_14, Suffolk_15, Surely_15, Swiphy_15, Swish_15, TallGrassMM_15, Telesworld_14, Thora_15, ThreeOh3D2_15, Thunderbird_15, Timmi_14, TomBombadil_15, Tomlarah_15, Toni_14, Tooj_15, True_14, Trypo_15, TyrionL_14, UAch1_15, UncleHowie_15, Usavi_15, Vaishali24_14, Valjean_15, Vaticameos_15, Veritas_14, Virapocalypse_15, Virgeve_14, Vista_15, Vivaldi_15, Vortex_15, Wallhey_14, Waterdiva_15, Weher20_15, Windsor_14, Xavier_14, Yoshand_15, YouGoGlencoco_15, Zaider_16, Zelda_15, Zonia_15,

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

- DigitDog_16, Nangang_16, StinkyVeggy_17, Suigeneris_16,

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

- Adelaide_22, Ben11_16, Bran_22, Dina_22, Evaa_15, HarveySr_17, Juicebox_24, Lederberg_22, Phaedrus_16, SamW_22, SlippinJimmy_17, StAB_22, Stiles_22, TPA2_24, Troy_22,

Summary by start number:

Start 11:

- Found in 7 of 296 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Suigeneris_16 (B5),

Start 13:

- Found in 1 of 296 (0.3%) of genes in pham

- Manual Annotations of this start: 1 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa_15 (DR),

Start 14:

- Found in 281 of 296 (94.9%) of genes in pham
- Manual Annotations of this start: 249 of 262
- Called 98.6% 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), AltPhacts_15 (B1), Altwerkus_14 (B1), Anderson_15 (B1), Andre_15 (B1), Antonia_14 (B1), Apizium_14 (B1), Ashraf_14 (B1), Badfish_15 (B1), Banjo_14 (B1), Basato_16 (B1), BatteryCK_14 (B1), Beaglebox_14 (B1), Bishoperium_14 (B1), BlackStallion_15 (B1), BlueHusk_15 (B1), Bluephacebaby_14 (B1), Boehler_15 (B1), Brilliant_15 (B1), Buckeye_15 (B1), Burr_14 (B1), CamL_15 (B1), CampRoach_14 (B1), Cannibal_15 (B1), Carthage_14 (B1), Chaelin_14 (B1), Chah_15 (B1), Charles1_15 (B1), CharlieGBrown_14 (B1), CheetO_15 (B1), Cher_14 (B1), Childish_14 (B1), Chorkpop_15 (B1), Chunky_15 (B1), Chute_14 (B1), Cobra_15 (B1), Colbert_15 (B1), Coletti_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_15 (B1), Dingo_15 (B1), Dione_14 (B1), DirtJuice_15 (B1), Doddsville_15 (B1), DoesntMatter_15 (B1), DonSanchon_14 (B1), Donny_16 (B5), DuchessDung_14 (B1), Duggie_14 (B1), Durga_15 (B1), Emiris_15 (B1), EmpTee_15 (B1), Eremos_15 (B1), Etaye_15 (B1), Eugenia_15 (B1), Fang_15 (B1), FluffyNinja_15 (B1), Fozzie_14 (B1), Frankicide_15 (B1), Freya_14 (B1), FriarPreacher_15 (B1), Fringe_15 (B1), FugateOSU_14 (B1), Gareth_14 (B1), GeneCoco_15 (B1), Giraffe_15 (B1), Gophee_15 (B1), Grand2040_14 (B1), Gwilliam_15 (B1), Gyarad_0015 (B1), HSavage_15 (B1), Haimas_15 (B1), Haleema_14 (B1), Hamish_15 (B1), Hartsy_14 (B1), Harvey_15 (B1), Held_15 (B1), HenryJackson_14 (B1), Hertubise_15 (B1), Hetaeria_15 (B1), HighStump_14 (B1), Hocus_14 (B1), Horchata_15 (B1), ImtiyazSitla_14 (B1), Inchworm_15 (B1), Inverness_15 (B1), Iridoclysis_15 (B1), IsaacEli_15 (B1), JDog_14 (B1), JacAttac_15 (B1), JakeO_14 (B1), JangoPhett_15 (B1), Jillium_14 (B1), Jiminy_14 (B1), Jiraiya_15 (B1), KLucky39_15 (B1), Kahve_14 (B1), Kailash_15 (B1), Katniss_15 (B1), Keitherie_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), Labeouficaum_14 (B1), LasagnaCat_15 (B1), Lasso_15 (B1), LeeLot_15 (B1), Lego3393_15 (B1), Legolas_14 (B1), LeiMonet_15 (B1), LemonSlice_15 (B1), 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), Mana_14 (B1), Manad_14 (B1), Maru_14 (B1), Maskar_14 (B1), Matalotodo_14 (B1), Mcshane_14 (B1), Mecca_14 (B1), Megamind20_15 (B1), Megatron_15 (B1), Melc17_15 (B1), MelsMeow_14 (B1), Mesh1_15 (B1), MichaelPhcott_14 (B1), Mikota_15 (B1), MiniBoss_15 (B1), MitKao_15 (B1), Morgushi_15 (B1), Morty_15 (B1), Mosaic_14 (B1), MrPhizzler_14 (B1), Mulan_14 (B1), Murdoc_15 (B1), Mutante_14 (B1), Nacho_0015 (B1), Newman_15 (B1), Nicole21_15 (B1), 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_15 (B1), PG1_15 (B1), Pacifista_16 (B1), Phamished_15 (B1), Phareon_15 (B1), PhatCats2014_15 (B1), PhatLouie_15 (B1), 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), Plmatters_15 (B1), Podrick_15 (B1), Pops_15 (B1), Potter_14 (B1), Prickles_15 (B1), ProfessorX_15 (B1), Puhltonio_15 (B1), QueenBeane_15 (B1), Quisquillae_15 (B1), RedMaple_14 (B1), Ricotta_15 (B1), Riggan_15 (B1), Rimu_14 (B1), Robyn_14 (B1), Roliet_15 (B1), Roscoe_16 (B1), Roy17_15 (B1), SDcharge11_15 (B1), Samaymay_15 (B1), SassyCat97_14 (B1), Schadenfreude_14 (B1), Schueller_14 (B1), Scoot17C_15 (B1), Scrick_14 (B1), Selr12_15 (B1), Serendipity_15 (B1), Serpentine_0015 (B1), Sheila_15 (B1), ShiVal_15 (B1), Sigman_15 (B1), Simielle_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), 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_15 (B1), Timmi_14 (B1), TomBombadil_15 (B1), Tomlarah_15 (B1), Toni_14 (B1), Tooj_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), Virapocalypse_15 (B1), Virgeve_14 (B1), Vista_15 (B1), Vivaldi_15 (B1), Vortex_15 (B1), Wallhey_14 (B1), Waterdiva_15 (B1), Weher20_15 (B1), Windsor_14 (B1), Xavier_14 (B1), Yoshand_15 (B1), YouGoGlencoco_15 (B1), Zaider_16 (B1), Zelda_15 (B1), Zonia_15 (B1),

Start 17:

- Found in 9 of 296 (3.0%) of genes in pham
- Manual Annotations of this start: 9 of 262
- Called 100.0% 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), StAB_22 (EP), Stiles_22 (EP), Troy_22 (EP),

Start 21:

- Found in 5 of 296 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 262
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Ben11_16 (B3), HarveySr_17 (B3), Phaedrus_16 (B3), SlippinJimmy_17 (B3),

Start 22:

- Found in 282 of 296 (95.3%) of genes in pham
- No Manual Annotations of this start.
- Called 0.7% of time when present
- Phage (with cluster) where this start called: DigitDog_16 (B5), StinkyVeggy_17 (B5),

Start 23:

- Found in 282 of 296 (95.3%) of genes in pham
- No Manual Annotations of this start.
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Nangang_16 (B5), TPA2_24 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, B5, B1, B3, DR, EP,

Info for manual annotations of cluster B1:

- Start number 14 was manually annotated 247 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 21 was manually annotated 2 times for cluster B3.

Info for manual annotations of cluster B5:

- Start number 11 was manually annotated 1 time for cluster B5.
- Start number 14 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster DR:

- Start number 13 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster EP:

- Start number 17 was manually annotated 8 times for cluster EP.

Gene Information:

Gene: ABU_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for ABU_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: AbsoluteMadLad_14 Start: 13249, Stop: 13638, Start Num: 14

Candidate Starts for AbsoluteMadLad_14:

(Start: 14 @13249 has 249 MA's), (20, 13327), (22, 13342), (23, 13345), (30, 13408), (31, 13417), (33, 13426), (36, 13462), (39, 13498), (49, 13603),

Gene: Acadian_16 Start: 14844, Stop: 15251, Start Num: 14

Candidate Starts for Acadian_16:

(7, 14721), (Start: 11 @14829 has 1 MA's), (Start: 14 @14844 has 249 MA's), (22, 14949), (23, 14952), (25, 14961), (31, 15024), (36, 15069), (39, 15105), (43, 15147), (52, 15231),

Gene: Adelaide_22 Start: 21613, Stop: 21981, Start Num: 17

Candidate Starts for Adelaide_22:

(4, 21418), (5, 21445), (15, 21595), (Start: 17 @21613 has 9 MA's), (22, 21685), (25, 21697), (27, 21736), (28, 21739),

Gene: Adriana_15 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for Adriana_15:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: Aelin_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Aelin_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: AltPhacts_15 Start: 13242, Stop: 13631, Start Num: 14

Candidate Starts for AltPhacts_15:

(Start: 14 @13242 has 249 MA's), (20, 13320), (22, 13335), (23, 13338), (30, 13401), (31, 13410), (33, 13419), (36, 13455), (39, 13491), (49, 13596),

Gene: Altwerkus_14 Start: 12942, Stop: 13331, Start Num: 14

Candidate Starts for Altwerkus_14:

(Start: 14 @12942 has 249 MA's), (20, 13020), (22, 13035), (23, 13038), (30, 13101), (31, 13110), (33, 13119), (36, 13155), (39, 13191), (49, 13296),

Gene: Anderson_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Anderson_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Andre_15 Start: 13236, Stop: 13625, Start Num: 14

Candidate Starts for Andre_15:

(Start: 14 @13236 has 249 MA's), (20, 13314), (22, 13329), (23, 13332), (30, 13395), (31, 13404), (33, 13413), (36, 13449), (39, 13485), (49, 13590),

Gene: Antonia_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Antonia_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Apizium_14 Start: 12982, Stop: 13371, Start Num: 14

Candidate Starts for Apizium_14:

(Start: 14 @12982 has 249 MA's), (19, 13024), (20, 13060), (22, 13075), (23, 13078), (30, 13141), (31, 13150), (33, 13159), (36, 13195), (39, 13231), (43, 13273), (49, 13336),

Gene: Ashraf_14 Start: 12800, Stop: 13189, Start Num: 14

Candidate Starts for Ashraf_14:

(Start: 14 @12800 has 249 MA's), (20, 12878), (22, 12893), (23, 12896), (30, 12959), (31, 12968), (33, 12977), (36, 13013), (39, 13049), (49, 13154),

Gene: Badfish_15 Start: 13271, Stop: 13660, Start Num: 14

Candidate Starts for Badfish_15:

(Start: 14 @13271 has 249 MA's), (20, 13349), (22, 13364), (23, 13367), (30, 13430), (31, 13439), (33, 13448), (36, 13484), (39, 13520), (49, 13625),

Gene: Banjo_14 Start: 12949, Stop: 13338, Start Num: 14

Candidate Starts for Banjo_14:

(Start: 14 @12949 has 249 MA's), (20, 13027), (22, 13042), (23, 13045), (30, 13108), (31, 13117), (33, 13126), (36, 13162), (39, 13198), (49, 13303),

Gene: Basato_16 Start: 13475, Stop: 13864, Start Num: 14

Candidate Starts for Basato_16:

(Start: 14 @13475 has 249 MA's), (20, 13553), (22, 13568), (23, 13571), (30, 13634), (31, 13643), (33, 13652), (36, 13688), (39, 13724), (49, 13829),

Gene: BatteryCK_14 Start: 12806, Stop: 13195, Start Num: 14

Candidate Starts for BatteryCK_14:

(Start: 14 @12806 has 249 MA's), (20, 12884), (22, 12899), (23, 12902), (30, 12965), (31, 12974), (33, 12983), (36, 13019), (39, 13055), (49, 13160),

Gene: Beaglebox_14 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Beaglebox_14:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: Ben11_16 Start: 14510, Stop: 14824, Start Num: 21

Candidate Starts for Ben11_16:

(7, 14285), (12, 14390), (18, 14444), (Start: 21 @14510 has 2 MA's), (43, 14711), (44, 14714),

Gene: Bishoperium_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Bishoperium_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: BlackStallion_15 Start: 13257, Stop: 13646, Start Num: 14

Candidate Starts for BlackStallion_15:

(Start: 14 @13257 has 249 MA's), (20, 13335), (22, 13350), (23, 13353), (30, 13416), (31, 13425), (33, 13434), (36, 13470), (39, 13506), (49, 13611),

Gene: BlueHusk_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for BlueHusk_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Bluephacebaby_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Bluephacebaby_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: Boehler_15 Start: 13265, Stop: 13654, Start Num: 14

Candidate Starts for Boehler_15:

(Start: 14 @13265 has 249 MA's), (20, 13343), (22, 13358), (23, 13361), (30, 13424), (31, 13433), (33, 13442), (36, 13478), (39, 13514), (41, 13520), (49, 13619),

Gene: Bran_22 Start: 21277, Stop: 21648, Start Num: 17

Candidate Starts for Bran_22:

(15, 21259), (Start: 17 @21277 has 9 MA's), (31, 21424), (37, 21487), (40, 21508), (42, 21535), (53, 21637),

Gene: Brilliant_15 Start: 12959, Stop: 13348, Start Num: 14

Candidate Starts for Brilliant_15:

(Start: 14 @12959 has 249 MA's), (20, 13037), (22, 13052), (23, 13055), (30, 13118), (31, 13127), (33, 13136), (36, 13172), (39, 13208), (49, 13313),

Gene: Buckeye_15 Start: 13273, Stop: 13662, Start Num: 14

Candidate Starts for Buckeye_15:

(Start: 14 @13273 has 249 MA's), (20, 13351), (22, 13366), (23, 13369), (30, 13432), (31, 13441), (33, 13450), (36, 13486), (39, 13522), (49, 13627),

Gene: Burr_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Burr_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: CamL_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for CamL_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: CampRoach_14 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for CampRoach_14:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Cannibal_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Cannibal_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Carthage_14 Start: 12916, Stop: 13305, Start Num: 14

Candidate Starts for Carthage_14:

(Start: 14 @12916 has 249 MA's), (20, 12994), (22, 13009), (23, 13012), (30, 13075), (31, 13084), (33, 13093), (36, 13129), (39, 13165), (49, 13270),

Gene: Chaelin_14 Start: 12920, Stop: 13309, Start Num: 14

Candidate Starts for Chaelin_14:

(Start: 14 @12920 has 249 MA's), (20, 12998), (22, 13013), (23, 13016), (30, 13079), (31, 13088), (33, 13097), (36, 13133), (39, 13169), (49, 13274),

Gene: Chah_15 Start: 13272, Stop: 13661, Start Num: 14

Candidate Starts for Chah_15:

(Start: 14 @13272 has 249 MA's), (20, 13350), (22, 13365), (23, 13368), (30, 13431), (31, 13440), (33, 13449), (36, 13485), (39, 13521), (49, 13626),

Gene: Charles1_15 Start: 13235, Stop: 13624, Start Num: 14

Candidate Starts for Charles1_15:

(Start: 14 @13235 has 249 MA's), (20, 13313), (22, 13328), (23, 13331), (30, 13394), (31, 13403), (33, 13412), (36, 13448), (39, 13484), (49, 13589),

Gene: CharlieGBrown_14 Start: 12824, Stop: 13213, Start Num: 14

Candidate Starts for CharlieGBrown_14:

(Start: 14 @12824 has 249 MA's), (20, 12902), (22, 12917), (23, 12920), (30, 12983), (31, 12992), (33, 13001), (36, 13037), (39, 13073), (49, 13178),

Gene: CheetO_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for CheetO_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Cher_14 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for Cher_14:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Childish_14 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Childish_14:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: Chorkpop_15 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for Chorkpop_15:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Chunky_15 Start: 13265, Stop: 13654, Start Num: 14

Candidate Starts for Chunky_15:

(Start: 14 @13265 has 249 MA's), (20, 13343), (22, 13358), (23, 13361), (30, 13424), (31, 13433), (33, 13442), (36, 13478), (39, 13514), (49, 13619),

Gene: Chute_14 Start: 13268, Stop: 13657, Start Num: 14

Candidate Starts for Chute_14:

(Start: 14 @13268 has 249 MA's), (20, 13346), (22, 13361), (23, 13364), (30, 13427), (31, 13436), (33, 13445), (36, 13481), (39, 13517), (49, 13622),

Gene: Cobra_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Cobra_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Colbert_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Colbert_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Coletti_14 Start: 13268, Stop: 13657, Start Num: 14

Candidate Starts for Coletti_14:

(Start: 14 @13268 has 249 MA's), (20, 13346), (22, 13361), (23, 13364), (30, 13427), (31, 13436), (33, 13445), (36, 13481), (39, 13517), (49, 13622),

Gene: Cornobble_14 Start: 12813, Stop: 13202, Start Num: 14

Candidate Starts for Cornobble_14:

(Start: 14 @12813 has 249 MA's), (20, 12891), (22, 12906), (23, 12909), (30, 12972), (31, 12981), (33, 12990), (36, 13026), (39, 13062), (49, 13167),

Gene: Cosmolli16_14 Start: 12970, Stop: 13359, Start Num: 14

Candidate Starts for Cosmolli16_14:

(Start: 14 @12970 has 249 MA's), (20, 13048), (22, 13063), (23, 13066), (30, 13129), (31, 13138), (33, 13147), (36, 13183), (39, 13219), (49, 13324),

Gene: Craff_15 Start: 13259, Stop: 13648, Start Num: 14

Candidate Starts for Craff_15:

(Start: 14 @13259 has 249 MA's), (20, 13337), (22, 13352), (23, 13355), (30, 13418), (31, 13427), (33, 13436), (36, 13472), (39, 13508), (49, 13613),

Gene: Crownjwl_15 Start: 13026, Stop: 13415, Start Num: 14

Candidate Starts for Crownjwl_15:

(Start: 14 @13026 has 249 MA's), (20, 13104), (22, 13119), (23, 13122), (30, 13185), (31, 13194), (33, 13203), (36, 13239), (39, 13275), (49, 13380),

Gene: DaddyDaniels_15 Start: 12962, Stop: 13351, Start Num: 14

Candidate Starts for DaddyDaniels_15:

(Start: 14 @12962 has 249 MA's), (20, 13040), (22, 13055), (23, 13058), (30, 13121), (31, 13130), (33, 13139), (36, 13175), (39, 13211), (49, 13316),

Gene: Daffy_15 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for Daffy_15:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Daka_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Daka_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Dati_15 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Dati_15:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: DelRivs_14 Start: 12965, Stop: 13354, Start Num: 14

Candidate Starts for DelRivs_14:

(Start: 14 @12965 has 249 MA's), (20, 13043), (22, 13058), (23, 13061), (30, 13124), (31, 13133), (33, 13142), (36, 13178), (39, 13214), (49, 13319),

Gene: Derpp_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Derpp_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Dice_15 Start: 12953, Stop: 13342, Start Num: 14

Candidate Starts for Dice_15:

(Start: 14 @12953 has 249 MA's), (20, 13031), (22, 13046), (23, 13049), (30, 13112), (31, 13121), (33, 13130), (36, 13166), (39, 13202), (49, 13307),

Gene: DigitDog_16 Start: 14925, Stop: 15227, Start Num: 22

Candidate Starts for DigitDog_16:

(7, 14706), (Start: 11 @14814 has 1 MA's), (Start: 14 @14829 has 249 MA's), (22, 14925), (23, 14928), (31, 15000), (36, 15045), (39, 15081), (43, 15123), (52, 15207),

Gene: Dina_22 Start: 21114, Stop: 21479, Start Num: 17

Candidate Starts for Dina_22:

(8, 21018), (9, 21021), (15, 21096), (Start: 17 @21114 has 9 MA's), (25, 21198), (27, 21237), (28, 21240), (36, 21306), (53, 21468),

Gene: Dingo_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Dingo_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Dione_14 Start: 12954, Stop: 13343, Start Num: 14

Candidate Starts for Dione_14:

(Start: 14 @12954 has 249 MA's), (20, 13032), (22, 13047), (23, 13050), (30, 13113), (31, 13122), (33, 13131), (36, 13167), (39, 13203), (49, 13308),

Gene: DirtJuice_15 Start: 13241, Stop: 13630, Start Num: 14

Candidate Starts for DirtJuice_15:

(Start: 14 @13241 has 249 MA's), (20, 13319), (22, 13334), (23, 13337), (30, 13400), (31, 13409), (33, 13418), (36, 13454), (39, 13490), (49, 13595),

Gene: Doddsville_15 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Doddsville_15:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: DoesntMatter_15 Start: 13235, Stop: 13624, Start Num: 14

Candidate Starts for DoesntMatter_15:

(Start: 14 @13235 has 249 MA's), (20, 13313), (22, 13328), (23, 13331), (30, 13394), (31, 13403), (33, 13412), (36, 13448), (39, 13484), (49, 13589),

Gene: DonSanchon_14 Start: 12954, Stop: 13343, Start Num: 14

Candidate Starts for DonSanchon_14:

(Start: 14 @12954 has 249 MA's), (20, 13032), (22, 13047), (23, 13050), (30, 13113), (31, 13122), (33, 13131), (36, 13167), (39, 13203), (49, 13308),

Gene: Donny_16 Start: 14846, Stop: 15253, Start Num: 14

Candidate Starts for Donny_16:

(7, 14723), (Start: 11 @14831 has 1 MA's), (Start: 14 @14846 has 249 MA's), (22, 14951), (23, 14954), (25, 14963), (31, 15026), (36, 15071), (39, 15107), (43, 15149), (52, 15233),

Gene: DuchessDung_14 Start: 12806, Stop: 13195, Start Num: 14

Candidate Starts for DuchessDung_14:

(Start: 14 @12806 has 249 MA's), (20, 12884), (22, 12899), (23, 12902), (30, 12965), (31, 12974), (33, 12983), (36, 13019), (39, 13055), (49, 13160),

Gene: Duggie_14 Start: 12968, Stop: 13357, Start Num: 14

Candidate Starts for Duggie_14:

(Start: 14 @12968 has 249 MA's), (20, 13046), (22, 13061), (23, 13064), (30, 13127), (31, 13136), (33, 13145), (36, 13181), (39, 13217), (49, 13322),

Gene: Durga_15 Start: 13267, Stop: 13656, Start Num: 14

Candidate Starts for Durga_15:

(Start: 14 @13267 has 249 MA's), (20, 13345), (22, 13360), (23, 13363), (30, 13426), (31, 13435), (33, 13444), (36, 13480), (39, 13516), (49, 13621),

Gene: Emiris_15 Start: 13248, Stop: 13637, Start Num: 14

Candidate Starts for Emiris_15:

(Start: 14 @13248 has 249 MA's), (20, 13326), (22, 13341), (23, 13344), (30, 13407), (31, 13416), (33, 13425), (36, 13461), (39, 13497), (49, 13602),

Gene: EmpTee_15 Start: 13254, Stop: 13643, Start Num: 14

Candidate Starts for EmpTee_15:

(Start: 14 @13254 has 249 MA's), (20, 13332), (22, 13347), (23, 13350), (30, 13413), (31, 13422), (33, 13431), (36, 13467), (39, 13503), (49, 13608),

Gene: Eremos_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Eremos_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Etaye_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Etaye_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Eugenia_15 Start: 13266, Stop: 13655, Start Num: 14

Candidate Starts for Eugenia_15:

(Start: 14 @13266 has 249 MA's), (20, 13344), (22, 13359), (23, 13362), (30, 13425), (31, 13434), (33, 13443), (36, 13479), (39, 13515), (49, 13620),

Gene: Evaa_15 Start: 14245, Stop: 14619, Start Num: 13

Candidate Starts for Evaa_15:

(Start: 13 @14245 has 1 MA's), (20, 14320), (Start: 21 @14332 has 2 MA's), (26, 14359), (34, 14431), (39, 14491), (41, 14497), (45, 14539), (46, 14548), (47, 14587),

Gene: Fang_15 Start: 13269, Stop: 13658, Start Num: 14

Candidate Starts for Fang_15:

(Start: 14 @13269 has 249 MA's), (20, 13347), (22, 13362), (23, 13365), (30, 13428), (31, 13437), (33, 13446), (36, 13482), (39, 13518), (49, 13623),

Gene: FluffyNinja_15 Start: 13257, Stop: 13646, Start Num: 14

Candidate Starts for FluffyNinja_15:

(Start: 14 @13257 has 249 MA's), (20, 13335), (22, 13350), (23, 13353), (30, 13416), (31, 13425), (33, 13434), (36, 13470), (39, 13506), (49, 13611),

Gene: Fozzie_14 Start: 13263, Stop: 13652, Start Num: 14

Candidate Starts for Fozzie_14:

(Start: 14 @13263 has 249 MA's), (20, 13341), (22, 13356), (23, 13359), (30, 13422), (31, 13431), (33, 13440), (36, 13476), (39, 13512), (49, 13617),

Gene: Frankicide_15 Start: 13255, Stop: 13644, Start Num: 14

Candidate Starts for Frankicide_15:

(Start: 14 @13255 has 249 MA's), (20, 13333), (22, 13348), (23, 13351), (30, 13414), (31, 13423), (33, 13432), (36, 13468), (39, 13504), (49, 13609),

Gene: Freya_14 Start: 12949, Stop: 13338, Start Num: 14

Candidate Starts for Freya_14:

(Start: 14 @12949 has 249 MA's), (20, 13027), (22, 13042), (23, 13045), (30, 13108), (31, 13117), (33, 13126), (36, 13162), (39, 13198), (49, 13303),

Gene: FriarPreacher_15 Start: 13274, Stop: 13663, Start Num: 14

Candidate Starts for FriarPreacher_15:

(Start: 14 @13274 has 249 MA's), (20, 13352), (22, 13367), (23, 13370), (30, 13433), (31, 13442), (33, 13451), (36, 13487), (39, 13523), (49, 13628),

Gene: Fringe_15 Start: 13236, Stop: 13625, Start Num: 14

Candidate Starts for Fringe_15:

(Start: 14 @13236 has 249 MA's), (20, 13314), (22, 13329), (23, 13332), (30, 13395), (31, 13404), (33, 13413), (36, 13449), (39, 13485), (49, 13590),

Gene: FugateOSU_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for FugateOSU_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Gareth_14 Start: 12957, Stop: 13346, Start Num: 14

Candidate Starts for Gareth_14:

(Start: 14 @12957 has 249 MA's), (20, 13035), (22, 13050), (23, 13053), (30, 13116), (31, 13125), (33, 13134), (36, 13170), (39, 13206), (49, 13311),

Gene: GeneCoco_15 Start: 13259, Stop: 13648, Start Num: 14

Candidate Starts for GeneCoco_15:

(Start: 14 @13259 has 249 MA's), (20, 13337), (22, 13352), (23, 13355), (30, 13418), (31, 13427), (33, 13436), (36, 13472), (39, 13508), (49, 13613),

Gene: Giraffe_15 Start: 12961, Stop: 13350, Start Num: 14

Candidate Starts for Giraffe_15:

(Start: 14 @12961 has 249 MA's), (20, 13039), (22, 13054), (23, 13057), (30, 13120), (31, 13129), (33, 13138), (36, 13174), (39, 13210), (49, 13315),

Gene: Gophee_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Gophee_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Grand2040_14 Start: 12976, Stop: 13365, Start Num: 14

Candidate Starts for Grand2040_14:

(Start: 14 @12976 has 249 MA's), (20, 13054), (22, 13069), (23, 13072), (30, 13135), (31, 13144), (33, 13153), (36, 13189), (39, 13225), (49, 13330),

Gene: Gwilliam_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Gwilliam_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Gyarad_0015 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Gyarad_0015:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: HSavage_15 Start: 13261, Stop: 13650, Start Num: 14

Candidate Starts for HSavage_15:

(Start: 14 @13261 has 249 MA's), (20, 13339), (22, 13354), (23, 13357), (30, 13420), (31, 13429), (33, 13438), (36, 13474), (39, 13510), (49, 13615),

Gene: Haimas_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Haimas_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Haleema_14 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for Haleema_14:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Hamish_15 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for Hamish_15:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: Hartsy_14 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Hartsy_14:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Harvey_15 Start: 13275, Stop: 13664, Start Num: 14

Candidate Starts for Harvey_15:

(Start: 14 @13275 has 249 MA's), (20, 13353), (22, 13368), (23, 13371), (30, 13434), (31, 13443), (33, 13452), (36, 13488), (39, 13524), (49, 13629),

Gene: HarveySr_17 Start: 14663, Stop: 14977, Start Num: 21

Candidate Starts for HarveySr_17:

(7, 14438), (12, 14543), (18, 14597), (Start: 21 @14663 has 2 MA's), (43, 14864), (44, 14867),

Gene: Held_15 Start: 12961, Stop: 13350, Start Num: 14

Candidate Starts for Held_15:

(Start: 14 @12961 has 249 MA's), (20, 13039), (22, 13054), (23, 13057), (30, 13120), (31, 13129), (33, 13138), (36, 13174), (39, 13210), (49, 13315),

Gene: HenryJackson_14 Start: 12975, Stop: 13364, Start Num: 14

Candidate Starts for HenryJackson_14:

(Start: 14 @12975 has 249 MA's), (20, 13053), (22, 13068), (23, 13071), (30, 13134), (31, 13143), (33, 13152), (36, 13188), (39, 13224), (49, 13329),

Gene: Hertubise_15 Start: 13268, Stop: 13657, Start Num: 14

Candidate Starts for Hertubise_15:

(Start: 14 @13268 has 249 MA's), (20, 13346), (22, 13361), (23, 13364), (30, 13427), (31, 13436), (33, 13445), (36, 13481), (39, 13517), (49, 13622),

Gene: Hetaeria_15 Start: 13271, Stop: 13660, Start Num: 14

Candidate Starts for Hetaeria_15:

(Start: 14 @13271 has 249 MA's), (20, 13349), (22, 13364), (23, 13367), (30, 13430), (31, 13439), (33, 13448), (36, 13484), (39, 13520), (49, 13625),

Gene: HighStump_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for HighStump_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Hocus_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Hocus_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Horchata_15 Start: 13240, Stop: 13629, Start Num: 14

Candidate Starts for Horchata_15:

(Start: 14 @13240 has 249 MA's), (20, 13318), (22, 13333), (23, 13336), (30, 13399), (31, 13408), (33, 13417), (36, 13453), (39, 13489), (49, 13594),

Gene: ImtiyazSitla_14 Start: 12800, Stop: 13189, Start Num: 14

Candidate Starts for ImtiyazSitla_14:

(Start: 14 @12800 has 249 MA's), (20, 12878), (22, 12893), (23, 12896), (30, 12959), (31, 12968), (33, 12977), (36, 13013), (39, 13049), (49, 13154),

Gene: Inchworm_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Inchworm_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Inverness_15 Start: 13261, Stop: 13650, Start Num: 14

Candidate Starts for Inverness_15:

(Start: 14 @13261 has 249 MA's), (20, 13339), (22, 13354), (23, 13357), (30, 13420), (31, 13429), (33, 13438), (36, 13474), (39, 13510), (49, 13615),

Gene: Iridoclysis_15 Start: 13233, Stop: 13622, Start Num: 14

Candidate Starts for Iridoclysis_15:

(Start: 14 @13233 has 249 MA's), (20, 13311), (22, 13326), (23, 13329), (30, 13392), (31, 13401), (33, 13410), (36, 13446), (39, 13482), (49, 13587),

Gene: IsaacEli_15 Start: 13265, Stop: 13654, Start Num: 14

Candidate Starts for IsaacEli_15:

(Start: 14 @13265 has 249 MA's), (20, 13343), (22, 13358), (23, 13361), (30, 13424), (31, 13433), (33, 13442), (36, 13478), (39, 13514), (49, 13619),

Gene: JDog_14 Start: 12968, Stop: 13357, Start Num: 14

Candidate Starts for JDog_14:

(Start: 14 @12968 has 249 MA's), (20, 13046), (22, 13061), (23, 13064), (30, 13127), (31, 13136), (33, 13145), (36, 13181), (39, 13217), (49, 13322),

Gene: JacAttac_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for JacAttac_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: JakeO_14 Start: 12968, Stop: 13357, Start Num: 14

Candidate Starts for JakeO_14:

(Start: 14 @12968 has 249 MA's), (20, 13046), (22, 13061), (23, 13064), (30, 13127), (31, 13136), (33, 13145), (36, 13181), (39, 13217), (49, 13322),

Gene: JangoPhett_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for JangoPhett_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: Jillium_14 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Jillium_14:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: Jiminy_14 Start: 12808, Stop: 13197, Start Num: 14

Candidate Starts for Jiminy_14:

(Start: 14 @12808 has 249 MA's), (20, 12886), (22, 12901), (23, 12904), (30, 12967), (31, 12976), (33, 12985), (36, 13021), (39, 13057), (49, 13162),

Gene: Jiraiya_15 Start: 12968, Stop: 13357, Start Num: 14

Candidate Starts for Jiraiya_15:

(Start: 14 @12968 has 249 MA's), (20, 13046), (22, 13061), (23, 13064), (30, 13127), (31, 13136), (33, 13145), (36, 13181), (39, 13217), (49, 13322),

Gene: Juicebox_24 Start: 22590, Stop: 22964, Start Num: 17

Candidate Starts for Juicebox_24:

(Start: 17 @22590 has 9 MA's), (24, 22671), (25, 22674), (29, 22722), (32, 22743), (35, 22776), (41, 22824), (51, 22938),

Gene: KLucky39_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for KLucky39_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Kahve_14 Start: 12975, Stop: 13364, Start Num: 14

Candidate Starts for Kahve_14:

(Start: 14 @12975 has 249 MA's), (20, 13053), (22, 13068), (23, 13071), (30, 13134), (31, 13143), (33, 13152), (36, 13188), (39, 13224), (49, 13329),

Gene: Kailash_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Kailash_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: Katniss_15 Start: 13272, Stop: 13661, Start Num: 14

Candidate Starts for Katniss_15:

(Start: 14 @13272 has 249 MA's), (20, 13350), (22, 13365), (23, 13368), (30, 13431), (31, 13440), (33, 13449), (36, 13485), (39, 13521), (49, 13626),

Gene: Keitherie_15 Start: 13273, Stop: 13662, Start Num: 14

Candidate Starts for Keitherie_15:

(Start: 14 @13273 has 249 MA's), (20, 13351), (22, 13366), (23, 13369), (30, 13432), (31, 13441), (33, 13450), (36, 13486), (39, 13522), (49, 13627),

Gene: Kikipoo_15 Start: 13265, Stop: 13654, Start Num: 14

Candidate Starts for Kikipoo_15:

(Start: 14 @13265 has 249 MA's), (20, 13343), (22, 13358), (23, 13361), (30, 13424), (31, 13433), (33, 13442), (36, 13478), (39, 13514), (49, 13619),

Gene: Kimbrough_15 Start: 12963, Stop: 13352, Start Num: 14

Candidate Starts for Kimbrough_15:

(Start: 14 @12963 has 249 MA's), (20, 13041), (22, 13056), (23, 13059), (30, 13122), (31, 13131), (33, 13140), (36, 13176), (39, 13212), (49, 13317),

Gene: KingTut_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for KingTut_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: KingVeVeVe_15 Start: 13242, Stop: 13631, Start Num: 14

Candidate Starts for KingVeVeVe_15:

(Start: 14 @13242 has 249 MA's), (20, 13320), (22, 13335), (23, 13338), (30, 13401), (31, 13410), (33, 13419), (36, 13455), (39, 13491), (49, 13596),

Gene: KlimbOn_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for KlimbOn_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Kloppinator_15 Start: 13269, Stop: 13658, Start Num: 14

Candidate Starts for Kloppinator_15:

(Start: 14 @13269 has 249 MA's), (20, 13347), (22, 13362), (23, 13365), (30, 13428), (31, 13437), (33, 13446), (36, 13482), (39, 13518), (49, 13623),

Gene: Kwadwo_14 Start: 12954, Stop: 13343, Start Num: 14

Candidate Starts for Kwadwo_14:

(Start: 14 @12954 has 249 MA's), (20, 13032), (22, 13047), (23, 13050), (30, 13113), (31, 13122), (33, 13131), (36, 13167), (39, 13203), (49, 13308),

Gene: Kwksand96_14 Start: 12818, Stop: 13207, Start Num: 14

Candidate Starts for Kwksand96_14:

(Start: 14 @12818 has 249 MA's), (20, 12896), (22, 12911), (23, 12914), (30, 12977), (31, 12986), (33, 12995), (36, 13031), (39, 13067), (49, 13172),

Gene: Labeouficaum_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Labeouficaum_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: LasagnaCat_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for LasagnaCat_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Lasso_15 Start: 13232, Stop: 13621, Start Num: 14

Candidate Starts for Lasso_15:

(Start: 14 @13232 has 249 MA's), (20, 13310), (22, 13325), (23, 13328), (30, 13391), (31, 13400), (33, 13409), (36, 13445), (39, 13481), (49, 13586),

Gene: Lederberg_22 Start: 21495, Stop: 21860, Start Num: 17

Candidate Starts for Lederberg_22:

(2, 21255), (6, 21339), (10, 21426), (Start: 17 @21495 has 9 MA's), (25, 21579), (27, 21618), (28, 21621), (36, 21687),

Gene: LeeLot_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for LeeLot_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Lego3393_15 Start: 13269, Stop: 13658, Start Num: 14

Candidate Starts for Lego3393_15:

(Start: 14 @13269 has 249 MA's), (20, 13347), (22, 13362), (23, 13365), (30, 13428), (31, 13437), (33, 13446), (36, 13482), (39, 13518), (49, 13623),

Gene: Legolas_14 Start: 12970, Stop: 13359, Start Num: 14

Candidate Starts for Legolas_14:

(Start: 14 @12970 has 249 MA's), (20, 13048), (22, 13063), (23, 13066), (30, 13129), (31, 13138), (33, 13147), (36, 13183), (39, 13219), (49, 13324),

Gene: LeiMonet_15 Start: 12962, Stop: 13351, Start Num: 14

Candidate Starts for LeiMonet_15:

(Start: 14 @12962 has 249 MA's), (20, 13040), (22, 13055), (23, 13058), (30, 13121), (31, 13130), (33, 13139), (36, 13175), (39, 13211), (49, 13316),

Gene: LemonSlice_15 Start: 12964, Stop: 13353, Start Num: 14

Candidate Starts for LemonSlice_15:

(Start: 14 @12964 has 249 MA's), (20, 13042), (22, 13057), (23, 13060), (30, 13123), (31, 13132), (33, 13141), (36, 13177), (39, 13213), (49, 13318),

Gene: Longacauda_14 Start: 12956, Stop: 13345, Start Num: 14

Candidate Starts for Longacauda_14:

(Start: 14 @12956 has 249 MA's), (20, 13034), (22, 13049), (23, 13052), (30, 13115), (31, 13124), (33, 13133), (36, 13169), (39, 13205), (49, 13310),

Gene: Lopsy_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Lopsy_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: LostAndPhound_14 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for LostAndPhound_14:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: LuckyMarjie_14 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for LuckyMarjie_14:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Lulumae_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Lulumae_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: Lulwa_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Lulwa_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Lumine_14 Start: 12948, Stop: 13337, Start Num: 14

Candidate Starts for Lumine_14:

(Start: 14 @12948 has 249 MA's), (20, 13026), (22, 13041), (23, 13044), (30, 13107), (31, 13116), (33, 13125), (36, 13161), (39, 13197), (49, 13302),

Gene: MRabcd_14 Start: 12957, Stop: 13346, Start Num: 14

Candidate Starts for MRabcd_14:

(Start: 14 @12957 has 249 MA's), (20, 13035), (22, 13050), (23, 13053), (30, 13116), (31, 13125), (33, 13134), (36, 13170), (39, 13206), (49, 13311),

Gene: Mag7_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Mag7_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Magic8_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Magic8_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Mana_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Mana_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Manad_14 Start: 12810, Stop: 13199, Start Num: 14

Candidate Starts for Manad_14:

(Start: 14 @12810 has 249 MA's), (20, 12888), (22, 12903), (23, 12906), (30, 12969), (31, 12978), (33, 12987), (36, 13023), (39, 13059), (49, 13164),

Gene: Maru_14 Start: 12958, Stop: 13347, Start Num: 14

Candidate Starts for Maru_14:

(Start: 14 @12958 has 249 MA's), (20, 13036), (22, 13051), (23, 13054), (30, 13117), (31, 13126), (33, 13135), (36, 13171), (39, 13207), (49, 13312),

Gene: Maskar_14 Start: 12800, Stop: 13189, Start Num: 14

Candidate Starts for Maskar_14:

(Start: 14 @12800 has 249 MA's), (20, 12878), (22, 12893), (23, 12896), (30, 12959), (31, 12968), (33, 12977), (36, 13013), (39, 13049), (49, 13154),

Gene: Matalotodo_14 Start: 13248, Stop: 13637, Start Num: 14

Candidate Starts for Matalotodo_14:

(Start: 14 @13248 has 249 MA's), (20, 13326), (22, 13341), (23, 13344), (30, 13407), (31, 13416), (33, 13425), (36, 13461), (39, 13497), (49, 13602),

Gene: Mcshane_14 Start: 12954, Stop: 13343, Start Num: 14

Candidate Starts for Mcshane_14:

(Start: 14 @12954 has 249 MA's), (20, 13032), (22, 13047), (23, 13050), (30, 13113), (31, 13122), (33, 13131), (36, 13167), (39, 13203), (49, 13308),

Gene: Mecca_14 Start: 12951, Stop: 13340, Start Num: 14

Candidate Starts for Mecca_14:

(Start: 14 @12951 has 249 MA's), (20, 13029), (22, 13044), (23, 13047), (30, 13110), (31, 13119), (33, 13128), (36, 13164), (39, 13200), (49, 13305),

Gene: Megamind20_15 Start: 12973, Stop: 13362, Start Num: 14

Candidate Starts for Megamind20_15:

(Start: 14 @12973 has 249 MA's), (20, 13051), (22, 13066), (23, 13069), (30, 13132), (31, 13141), (33, 13150), (36, 13186), (39, 13222), (49, 13327),

Gene: Megatron_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Megatron_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Melc17_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Melc17_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: MelsMeow_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for MelsMeow_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Mesh1_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Mesh1_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: MichaelPhcott_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for MichaelPhcott_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Mikota_15 Start: 13239, Stop: 13628, Start Num: 14

Candidate Starts for Mikota_15:

(Start: 14 @13239 has 249 MA's), (20, 13317), (22, 13332), (23, 13335), (30, 13398), (31, 13407), (33, 13416), (36, 13452), (39, 13488), (49, 13593),

Gene: MiniBoss_15 Start: 13241, Stop: 13630, Start Num: 14

Candidate Starts for MiniBoss_15:

(Start: 14 @13241 has 249 MA's), (20, 13319), (22, 13334), (23, 13337), (30, 13400), (31, 13409), (33, 13418), (36, 13454), (39, 13490), (49, 13595),

Gene: MitKao_15 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for MitKao_15:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Morgushi_15 Start: 12964, Stop: 13353, Start Num: 14

Candidate Starts for Morgushi_15:

(Start: 14 @12964 has 249 MA's), (20, 13042), (22, 13057), (23, 13060), (30, 13123), (31, 13132), (33, 13141), (36, 13177), (39, 13213), (49, 13318),

Gene: Morty_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Morty_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: Mosaic_14 Start: 12967, Stop: 13356, Start Num: 14

Candidate Starts for Mosaic_14:

(Start: 14 @12967 has 249 MA's), (20, 13045), (22, 13060), (23, 13063), (30, 13126), (31, 13135), (33, 13144), (36, 13180), (39, 13216), (49, 13321),

Gene: MrPhizzler_14 Start: 12965, Stop: 13354, Start Num: 14

Candidate Starts for MrPhizzler_14:

(Start: 14 @12965 has 249 MA's), (20, 13043), (22, 13058), (23, 13061), (30, 13124), (31, 13133), (33, 13142), (36, 13178), (39, 13214), (49, 13319),

Gene: Mulan_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Mulan_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Murdoc_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Murdoc_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Mutante_14 Start: 12963, Stop: 13352, Start Num: 14

Candidate Starts for Mutante_14:

(Start: 14 @12963 has 249 MA's), (20, 13041), (22, 13056), (23, 13059), (30, 13122), (31, 13131), (33, 13140), (36, 13176), (39, 13212), (49, 13317),

Gene: Nacho_0015 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Nacho_0015:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Nangang_16 Start: 14928, Stop: 15227, Start Num: 23

Candidate Starts for Nangang_16:

(7, 14706), (Start: 11 @14814 has 1 MA's), (Start: 14 @14829 has 249 MA's), (22, 14925), (23, 14928), (31, 15000), (36, 15045), (39, 15081), (43, 15123), (52, 15207),

Gene: Newman_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Newman_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Nicole21_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for Nicole21_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: Numberten_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Numberten_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Nyala_14 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Nyala_14:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: OSmaximus_15 Start: 13263, Stop: 13652, Start Num: 14

Candidate Starts for OSmaximus_15:

(Start: 14 @13263 has 249 MA's), (20, 13341), (22, 13356), (23, 13359), (30, 13422), (31, 13431), (33, 13440), (36, 13476), (39, 13512), (49, 13617),

Gene: Olak_14 Start: 12952, Stop: 13341, Start Num: 14

Candidate Starts for Olak_14:

(Start: 14 @12952 has 249 MA's), (20, 13030), (22, 13045), (23, 13048), (30, 13111), (31, 13120), (33, 13129), (36, 13165), (39, 13201), (49, 13306),

Gene: Oline_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Oline_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Olive_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Olive_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: OliverWalter_15 Start: 13261, Stop: 13650, Start Num: 14

Candidate Starts for OliverWalter_15:

(Start: 14 @13261 has 249 MA's), (20, 13339), (22, 13354), (23, 13357), (30, 13420), (31, 13429), (33, 13438), (36, 13474), (39, 13510), (49, 13615),

Gene: Omniscient_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Omniscient_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: Oosterbaan_15 Start: 13254, Stop: 13643, Start Num: 14

Candidate Starts for Oosterbaan_15:

(Start: 14 @13254 has 249 MA's), (20, 13332), (22, 13347), (23, 13350), (30, 13413), (31, 13422), (33, 13431), (36, 13467), (39, 13503), (49, 13608),

Gene: Orfeu_14 Start: 12953, Stop: 13342, Start Num: 14

Candidate Starts for Orfeu_14:

(Start: 14 @12953 has 249 MA's), (20, 13031), (22, 13046), (23, 13049), (30, 13112), (31, 13121), (33, 13130), (36, 13166), (39, 13202), (49, 13307),

Gene: Orion_15 Start: 13254, Stop: 13643, Start Num: 14

Candidate Starts for Orion_15:

(Start: 14 @13254 has 249 MA's), (20, 13332), (22, 13347), (23, 13350), (30, 13413), (31, 13422), (33, 13431), (36, 13467), (39, 13503), (49, 13608),

Gene: Orwigg_15 Start: 12946, Stop: 13335, Start Num: 14

Candidate Starts for Orwigg_15:

(Start: 14 @12946 has 249 MA's), (20, 13024), (22, 13039), (23, 13042), (30, 13105), (31, 13114), (33, 13123), (36, 13159), (39, 13195), (49, 13300),

Gene: PG1_15 Start: 13266, Stop: 13655, Start Num: 14

Candidate Starts for PG1_15:

(Start: 14 @13266 has 249 MA's), (20, 13344), (22, 13359), (23, 13362), (30, 13425), (31, 13434), (33, 13443), (36, 13479), (39, 13515), (49, 13620),

Gene: Pacifista_16 Start: 12957, Stop: 13346, Start Num: 14

Candidate Starts for Pacifista_16:

(Start: 14 @12957 has 249 MA's), (20, 13035), (22, 13050), (23, 13053), (30, 13116), (31, 13125), (33, 13134), (36, 13170), (39, 13206), (49, 13311),

Gene: Phaedrus_16 Start: 14604, Stop: 14918, Start Num: 21

Candidate Starts for Phaedrus_16:

(7, 14379), (12, 14484), (18, 14538), (Start: 21 @14604 has 2 MA's), (43, 14805), (44, 14808),

Gene: Phamished_15 Start: 13259, Stop: 13648, Start Num: 14

Candidate Starts for Phamished_15:

(Start: 14 @13259 has 249 MA's), (20, 13337), (22, 13352), (23, 13355), (30, 13418), (31, 13427), (33, 13436), (36, 13472), (39, 13508), (49, 13613),

Gene: Phareon_15 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Phareon_15:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: PhatCats2014_15 Start: 13269, Stop: 13658, Start Num: 14

Candidate Starts for PhatCats2014_15:

(Start: 14 @13269 has 249 MA's), (20, 13347), (22, 13362), (23, 13365), (30, 13428), (31, 13437), (33, 13446), (36, 13482), (39, 13518), (49, 13623),

Gene: PhatLouie_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for PhatLouie_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: PhenghisKhan_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for PhenghisKhan_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Pherdinand_15 Start: 13257, Stop: 13646, Start Num: 14

Candidate Starts for Pherdinand_15:

(Start: 14 @13257 has 249 MA's), (20, 13335), (22, 13350), (23, 13353), (30, 13416), (31, 13425), (33, 13434), (36, 13470), (39, 13506), (49, 13611),

Gene: Phergie_14 Start: 12806, Stop: 13195, Start Num: 14

Candidate Starts for Phergie_14:

(Start: 14 @12806 has 249 MA's), (20, 12884), (22, 12899), (23, 12902), (30, 12965), (31, 12974), (33, 12983), (36, 13019), (39, 13055), (49, 13160),

Gene: Phipps_15 Start: 13232, Stop: 13621, Start Num: 14

Candidate Starts for Phipps_15:

(Start: 14 @13232 has 249 MA's), (20, 13310), (22, 13325), (23, 13328), (30, 13391), (31, 13400), (33, 13409), (36, 13445), (39, 13481), (49, 13586),

Gene: Phleuron_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Phleuron_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: PhrankReynolds_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for PhrankReynolds_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: PhrodoBaggins_14 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for PhrodoBaggins_14:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: Phunky_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Phunky_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Piglet_0014 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Piglet_0014:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: PinheadLarry_15 Start: 12972, Stop: 13361, Start Num: 14

Candidate Starts for PinheadLarry_15:

(Start: 14 @12972 has 249 MA's), (20, 13050), (22, 13065), (23, 13068), (30, 13131), (31, 13140), (33, 13149), (36, 13185), (39, 13221), (49, 13326),

Gene: Pinkman_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for Pinkman_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: Pipsqueak_15 Start: 13259, Stop: 13648, Start Num: 14

Candidate Starts for Pipsqueak_15:

(Start: 14 @13259 has 249 MA's), (20, 13337), (22, 13352), (23, 13355), (30, 13418), (31, 13427), (33, 13436), (36, 13472), (39, 13508), (49, 13613),

Gene: Placalicious_14 Start: 12954, Stop: 13343, Start Num: 14

Candidate Starts for Placalicious_14:

(Start: 14 @12954 has 249 MA's), (20, 13032), (22, 13047), (23, 13050), (30, 13113), (31, 13122), (33, 13131), (36, 13167), (39, 13203), (49, 13308),

Gene: Plmatters_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Plmatters_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Podrick_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Podrick_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Pops_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Pops_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Potter_14 Start: 12967, Stop: 13356, Start Num: 14

Candidate Starts for Potter_14:

(Start: 14 @12967 has 249 MA's), (20, 13045), (22, 13060), (23, 13063), (30, 13126), (31, 13135), (33, 13144), (36, 13180), (39, 13216), (49, 13321),

Gene: Prickles_15 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for Prickles_15:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: ProfessorX_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for ProfessorX_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: Puhltonio_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Puhltonio_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: QueenBeane_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for QueenBeane_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Quisquilliae_15 Start: 13268, Stop: 13657, Start Num: 14

Candidate Starts for Quisquilliae_15:

(Start: 14 @13268 has 249 MA's), (20, 13346), (22, 13361), (23, 13364), (30, 13427), (31, 13436), (33, 13445), (36, 13481), (39, 13517), (49, 13622),

Gene: RedMaple_14 Start: 13265, Stop: 13654, Start Num: 14

Candidate Starts for RedMaple_14:

(Start: 14 @13265 has 249 MA's), (20, 13343), (22, 13358), (23, 13361), (30, 13424), (31, 13433), (33, 13442), (36, 13478), (39, 13514), (49, 13619),

Gene: Ricotta_15 Start: 12977, Stop: 13366, Start Num: 14

Candidate Starts for Ricotta_15:

(Start: 14 @12977 has 249 MA's), (20, 13055), (22, 13070), (23, 13073), (30, 13136), (31, 13145), (33, 13154), (36, 13190), (39, 13226), (49, 13331),

Gene: Riggan_15 Start: 13233, Stop: 13622, Start Num: 14

Candidate Starts for Riggan_15:

(Start: 14 @13233 has 249 MA's), (20, 13311), (22, 13326), (23, 13329), (30, 13392), (31, 13401), (33, 13410), (36, 13446), (39, 13482), (49, 13587),

Gene: Rimu_14 Start: 12965, Stop: 13354, Start Num: 14

Candidate Starts for Rimu_14:

(Start: 14 @12965 has 249 MA's), (20, 13043), (22, 13058), (23, 13061), (30, 13124), (31, 13133), (33, 13142), (36, 13178), (39, 13214), (49, 13319),

Gene: Robyn_14 Start: 12826, Stop: 13215, Start Num: 14

Candidate Starts for Robyn_14:

(Start: 14 @12826 has 249 MA's), (20, 12904), (22, 12919), (23, 12922), (30, 12985), (31, 12994), (33, 13003), (36, 13039), (39, 13075), (49, 13180),

Gene: Roliet_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Roliet_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Roscoe_16 Start: 13494, Stop: 13883, Start Num: 14

Candidate Starts for Roscoe_16:

(Start: 14 @13494 has 249 MA's), (20, 13572), (22, 13587), (23, 13590), (30, 13653), (31, 13662), (33, 13671), (36, 13707), (39, 13743), (41, 13749), (49, 13848),

Gene: Roy17_15 Start: 12955, Stop: 13344, Start Num: 14

Candidate Starts for Roy17_15:

(Start: 14 @12955 has 249 MA's), (20, 13033), (22, 13048), (23, 13051), (30, 13114), (31, 13123), (33, 13132), (36, 13168), (39, 13204), (49, 13309),

Gene: SDcharge11_15 Start: 13234, Stop: 13623, Start Num: 14

Candidate Starts for SDcharge11_15:

(Start: 14 @13234 has 249 MA's), (20, 13312), (22, 13327), (23, 13330), (30, 13393), (31, 13402), (33, 13411), (36, 13447), (39, 13483), (49, 13588),

Gene: SamW_22 Start: 21107, Stop: 21475, Start Num: 17

Candidate Starts for SamW_22:

(3, 20891), (Start: 17 @21107 has 9 MA's), (25, 21191), (27, 21230), (31, 21254), (34, 21275), (38, 21332),

Gene: Samaymay_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Samaymay_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: SassyCat97_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for SassyCat97_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (41, 13215), (49, 13314),

Gene: Schadenfreude_14 Start: 12810, Stop: 13199, Start Num: 14

Candidate Starts for Schadenfreude_14:

(Start: 14 @12810 has 249 MA's), (20, 12888), (22, 12903), (23, 12906), (30, 12969), (31, 12978), (33, 12987), (36, 13023), (39, 13059), (49, 13164),

Gene: Schueller_14 Start: 12951, Stop: 13340, Start Num: 14

Candidate Starts for Schueller_14:

(Start: 14 @12951 has 249 MA's), (20, 13029), (22, 13044), (23, 13047), (30, 13110), (31, 13119), (33, 13128), (36, 13164), (39, 13200), (49, 13305),

Gene: Scoot17C_15 Start: 13254, Stop: 13643, Start Num: 14

Candidate Starts for Scoot17C_15:

(Start: 14 @13254 has 249 MA's), (20, 13332), (22, 13347), (23, 13350), (30, 13413), (31, 13422), (33, 13431), (36, 13467), (39, 13503), (49, 13608),

Gene: Scrick_14 Start: 12973, Stop: 13362, Start Num: 14

Candidate Starts for Scrick_14:

(Start: 14 @12973 has 249 MA's), (20, 13051), (22, 13066), (23, 13069), (30, 13132), (31, 13141), (33, 13150), (36, 13186), (39, 13222), (49, 13327),

Gene: Selr12_15 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for Selr12_15:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Serendipity_15 Start: 13274, Stop: 13663, Start Num: 14

Candidate Starts for Serendipity_15:

(Start: 14 @13274 has 249 MA's), (20, 13352), (22, 13367), (23, 13370), (30, 13433), (31, 13442), (33, 13451), (36, 13487), (39, 13523), (49, 13628),

Gene: Serpentine_0015 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Serpentine_0015:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Sheila_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for Sheila_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: ShiVal_15 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for ShiVal_15:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: Sigman_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Sigman_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Simielle_14 Start: 12945, Stop: 13334, Start Num: 14

Candidate Starts for Simielle_14:

(Start: 14 @12945 has 249 MA's), (20, 13023), (22, 13038), (23, 13041), (30, 13104), (31, 13113), (33, 13122), (36, 13158), (39, 13194), (49, 13299),

Gene: SirJeffery_16 Start: 14846, Stop: 15253, Start Num: 14

Candidate Starts for SirJeffery_16:

(7, 14723), (Start: 11 @14831 has 1 MA's), (Start: 14 @14846 has 249 MA's), (22, 14951), (23, 14954), (25, 14963), (31, 15026), (36, 15071), (39, 15107), (43, 15149), (52, 15233),

Gene: Skippy_15 Start: 13238, Stop: 13627, Start Num: 14

Candidate Starts for Skippy_15:

(Start: 14 @13238 has 249 MA's), (20, 13316), (22, 13331), (23, 13334), (30, 13397), (31, 13406), (33, 13415), (36, 13451), (39, 13487), (49, 13592),

Gene: Slatt_15 Start: 13270, Stop: 13659, Start Num: 14

Candidate Starts for Slatt_15:

(Start: 14 @13270 has 249 MA's), (20, 13348), (22, 13363), (23, 13366), (30, 13429), (31, 13438), (33, 13447), (36, 13483), (39, 13519), (49, 13624),

Gene: SlippinJimmy_17 Start: 15451, Stop: 15765, Start Num: 21

Candidate Starts for SlippinJimmy_17:

(7, 15226), (12, 15331), (18, 15385), (Start: 21 @15451 has 2 MA's), (43, 15652), (44, 15655),

Gene: Soile_15 Start: 12965, Stop: 13354, Start Num: 14

Candidate Starts for Soile_15:

(Start: 14 @12965 has 249 MA's), (20, 13043), (22, 13058), (23, 13061), (30, 13124), (31, 13133), (33, 13142), (36, 13178), (39, 13214), (49, 13319),

Gene: Solosis_14 Start: 12972, Stop: 13361, Start Num: 14

Candidate Starts for Solosis_14:

(Start: 14 @12972 has 249 MA's), (20, 13050), (22, 13065), (23, 13068), (30, 13131), (31, 13140), (33, 13149), (36, 13185), (39, 13221), (49, 13326),

Gene: Sophia_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Sophia_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Soto_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Soto_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Spartan300_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Spartan300_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Squid_15 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Squid_15:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Squiggle_15 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Squiggle_15:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: StAB_22 Start: 21542, Stop: 21910, Start Num: 17

Candidate Starts for StAB_22:

(15, 21524), (Start: 17 @21542 has 9 MA's), (25, 21626), (31, 21689), (38, 21767),

Gene: Stiles_22 Start: 21096, Stop: 21464, Start Num: 17

Candidate Starts for Stiles_22:

(15, 21078), (Start: 17 @21096 has 9 MA's), (27, 21219), (28, 21222),

Gene: StinkyVeggy_17 Start: 15081, Stop: 15383, Start Num: 22

Candidate Starts for StinkyVeggy_17:

(7, 14862), (Start: 11 @14970 has 1 MA's), (Start: 14 @14985 has 249 MA's), (22, 15081), (23, 15084), (31, 15156), (36, 15201), (39, 15237), (41, 15243), (43, 15279), (52, 15363),

Gene: Struggle_14 Start: 12806, Stop: 13195, Start Num: 14

Candidate Starts for Struggle_14:

(Start: 14 @12806 has 249 MA's), (20, 12884), (22, 12899), (23, 12902), (30, 12965), (31, 12974), (33, 12983), (36, 13019), (39, 13055), (49, 13160),

Gene: Suffolk_15 Start: 13252, Stop: 13641, Start Num: 14

Candidate Starts for Suffolk_15:

(Start: 14 @13252 has 249 MA's), (20, 13330), (22, 13345), (23, 13348), (30, 13411), (31, 13420), (33, 13429), (36, 13465), (39, 13501), (49, 13606),

Gene: Suigeneris_16 Start: 14831, Stop: 15253, Start Num: 11

Candidate Starts for Suigeneris_16:

(7, 14723), (Start: 11 @14831 has 1 MA's), (Start: 14 @14846 has 249 MA's), (22, 14951), (23, 14954), (25, 14963), (31, 15026), (36, 15071), (39, 15107), (43, 15149), (52, 15233),

Gene: Surely_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Surely_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: Swiphy_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Swiphy_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Swish_15 Start: 13248, Stop: 13637, Start Num: 14

Candidate Starts for Swish_15:

(Start: 14 @13248 has 249 MA's), (20, 13326), (22, 13341), (23, 13344), (30, 13407), (31, 13416), (33, 13425), (36, 13461), (39, 13497), (49, 13602),

Gene: TPA2_24 Start: 15808, Stop: 16110, Start Num: 23

Candidate Starts for TPA2_24:

(1, 15427), (16, 15712), (18, 15736), (23, 15808), (26, 15829), (41, 15967), (42, 15991), (43, 16003), (48, 16060), (50, 16072), (51, 16081),

Gene: TallGrassMM_15 Start: 12978, Stop: 13367, Start Num: 14

Candidate Starts for TallGrassMM_15:

(Start: 14 @12978 has 249 MA's), (20, 13056), (22, 13071), (23, 13074), (30, 13137), (31, 13146), (33, 13155), (36, 13191), (39, 13227), (49, 13332),

Gene: Telesworld_14 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for Telesworld_14:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Thora_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Thora_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: ThreeOh3D2_15 Start: 13263, Stop: 13652, Start Num: 14

Candidate Starts for ThreeOh3D2_15:

(Start: 14 @13263 has 249 MA's), (20, 13341), (22, 13356), (23, 13359), (30, 13422), (31, 13431), (33, 13440), (36, 13476), (39, 13512), (49, 13617),

Gene: Thunderbird_15 Start: 12962, Stop: 13351, Start Num: 14

Candidate Starts for Thunderbird_15:

(Start: 14 @12962 has 249 MA's), (20, 13040), (22, 13055), (23, 13058), (30, 13121), (31, 13130), (33, 13139), (36, 13175), (39, 13211), (49, 13316),

Gene: Timmi_14 Start: 12972, Stop: 13361, Start Num: 14

Candidate Starts for Timmi_14:

(Start: 14 @12972 has 249 MA's), (20, 13050), (22, 13065), (23, 13068), (30, 13131), (31, 13140), (33, 13149), (36, 13185), (39, 13221), (49, 13326),

Gene: TomBombadil_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for TomBombadil_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Tomlarah_15 Start: 13247, Stop: 13636, Start Num: 14

Candidate Starts for Tomlarah_15:

(Start: 14 @13247 has 249 MA's), (20, 13325), (22, 13340), (23, 13343), (30, 13406), (31, 13415), (33, 13424), (36, 13460), (39, 13496), (49, 13601),

Gene: Toni_14 Start: 12958, Stop: 13347, Start Num: 14

Candidate Starts for Toni_14:

(Start: 14 @12958 has 249 MA's), (20, 13036), (22, 13051), (23, 13054), (30, 13117), (31, 13126), (33, 13135), (36, 13171), (39, 13207), (49, 13312),

Gene: Tooj_15 Start: 13260, Stop: 13649, Start Num: 14

Candidate Starts for Tooj_15:

(Start: 14 @13260 has 249 MA's), (20, 13338), (22, 13353), (23, 13356), (30, 13419), (31, 13428), (33, 13437), (36, 13473), (39, 13509), (49, 13614),

Gene: Troy_22 Start: 21107, Stop: 21475, Start Num: 17

Candidate Starts for Troy_22:

(3, 20891), (Start: 17 @21107 has 9 MA's), (25, 21191), (27, 21230), (31, 21254), (34, 21275), (38, 21332),

Gene: True_14 Start: 12961, Stop: 13350, Start Num: 14

Candidate Starts for True_14:

(Start: 14 @12961 has 249 MA's), (20, 13039), (22, 13054), (23, 13057), (30, 13120), (31, 13129), (33, 13138), (36, 13174), (39, 13210), (49, 13315),

Gene: Trypo_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for Trypo_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: TyrionL_14 Start: 12812, Stop: 13201, Start Num: 14

Candidate Starts for TyrionL_14:

(Start: 14 @12812 has 249 MA's), (20, 12890), (22, 12905), (23, 12908), (30, 12971), (31, 12980), (33, 12989), (36, 13025), (39, 13061), (49, 13166),

Gene: UAch1_15 Start: 13271, Stop: 13660, Start Num: 14

Candidate Starts for UAch1_15:

(Start: 14 @13271 has 249 MA's), (20, 13349), (22, 13364), (23, 13367), (30, 13430), (31, 13439), (33, 13448), (36, 13484), (39, 13520), (49, 13625),

Gene: UncleHowie_15 Start: 12960, Stop: 13349, Start Num: 14

Candidate Starts for UncleHowie_15:

(Start: 14 @12960 has 249 MA's), (20, 13038), (22, 13053), (23, 13056), (30, 13119), (31, 13128), (33, 13137), (36, 13173), (39, 13209), (49, 13314),

Gene: Usavi_15 Start: 13262, Stop: 13651, Start Num: 14

Candidate Starts for Usavi_15:

(Start: 14 @13262 has 249 MA's), (20, 13340), (22, 13355), (23, 13358), (30, 13421), (31, 13430), (33, 13439), (36, 13475), (39, 13511), (49, 13616),

Gene: Vaishali24_14 Start: 12913, Stop: 13302, Start Num: 14

Candidate Starts for Vaishali24_14:

(Start: 14 @12913 has 249 MA's), (20, 12991), (22, 13006), (23, 13009), (30, 13072), (31, 13081), (33, 13090), (36, 13126), (39, 13162), (49, 13267),

Gene: Valjean_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Valjean_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Vaticameos_15 Start: 12951, Stop: 13340, Start Num: 14

Candidate Starts for Vaticameos_15:

(Start: 14 @12951 has 249 MA's), (20, 13029), (22, 13044), (23, 13047), (30, 13110), (31, 13119), (33, 13128), (36, 13164), (39, 13200), (49, 13305),

Gene: Veritas_14 Start: 12800, Stop: 13189, Start Num: 14

Candidate Starts for Veritas_14:

(Start: 14 @12800 has 249 MA's), (20, 12878), (22, 12893), (23, 12896), (30, 12959), (31, 12968), (33, 12977), (36, 13013), (39, 13049), (49, 13154),

Gene: Virapocalypse_15 Start: 13245, Stop: 13634, Start Num: 14

Candidate Starts for Virapocalypse_15:

(Start: 14 @13245 has 249 MA's), (20, 13323), (22, 13338), (23, 13341), (30, 13404), (31, 13413), (33, 13422), (36, 13458), (39, 13494), (49, 13599),

Gene: Virgeve_14 Start: 12966, Stop: 13355, Start Num: 14

Candidate Starts for Virgeve_14:

(Start: 14 @12966 has 249 MA's), (20, 13044), (22, 13059), (23, 13062), (30, 13125), (31, 13134), (33, 13143), (36, 13179), (39, 13215), (49, 13320),

Gene: Vista_15 Start: 13256, Stop: 13645, Start Num: 14

Candidate Starts for Vista_15:

(Start: 14 @13256 has 249 MA's), (20, 13334), (22, 13349), (23, 13352), (30, 13415), (31, 13424), (33, 13433), (36, 13469), (39, 13505), (49, 13610),

Gene: Vivaldi_15 Start: 13287, Stop: 13676, Start Num: 14

Candidate Starts for Vivaldi_15:

(Start: 14 @13287 has 249 MA's), (20, 13365), (22, 13380), (23, 13383), (30, 13446), (31, 13455), (33, 13464), (36, 13500), (39, 13536), (49, 13641),

Gene: Vortex_15 Start: 12967, Stop: 13356, Start Num: 14

Candidate Starts for Vortex_15:

(Start: 14 @12967 has 249 MA's), (20, 13045), (22, 13060), (23, 13063), (30, 13126), (31, 13135), (33, 13144), (36, 13180), (39, 13216), (49, 13321),

Gene: Wallhey_14 Start: 12818, Stop: 13207, Start Num: 14

Candidate Starts for Wallhey_14:

(Start: 14 @12818 has 249 MA's), (20, 12896), (22, 12911), (23, 12914), (30, 12977), (31, 12986), (33, 12995), (36, 13031), (39, 13067), (49, 13172),

Gene: Waterdiva_15 Start: 13254, Stop: 13643, Start Num: 14

Candidate Starts for Waterdiva_15:

(Start: 14 @13254 has 249 MA's), (20, 13332), (22, 13347), (23, 13350), (30, 13413), (31, 13422), (33, 13431), (36, 13467), (39, 13503), (49, 13608),

Gene: Weher20_15 Start: 13244, Stop: 13633, Start Num: 14

Candidate Starts for Weher20_15:

(Start: 14 @13244 has 249 MA's), (20, 13322), (22, 13337), (23, 13340), (30, 13403), (31, 13412), (33, 13421), (36, 13457), (39, 13493), (49, 13598),

Gene: Windsor_14 Start: 12920, Stop: 13309, Start Num: 14

Candidate Starts for Windsor_14:

(Start: 14 @12920 has 249 MA's), (20, 12998), (22, 13013), (23, 13016), (30, 13079), (31, 13088), (33, 13097), (36, 13133), (39, 13169), (49, 13274),

Gene: Xavier_14 Start: 12972, Stop: 13361, Start Num: 14

Candidate Starts for Xavier_14:

(Start: 14 @12972 has 249 MA's), (20, 13050), (22, 13065), (23, 13068), (30, 13131), (31, 13140), (33, 13149), (36, 13185), (39, 13221), (49, 13326),

Gene: Yoshand_15 Start: 13257, Stop: 13646, Start Num: 14

Candidate Starts for Yoshand_15:

(Start: 14 @13257 has 249 MA's), (20, 13335), (22, 13350), (23, 13353), (30, 13416), (31, 13425), (33, 13434), (36, 13470), (39, 13506), (49, 13611),

Gene: YouGoGlencoco_15 Start: 13250, Stop: 13639, Start Num: 14

Candidate Starts for YouGoGlencoco_15:

(Start: 14 @13250 has 249 MA's), (20, 13328), (22, 13343), (23, 13346), (30, 13409), (31, 13418), (33, 13427), (36, 13463), (39, 13499), (49, 13604),

Gene: Zaider_16 Start: 13483, Stop: 13872, Start Num: 14

Candidate Starts for Zaider_16:

(Start: 14 @13483 has 249 MA's), (20, 13561), (22, 13576), (23, 13579), (30, 13642), (31, 13651), (33, 13660), (36, 13696), (39, 13732), (49, 13837),

Gene: Zelda_15 Start: 13253, Stop: 13642, Start Num: 14

Candidate Starts for Zelda_15:

(Start: 14 @13253 has 249 MA's), (20, 13331), (22, 13346), (23, 13349), (30, 13412), (31, 13421), (33, 13430), (36, 13466), (39, 13502), (49, 13607),

Gene: Zonia_15 Start: 13267, Stop: 13656, Start Num: 14

Candidate Starts for Zonia_15:

(Start: 14 @13267 has 249 MA's), (20, 13345), (22, 13360), (23, 13363), (30, 13426), (31, 13435), (33, 13444), (36, 13480), (39, 13516), (49, 13621),