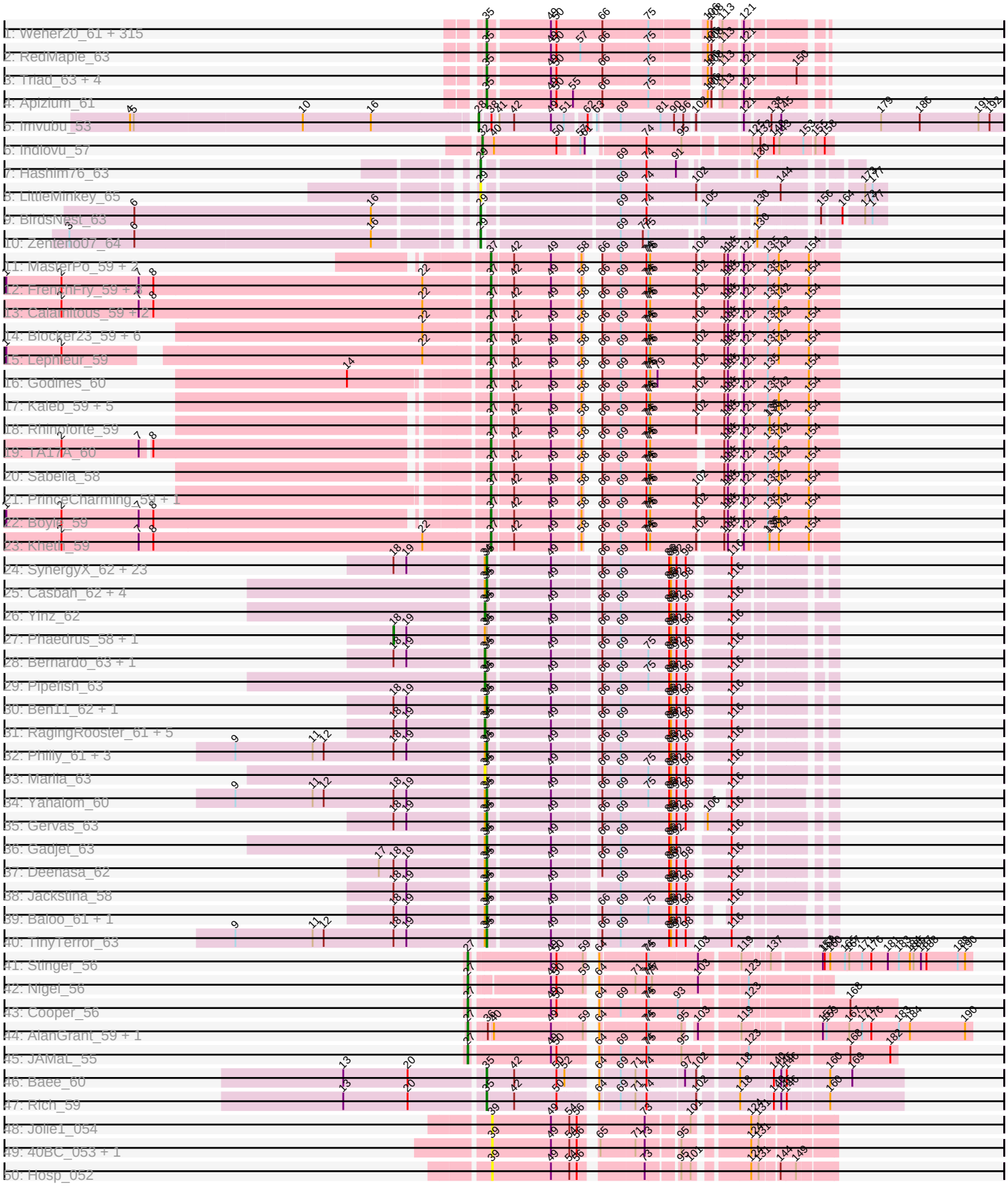
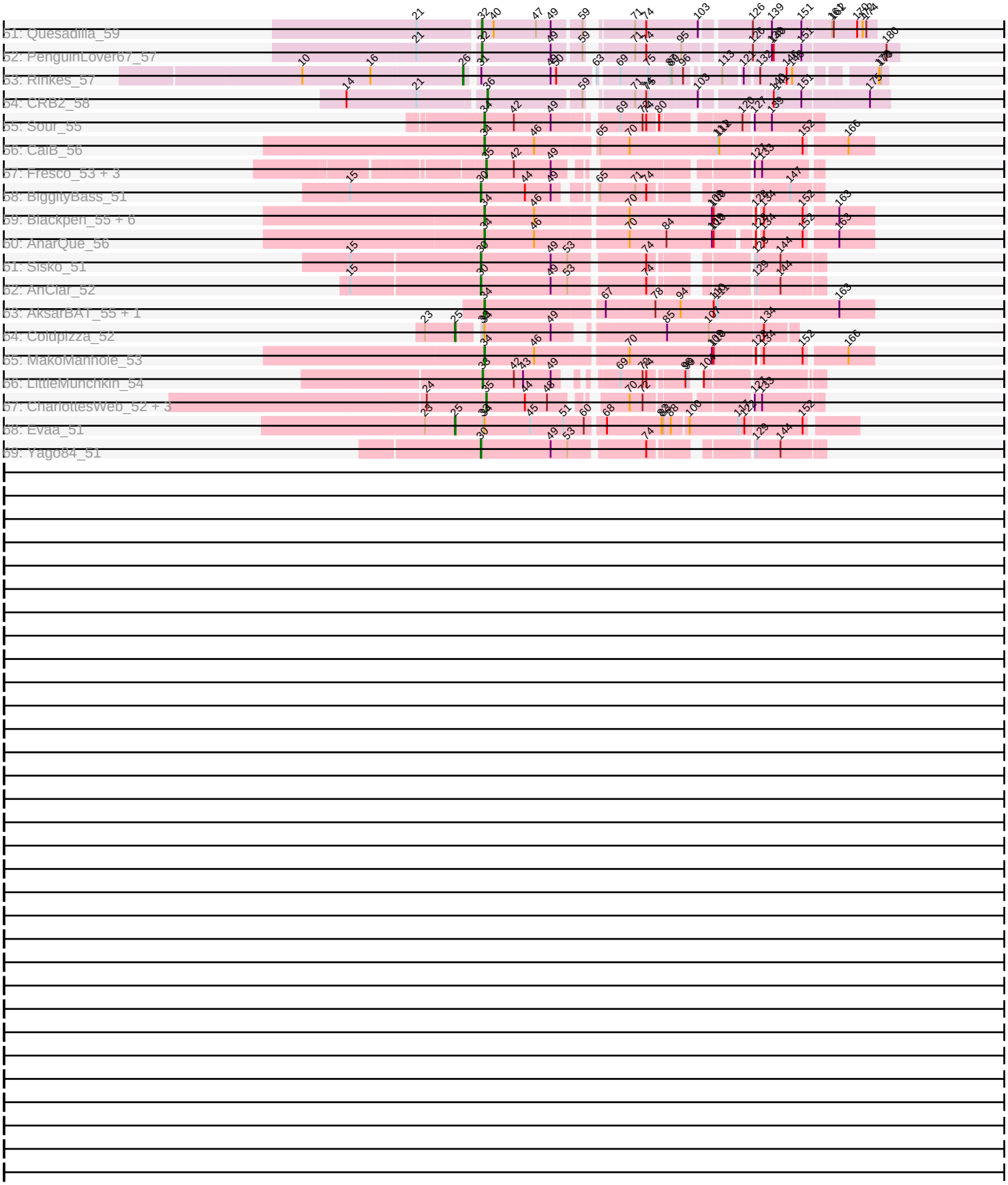
Pham 347087


1: Wener20_61 + 315
2: RedMaple_63
3: Thad_63 + 4
4: Apizium_61
5: Imvubu_53
6: Indiovu_57
7: Hashim76_63
8: LittleMinkey_65
9: BirdsNest_63
10: Zenteno07_64
11: MasterPo_59 + 2
12: FrenchFry_59 + 3
13: Calamitous_59 + 2
14: Blocker23_59 + 6
15: Lephleur_59
16: Godines_60
17: Kaleb_59 + 5
18: Rhinoflorie_59
19: TA17A_60
20: Sabella_58
21: PrinceCharming_59 + 1
22: Boyka_59
23: Khem_59
24: SynergyX_62 + 23
25: Casban_62 + 4
26: Yinz_62
27: Phaedrus_58 + 1
28: Bernardo_63 + 1
29: Pipefish_63
30: Ben11_62 + 1
31: RagingRooster_61 + 5
32: Philly_61 + 3
33: Manila_63
34: Yanalom_60
35: Gervas_63
36: Gadjet_63
37: Deenasa_62
38: Jackstina_58
39: Baloo_61 + 1
40: TinyTerror_63
41: Stinger_56
42: Nigel_56
43: Cooper_56
44: AlanGrant_59 + 1
45: JAMaL_55
46: Baee_60
47: Rich_59
48: Jolie1_054
49: 40BC_053 + 1
50: Hosp_052

Pham 347087


51: Quesadilla_59
52: PenguinLover67_57
53: Rinkes_57
54: CRB2_58
55: Sour_55
56: CalB_56
57: Fresco_53 + 3
58: BigglyBass_51
59: Blackpen_55 + 6
60: AnarQue_56
61: Sisko_51
62: AnClar_52
63: AksarBAT_55 + 1
64: Coldpizza_52
65: MakoManhole_53
66: LittleMunchkin_54
67: CharlottesWeb_52 + 3
68: Evaa_51
69: Yago84_51

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 347087 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347087 has 466 members, 40 are drafts.

Phages represented in each track:
• Track 1 : Weher20_61, JDog_60, Magic8_62, FriarPreacher_61, Zelda_62, Murdoc_60, DirtJuice_62, EmpTee_61, Podrick_60, Salazzle_63, DolOn_67, Mulan_61, Pherdinand_63, Prickles_63, Soto_60, Buckeye_62, Orwigg_61, Riverton_61, Thora_61, Altwerkus_59, Jbug01_63, Basato_62, Derpp_61, Fringe_65, Swiphy_63, Melc17_61, Zonia_63, Boehler_61, Chaelin_62, Mesmerelda_61, Aelin_61, Cher_61, Tomlarah_62, OSmaximus_63, ShiVal_59, PG1_62, Azuria_61, Vortex_61, Chuni_65, Megamind20_62, Pipsqueak_60, Pacifista_60, Veritas_63, Chah_63, Gwilliam_62, SDcharge11_61, Plmatters_60, Jiminy_62, Gareth_61, Serpentine_0061, Skippy_62, Nacho_0063, Iridoclysis_62, Andre_63, Larson_65, Nicole21_62, Dione_59, JakeO_62, Manad_61, Simielle_61, DelRivs_60, Giraffe_62, Waterdiva_61, DoesntMatter_59, MitKao_61, Vista_61, Numberten_61, Maru_61, Selr12_62, Pops_61, Chunky_60, Pinkman_61, ThreeOh3D2_63, Roy17_60, BlackStallion_63, AltPhacts_61, FluffyNinja_63, NiaNia_64, Bishoperium_61, Windsor_61, Schadenfreude_61, Mcshane_60, ImtiyazSitla_63, Yoshand_63, Ashraf_63, UncleHowie_60, SilverBell_62, Eugenia_61, Oline_62, BoogieWoogie_63, Mutante_61, Inchworm_63, MiniBoss_59, Cornbread_61, Megatron_62, Karn_62, Phergie_63, AngelCake_62, Gyarad_0060, Frankicide_60, Olive_61, Mosaic_60, Dingo_60, LeeLot_62, Taraxa_64, Mikota_60, KLucky39_60, Thunderbird_61, Grand2040_61, KlimbOn_61, ElvisPhasley_63, Inverness_60, PinheadLarry_62, Suffolk_60, Kikipoo_63, Doddsville_62, Coletti_64, Lopsy_60, Sophia_60, Kiwot_64, Etaye_63, Surely_61, TyrionL_62, Chorkpop_61, ProfessorX_61, Dati_61, Childish_61, Duggie_62, Virapocalypse_62, Newman_60, Crownjwl_61, Trypo_64, Hocus_61, Kailash_62, Badfish_62, Cannibal_61, Schueller_62, Squid_61, Morty_62, Mana_60, Daffy_61, Hertubise_61, QueenBeane_61, Antonia_61, RedRaider89_62, BlacksBerry_62, TooFast2Furius_61, ABU_62, Cornobble_61, Hamish_60, Soile_62, Kwadwo_60, Freya_59, Mecca_61, Longacauda_62, Virgeve_61, Lego3393_60, Toni_61, LostAndPhound_62, OliverWalter_60, Scrick_62, Haleema_60, EmGer13_63, Spartan300_61, Olak_60, Mesh1_63, Fang_63, AbsoluteMadLad_62, Keitherie_63, PhrankReynolds_61, Orion_63, Sigman_62, Durga_64, MelsMeow_62, Scoot17C_62, Legolas_63, Chipette_62, Emiris_64, Colbert_60, LemonSlice_62, Phareon_60, Cobra_63, GeneCoco_62, Wallhey_62, Swish_63, Quisquiliae_62, Bluephacebaby_61, Gwennie1_61, HogWash_63, IsaacEli_63, PhrodoBaggins_62, DuchessDung_63, Xavier_60, Beaglebox_61, CheetO_61, Jillium_61, LasagnaCat_63, Vaticameos_58, KingTut_54, Slatt_62, PhenghisKhan_62, Eremos_61, Chute_63, Serendipity_61, Solosis_60, Katniss_62, Jesabah_63, Dice_60, True_60, Harvey_60, JacAttac_63, Charles1_62, DaddyDaniels_63, Nehme_62, Riggan_62, Brilliant_64, SassyCat97_60, Lasso_62, UAch1_61,

Phunky_60, Squiggle_62, Ricotta_61, Omniscient_62, Plata_62, Morgushi_61, PhatCats2014_62, Phipps_61, Held_61, Potter_60, Iridessa_62, Hartsy_62, Vectra_63, Vivaldi_63, Piglet_0061, HenryJackson_61, Fozzie_62, CamL_61, Rimu_61, FugateOSU_62, FleetyMac_62, Septica_62, Sheila_59, GreenChile_63, SallyH_64, Orfeu_60, LuckyMarjie_59, Phamished_63, Timmi_60, Mag7_62, Aonishiki_62, Lulumae_59, Banjo_60, CampRoach_63, PhatLouie_63, Kahve_61, LeiMonet_64, BlueHusk_63, Tooj_60, Telesworld_59, Nova1_64, YouGoGlencoco_62, Nathan_62, Nyala_60, Khan1_61, Anderson_62, CharlieGBrown_62, HSavage_60, Placalicious_62, Jiraiya_62, TallGrassMM_61, HighStump_63, JangoPhett_61, Cosmolli16_62, Labeouficaum_62, PallasAthena_62, Lulwa_59, Hekos_60, Phleuron_62, Kwksand96_62, Flake_62, MichaelPhcott_62, FremontTroll_61, Haimas_60, SirBeauregard_62, MRabcd_61, ShadowBud_62, Gophee_63, Happabalu_62, Puhltonio_61, Adriana_63, Roliet_59, Samaymay_61, OneBrain_64, Kimbrough_62, Roscoe_62, Daka_64, Hetaeria_61, Usavi_61, Oosterbaan_61, Lumine_62, Horchata_60, Craff_64, Burr_61, Kloppinator_62, Matalotodo_61, Maskar_63, Aleia_64, KingVeVeVe_60, Zaider_62, Valjean_61, TomBombadil_61, Caspiboi_62, Struggle_62, BatteryCK_62, DonSanchon_59, MrPhizzler_64

- Track 2 : RedMaple_63
- Track 3 : Triad_63, Vaishali24_60, Robyn_61, Carthage_60, Lehmann_63
- Track 4 : Apizium_61
- Track 5 : Imvubu_53
- Track 6 : Indlovu_57
- Track 7 : Hashim76_63
- Track 8 : LittleMinkey_65
- Track 9 : BirdsNest_63
- Track 10 : Zenteno07_64
- Track 11 : MasterPo_59, Laurie_59, Vic9_00059
- Track 12 : FrenchFry_59, Bananafish_59, Holeinone_59, Lars_59, Opia_59, Glass_59, Arbiter_58, LizLemon_59, Ares_59
- Track 13 : Calamitous_59, Kolhan_59, Qyrzula_54
- Track 14 : Blocker23_59, Phantasmagoria_59, Faze9_58, West99_59, Coffee_59, Allegro_59, LilSmirk_59
- Track 15 : Lephleur_59
- Track 16 : Godines_60
- Track 17 : Kaleb_59, Brownie5_59, Tinciduntsolum_60, Rosebush_58, Tres_59, Hedgerow_59
- Track 18 : Rhinoforte_59
- Track 19 : TA17A_60
- Track 20 : Sabella_58
- Track 21 : PrinceCharming_59, Eaglehorse_59
- Track 22 : Boyle_59
- Track 23 : Kheth_59
- Track 24 : SynergyX_62, MmasiCarm_63, Chalmers_61, Athena_64, ChaChing_62, Neos5_61, Olivio_62, GlenHope_63, Chentzyk_63, SlippinJimmy_64, Marley1013_62, Glubnar_63, Akoma_62, Daisy_61, Rita1961_63, HarveySr_61, Nozo_62, Corofin_62, Tydolla_59, Kamiyu_62, Devonte_61, Chandler_62, OrangeOswald_62, Shenandoah_61
- Track 25 : Casbah_62, Briakila_61, Phayeta_64, Halfpint_61, SwainyDoc_63
- Track 26 : Yinz_62
- Track 27 : Phaedrus_58, Morty007_61
- Track 28 : Bernardo_63, LestyG_60
- Track 29 : Pipefish_63

• Track 30 : Ben11_62, Kronus_62
• Track 31 : RagingRooster_61, RomaT_62, Audrey_62, Mortcellus_62, Heathcliff_62, Abinghost_62
• Track 32 : Philly_61, Obutu_63, Compostia_62, Mulaychimus_63
• Track 33 : Marlia_63
• Track 34 : Yahalom_60
• Track 35 : Gervas_63
• Track 36 : Gadjet_63
• Track 37 : Deenasa_62
• Track 38 : Jackstina_58
• Track 39 : Baloo_61, Phlyer_62
• Track 40 : TinyTerror_63
• Track 41 : Stinger_56
• Track 42 : Nigel_56
• Track 43 : Cooper_56
• Track 44 : AlanGrant_59, Vincenzo_58
• Track 45 : JAMaL_55
• Track 46 : Baee_60
• Track 47 : Rich_59
• Track 48 : Jolie1_054
• Track 49 : 40BC_053, 39HC_053
• Track 50 : Hosp_052
• Track 51 : Quesadilla_59
• Track 52 : PenguinLover67_57
• Track 53 : Rinkes_57
• Track 54 : CRB2_58
• Track 55 : Sour_55
• Track 56 : CaiB_56
• Track 57 : Fresco_53, Ligma_53, Axumite_53, Shatter_53
• Track 58 : BiggityBass_51
• Track 59 : Blackpen_55, Wooper_56, CloverMinnie_55, FelixTres_55, TraderJ_56, MossRose_55, Yeshua_56
• Track 60 : AnarQue_56
• Track 61 : Sisko_51
• Track 62 : AnClar_52
• Track 63 : AksarBAT_55, NHagos_54
• Track 64 : Coldpizza_52
• Track 65 : MakoManhole_53
• Track 66 : LittleMunchkin_54
• Track 67 : CharlottesWeb_52, Coco2012_52, JellyBelly_51, Mariokart_52
• Track 68 : Evaa_51
• Track 69 : Yago84_51

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

The start number called the most often in the published annotations is 35, it was called in 346 of the 426 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABU_62, AbsoluteMadLad_62, Adriana_63, Aelin_61, Akoma_62, Aleia_64, AltPhacts_61, Altwerkus_59, Anderson_62, Andre_63, AngelCake_62, Antonia_61, Aonishiki_62, Apizium_61, Ashraf_63, Athena_64, Axumite_53, Azuria_61, Badfish_62, Baee_60, Baloo_61, Banjo_60, Basato_62, BatteryCK_62, Beaglebox_61, Ben11_62, Bishoperium_61, BlackStallion_63, BlacksBerry_62, BlueHusk_63, Bluephacebaby_61, Boehler_61, BoogieWoogie_63, Briakila_61, Brilliant_64, Buckeye_62, Burr_61, CamL_61, CampRoach_63, Cannibal_61, Carthage_60, Casbah_62, Caspiboi_62, ChaChing_62, Chaelin_62, Chah_63, Chalmers_61, Chandler_62, Charles1_62, CharlieGBrown_62, CharlottesWeb_52, CheetO_61, Chentzyk_63, Cher_61, Childish_61, Chipette_62, Chorkpop_61, Chuni_65, Chunky_60, Chute_63, Cobra_63, Coco2012_52, Colbert_60, Coletti_64, Compostia_62, Cornbread_61, Cornobble_61, Corofin_62, Cosmolli16_62, Craff_64, Crownjwl_61, DaddyDaniels_63, Daffy_61, Daisy_61, Daka_64, Dati_61, Deenasa_62, DelRivs_60, Derpp_61, Devonte_61, Dice_60, Dingo_60, Dione_59, DirtJuice_62, Doddsville_62, DoesntMatter_59, DolOn_67, DonSanchon_59, DuchessDung_63, Duggie_62, Durga_64, ElvisPhasley_63, EmGer13_63, Emiris_64, EmpTee_61, Eremos_61, Etaye_63, Eugenia_61, Fang_63, Flake_62, FleetyMac_62, FluffyNinja_63, Fozzie_62, Frankicide_60, FremontTroll_61, Fresco_53, Freya_59, FriarPreacher_61, Fringe_65, FugateOSU_62, Gadjet_63, Gareth_61, GeneCoco_62, Gervas_63, Giraffe_62, GlenHope_63, Glubnar_63, Gophee_63, Grand2040_61, GreenChile_63, Gwennie1_61, Gwilliam_62, Gyarad_0060, HSavage_60, Haimas_60, Haleema_60, Halfpint_61, Hamish_60, Happabalu_62, Hartsy_62, HarveySr_61, Harvey_60, Hekos_60, Held_61, HenryJackson_61, Hertubise_61, Hetaeria_61, HighStump_63, Hocus_61, HogWash_63, Horchata_60, ImtiyazSitla_63, Inchworm_63, Inverness_60, Iridessa_62, Iridoclysis_62, IsaacEli_63, JDog_60, JacAttac_63, Jackstina_58, JakeO_62, JangoPhett_61, Jbug01_63, JellyBelly_51, Jesabah_63, Jillium_61, Jiminy_62, Jiraiya_62, KLucky39_60, Kahve_61, Kailash_62, Kamiyu_62, Karn_62, Katniss_62, Keitherie_63, Khan1_61, Kikipoo_63, Kimbrough_62, KingTut_54, KingVeVeVe_60, Kiwot_64, KlimbOn_61, Kloppinator_62, Kronus_62, Kwadwo_60, Kwksand96_62, Labeouficaum_62, Larson_65, LasagnaCat_63, Lasso_62, LeeLot_62, Lego3393_60, Legolas_63, Lehmann_63, LeiMonet_64, LemonSlice_62, Ligma_53, Longacauda_62, Lopsy_60, LostAndPhound_62, LuckyMarjie_59, Lulumae_59, Lulwa_59, Lumine_62, MRabcd_61, Mag7_62, Magic8_62, Mana_60, Manad_61, Mariokart_52, Marley1013_62, Maru_61, Maskar_63, Matalotodo_61, Mcshane_60, Mecca_61, Megamind20_62, Megatron_62, Melc17_61, MelsMeow_62, Mesh1_63, Mesmerelda_61, MichaelPhcott_62, Mikota_60, MiniBoss_59, MitKao_61, MmasiCarm_63, Morgushi_61, Morty_62, Mosaic_60, MrPhizzler_64, Mulan_61, Mulaychimus_63, Murdoc_60, Mutante_61, Nacho_0063, Nathan_62, Nehme_62, Neos5_61, Newman_60, NiaNia_64, Nicole21_62, Nova1_64, Nozo_62, Numberten_61, Nyala_60, OSmaximus_63, Obutu_63, Olak_60, Oline_62, Olive_61, OliverWalter_60, Olivio_62, Omniscient_62, OneBrain_64, Oosterbaan_61, OrangeOswald_62, Orfeu_60, Orion_63, Orwigg_61, PG1_62, Pacifista_60, PallasAthena_62, Phamished_63, Phareon_60, PhatCats2014_62, PhatLouie_63, Phayeta_64, PhenghisKhan_62, Pherdinand_63, Phergie_63, Philly_61, Phipps_61, Phleuron_62, Phlyer_62, PhrankReynolds_61, PhrodoBaggins_62, Phunky_60, Piglet_0061, PinheadLarry_62, Pinkman_61, Pipsqueak_60, Placalicious_62, Plata_62, Plmatters_60, Podrick_60, Pops_61, Potter_60, Prickles_63, ProfessorX_61, Puhltonio_61, QueenBeane_61, Quisquiliae_62, RedMaple_63, RedRaider89_62, Rich_59, Ricotta_61, Riggan_62, Rimu_61, Rita1961_63, Riverton_61, Robyn_61, Roliet_59, Roscoe_62, Roy17_60, SDcharge11_61, Salazzle_63, SallyH_64, Samaymay_61, SassyCat97_60, Schadenfreude_61, Schueller_62, Scoot17C_62, Scrick_62, Selr12_62, Septica_62,

Serendipity_61, Serpentine_0061, ShadowBud_62, Shatter_53, Sheila_59, Shenandoah_61, ShiVal_59, Sigman_62, SilverBell_62, Simielle_61, SirBeauregard_62, Skippy_62, Slatt_62, SlippinJimmy_64, Soile_62, Solosis_60, Sophia_60, Soto_60, Spartan300_61, Squid_61, Squiggle_62, Struggle_62, Suffolk_60, Surely_61, SwainyDoc_63, Swiphy_63, Swish_63, SynergyX_62, TallGrassMM_61, Taraxa_64, Telesworld_59, Thora_61, ThreeOh3D2_63, Thunderbird_61, Timmi_60, TinyTerror_63, TomBombadil_61, Tomlarah_62, Toni_61, TooFast2Furius_61, Tooj_60, Triad_63, True_60, Trypo_64, Tydolla_59, TyrionL_62, UAch1_61, UncleHowie_60, Usavi_61, Vaishali24_60, Valjean_61, Vaticameos_58, Vectra_63, Veritas_63, Virapocalypse_62, Virgeve_61, Vista_61, Vivaldi_63, Vortex_61, Wallhey_62, Waterdiva_61, Weher20_61, Windsor_61, Xavier_60, Yahalom_60, Yoshand_63, YouGoGlencoco_62, Zaider_62, Zelda_62, Zonia_63,

Genes that have the "Most Annotated" start but do not call it:
• Abinghost_62, Audrey_62, Bernardo_63, Heathcliff_62, LestyG_60, Marlia_63, Mortcellus_62, Morty007_61, Phaedrus_58, Pipefish_63, RagingRooster_61, RomaT_62, Yinz_62,

Genes that do not have the "Most Annotated" start:
• 39HC_053, 40BC_053, AksarBAT_55, AlanGrant_59, Allegro_59, AnClar_52, AnarQue_56, Arbiter_58, Ares_59, Bananafish_59, BiggityBass_51, BirdsNest_63, Blackpen_55, Blocker23_59, Boyle_59, Brownie5_59, CRB2_58, CaiB_56, Calamitous_59, CloverMinnie_55, Coffee_59, Coldpizza_52, Cooper_56, Eaglehorse_59, Evaa_51, Faze9_58, FelixTres_55, FrenchFry_59, Glass_59, Godines_60, Hashim76_63, Hedgerow_59, Holeinone_59, Hosp_052, Imvubu_53, Indlovu_57, JAMaL_55, Jolie1_054, Kaleb_59, Kheth_59, Kolhan_59, Lars_59, Laurie_59, Lephleur_59, LilSmirk_59, LittleMinkey_65, LittleMunchkin_54, LizLemon_59, MakoManhole_53, MasterPo_59, MossRose_55, NHagos_54, Nigel_56, Opia_59, PenguinLover67_57, Phantasmagoria_59, PrinceCharming_59, Quesadilla_59, Qyrzula_54, Rhinoforte_59, Rinkes_57, Rosebush_58, Sabella_58, Sisko_51, Sour_55, Stinger_56, TA17A_60, Tinciduntsolum_60, TraderJ_56, Tres_59, Vic9_00059, Vincenzo_58, West99_59, Wooper_56, Yago84_51, Yeshua_56, Zenteno07_64,

Summary by start number:

Start 18:
• Found in 47 of 466 (10.1%) of genes in pham
• Manual Annotations of this start: 2 of 426
• Called 4.3% of time when present
• Phage (with cluster) where this start called: Morty007_61 (B3), Phaedrus_58 (B3),

Start 25:
• Found in 2 of 466 (0.4%) of genes in pham
• Manual Annotations of this start: 2 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Coldpizza_52 (DR), Evaa_51 (DR),

Start 26:
• Found in 1 of 466 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 426
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Rinkes_57 (B9),

Start 27:
• Found in 6 of 466 (1.3%) of genes in pham
• Manual Annotations of this start: 6 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AlanGrant_59 (B4), Cooper_56 (B4), JAMaL_55 (B4), Nigel_56 (B4), Stinger_56 (B4), Vincenzo_58 (B4),

Start 28:
• Found in 1 of 466 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Imvubu_53 (B10),

Start 29:
• Found in 4 of 466 (0.9%) of genes in pham
• Manual Annotations of this start: 3 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BirdsNest_63 (B13), Hashim76_63 (B13), LittleMinkey_65 (B13), Zenteno07_64 (B13),

Start 30:
• Found in 4 of 466 (0.9%) of genes in pham
• Manual Annotations of this start: 4 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AnClar_52 (DR), BiggityBass_51 (DR), Sisko_51 (DR), Yago84_51 (DR),

Start 32:
• Found in 3 of 466 (0.6%) of genes in pham
• Manual Annotations of this start: 3 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlovu_57 (B11), PenguinLover67_57 (B9), Quesadilla_59 (B9),

Start 33:
• Found in 3 of 466 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 426
• Called 33.3% of time when present
• Phage (with cluster) where this start called: LittleMunchkin_54 (DR),

Start 34:
• Found in 71 of 466 (15.2%) of genes in pham
• Manual Annotations of this start: 20 of 426
• Called 33.8% of time when present
• Phage (with cluster) where this start called: Abinghost_62 (B3), AksarBAT_55 (DR), AnarQue_56 (DR), Audrey_62 (B3), Bernardo_63 (B3), Blackpen_55 (DR), CaiB_56 (DR), CloverMinnie_55 (DR), FelixTres_55 (DR), Heathcliff_62 (B3), LestyG_60 (B3), MakoManhole_53 (DR), Marlia_63 (B3), Mortcellus_62 (B3), MossRose_55 (DR), NHagos_54 (DR), Pipefish_63 (B3), RagingRooster_61 (B3), RomaT_62 (B3), Sour_55 (DR), TraderJ_56 (DR), Wooper_56 (DR), Yeshua_56 (DR), Yinz_62 (B3),

Start 35:
• Found in 389 of 466 (83.5%) of genes in pham
• Manual Annotations of this start: 346 of 426
• Called 96.7% of time when present
• Phage (with cluster) where this start called: ABU_62 (B1), AbsoluteMadLad_62 (B1), Adriana_63 (B1), Aelin_61 (B1), Akoma_62 (B3), Aleia_64 (B1), AltPhacts_61 (B1), Altwerkus_59 (B1), Anderson_62 (B1), Andre_63 (B1), AngelCake_62 (B1), Antonia_61 (B1), Aonishiki_62 (B1), Apizium_61 (B1), Ashraf_63 (B1), Athena_64 (B3), Axumite_53 (DR), Azuria_61 (B1), Badfish_62 (B1), Baee_60 (B5), Baloo_61 (B3), Banjo_60 (B1), Basato_62 (B1), BatteryCK_62 (B1), Beaglebox_61 (B1), Ben11_62 (B3), Bishoperium_61 (B1), BlackStallion_63 (B1), BlacksBerry_62 (B1), BlueHusk_63 (B1), Bluephacebaby_61 (B1), Boehler_61 (B1), BoogieWoogie_63 (B1), Briakila_61 (B3), Brilliant_64 (B1), Buckeye_62 (B1), Burr_61 (B1), CamL_61 (B1), CampRoach_63 (B1), Cannibal_61 (B1), Carthage_60 (B1), Casbah_62 (B3), Caspiboi_62 (B1), ChaChing_62 (B3), Chaelin_62 (B1), Chah_63 (B1), Chalmers_61 (B3), Chandler_62 (B3), Charles1_62 (B1), CharlieGBrown_62 (B1), CharlottesWeb_52 (DR), CheetO_61 (B1), Chentzyk_63 (B3), Cher_61 (B1), Childish_61 (B1), Chipette_62 (B1), Chorkpop_61 (B1), Chuni_65 (B1), Chunky_60 (B1), Chute_63 (B1), Cobra_63 (B1), Coco2012_52 (DR), Colbert_60 (B1), Coletti_64 (B1), Compostia_62 (B3), Cornbread_61 (B1), Cornobble_61 (B1), Corofin_62 (B3), Cosmolli16_62 (B1), Craff_64 (B1), Crownjwl_61 (B1), DaddyDaniels_63 (B1), Daffy_61 (B1), Daisy_61 (B3), Daka_64 (B1), Dati_61 (B1), Deenasa_62 (B3), DelRivs_60 (B1), Derpp_61 (B1), Devonte_61 (B3), Dice_60 (B1), Dingo_60 (B1), Dione_59 (B1), DirtJuice_62 (B1), Doddsville_62 (B1), DoesntMatter_59 (B1), DolOn_67 (B1), DonSanchon_59 (B1), DuchessDung_63 (B1), Duggie_62 (B1), Durga_64 (B1), ElvisPhasley_63 (B1), EmGer13_63 (B1), Emiris_64 (B1), EmpTee_61 (B1), Eremos_61 (B1), Etaye_63 (B1), Eugenia_61 (B1), Fang_63 (B1), Flake_62 (B1), FleetyMac_62 (B1), FluffyNinja_63 (B1), Fozzie_62 (B1), Frankicide_60 (B1), FremontTroll_61 (B1), Fresco_53 (DR), Freya_59 (B1), FriarPreacher_61 (B1), Fringe_65 (B1), FugateOSU_62 (B1), Gadjet_63 (B3), Gareth_61 (B1), GeneCoco_62 (B1), Gervas_63 (B3), Giraffe_62 (B1), GlenHope_63 (B3), Glubnar_63 (B3), Gophee_63 (B1), Grand2040_61 (B1), GreenChile_63 (B1), Gwennie1_61 (B1), Gwilliam_62 (B1), Gyarad_0060 (B1), HSavage_60 (B1), Haimas_60 (B1), Haleema_60 (B1), Halfpint_61 (B3), Hamish_60 (B1), Happabalu_62 (B1), Hartsy_62 (B1), HarveySr_61 (B3), Harvey_60 (B1), Hekos_60 (B1), Held_61 (B1), HenryJackson_61 (B1), Hertubise_61 (B1), Hetaeria_61 (B1), HighStump_63 (B1), Hocus_61 (B1), HogWash_63 (B1), Horchata_60 (B1), ImtiyazSitla_63 (B1), Inchworm_63 (B1), Inverness_60 (B1), Iridessa_62 (B1), Iridoclysis_62 (B1), IsaacEli_63 (B1), JDog_60 (B1), JacAttac_63 (B1), Jackstina_58 (B3), JakeO_62 (B1), JangoPhett_61 (B1), Jbug01_63 (B1), JellyBelly_51 (DR), Jesabah_63 (B1), Jillium_61 (B1), Jiminy_62 (B1), Jiraiya_62 (B1), KLucky39_60 (B1), Kahve_61 (B1), Kailash_62 (B1), Kamiyu_62 (B3), Karn_62 (B1), Katniss_62 (B1), Keitherie_63 (B1), Khan1_61 (B1), Kikipoo_63 (B1), Kimbrough_62 (B1), KingTut_54 (B1), KingVeVeVe_60 (B1), Kiwot_64 (B1), KlimbOn_61 (B1), Kloppinator_62 (B1), Kronus_62 (B3), Kwadwo_60 (B1), Kwksand96_62 (B1), Labeouficaum_62 (B1), Larson_65 (B1), LasagnaCat_63 (B1), Lasso_62 (B1), LeeLot_62 (B1), Lego3393_60 (B1), Legolas_63 (B1), Lehmann_63 (B1), LeiMonet_64 (B1), LemonSlice_62 (B1), Ligma_53 (DR), Longacauda_62 (B1), Lopsy_60 (B1), LostAndPhound_62 (B1), LuckyMarjie_59 (B1), Lulumae_59 (B1), Lulwa_59 (B1), Lumine_62 (B1), MRabcd_61 (B1), Mag7_62 (B1), Magic8_62 (B1), Mana_60 (B1), Manad_61 (B1), Mariokart_52 (DR), Marley1013_62 (B3), Maru_61 (B1), Maskar_63 (B1), Matalotodo_61 (B1), Mcshane_60 (B1), Mecca_61 (B1), Megamind20_62 (B1), Megatron_62 (B1), Melc17_61 (B1), MelsMeow_62 (B1),

Mesh1_63 (B1), Mesmerelda_61 (B1), MichaelPhcott_62 (B1), Mikota_60 (B1), MiniBoss_59 (B1), MitKao_61 (B1), MmasiCarm_63 (B3), Morgushi_61 (B1), Morty_62 (B1), Mosaic_60 (B1), MrPhizzler_64 (B1), Mulan_61 (B1), Mulaychimus_63 (B3), Murdoc_60 (B1), Mutante_61 (B1), Nacho_0063 (B1), Nathan_62 (B1), Nehme_62 (B1), Neos5_61 (B3), Newman_60 (B1), NiaNia_64 (B1), Nicole21_62 (B1), Nova1_64 (B1), Nozo_62 (B3), Numberten_61 (B1), Nyala_60 (B1), OSmaximus_63 (B1), Obutu_63 (B3), Olak_60 (B1), Oline_62 (B1), Olive_61 (B1), OliverWalter_60 (B1), Olivio_62 (B3), Omniscient_62 (B1), OneBrain_64 (B1), Oosterbaan_61 (B1), OrangeOswald_62 (B3), Orfeu_60 (B1), Orion_63 (B1), Orwigg_61 (B1), PG1_62 (B1), Pacifista_60 (B1), PallasAthena_62 (B1), Phamished_63 (B1), Phareon_60 (B1), PhatCats2014_62 (B1), PhatLouie_63 (B1), Phayeta_64 (B3), PhenghisKhan_62 (B1), Pherdinand_63 (B1), Phergie_63 (B1), Philly_61 (B3), Phipps_61 (B1), Phleuron_62 (B1), Phlyer_62 (B3), PhrankReynolds_61 (B1), PhrodoBaggins_62 (B1), Phunky_60 (B1), Piglet_0061 (B1), PinheadLarry_62 (B1), Pinkman_61 (B1), Pipsqueak_60 (B1), Placalicious_62 (B1), Plata_62 (B1), Plmatters_60 (B1), Podrick_60 (B1), Pops_61 (B1), Potter_60 (B1), Prickles_63 (B1), ProfessorX_61 (B1), Puhltonio_61 (B1), QueenBeane_61 (B1), Quisquiliae_62 (B1), RedMaple_63 (B1), RedRaider89_62 (B1), Rich_59 (B5), Ricotta_61 (B1), Riggan_62 (B1), Rimu_61 (B1), Rita1961_63 (B3), Riverton_61 (B1), Robyn_61 (B1), Roliet_59 (B1), Roscoe_62 (B1), Roy17_60 (B1), SDcharge11_61 (B1), Salazzle_63 (B1), SallyH_64 (B1), Samaymay_61 (B1), SassyCat97_60 (B1), Schadenfreude_61 (B1), Schueller_62 (B1), Scoot17C_62 (B1), Scrick_62 (B1), Selr12_62 (B1), Septica_62 (B1), Serendipity_61 (B1), Serpentine_0061 (B1), ShadowBud_62 (B1), Shatter_53 (DR), Sheila_59 (B1), Shenandoah_61 (B3), ShiVal_59 (B1), Sigman_62 (B1), SilverBell_62 (B1), Simielle_61 (B1), SirBeauregard_62 (B1), Skippy_62 (B1), Slatt_62 (B1), SlippinJimmy_64 (B3), Soile_62 (B1), Solosis_60 (B1), Sophia_60 (B1), Soto_60 (B1), Spartan300_61 (B1), Squid_61 (B1), Squiggle_62 (B1), Struggle_62 (B1), Suffolk_60 (B1), Surely_61 (B1), SwainyDoc_63 (B3), Swiphy_63 (B1), Swish_63 (B1), SynergyX_62 (B3), TallGrassMM_61 (B1), Taraxa_64 (B1), Telesworld_59 (B1), Thora_61 (B1), ThreeOh3D2_63 (B1), Thunderbird_61 (B1), Timmi_60 (B1), TinyTerror_63 (B3), TomBombadil_61 (B1), Tomlarah_62 (B1), Toni_61 (B1), TooFast2Furius_61 (B1), Tooj_60 (B1), Triad_63 (B1), True_60 (B1), Trypo_64 (B1), Tydolla_59 (B3), TyrionL_62 (B1), UAch1_61 (B1), UncleHowie_60 (B1), Usavi_61 (B1), Vaishali24_60 (B1), Valjean_61 (B1), Vaticameos_58 (B1), Vectra_63 (B1), Veritas_63 (B1), Virapocalypse_62 (B1), Virgeve_61 (B1), Vista_61 (B1), Vivaldi_63 (B1), Vortex_61 (B1), Wallhey_62 (B1), Waterdiva_61 (B1), Weher20_61 (B1), Windsor_61 (B1), Xavier_60 (B1), Yahalom_60 (B3), Yoshand_63 (B1), YouGoGlencoco_62 (B1), Zaider_62 (B1), Zelda_62 (B1), Zonia_63 (B1),

Start 36:
• Found in 3 of 466 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 426
• Called 33.3% of time when present
• Phage (with cluster) where this start called: CRB2_58 (B9),

Start 37:
• Found in 37 of 466 (7.9%) of genes in pham
• Manual Annotations of this start: 36 of 426
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Allegro_59 (B2), Arbiter_58 (B2), Ares_59 (B2), Bananafish_59 (B2), Blocker23_59 (B2), Boyle_59 (B2), Brownie5_59 (B2), Calamitous_59 (B2), Coffee_59 (B2), Eaglehorse_59 (B2), Faze9_58 (B2),

FrenchFry_59 (B2), Glass_59 (B2), Godines_60 (B2), Hedgerow_59 (B2), Holeinone_59 (B2), Kaleb_59 (B2), Kheth_59 (B2), Kolhan_59 (B2), Lars_59 (B2), Laurie_59 (B2), Lephleur_59 (B2), LilSmirk_59 (B2), LizLemon_59 (B2), MasterPo_59 (B2), Opia_59 (B2), Phantasmagoria_59 (B2), PrinceCharming_59 (B2), Qyrzula_54 (B2), Rhinoforte_59 (B2), Rosebush_58 (B2), Sabella_58 (B2), TA17A_60 (B2), Tinciduntsolum_60 (B2), Tres_59 (B2), Vic9_00059 (B2), West99_59 (B2),

Start 39:
• Found in 4 of 466 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 39HC_053 (B6), 40BC_053 (B6), Hosp_052 (B6), Jolie1_054 (B6),

Summary by clusters:

There are 11 clusters represented in this pham: B10, B11, B4, B5, B6, B1, B2, B3, DR, B9, B13,

Info for manual annotations of cluster B1:
•Start number 35 was manually annotated 297 times for cluster B1.

Info for manual annotations of cluster B10:
•Start number 28 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:
•Start number 32 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B13:
•Start number 29 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:
•Start number 37 was manually annotated 36 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 18 was manually annotated 2 times for cluster B3.
•Start number 34 was manually annotated 10 times for cluster B3.
•Start number 35 was manually annotated 41 times for cluster B3.

Info for manual annotations of cluster B4:
•Start number 27 was manually annotated 6 times for cluster B4.

Info for manual annotations of cluster B5:
•Start number 35 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster B9:
•Start number 26 was manually annotated 1 time for cluster B9.
•Start number 32 was manually annotated 2 times for cluster B9.
•Start number 36 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster DR:
•Start number 25 was manually annotated 2 times for cluster DR.

•Start number 30 was manually annotated 4 times for cluster DR.
•Start number 33 was manually annotated 1 time for cluster DR.
•Start number 34 was manually annotated 10 times for cluster DR.
•Start number 35 was manually annotated 6 times for cluster DR.

Gene Information:

Gene: 39HC_053 Start: 53120, Stop: 52647, Start Num: 39
Candidate Starts for 39HC_053:
(39, 53120), (49, 53027), (54, 52997), (56, 52985), (65, 52967), (71, 52913), (73, 52898), (95, 52853), (124, 52766), (131, 52754),

Gene: 40BC_053 Start: 53120, Stop: 52647, Start Num: 39
Candidate Starts for 40BC_053:
(39, 53120), (49, 53027), (54, 52997), (56, 52985), (65, 52967), (71, 52913), (73, 52898), (95, 52853), (124, 52766), (131, 52754),

Gene: ABU_62 Start: 54987, Stop: 54529, Start Num: 35
Candidate Starts for ABU_62:
(Start: 35 @54987 has 346 MA's), (49, 54891), (50, 54882), (66, 54807), (75, 54735), (106, 54669), (108, 54663), (113, 54657), (121, 54630),

Gene: Abinghost_62 Start: 54965, Stop: 54486, Start Num: 34
Candidate Starts for Abinghost_62:
(Start: 18 @55097 has 2 MA's), (19, 55076), (Start: 34 @54965 has 20 MA's), (Start: 35 @54962 has 346 MA's), (49, 54866), (66, 54800), (69, 54770), (86, 54698), (88, 54695), (92, 54686), (98, 54671), (116, 54614),

Gene: AbsoluteMadLad_62 Start: 54941, Stop: 54483, Start Num: 35
Candidate Starts for AbsoluteMadLad_62:
(Start: 35 @54941 has 346 MA's), (49, 54845), (50, 54836), (66, 54761), (75, 54689), (106, 54623), (108, 54617), (113, 54611), (121, 54584),

Gene: Adriana_63 Start: 55568, Stop: 55110, Start Num: 35
Candidate Starts for Adriana_63:
(Start: 35 @55568 has 346 MA's), (49, 55472), (50, 55463), (66, 55388), (75, 55316), (106, 55250), (108, 55244), (113, 55238), (121, 55211),

Gene: Aelin_61 Start: 54505, Stop: 54047, Start Num: 35
Candidate Starts for Aelin_61:
(Start: 35 @54505 has 346 MA's), (49, 54409), (50, 54400), (66, 54325), (75, 54253), (106, 54187), (108, 54181), (113, 54175), (121, 54148),

Gene: Akoma_62 Start: 55010, Stop: 54534, Start Num: 35
Candidate Starts for Akoma_62:
(Start: 18 @55145 has 2 MA's), (19, 55124), (Start: 34 @55013 has 20 MA's), (Start: 35 @55010 has 346 MA's), (49, 54914), (66, 54848), (69, 54818), (86, 54746), (88, 54743), (92, 54734), (98, 54719), (116, 54662),

Gene: AksarBAT_55 Start: 48138, Stop: 47536, Start Num: 34
Candidate Starts for AksarBAT_55:

(Start: 34 @48138 has 20 MA's), (67, 47955), (78, 47877), (94, 47838), (110, 47784), (111, 47778), (163, 47589),

Gene: AlanGrant_59 Start: 56404, Stop: 55694, Start Num: 27
Candidate Starts for AlanGrant_59:
(Start: 27 @56404 has 6 MA's), (Start: 36 @56386 has 1 MA's), (40, 56380), (49, 56290), (59, 56242), (64, 56236), (74, 56167), (75, 56164), (95, 56113), (103, 56101), (119, 56044), (157, 55936), (159, 55930), (167, 55894), (171, 55873), (176, 55858), (183, 55813), (184, 55795), (190, 55705),

Gene: Aleia_64 Start: 54832, Stop: 54374, Start Num: 35
Candidate Starts for Aleia_64:
(Start: 35 @54832 has 346 MA's), (49, 54736), (50, 54727), (66, 54652), (75, 54580), (106, 54514), (108, 54508), (113, 54502), (121, 54475),

Gene: Allegro_59 Start: 53342, Stop: 52851, Start Num: 37
Candidate Starts for Allegro_59:
(22, 53444), (Start: 37 @53342 has 36 MA's), (42, 53309), (49, 53249), (58, 53207), (66, 53204), (69, 53174), (74, 53135), (75, 53132), (76, 53129), (102, 53054), (114, 53015), (115, 53009), (121, 52991), (135, 52958), (142, 52940), (154, 52895),

Gene: AltPhacts_61 Start: 54054, Stop: 53596, Start Num: 35
Candidate Starts for AltPhacts_61:
(Start: 35 @54054 has 346 MA's), (49, 53958), (50, 53949), (66, 53874), (75, 53802), (106, 53736), (108, 53730), (113, 53724), (121, 53697),

Gene: Altwerkus_59 Start: 54151, Stop: 53693, Start Num: 35
Candidate Starts for Altwerkus_59:
(Start: 35 @54151 has 346 MA's), (49, 54055), (50, 54046), (66, 53971), (75, 53899), (106, 53833), (108, 53827), (113, 53821), (121, 53794),

Gene: AnClar_52 Start: 48749, Stop: 48273, Start Num: 30
Candidate Starts for AnClar_52:
(15, 48956), (Start: 30 @48749 has 4 MA's), (49, 48638), (53, 48611), (74, 48500), (129, 48374), (144, 48335),

Gene: AnarQue_56 Start: 48966, Stop: 48397, Start Num: 34
Candidate Starts for AnarQue_56:
(Start: 34 @48966 has 20 MA's), (46, 48885), (70, 48747), (84, 48687), (109, 48615), (110, 48612), (128, 48564), (134, 48558), (152, 48498), (163, 48453),

Gene: Anderson_62 Start: 54723, Stop: 54265, Start Num: 35
Candidate Starts for Anderson_62:
(Start: 35 @54723 has 346 MA's), (49, 54627), (50, 54618), (66, 54543), (75, 54471), (106, 54405), (108, 54399), (113, 54393), (121, 54366),

Gene: Andre_63 Start: 54899, Stop: 54441, Start Num: 35
Candidate Starts for Andre_63:
(Start: 35 @54899 has 346 MA's), (49, 54803), (50, 54794), (66, 54719), (75, 54647), (106, 54581), (108, 54575), (113, 54569), (121, 54542),

Gene: AngelCake_62 Start: 54826, Stop: 54368, Start Num: 35
Candidate Starts for AngelCake_62:

(Start: 35 @54826 has 346 MA's), (49, 54730), (50, 54721), (66, 54646), (75, 54574), (106, 54508), (108, 54502), (113, 54496), (121, 54469),

Gene: Antonia_61 Start: 54505, Stop: 54047, Start Num: 35
Candidate Starts for Antonia_61:
(Start: 35 @54505 has 346 MA's), (49, 54409), (50, 54400), (66, 54325), (75, 54253), (106, 54187), (108, 54181), (113, 54175), (121, 54148),

Gene: Aonishiki_62 Start: 54766, Stop: 54308, Start Num: 35
Candidate Starts for Aonishiki_62:
(Start: 35 @54766 has 346 MA's), (49, 54670), (50, 54661), (66, 54586), (75, 54514), (106, 54448), (108, 54442), (113, 54436), (121, 54409),

Gene: Apizium_61 Start: 54172, Stop: 53708, Start Num: 35
Candidate Starts for Apizium_61:
(Start: 35 @54172 has 346 MA's), (49, 54076), (50, 54067), (55, 54040), (66, 53992), (75, 53920), (106, 53854), (108, 53848), (113, 53842), (121, 53815),

Gene: Arbiter_58 Start: 53454, Stop: 52963, Start Num: 37
Candidate Starts for Arbiter_58:
(1, 54234), (2, 54144), (7, 54018), (8, 53994), (22, 53556), (Start: 37 @53454 has 36 MA's), (42, 53421), (49, 53361), (58, 53319), (66, 53316), (69, 53286), (74, 53247), (75, 53244), (76, 53241), (102, 53166), (114, 53127), (115, 53121), (121, 53103), (135, 53070), (142, 53052), (154, 53007),

Gene: Ares_59 Start: 53423, Stop: 52935, Start Num: 37
Candidate Starts for Ares_59:
(1, 54203), (2, 54113), (7, 53987), (8, 53963), (22, 53525), (Start: 37 @53423 has 36 MA's), (42, 53390), (49, 53330), (58, 53288), (66, 53285), (69, 53255), (74, 53216), (75, 53213), (76, 53210), (102, 53135), (114, 53096), (115, 53090), (121, 53072), (135, 53039), (142, 53021), (154, 52976),

Gene: Ashraf_63 Start: 54718, Stop: 54254, Start Num: 35
Candidate Starts for Ashraf_63:
(Start: 35 @54718 has 346 MA's), (49, 54622), (50, 54613), (66, 54538), (75, 54466), (106, 54400), (108, 54394), (113, 54388), (121, 54361),

Gene: Athena_64 Start: 55745, Stop: 55269, Start Num: 35
Candidate Starts for Athena_64:
(Start: 18 @55880 has 2 MA's), (19, 55859), (Start: 34 @55748 has 20 MA's), (Start: 35 @55745 has 346 MA's), (49, 55649), (66, 55583), (69, 55553), (86, 55481), (88, 55478), (92, 55469), (98, 55454), (116, 55397),

Gene: Audrey_62 Start: 55004, Stop: 54525, Start Num: 34
Candidate Starts for Audrey_62:
(Start: 18 @55136 has 2 MA's), (19, 55115), (Start: 34 @55004 has 20 MA's), (Start: 35 @55001 has 346 MA's), (49, 54905), (66, 54839), (69, 54809), (86, 54737), (88, 54734), (92, 54725), (98, 54710), (116, 54653),

Gene: Axumite_53 Start: 46714, Stop: 46265, Start Num: 35
Candidate Starts for Axumite_53:
(Start: 35 @46714 has 346 MA's), (42, 46672), (49, 46612), (127, 46360), (133, 46348),

Gene: Azuria_61 Start: 54741, Stop: 54283, Start Num: 35
Candidate Starts for Azuria_61:

(Start: 35 @54741 has 346 MA's), (49, 54645), (50, 54636), (66, 54561), (75, 54489), (106, 54423), (108, 54417), (113, 54411), (121, 54384),

Gene: Badfish_62 Start: 55009, Stop: 54551, Start Num: 35
Candidate Starts for Badfish_62:
(Start: 35 @55009 has 346 MA's), (49, 54913), (50, 54904), (66, 54829), (75, 54757), (106, 54691), (108, 54685), (113, 54679), (121, 54652),

Gene: Baee_60 Start: 56166, Stop: 55558, Start Num: 35
Candidate Starts for Baee_60:
(13, 56388), (20, 56283), (Start: 35 @56166 has 346 MA's), (42, 56124), (50, 56055), (52, 56043), (64, 56007), (69, 55977), (71, 55956), (74, 55938), (97, 55881), (102, 55863), (118, 55812), (140, 55761), (145, 55749), (146, 55740), (160, 55677), (169, 55641),

Gene: Baloo_61 Start: 54834, Stop: 54385, Start Num: 35
Candidate Starts for Baloo_61:
(Start: 18 @54969 has 2 MA's), (19, 54948), (Start: 34 @54837 has 20 MA's), (Start: 35 @54834 has 346 MA's), (49, 54738), (66, 54672), (69, 54642), (75, 54600), (86, 54570), (88, 54567), (92, 54558), (98, 54543), (116, 54510),

Gene: Bananafish_59 Start: 53354, Stop: 52863, Start Num: 37
Candidate Starts for Bananafish_59:
(1, 54134), (2, 54044), (7, 53918), (8, 53894), (22, 53456), (Start: 37 @53354 has 36 MA's), (42, 53321), (49, 53261), (58, 53219), (66, 53216), (69, 53186), (74, 53147), (75, 53144), (76, 53141), (102, 53066), (114, 53027), (115, 53021), (121, 53003), (135, 52970), (142, 52952), (154, 52907),

Gene: Banjo_60 Start: 54498, Stop: 54040, Start Num: 35
Candidate Starts for Banjo_60:
(Start: 35 @54498 has 346 MA's), (49, 54402), (50, 54393), (66, 54318), (75, 54246), (106, 54180), (108, 54174), (113, 54168), (121, 54141),

Gene: Basato_62 Start: 54772, Stop: 54314, Start Num: 35
Candidate Starts for Basato_62:
(Start: 35 @54772 has 346 MA's), (49, 54676), (50, 54667), (66, 54592), (75, 54520), (106, 54454), (108, 54448), (113, 54442), (121, 54415),

Gene: BatteryCK_62 Start: 54654, Stop: 54190, Start Num: 35
Candidate Starts for BatteryCK_62:
(Start: 35 @54654 has 346 MA's), (49, 54558), (50, 54549), (66, 54474), (75, 54402), (106, 54336), (108, 54330), (113, 54324), (121, 54297),

Gene: Beaglebox_61 Start: 54562, Stop: 54104, Start Num: 35
Candidate Starts for Beaglebox_61:
(Start: 35 @54562 has 346 MA's), (49, 54466), (50, 54457), (66, 54382), (75, 54310), (106, 54244), (108, 54238), (113, 54232), (121, 54205),

Gene: Ben11_62 Start: 55216, Stop: 54740, Start Num: 35
Candidate Starts for Ben11_62:
(Start: 18 @55354 has 2 MA's), (19, 55333), (Start: 34 @55219 has 20 MA's), (Start: 35 @55216 has 346 MA's), (49, 55120), (66, 55054), (69, 55024), (86, 54952), (88, 54949), (92, 54940), (98, 54925), (116, 54868),

Gene: Bernardo_63 Start: 55359, Stop: 54877, Start Num: 34

Candidate Starts for Bernardo_63:
(Start: 18 @55491 has 2 MA's), (19, 55470), (Start: 34 @55359 has 20 MA's), (Start: 35 @55356 has 346 MA's), (49, 55260), (66, 55194), (69, 55164), (75, 55122), (86, 55092), (88, 55089), (92, 55080), (98, 55065), (116, 55005),

Gene: BiggityBass_51 Start: 48087, Stop: 47641, Start Num: 30
Candidate Starts for BiggityBass_51:
(15, 48300), (Start: 30 @48087 has 4 MA's), (44, 48018), (49, 47976), (65, 47934), (71, 47877), (74, 47862), (147, 47682),

Gene: BirdsNest_63 Start: 54973, Stop: 54419, Start Num: 29
Candidate Starts for BirdsNest_63:
(6, 55486), (16, 55102), (Start: 29 @54973 has 3 MA's), (69, 54775), (74, 54736), (105, 54652), (130, 54586), (156, 54508), (164, 54481), (173, 54454), (177, 54442),

Gene: Bishoperium_61 Start: 55037, Stop: 54579, Start Num: 35
Candidate Starts for Bishoperium_61:
(Start: 35 @55037 has 346 MA's), (49, 54941), (50, 54932), (66, 54857), (75, 54785), (106, 54719), (108, 54713), (113, 54707), (121, 54680),

Gene: BlackStallion_63 Start: 54766, Stop: 54308, Start Num: 35
Candidate Starts for BlackStallion_63:
(Start: 35 @54766 has 346 MA's), (49, 54670), (50, 54661), (66, 54586), (75, 54514), (106, 54448), (108, 54442), (113, 54436), (121, 54409),

Gene: Blackpen_55 Start: 48044, Stop: 47466, Start Num: 34
Candidate Starts for Blackpen_55:
(Start: 34 @48044 has 20 MA's), (46, 47963), (70, 47825), (109, 47693), (110, 47690), (128, 47633), (134, 47627), (152, 47567), (163, 47522),

Gene: BlacksBerry_62 Start: 54397, Stop: 53939, Start Num: 35
Candidate Starts for BlacksBerry_62:
(Start: 35 @54397 has 346 MA's), (49, 54301), (50, 54292), (66, 54217), (75, 54145), (106, 54079), (108, 54073), (113, 54067), (121, 54040),

Gene: Blocker23_59 Start: 53464, Stop: 52973, Start Num: 37
Candidate Starts for Blocker23_59:
(22, 53566), (Start: 37 @53464 has 36 MA's), (42, 53431), (49, 53371), (58, 53329), (66, 53326), (69, 53296), (74, 53257), (75, 53254), (76, 53251), (102, 53176), (114, 53137), (115, 53131), (121, 53113), (135, 53080), (142, 53062), (154, 53017),

Gene: BlueHusk_63 Start: 54521, Stop: 54063, Start Num: 35
Candidate Starts for BlueHusk_63:
(Start: 35 @54521 has 346 MA's), (49, 54425), (50, 54416), (66, 54341), (75, 54269), (106, 54203), (108, 54197), (113, 54191), (121, 54164),

Gene: Bluephacebaby_61 Start: 55040, Stop: 54582, Start Num: 35
Candidate Starts for Bluephacebaby_61:
(Start: 35 @55040 has 346 MA's), (49, 54944), (50, 54935), (66, 54860), (75, 54788), (106, 54722), (108, 54716), (113, 54710), (121, 54683),

Gene: Boehler_61 Start: 54684, Stop: 54226, Start Num: 35
Candidate Starts for Boehler_61:

(Start: 35 @54684 has 346 MA's), (49, 54588), (50, 54579), (66, 54504), (75, 54432), (106, 54366), (108, 54360), (113, 54354), (121, 54327),

Gene: BoogieWoogie_63 Start: 54473, Stop: 54015, Start Num: 35
Candidate Starts for BoogieWoogie_63:
(Start: 35 @54473 has 346 MA's), (49, 54377), (50, 54368), (66, 54293), (75, 54221), (106, 54155), (108, 54149), (113, 54143), (121, 54116),

Gene: Boyle_59 Start: 53493, Stop: 53002, Start Num: 37
Candidate Starts for Boyle_59:
(1, 54243), (2, 54153), (7, 54027), (8, 54003), (Start: 37 @53493 has 36 MA's), (42, 53460), (49, 53400), (58, 53358), (66, 53355), (69, 53325), (74, 53286), (75, 53283), (76, 53280), (102, 53205), (114, 53166), (115, 53160), (121, 53142), (135, 53109), (142, 53091), (154, 53046),

Gene: Briakila_61 Start: 54974, Stop: 54498, Start Num: 35
Candidate Starts for Briakila_61:
(Start: 34 @54977 has 20 MA's), (Start: 35 @54974 has 346 MA's), (49, 54878), (66, 54812), (69, 54782), (86, 54710), (88, 54707), (92, 54698), (98, 54683), (116, 54626),

Gene: Brilliant_64 Start: 55005, Stop: 54541, Start Num: 35
Candidate Starts for Brilliant_64:
(Start: 35 @55005 has 346 MA's), (49, 54909), (50, 54900), (66, 54825), (75, 54753), (106, 54687), (108, 54681), (113, 54675), (121, 54648),

Gene: Brownie5_59 Start: 53503, Stop: 53015, Start Num: 37
Candidate Starts for Brownie5_59:
(Start: 37 @53503 has 36 MA's), (42, 53470), (49, 53410), (58, 53368), (66, 53365), (69, 53335), (74, 53296), (75, 53293), (76, 53290), (102, 53215), (114, 53176), (115, 53170), (121, 53152), (135, 53119), (142, 53101), (154, 53056),

Gene: Buckeye_62 Start: 55298, Stop: 54840, Start Num: 35
Candidate Starts for Buckeye_62:
(Start: 35 @55298 has 346 MA's), (49, 55202), (50, 55193), (66, 55118), (75, 55046), (106, 54980), (108, 54974), (113, 54968), (121, 54941),

Gene: Burr_61 Start: 54473, Stop: 54015, Start Num: 35
Candidate Starts for Burr_61:
(Start: 35 @54473 has 346 MA's), (49, 54377), (50, 54368), (66, 54293), (75, 54221), (106, 54155), (108, 54149), (113, 54143), (121, 54116),

Gene: CRB2_58 Start: 56218, Stop: 55649, Start Num: 36
Candidate Starts for CRB2_58:
(14, 56434), (21, 56320), (Start: 36 @56218 has 1 MA's), (59, 56080), (71, 56026), (74, 56008), (75, 56005), (103, 55930), (140, 55828), (141, 55822), (151, 55783), (175, 55681),

Gene: CaiB_56 Start: 49517, Stop: 48930, Start Num: 34
Candidate Starts for CaiB_56:
(Start: 34 @49517 has 20 MA's), (46, 49436), (65, 49343), (70, 49298), (111, 49157), (112, 49154), (152, 49031), (166, 48971),

Gene: Calamitous_59 Start: 53353, Stop: 52862, Start Num: 37
Candidate Starts for Calamitous_59:

(2, 54043), (7, 53917), (8, 53893), (22, 53455), (Start: 37 @53353 has 36 MA's), (42, 53320), (49, 53260), (58, 53218), (66, 53215), (69, 53185), (74, 53146), (75, 53143), (76, 53140), (102, 53065), (114, 53026), (115, 53020), (121, 53002), (135, 52969), (142, 52951), (154, 52906),

Gene: CamL_61 Start: 54805, Stop: 54347, Start Num: 35
Candidate Starts for CamL_61:
(Start: 35 @54805 has 346 MA's), (49, 54709), (50, 54700), (66, 54625), (75, 54553), (106, 54487), (108, 54481), (113, 54475), (121, 54448),

Gene: CampRoach_63 Start: 54909, Stop: 54445, Start Num: 35
Candidate Starts for CampRoach_63:
(Start: 35 @54909 has 346 MA's), (49, 54813), (50, 54804), (66, 54729), (75, 54657), (106, 54591), (108, 54585), (113, 54579), (121, 54552),

Gene: Cannibal_61 Start: 54747, Stop: 54289, Start Num: 35
Candidate Starts for Cannibal_61:
(Start: 35 @54747 has 346 MA's), (49, 54651), (50, 54642), (66, 54567), (75, 54495), (106, 54429), (108, 54423), (113, 54417), (121, 54390),

Gene: Carthage_60 Start: 53984, Stop: 53526, Start Num: 35
Candidate Starts for Carthage_60:
(Start: 35 @53984 has 346 MA's), (49, 53888), (50, 53879), (66, 53804), (75, 53732), (106, 53666), (108, 53660), (113, 53654), (121, 53627), (150, 53558),

Gene: Casbah_62 Start: 55319, Stop: 54843, Start Num: 35
Candidate Starts for Casbah_62:
(Start: 34 @55322 has 20 MA's), (Start: 35 @55319 has 346 MA's), (49, 55223), (66, 55157), (69, 55127), (86, 55055), (88, 55052), (92, 55043), (98, 55028), (116, 54971),

Gene: Caspiboi_62 Start: 54731, Stop: 54267, Start Num: 35
Candidate Starts for Caspiboi_62:
(Start: 35 @54731 has 346 MA's), (49, 54635), (50, 54626), (66, 54551), (75, 54479), (106, 54413), (108, 54407), (113, 54401), (121, 54374),

Gene: ChaChing_62 Start: 55021, Stop: 54545, Start Num: 35
Candidate Starts for ChaChing_62:
(Start: 18 @55156 has 2 MA's), (19, 55135), (Start: 34 @55024 has 20 MA's), (Start: 35 @55021 has 346 MA's), (49, 54925), (66, 54859), (69, 54829), (86, 54757), (88, 54754), (92, 54745), (98, 54730), (116, 54673),

Gene: Chaelin_62 Start: 55035, Stop: 54577, Start Num: 35
Candidate Starts for Chaelin_62:
(Start: 35 @55035 has 346 MA's), (49, 54939), (50, 54930), (66, 54855), (75, 54783), (106, 54717), (108, 54711), (113, 54705), (121, 54678),

Gene: Chah_63 Start: 54450, Stop: 53992, Start Num: 35
Candidate Starts for Chah_63:
(Start: 35 @54450 has 346 MA's), (49, 54354), (50, 54345), (66, 54270), (75, 54198), (106, 54132), (108, 54126), (113, 54120), (121, 54093),

Gene: Chalmers_61 Start: 55460, Stop: 54984, Start Num: 35
Candidate Starts for Chalmers_61:

(Start: 18 @55595 has 2 MA's), (19, 55574), (Start: 34 @55463 has 20 MA's), (Start: 35 @55460 has 346 MA's), (49, 55364), (66, 55298), (69, 55268), (86, 55196), (88, 55193), (92, 55184), (98, 55169), (116, 55112),

Gene: Chandler_62 Start: 55789, Stop: 55313, Start Num: 35
Candidate Starts for Chandler_62:
(Start: 18 @55924 has 2 MA's), (19, 55903), (Start: 34 @55792 has 20 MA's), (Start: 35 @55789 has 346 MA's), (49, 55693), (66, 55627), (69, 55597), (86, 55525), (88, 55522), (92, 55513), (98, 55498), (116, 55441),

Gene: Charles1_62 Start: 54759, Stop: 54301, Start Num: 35
Candidate Starts for Charles1_62:
(Start: 35 @54759 has 346 MA's), (49, 54663), (50, 54654), (66, 54579), (75, 54507), (106, 54441), (108, 54435), (113, 54429), (121, 54402),

Gene: CharlieGBrown_62 Start: 54598, Stop: 54140, Start Num: 35
Candidate Starts for CharlieGBrown_62:
(Start: 35 @54598 has 346 MA's), (49, 54502), (50, 54493), (66, 54418), (75, 54346), (106, 54280), (108, 54274), (113, 54268), (121, 54241),

Gene: CharlottesWeb_52 Start: 46101, Stop: 45649, Start Num: 35
Candidate Starts for CharlottesWeb_52:
(24, 46194), (Start: 35 @46101 has 346 MA's), (44, 46041), (48, 46005), (70, 45915), (72, 45894), (127, 45750), (133, 45738),

Gene: CheetO_61 Start: 54721, Stop: 54263, Start Num: 35
Candidate Starts for CheetO_61:
(Start: 35 @54721 has 346 MA's), (49, 54625), (50, 54616), (66, 54541), (75, 54469), (106, 54403), (108, 54397), (113, 54391), (121, 54364),

Gene: Chentzyk_63 Start: 55726, Stop: 55265, Start Num: 35
Candidate Starts for Chentzyk_63:
(Start: 18 @55861 has 2 MA's), (19, 55840), (Start: 34 @55729 has 20 MA's), (Start: 35 @55726 has 346 MA's), (49, 55630), (66, 55564), (69, 55534), (86, 55462), (88, 55459), (92, 55450), (98, 55435), (116, 55402),

Gene: Cher_61 Start: 55015, Stop: 54557, Start Num: 35
Candidate Starts for Cher_61:
(Start: 35 @55015 has 346 MA's), (49, 54919), (50, 54910), (66, 54835), (75, 54763), (106, 54697), (108, 54691), (113, 54685), (121, 54658),

Gene: Childish_61 Start: 55026, Stop: 54568, Start Num: 35
Candidate Starts for Childish_61:
(Start: 35 @55026 has 346 MA's), (49, 54930), (50, 54921), (66, 54846), (75, 54774), (106, 54708), (108, 54702), (113, 54696), (121, 54669),

Gene: Chipette_62 Start: 54716, Stop: 54252, Start Num: 35
Candidate Starts for Chipette_62:
(Start: 35 @54716 has 346 MA's), (49, 54620), (50, 54611), (66, 54536), (75, 54464), (106, 54398), (108, 54392), (113, 54386), (121, 54359),

Gene: Chorkpop_61 Start: 54502, Stop: 54044, Start Num: 35
Candidate Starts for Chorkpop_61:

(Start: 35 @54502 has 346 MA's), (49, 54406), (50, 54397), (66, 54322), (75, 54250), (106, 54184), (108, 54178), (113, 54172), (121, 54145),

Gene: Chuni_65 Start: 55262, Stop: 54804, Start Num: 35
Candidate Starts for Chuni_65:
(Start: 35 @55262 has 346 MA's), (49, 55166), (50, 55157), (66, 55082), (75, 55010), (106, 54944), (108, 54938), (113, 54932), (121, 54905),

Gene: Chunky_60 Start: 54051, Stop: 53593, Start Num: 35
Candidate Starts for Chunky_60:
(Start: 35 @54051 has 346 MA's), (49, 53955), (50, 53946), (66, 53871), (75, 53799), (106, 53733), (108, 53727), (113, 53721), (121, 53694),

Gene: Chute_63 Start: 55063, Stop: 54605, Start Num: 35
Candidate Starts for Chute_63:
(Start: 35 @55063 has 346 MA's), (49, 54967), (50, 54958), (66, 54883), (75, 54811), (106, 54745), (108, 54739), (113, 54733), (121, 54706),

Gene: CloverMinnie_55 Start: 48552, Stop: 47974, Start Num: 34
Candidate Starts for CloverMinnie_55:
(Start: 34 @48552 has 20 MA's), (46, 48471), (70, 48333), (109, 48201), (110, 48198), (128, 48141), (134, 48135), (152, 48075), (163, 48030),

Gene: Cobra_63 Start: 55047, Stop: 54583, Start Num: 35
Candidate Starts for Cobra_63:
(Start: 35 @55047 has 346 MA's), (49, 54951), (50, 54942), (66, 54867), (75, 54795), (106, 54729), (108, 54723), (113, 54717), (121, 54690),

Gene: Coco2012_52 Start: 46093, Stop: 45641, Start Num: 35
Candidate Starts for Coco2012_52:
(24, 46186), (Start: 35 @46093 has 346 MA's), (44, 46033), (48, 45997), (70, 45907), (72, 45886), (127, 45742), (133, 45730),

Gene: Coffee_59 Start: 53465, Stop: 52974, Start Num: 37
Candidate Starts for Coffee_59:
(22, 53567), (Start: 37 @53465 has 36 MA's), (42, 53432), (49, 53372), (58, 53330), (66, 53327), (69, 53297), (74, 53258), (75, 53255), (76, 53252), (102, 53177), (114, 53138), (115, 53132), (121, 53114), (135, 53081), (142, 53063), (154, 53018),

Gene: Colbert_60 Start: 54061, Stop: 53603, Start Num: 35
Candidate Starts for Colbert_60:
(Start: 35 @54061 has 346 MA's), (49, 53965), (50, 53956), (66, 53881), (75, 53809), (106, 53743), (108, 53737), (113, 53731), (121, 53704),

Gene: Coldpizza_52 Start: 49032, Stop: 48547, Start Num: 25
Candidate Starts for Coldpizza_52:
(23, 49080), (Start: 25 @49032 has 2 MA's), (Start: 33 @49005 has 1 MA's), (Start: 34 @49002 has 20 MA's), (49, 48894), (85, 48747), (107, 48681), (134, 48597),

Gene: Coletti_64 Start: 55563, Stop: 55105, Start Num: 35
Candidate Starts for Coletti_64:
(Start: 35 @55563 has 346 MA's), (49, 55467), (50, 55458), (66, 55383), (75, 55311), (106, 55245), (108, 55239), (113, 55233), (121, 55206),

Gene: Compostia_62 Start: 55408, Stop: 54932, Start Num: 35
Candidate Starts for Compostia_62:
(9, 55801), (11, 55675), (12, 55657), (Start: 18 @55543 has 2 MA's), (19, 55522), (Start: 34 @55411 has 20 MA's), (Start: 35 @55408 has 346 MA's), (49, 55312), (66, 55246), (69, 55216), (86, 55144), (88, 55141), (92, 55132), (98, 55117), (116, 55060),

Gene: Cooper_56 Start: 54445, Stop: 53840, Start Num: 27
Candidate Starts for Cooper_56:
(Start: 27 @54445 has 6 MA's), (49, 54325), (50, 54316), (64, 54271), (69, 54241), (74, 54202), (75, 54199), (93, 54154), (123, 54058), (168, 53914),

Gene: Cornbread_61 Start: 54527, Stop: 54069, Start Num: 35
Candidate Starts for Cornbread_61:
(Start: 35 @54527 has 346 MA's), (49, 54431), (50, 54422), (66, 54347), (75, 54275), (106, 54209), (108, 54203), (113, 54197), (121, 54170),

Gene: Cornobble_61 Start: 54495, Stop: 54037, Start Num: 35
Candidate Starts for Cornobble_61:
(Start: 35 @54495 has 346 MA's), (49, 54399), (50, 54390), (66, 54315), (75, 54243), (106, 54177), (108, 54171), (113, 54165), (121, 54138),

Gene: Corofin_62 Start: 55032, Stop: 54556, Start Num: 35
Candidate Starts for Corofin_62:
(Start: 18 @55167 has 2 MA's), (19, 55146), (Start: 34 @55035 has 20 MA's), (Start: 35 @55032 has 346 MA's), (49, 54936), (66, 54870), (69, 54840), (86, 54768), (88, 54765), (92, 54756), (98, 54741), (116, 54684),

Gene: Cosmolli16_62 Start: 55205, Stop: 54747, Start Num: 35
Candidate Starts for Cosmolli16_62:
(Start: 35 @55205 has 346 MA's), (49, 55109), (50, 55100), (66, 55025), (75, 54953), (106, 54887), (108, 54881), (113, 54875), (121, 54848),

Gene: Craff_64 Start: 55450, Stop: 54992, Start Num: 35
Candidate Starts for Craff_64:
(Start: 35 @55450 has 346 MA's), (49, 55354), (50, 55345), (66, 55270), (75, 55198), (106, 55132), (108, 55126), (113, 55120), (121, 55093),

Gene: Crownjwl_61 Start: 54524, Stop: 54066, Start Num: 35
Candidate Starts for Crownjwl_61:
(Start: 35 @54524 has 346 MA's), (49, 54428), (50, 54419), (66, 54344), (75, 54272), (106, 54206), (108, 54200), (113, 54194), (121, 54167),

Gene: DaddyDaniels_63 Start: 54983, Stop: 54525, Start Num: 35
Candidate Starts for DaddyDaniels_63:
(Start: 35 @54983 has 346 MA's), (49, 54887), (50, 54878), (66, 54803), (75, 54731), (106, 54665), (108, 54659), (113, 54653), (121, 54626),

Gene: Daffy_61 Start: 54488, Stop: 54030, Start Num: 35
Candidate Starts for Daffy_61:
(Start: 35 @54488 has 346 MA's), (49, 54392), (50, 54383), (66, 54308), (75, 54236), (106, 54170), (108, 54164), (113, 54158), (121, 54131),

Gene: Daisy_61 Start: 54565, Stop: 54089, Start Num: 35
Candidate Starts for Daisy_61:
(Start: 18 @54700 has 2 MA's), (19, 54679), (Start: 34 @54568 has 20 MA's), (Start: 35 @54565 has 346 MA's), (49, 54469), (66, 54403), (69, 54373), (86, 54301), (88, 54298), (92, 54289), (98, 54274), (116, 54217),

Gene: Daka_64 Start: 55004, Stop: 54546, Start Num: 35
Candidate Starts for Daka_64:
(Start: 35 @55004 has 346 MA's), (49, 54908), (50, 54899), (66, 54824), (75, 54752), (106, 54686), (108, 54680), (113, 54674), (121, 54647),

Gene: Dati_61 Start: 55019, Stop: 54561, Start Num: 35
Candidate Starts for Dati_61:
(Start: 35 @55019 has 346 MA's), (49, 54923), (50, 54914), (66, 54839), (75, 54767), (106, 54701), (108, 54695), (113, 54689), (121, 54662),

Gene: Deenasa_62 Start: 55870, Stop: 55394, Start Num: 35
Candidate Starts for Deenasa_62:
(17, 56029), (Start: 18 @56005 has 2 MA's), (19, 55984), (Start: 34 @55873 has 20 MA's), (Start: 35 @55870 has 346 MA's), (49, 55774), (66, 55708), (69, 55678), (86, 55606), (88, 55603), (92, 55594), (98, 55579), (116, 55522),

Gene: DelRivs_60 Start: 54472, Stop: 54008, Start Num: 35
Candidate Starts for DelRivs_60:
(Start: 35 @54472 has 346 MA's), (49, 54376), (50, 54367), (66, 54292), (75, 54220), (106, 54154), (108, 54148), (113, 54142), (121, 54115),

Gene: Derpp_61 Start: 54586, Stop: 54128, Start Num: 35
Candidate Starts for Derpp_61:
(Start: 35 @54586 has 346 MA's), (49, 54490), (50, 54481), (66, 54406), (75, 54334), (106, 54268), (108, 54262), (113, 54256), (121, 54229),

Gene: Devonte_61 Start: 54644, Stop: 54168, Start Num: 35
Candidate Starts for Devonte_61:
(Start: 18 @54779 has 2 MA's), (19, 54758), (Start: 34 @54647 has 20 MA's), (Start: 35 @54644 has 346 MA's), (49, 54548), (66, 54482), (69, 54452), (86, 54380), (88, 54377), (92, 54368), (98, 54353), (116, 54296),

Gene: Dice_60 Start: 54471, Stop: 54013, Start Num: 35
Candidate Starts for Dice_60:
(Start: 35 @54471 has 346 MA's), (49, 54375), (50, 54366), (66, 54291), (75, 54219), (106, 54153), (108, 54147), (113, 54141), (121, 54114),

Gene: Dingo_60 Start: 54030, Stop: 53572, Start Num: 35
Candidate Starts for Dingo_60:
(Start: 35 @54030 has 346 MA's), (49, 53934), (50, 53925), (66, 53850), (75, 53778), (106, 53712), (108, 53706), (113, 53700), (121, 53673),

Gene: Dione_59 Start: 54202, Stop: 53744, Start Num: 35
Candidate Starts for Dione_59:
(Start: 35 @54202 has 346 MA's), (49, 54106), (50, 54097), (66, 54022), (75, 53950), (106, 53884), (108, 53878), (113, 53872), (121, 53845),

Gene: DirtJuice_62 Start: 54792, Stop: 54334, Start Num: 35
Candidate Starts for DirtJuice_62:
(Start: 35 @54792 has 346 MA's), (49, 54696), (50, 54687), (66, 54612), (75, 54540), (106, 54474), (108, 54468), (113, 54462), (121, 54435),

Gene: Doddsville_62 Start: 54738, Stop: 54280, Start Num: 35
Candidate Starts for Doddsville_62:
(Start: 35 @54738 has 346 MA's), (49, 54642), (50, 54633), (66, 54558), (75, 54486), (106, 54420), (108, 54414), (113, 54408), (121, 54381),

Gene: DoesntMatter_59 Start: 54495, Stop: 54037, Start Num: 35
Candidate Starts for DoesntMatter_59:
(Start: 35 @54495 has 346 MA's), (49, 54399), (50, 54390), (66, 54315), (75, 54243), (106, 54177), (108, 54171), (113, 54165), (121, 54138),

Gene: DolOn_67 Start: 55950, Stop: 55492, Start Num: 35
Candidate Starts for DolOn_67:
(Start: 35 @55950 has 346 MA's), (49, 55854), (50, 55845), (66, 55770), (75, 55698), (106, 55632), (108, 55626), (113, 55620), (121, 55593),

Gene: DonSanchon_59 Start: 54185, Stop: 53727, Start Num: 35
Candidate Starts for DonSanchon_59:
(Start: 35 @54185 has 346 MA's), (49, 54089), (50, 54080), (66, 54005), (75, 53933), (106, 53867), (108, 53861), (113, 53855), (121, 53828),

Gene: DuchessDung_63 Start: 54255, Stop: 53797, Start Num: 35
Candidate Starts for DuchessDung_63:
(Start: 35 @54255 has 346 MA's), (49, 54159), (50, 54150), (66, 54075), (75, 54003), (106, 53937), (108, 53931), (113, 53925), (121, 53898),

Gene: Duggie_62 Start: 54745, Stop: 54281, Start Num: 35
Candidate Starts for Duggie_62:
(Start: 35 @54745 has 346 MA's), (49, 54649), (50, 54640), (66, 54565), (75, 54493), (106, 54427), (108, 54421), (113, 54415), (121, 54388),

Gene: Durga_64 Start: 55235, Stop: 54777, Start Num: 35
Candidate Starts for Durga_64:
(Start: 35 @55235 has 346 MA's), (49, 55139), (50, 55130), (66, 55055), (75, 54983), (106, 54917), (108, 54911), (113, 54905), (121, 54878),

Gene: Eaglehorse_59 Start: 53403, Stop: 52912, Start Num: 37
Candidate Starts for Eaglehorse_59:
(Start: 37 @53403 has 36 MA's), (42, 53370), (49, 53310), (58, 53268), (66, 53265), (69, 53235), (74, 53196), (75, 53193), (76, 53190), (102, 53115), (114, 53076), (115, 53070), (121, 53052), (135, 53019), (142, 53001), (154, 52956),

Gene: ElvisPhasley_63 Start: 55231, Stop: 54773, Start Num: 35
Candidate Starts for ElvisPhasley_63:
(Start: 35 @55231 has 346 MA's), (49, 55135), (50, 55126), (66, 55051), (75, 54979), (106, 54913), (108, 54907), (113, 54901), (121, 54874),

Gene: EmGer13_63 Start: 54505, Stop: 54047, Start Num: 35
Candidate Starts for EmGer13_63:

(Start: 35 @54505 has 346 MA's), (49, 54409), (50, 54400), (66, 54325), (75, 54253), (106, 54187), (108, 54181), (113, 54175), (121, 54148),

Gene: Emiris_64 Start: 55202, Stop: 54744, Start Num: 35
Candidate Starts for Emiris_64:
(Start: 35 @55202 has 346 MA's), (49, 55106), (50, 55097), (66, 55022), (75, 54950), (106, 54884), (108, 54878), (113, 54872), (121, 54845),

Gene: EmpTee_61 Start: 54711, Stop: 54253, Start Num: 35
Candidate Starts for EmpTee_61:
(Start: 35 @54711 has 346 MA's), (49, 54615), (50, 54606), (66, 54531), (75, 54459), (106, 54393), (108, 54387), (113, 54381), (121, 54354),

Gene: Eremos_61 Start: 54701, Stop: 54243, Start Num: 35
Candidate Starts for Eremos_61:
(Start: 35 @54701 has 346 MA's), (49, 54605), (50, 54596), (66, 54521), (75, 54449), (106, 54383), (108, 54377), (113, 54371), (121, 54344),

Gene: Etaye_63 Start: 55532, Stop: 55074, Start Num: 35
Candidate Starts for Etaye_63:
(Start: 35 @55532 has 346 MA's), (49, 55436), (50, 55427), (66, 55352), (75, 55280), (106, 55214), (108, 55208), (113, 55202), (121, 55175),

Gene: Eugenia_61 Start: 54854, Stop: 54396, Start Num: 35
Candidate Starts for Eugenia_61:
(Start: 35 @54854 has 346 MA's), (49, 54758), (50, 54749), (66, 54674), (75, 54602), (106, 54536), (108, 54530), (113, 54524), (121, 54497),

Gene: Evaa_51 Start: 46670, Stop: 46056, Start Num: 25
Candidate Starts for Evaa_51:
(23, 46718), (Start: 25 @46670 has 2 MA's), (Start: 33 @46625 has 1 MA's), (Start: 34 @46622 has 20 MA's), (45, 46547), (51, 46493), (60, 46460), (68, 46433), (82, 46349), (83, 46346), (88, 46334), (100, 46310), (117, 46232), (122, 46223), (152, 46133),

Gene: Fang_63 Start: 54747, Stop: 54289, Start Num: 35
Candidate Starts for Fang_63:
(Start: 35 @54747 has 346 MA's), (49, 54651), (50, 54642), (66, 54567), (75, 54495), (106, 54429), (108, 54423), (113, 54417), (121, 54390),

Gene: Faze9_58 Start: 53488, Stop: 52997, Start Num: 37
Candidate Starts for Faze9_58:
(22, 53590), (Start: 37 @53488 has 36 MA's), (42, 53455), (49, 53395), (58, 53353), (66, 53350), (69, 53320), (74, 53281), (75, 53278), (76, 53275), (102, 53200), (114, 53161), (115, 53155), (121, 53137), (135, 53104), (142, 53086), (154, 53041),

Gene: FelixTres_55 Start: 48587, Stop: 48012, Start Num: 34
Candidate Starts for FelixTres_55:
(Start: 34 @48587 has 20 MA's), (46, 48506), (70, 48368), (109, 48236), (110, 48233), (128, 48179), (134, 48173), (152, 48113), (163, 48068),

Gene: Flake_62 Start: 54743, Stop: 54285, Start Num: 35
Candidate Starts for Flake_62:

(Start: 35 @54743 has 346 MA's), (49, 54647), (50, 54638), (66, 54563), (75, 54491), (106, 54425), (108, 54419), (113, 54413), (121, 54386),

Gene: FleetyMac_62 Start: 54685, Stop: 54227, Start Num: 35
Candidate Starts for FleetyMac_62:
(Start: 35 @54685 has 346 MA's), (49, 54589), (50, 54580), (66, 54505), (75, 54433), (106, 54367), (108, 54361), (113, 54355), (121, 54328),

Gene: FluffyNinja_63 Start: 54767, Stop: 54309, Start Num: 35
Candidate Starts for FluffyNinja_63:
(Start: 35 @54767 has 346 MA's), (49, 54671), (50, 54662), (66, 54587), (75, 54515), (106, 54449), (108, 54443), (113, 54437), (121, 54410),

Gene: Fozzie_62 Start: 54992, Stop: 54534, Start Num: 35
Candidate Starts for Fozzie_62:
(Start: 35 @54992 has 346 MA's), (49, 54896), (50, 54887), (66, 54812), (75, 54740), (106, 54674), (108, 54668), (113, 54662), (121, 54635),

Gene: Frankicide_60 Start: 54532, Stop: 54074, Start Num: 35
Candidate Starts for Frankicide_60:
(Start: 35 @54532 has 346 MA's), (49, 54436), (50, 54427), (66, 54352), (75, 54280), (106, 54214), (108, 54208), (113, 54202), (121, 54175),

Gene: FremontTroll_61 Start: 55099, Stop: 54641, Start Num: 35
Candidate Starts for FremontTroll_61:
(Start: 35 @55099 has 346 MA's), (49, 55003), (50, 54994), (66, 54919), (75, 54847), (106, 54781), (108, 54775), (113, 54769), (121, 54742),

Gene: FrenchFry_59 Start: 53464, Stop: 52973, Start Num: 37
Candidate Starts for FrenchFry_59:
(1, 54244), (2, 54154), (7, 54028), (8, 54004), (22, 53566), (Start: 37 @53464 has 36 MA's), (42, 53431), (49, 53371), (58, 53329), (66, 53326), (69, 53296), (74, 53257), (75, 53254), (76, 53251), (102, 53176), (114, 53137), (115, 53131), (121, 53113), (135, 53080), (142, 53062), (154, 53017),

Gene: Fresco_53 Start: 46714, Stop: 46265, Start Num: 35
Candidate Starts for Fresco_53:
(Start: 35 @46714 has 346 MA's), (42, 46672), (49, 46612), (127, 46360), (133, 46348),

Gene: Freya_59 Start: 54193, Stop: 53735, Start Num: 35
Candidate Starts for Freya_59:
(Start: 35 @54193 has 346 MA's), (49, 54097), (50, 54088), (66, 54013), (75, 53941), (106, 53875), (108, 53869), (113, 53863), (121, 53836),

Gene: FriarPreacher_61 Start: 54585, Stop: 54121, Start Num: 35
Candidate Starts for FriarPreacher_61:
(Start: 35 @54585 has 346 MA's), (49, 54489), (50, 54480), (66, 54405), (75, 54333), (106, 54267), (108, 54261), (113, 54255), (121, 54228),

Gene: Fringe_65 Start: 55369, Stop: 54911, Start Num: 35
Candidate Starts for Fringe_65:
(Start: 35 @55369 has 346 MA's), (49, 55273), (50, 55264), (66, 55189), (75, 55117), (106, 55051), (108, 55045), (113, 55039), (121, 55012),

Gene: FugateOSU_62 Start: 55538, Stop: 55080, Start Num: 35
Candidate Starts for FugateOSU_62:
(Start: 35 @55538 has 346 MA's), (49, 55442), (50, 55433), (66, 55358), (75, 55286), (106, 55220), (108, 55214), (113, 55208), (121, 55181),

Gene: Gadjet_63 Start: 55340, Stop: 54861, Start Num: 35
Candidate Starts for Gadjet_63:
(Start: 34 @55343 has 20 MA's), (Start: 35 @55340 has 346 MA's), (49, 55244), (66, 55178), (69, 55148), (86, 55076), (88, 55073), (92, 55064), (116, 54989),

Gene: Gareth_61 Start: 54991, Stop: 54533, Start Num: 35
Candidate Starts for Gareth_61:
(Start: 35 @54991 has 346 MA's), (49, 54895), (50, 54886), (66, 54811), (75, 54739), (106, 54673), (108, 54667), (113, 54661), (121, 54634),

Gene: GeneCoco_62 Start: 55034, Stop: 54576, Start Num: 35
Candidate Starts for GeneCoco_62:
(Start: 35 @55034 has 346 MA's), (49, 54938), (50, 54929), (66, 54854), (75, 54782), (106, 54716), (108, 54710), (113, 54704), (121, 54677),

Gene: Gervas_63 Start: 55426, Stop: 54950, Start Num: 35
Candidate Starts for Gervas_63:
(Start: 18 @55561 has 2 MA's), (19, 55540), (Start: 34 @55429 has 20 MA's), (Start: 35 @55426 has 346 MA's), (49, 55330), (66, 55264), (69, 55234), (86, 55162), (88, 55159), (92, 55150), (98, 55135), (106, 55117), (116, 55078),

Gene: Giraffe_62 Start: 54986, Stop: 54528, Start Num: 35
Candidate Starts for Giraffe_62:
(Start: 35 @54986 has 346 MA's), (49, 54890), (50, 54881), (66, 54806), (75, 54734), (106, 54668), (108, 54662), (113, 54656), (121, 54629),

Gene: Glass_59 Start: 53466, Stop: 52975, Start Num: 37
Candidate Starts for Glass_59:
(1, 54246), (2, 54156), (7, 54030), (8, 54006), (22, 53568), (Start: 37 @53466 has 36 MA's), (42, 53433), (49, 53373), (58, 53331), (66, 53328), (69, 53298), (74, 53259), (75, 53256), (76, 53253), (102, 53178), (114, 53139), (115, 53133), (121, 53115), (135, 53082), (142, 53064), (154, 53019),

Gene: GlenHope_63 Start: 55000, Stop: 54524, Start Num: 35
Candidate Starts for GlenHope_63:
(Start: 18 @55135 has 2 MA's), (19, 55114), (Start: 34 @55003 has 20 MA's), (Start: 35 @55000 has 346 MA's), (49, 54904), (66, 54838), (69, 54808), (86, 54736), (88, 54733), (92, 54724), (98, 54709), (116, 54652),

Gene: Glubnar_63 Start: 54906, Stop: 54430, Start Num: 35
Candidate Starts for Glubnar_63:
(Start: 18 @55041 has 2 MA's), (19, 55020), (Start: 34 @54909 has 20 MA's), (Start: 35 @54906 has 346 MA's), (49, 54810), (66, 54744), (69, 54714), (86, 54642), (88, 54639), (92, 54630), (98, 54615), (116, 54558),

Gene: Godines_60 Start: 53749, Stop: 53258, Start Num: 37
Candidate Starts for Godines_60:
(14, 53956), (Start: 37 @53749 has 36 MA's), (42, 53716), (49, 53656), (58, 53614), (66, 53611), (69, 53581), (74, 53542), (75, 53539), (76, 53536), (79, 53524), (102, 53461), (114, 53422), (115, 53416),

(121, 53398), (135, 53365), (154, 53302),

Gene: Gophee_63 Start: 54977, Stop: 54519, Start Num: 35
Candidate Starts for Gophee_63:
(Start: 35 @54977 has 346 MA's), (49, 54881), (50, 54872), (66, 54797), (75, 54725), (106, 54659), (108, 54653), (113, 54647), (121, 54620),

Gene: Grand2040_61 Start: 54980, Stop: 54522, Start Num: 35
Candidate Starts for Grand2040_61:
(Start: 35 @54980 has 346 MA's), (49, 54884), (50, 54875), (66, 54800), (75, 54728), (106, 54662), (108, 54656), (113, 54650), (121, 54623),

Gene: GreenChile_63 Start: 54514, Stop: 54056, Start Num: 35
Candidate Starts for GreenChile_63:
(Start: 35 @54514 has 346 MA's), (49, 54418), (50, 54409), (66, 54334), (75, 54262), (106, 54196), (108, 54190), (113, 54184), (121, 54157),

Gene: Gwennie1_61 Start: 54779, Stop: 54321, Start Num: 35
Candidate Starts for Gwennie1_61:
(Start: 35 @54779 has 346 MA's), (49, 54683), (50, 54674), (66, 54599), (75, 54527), (106, 54461), (108, 54455), (113, 54449), (121, 54422),

Gene: Gwilliam_62 Start: 55385, Stop: 54927, Start Num: 35
Candidate Starts for Gwilliam_62:
(Start: 35 @55385 has 346 MA's), (49, 55289), (50, 55280), (66, 55205), (75, 55133), (106, 55067), (108, 55061), (113, 55055), (121, 55028),

Gene: Gyarad_0060 Start: 54067, Stop: 53609, Start Num: 35
Candidate Starts for Gyarad_0060:
(Start: 35 @54067 has 346 MA's), (49, 53971), (50, 53962), (66, 53887), (75, 53815), (106, 53749), (108, 53743), (113, 53737), (121, 53710),

Gene: HSavage_60 Start: 54511, Stop: 54053, Start Num: 35
Candidate Starts for HSavage_60:
(Start: 35 @54511 has 346 MA's), (49, 54415), (50, 54406), (66, 54331), (75, 54259), (106, 54193), (108, 54187), (113, 54181), (121, 54154),

Gene: Haimas_60 Start: 54428, Stop: 53970, Start Num: 35
Candidate Starts for Haimas_60:
(Start: 35 @54428 has 346 MA's), (49, 54332), (50, 54323), (66, 54248), (75, 54176), (106, 54110), (108, 54104), (113, 54098), (121, 54071),

Gene: Haleema_60 Start: 54532, Stop: 54068, Start Num: 35
Candidate Starts for Haleema_60:
(Start: 35 @54532 has 346 MA's), (49, 54436), (50, 54427), (66, 54352), (75, 54280), (106, 54214), (108, 54208), (113, 54202), (121, 54175),

Gene: Halfpint_61 Start: 54743, Stop: 54264, Start Num: 35
Candidate Starts for Halfpint_61:
(Start: 34 @54746 has 20 MA's), (Start: 35 @54743 has 346 MA's), (49, 54647), (66, 54581), (69, 54551), (86, 54479), (88, 54476), (92, 54467), (98, 54452), (116, 54395),

Gene: Hamish_60 Start: 54422, Stop: 53964, Start Num: 35

Candidate Starts for Hamish_60:
(Start: 35 @54422 has 346 MA's), (49, 54326), (50, 54317), (66, 54242), (75, 54170), (106, 54104), (108, 54098), (113, 54092), (121, 54065),

Gene: Happabalu_62 Start: 55562, Stop: 55104, Start Num: 35
Candidate Starts for Happabalu_62:
(Start: 35 @55562 has 346 MA's), (49, 55466), (50, 55457), (66, 55382), (75, 55310), (106, 55244), (108, 55238), (113, 55232), (121, 55205),

Gene: Hartsy_62 Start: 54860, Stop: 54402, Start Num: 35
Candidate Starts for Hartsy_62:
(Start: 35 @54860 has 346 MA's), (49, 54764), (50, 54755), (66, 54680), (75, 54608), (106, 54542), (108, 54536), (113, 54530), (121, 54503),

Gene: Harvey_60 Start: 54515, Stop: 54057, Start Num: 35
Candidate Starts for Harvey_60:
(Start: 35 @54515 has 346 MA's), (49, 54419), (50, 54410), (66, 54335), (75, 54263), (106, 54197), (108, 54191), (113, 54185), (121, 54158),

Gene: HarveySr_61 Start: 54590, Stop: 54114, Start Num: 35
Candidate Starts for HarveySr_61:
(Start: 18 @54725 has 2 MA's), (19, 54704), (Start: 34 @54593 has 20 MA's), (Start: 35 @54590 has 346 MA's), (49, 54494), (66, 54428), (69, 54398), (86, 54326), (88, 54323), (92, 54314), (98, 54299), (116, 54242),

Gene: Hashim76_63 Start: 55261, Stop: 54758, Start Num: 29
Candidate Starts for Hashim76_63:
(Start: 29 @55261 has 3 MA's), (69, 55063), (74, 55024), (91, 54982), (130, 54889),

Gene: Heathcliff_62 Start: 54970, Stop: 54491, Start Num: 34
Candidate Starts for Heathcliff_62:
(Start: 18 @55102 has 2 MA's), (19, 55081), (Start: 34 @54970 has 20 MA's), (Start: 35 @54967 has 346 MA's), (49, 54871), (66, 54805), (69, 54775), (86, 54703), (88, 54700), (92, 54691), (98, 54676), (116, 54619),

Gene: Hedgerow_59 Start: 53478, Stop: 52990, Start Num: 37
Candidate Starts for Hedgerow_59:
(Start: 37 @53478 has 36 MA's), (42, 53445), (49, 53385), (58, 53343), (66, 53340), (69, 53310), (74, 53271), (75, 53268), (76, 53265), (102, 53190), (114, 53151), (115, 53145), (121, 53127), (135, 53094), (142, 53076), (154, 53031),

Gene: Hekos_60 Start: 54057, Stop: 53599, Start Num: 35
Candidate Starts for Hekos_60:
(Start: 35 @54057 has 346 MA's), (49, 53961), (50, 53952), (66, 53877), (75, 53805), (106, 53739), (108, 53733), (113, 53727), (121, 53700),

Gene: Held_61 Start: 54489, Stop: 54031, Start Num: 35
Candidate Starts for Held_61:
(Start: 35 @54489 has 346 MA's), (49, 54393), (50, 54384), (66, 54309), (75, 54237), (106, 54171), (108, 54165), (113, 54159), (121, 54132),

Gene: HenryJackson_61 Start: 55015, Stop: 54557, Start Num: 35
Candidate Starts for HenryJackson_61:

(Start: 35 @55015 has 346 MA's), (49, 54919), (50, 54910), (66, 54835), (75, 54763), (106, 54697), (108, 54691), (113, 54685), (121, 54658),

Gene: Hertubise_61 Start: 54781, Stop: 54323, Start Num: 35
Candidate Starts for Hertubise_61:
(Start: 35 @54781 has 346 MA's), (49, 54685), (50, 54676), (66, 54601), (75, 54529), (106, 54463), (108, 54457), (113, 54451), (121, 54424),

Gene: Hetaeria_61 Start: 54720, Stop: 54262, Start Num: 35
Candidate Starts for Hetaeria_61:
(Start: 35 @54720 has 346 MA's), (49, 54624), (50, 54615), (66, 54540), (75, 54468), (106, 54402), (108, 54396), (113, 54390), (121, 54363),

Gene: HighStump_63 Start: 54992, Stop: 54534, Start Num: 35
Candidate Starts for HighStump_63:
(Start: 35 @54992 has 346 MA's), (49, 54896), (50, 54887), (66, 54812), (75, 54740), (106, 54674), (108, 54668), (113, 54662), (121, 54635),

Gene: Hocus_61 Start: 54476, Stop: 54018, Start Num: 35
Candidate Starts for Hocus_61:
(Start: 35 @54476 has 346 MA's), (49, 54380), (50, 54371), (66, 54296), (75, 54224), (106, 54158), (108, 54152), (113, 54146), (121, 54119),

Gene: HogWash_63 Start: 55554, Stop: 55096, Start Num: 35
Candidate Starts for HogWash_63:
(Start: 35 @55554 has 346 MA's), (49, 55458), (50, 55449), (66, 55374), (75, 55302), (106, 55236), (108, 55230), (113, 55224), (121, 55197),

Gene: Holeinone_59 Start: 53320, Stop: 52829, Start Num: 37
Candidate Starts for Holeinone_59:
(1, 54100), (2, 54010), (7, 53884), (8, 53860), (22, 53422), (Start: 37 @53320 has 36 MA's), (42, 53287), (49, 53227), (58, 53185), (66, 53182), (69, 53152), (74, 53113), (75, 53110), (76, 53107), (102, 53032), (114, 52993), (115, 52987), (121, 52969), (135, 52936), (142, 52918), (154, 52873),

Gene: Horchata_60 Start: 54511, Stop: 54053, Start Num: 35
Candidate Starts for Horchata_60:
(Start: 35 @54511 has 346 MA's), (49, 54415), (50, 54406), (66, 54331), (75, 54259), (106, 54193), (108, 54187), (113, 54181), (121, 54154),

Gene: Hosp_052 Start: 51513, Stop: 51040, Start Num: 39
Candidate Starts for Hosp_052:
(39, 51513), (49, 51420), (54, 51390), (56, 51378), (73, 51291), (95, 51246), (101, 51231), (124, 51159), (131, 51147), (144, 51123), (149, 51099),

Gene: ImtiyazSitla_63 Start: 54718, Stop: 54254, Start Num: 35
Candidate Starts for ImtiyazSitla_63:
(Start: 35 @54718 has 346 MA's), (49, 54622), (50, 54613), (66, 54538), (75, 54466), (106, 54400), (108, 54394), (113, 54388), (121, 54361),

Gene: Imvubu_53 Start: 52588, Stop: 51845, Start Num: 28
Candidate Starts for Imvubu_53:
(4, 53128), (5, 53122), (10, 52852), (16, 52741), (Start: 28 @52588 has 1 MA's), (38, 52573), (41, 52567), (42, 52543), (49, 52483), (51, 52462), (62, 52432), (63, 52426), (69, 52396), (81, 52339), (90,

52321), (96, 52309), (102, 52297), (121, 52234), (138, 52198), (145, 52183), (179, 52045), (186, 51982), (191, 51886), (192, 51868),

Gene: Inchworm_63 Start: 54869, Stop: 54405, Start Num: 35
Candidate Starts for Inchworm_63:
(Start: 35 @54869 has 346 MA's), (49, 54773), (50, 54764), (66, 54689), (75, 54617), (106, 54551), (108, 54545), (113, 54539), (121, 54512),

Gene: Indlovu_57 Start: 55077, Stop: 54580, Start Num: 32
Candidate Starts for Indlovu_57:
(Start: 32 @55077 has 3 MA's), (40, 55059), (50, 54960), (57, 54930), (61, 54924), (74, 54855), (95, 54798), (125, 54702), (132, 54690), (140, 54672), (143, 54663), (153, 54624), (155, 54609), (158, 54594),

Gene: Inverness_60 Start: 54519, Stop: 54061, Start Num: 35
Candidate Starts for Inverness_60:
(Start: 35 @54519 has 346 MA's), (49, 54423), (50, 54414), (66, 54339), (75, 54267), (106, 54201), (108, 54195), (113, 54189), (121, 54162),

Gene: Iridessa_62 Start: 54436, Stop: 53978, Start Num: 35
Candidate Starts for Iridessa_62:
(Start: 35 @54436 has 346 MA's), (49, 54340), (50, 54331), (66, 54256), (75, 54184), (106, 54118), (108, 54112), (113, 54106), (121, 54079),

Gene: Iridoclysis_62 Start: 54803, Stop: 54345, Start Num: 35
Candidate Starts for Iridoclysis_62:
(Start: 35 @54803 has 346 MA's), (49, 54707), (50, 54698), (66, 54623), (75, 54551), (106, 54485), (108, 54479), (113, 54473), (121, 54446),

Gene: IsaacEli_63 Start: 55002, Stop: 54544, Start Num: 35
Candidate Starts for IsaacEli_63:
(Start: 35 @55002 has 346 MA's), (49, 54906), (50, 54897), (66, 54822), (75, 54750), (106, 54684), (108, 54678), (113, 54672), (121, 54645),

Gene: JAMaL_55 Start: 55393, Stop: 54788, Start Num: 27
Candidate Starts for JAMaL_55:
(Start: 27 @55393 has 6 MA's), (49, 55273), (50, 55264), (64, 55219), (69, 55189), (74, 55150), (75, 55147), (95, 55096), (123, 55006), (168, 54862), (182, 54799),

Gene: JDog_60 Start: 55024, Stop: 54560, Start Num: 35
Candidate Starts for JDog_60:
(Start: 35 @55024 has 346 MA's), (49, 54928), (50, 54919), (66, 54844), (75, 54772), (106, 54706), (108, 54700), (113, 54694), (121, 54667),

Gene: JacAttac_63 Start: 54465, Stop: 54007, Start Num: 35
Candidate Starts for JacAttac_63:
(Start: 35 @54465 has 346 MA's), (49, 54369), (50, 54360), (66, 54285), (75, 54213), (106, 54147), (108, 54141), (113, 54135), (121, 54108),

Gene: Jackstina_58 Start: 54892, Stop: 54416, Start Num: 35
Candidate Starts for Jackstina_58:
(Start: 18 @55027 has 2 MA's), (19, 55006), (Start: 34 @54895 has 20 MA's), (Start: 35 @54892 has 346 MA's), (49, 54796), (69, 54700), (86, 54628), (88, 54625), (92, 54616), (98, 54601), (116, 54544),

Gene: JakeO_62 Start: 54747, Stop: 54283, Start Num: 35
Candidate Starts for JakeO_62:
(Start: 35 @54747 has 346 MA's), (49, 54651), (50, 54642), (66, 54567), (75, 54495), (106, 54429), (108, 54423), (113, 54417), (121, 54390),

Gene: JangoPhett_61 Start: 54806, Stop: 54348, Start Num: 35
Candidate Starts for JangoPhett_61:
(Start: 35 @54806 has 346 MA's), (49, 54710), (50, 54701), (66, 54626), (75, 54554), (106, 54488), (108, 54482), (113, 54476), (121, 54449),

Gene: Jbug01_63 Start: 54390, Stop: 53926, Start Num: 35
Candidate Starts for Jbug01_63:
(Start: 35 @54390 has 346 MA's), (49, 54294), (50, 54285), (66, 54210), (75, 54138), (106, 54072), (108, 54066), (113, 54060), (121, 54033),

Gene: JellyBelly_51 Start: 46099, Stop: 45647, Start Num: 35
Candidate Starts for JellyBelly_51:
(24, 46192), (Start: 35 @46099 has 346 MA's), (44, 46039), (48, 46003), (70, 45913), (72, 45892), (127, 45748), (133, 45736),

Gene: Jesabah_63 Start: 55603, Stop: 55145, Start Num: 35
Candidate Starts for Jesabah_63:
(Start: 35 @55603 has 346 MA's), (49, 55507), (50, 55498), (66, 55423), (75, 55351), (106, 55285), (108, 55279), (113, 55273), (121, 55246),

Gene: Jillium_61 Start: 55010, Stop: 54552, Start Num: 35
Candidate Starts for Jillium_61:
(Start: 35 @55010 has 346 MA's), (49, 54914), (50, 54905), (66, 54830), (75, 54758), (106, 54692), (108, 54686), (113, 54680), (121, 54653),

Gene: Jiminy_62 Start: 54583, Stop: 54119, Start Num: 35
Candidate Starts for Jiminy_62:
(Start: 35 @54583 has 346 MA's), (49, 54487), (50, 54478), (66, 54403), (75, 54331), (106, 54265), (108, 54259), (113, 54253), (121, 54226),

Gene: Jiraiya_62 Start: 54781, Stop: 54317, Start Num: 35
Candidate Starts for Jiraiya_62:
(Start: 35 @54781 has 346 MA's), (49, 54685), (50, 54676), (66, 54601), (75, 54529), (106, 54463), (108, 54457), (113, 54451), (121, 54424),

Gene: Jolie1_054 Start: 53413, Stop: 52940, Start Num: 39
Candidate Starts for Jolie1_054:
(39, 53413), (49, 53320), (54, 53290), (56, 53278), (73, 53191), (101, 53131), (124, 53059), (131, 53047),

Gene: KLucky39_60 Start: 54066, Stop: 53608, Start Num: 35
Candidate Starts for KLucky39_60:
(Start: 35 @54066 has 346 MA's), (49, 53970), (50, 53961), (66, 53886), (75, 53814), (106, 53748), (108, 53742), (113, 53736), (121, 53709),

Gene: Kahve_61 Start: 55012, Stop: 54554, Start Num: 35
Candidate Starts for Kahve_61:

(Start: 35 @55012 has 346 MA's), (49, 54916), (50, 54907), (66, 54832), (75, 54760), (106, 54694), (108, 54688), (113, 54682), (121, 54655),

Gene: Kailash_62 Start: 55098, Stop: 54634, Start Num: 35
Candidate Starts for Kailash_62:
(Start: 35 @55098 has 346 MA's), (49, 55002), (50, 54993), (66, 54918), (75, 54846), (106, 54780), (108, 54774), (113, 54768), (121, 54741),

Gene: Kaleb_59 Start: 53502, Stop: 53011, Start Num: 37
Candidate Starts for Kaleb_59:
(Start: 37 @53502 has 36 MA's), (42, 53469), (49, 53409), (58, 53367), (66, 53364), (69, 53334), (74, 53295), (75, 53292), (76, 53289), (102, 53214), (114, 53175), (115, 53169), (121, 53151), (135, 53118), (142, 53100), (154, 53055),

Gene: Kamiyu_62 Start: 54969, Stop: 54493, Start Num: 35
Candidate Starts for Kamiyu_62:
(Start: 18 @55104 has 2 MA's), (19, 55083), (Start: 34 @54972 has 20 MA's), (Start: 35 @54969 has 346 MA's), (49, 54873), (66, 54807), (69, 54777), (86, 54705), (88, 54702), (92, 54693), (98, 54678), (116, 54621),

Gene: Karn_62 Start: 54743, Stop: 54279, Start Num: 35
Candidate Starts for Karn_62:
(Start: 35 @54743 has 346 MA's), (49, 54647), (50, 54638), (66, 54563), (75, 54491), (106, 54425), (108, 54419), (113, 54413), (121, 54386),

Gene: Katniss_62 Start: 54450, Stop: 53992, Start Num: 35
Candidate Starts for Katniss_62:
(Start: 35 @54450 has 346 MA's), (49, 54354), (50, 54345), (66, 54270), (75, 54198), (106, 54132), (108, 54126), (113, 54120), (121, 54093),

Gene: Keitherie_63 Start: 55073, Stop: 54615, Start Num: 35
Candidate Starts for Keitherie_63:
(Start: 35 @55073 has 346 MA's), (49, 54977), (50, 54968), (66, 54893), (75, 54821), (106, 54755), (108, 54749), (113, 54743), (121, 54716),

Gene: Khan1_61 Start: 54968, Stop: 54510, Start Num: 35
Candidate Starts for Khan1_61:
(Start: 35 @54968 has 346 MA's), (49, 54872), (50, 54863), (66, 54788), (75, 54716), (106, 54650), (108, 54644), (113, 54638), (121, 54611),

Gene: Kheth_59 Start: 53385, Stop: 52894, Start Num: 37
Candidate Starts for Kheth_59:
(2, 54075), (7, 53949), (8, 53925), (22, 53487), (Start: 37 @53385 has 36 MA's), (42, 53352), (49, 53292), (58, 53250), (66, 53247), (69, 53217), (74, 53178), (75, 53175), (76, 53172), (102, 53097), (114, 53058), (115, 53052), (121, 53034), (135, 53001), (136, 52998), (142, 52983), (154, 52938),

Gene: Kikipoo_63 Start: 55002, Stop: 54544, Start Num: 35
Candidate Starts for Kikipoo_63:
(Start: 35 @55002 has 346 MA's), (49, 54906), (50, 54897), (66, 54822), (75, 54750), (106, 54684), (108, 54678), (113, 54672), (121, 54645),

Gene: Kimbrough_62 Start: 55053, Stop: 54595, Start Num: 35
Candidate Starts for Kimbrough_62:

(Start: 35 @55053 has 346 MA's), (49, 54957), (50, 54948), (66, 54873), (75, 54801), (106, 54735), (108, 54729), (113, 54723), (121, 54696),

Gene: KingTut_54 Start: 51217, Stop: 50759, Start Num: 35
Candidate Starts for KingTut_54:
(Start: 35 @51217 has 346 MA's), (49, 51121), (50, 51112), (66, 51037), (75, 50965), (106, 50899), (108, 50893), (113, 50887), (121, 50860),

Gene: KingVeVeVe_60 Start: 54020, Stop: 53562, Start Num: 35
Candidate Starts for KingVeVeVe_60:
(Start: 35 @54020 has 346 MA's), (49, 53924), (50, 53915), (66, 53840), (75, 53768), (106, 53702), (108, 53696), (113, 53690), (121, 53663),

Gene: Kiwot_64 Start: 54851, Stop: 54393, Start Num: 35
Candidate Starts for Kiwot_64:
(Start: 35 @54851 has 346 MA's), (49, 54755), (50, 54746), (66, 54671), (75, 54599), (106, 54533), (108, 54527), (113, 54521), (121, 54494),

Gene: KlimbOn_61 Start: 54511, Stop: 54053, Start Num: 35
Candidate Starts for KlimbOn_61:
(Start: 35 @54511 has 346 MA's), (49, 54415), (50, 54406), (66, 54331), (75, 54259), (106, 54193), (108, 54187), (113, 54181), (121, 54154),

Gene: Kloppinator_62 Start: 54662, Stop: 54204, Start Num: 35
Candidate Starts for Kloppinator_62:
(Start: 35 @54662 has 346 MA's), (49, 54566), (50, 54557), (66, 54482), (75, 54410), (106, 54344), (108, 54338), (113, 54332), (121, 54305),

Gene: Kolhan_59 Start: 53352, Stop: 52861, Start Num: 37
Candidate Starts for Kolhan_59:
(2, 54042), (7, 53916), (8, 53892), (22, 53454), (Start: 37 @53352 has 36 MA's), (42, 53319), (49, 53259), (58, 53217), (66, 53214), (69, 53184), (74, 53145), (75, 53142), (76, 53139), (102, 53064), (114, 53025), (115, 53019), (121, 53001), (135, 52968), (142, 52950), (154, 52905),

Gene: Kronus_62 Start: 56054, Stop: 55578, Start Num: 35
Candidate Starts for Kronus_62:
(Start: 18 @56192 has 2 MA's), (19, 56171), (Start: 34 @56057 has 20 MA's), (Start: 35 @56054 has 346 MA's), (49, 55958), (66, 55892), (69, 55862), (86, 55790), (88, 55787), (92, 55778), (98, 55763), (116, 55706),

Gene: Kwadwo_60 Start: 54463, Stop: 54005, Start Num: 35
Candidate Starts for Kwadwo_60:
(Start: 35 @54463 has 346 MA's), (49, 54367), (50, 54358), (66, 54283), (75, 54211), (106, 54145), (108, 54139), (113, 54133), (121, 54106),

Gene: Kwksand96_62 Start: 54598, Stop: 54134, Start Num: 35
Candidate Starts for Kwksand96_62:
(Start: 35 @54598 has 346 MA's), (49, 54502), (50, 54493), (66, 54418), (75, 54346), (106, 54280), (108, 54274), (113, 54268), (121, 54241),

Gene: Labeouficaum_62 Start: 54586, Stop: 54128, Start Num: 35
Candidate Starts for Labeouficaum_62:

(Start: 35 @54586 has 346 MA's), (49, 54490), (50, 54481), (66, 54406), (75, 54334), (106, 54268), (108, 54262), (113, 54256), (121, 54229),

Gene: Lars_59 Start: 53450, Stop: 52959, Start Num: 37
Candidate Starts for Lars_59:
(1, 54230), (2, 54140), (7, 54014), (8, 53990), (22, 53552), (Start: 37 @53450 has 36 MA's), (42, 53417), (49, 53357), (58, 53315), (66, 53312), (69, 53282), (74, 53243), (75, 53240), (76, 53237), (102, 53162), (114, 53123), (115, 53117), (121, 53099), (135, 53066), (142, 53048), (154, 53003),

Gene: Larson_65 Start: 54803, Stop: 54345, Start Num: 35
Candidate Starts for Larson_65:
(Start: 35 @54803 has 346 MA's), (49, 54707), (50, 54698), (66, 54623), (75, 54551), (106, 54485), (108, 54479), (113, 54473), (121, 54446),

Gene: LasagnaCat_63 Start: 54881, Stop: 54417, Start Num: 35
Candidate Starts for LasagnaCat_63:
(Start: 35 @54881 has 346 MA's), (49, 54785), (50, 54776), (66, 54701), (75, 54629), (106, 54563), (108, 54557), (113, 54551), (121, 54524),

Gene: Lasso_62 Start: 54738, Stop: 54280, Start Num: 35
Candidate Starts for Lasso_62:
(Start: 35 @54738 has 346 MA's), (49, 54642), (50, 54633), (66, 54558), (75, 54486), (106, 54420), (108, 54414), (113, 54408), (121, 54381),

Gene: Laurie_59 Start: 53177, Stop: 52686, Start Num: 37
Candidate Starts for Laurie_59:
(Start: 37 @53177 has 36 MA's), (42, 53144), (49, 53084), (58, 53042), (66, 53039), (69, 53009), (74, 52970), (75, 52967), (76, 52964), (102, 52889), (114, 52850), (115, 52844), (121, 52826), (135, 52793), (142, 52775), (154, 52730),

Gene: LeeLot_62 Start: 55093, Stop: 54635, Start Num: 35
Candidate Starts for LeeLot_62:
(Start: 35 @55093 has 346 MA's), (49, 54997), (50, 54988), (66, 54913), (75, 54841), (106, 54775), (108, 54769), (113, 54763), (121, 54736),

Gene: Lego3393_60 Start: 55044, Stop: 54586, Start Num: 35
Candidate Starts for Lego3393_60:
(Start: 35 @55044 has 346 MA's), (49, 54948), (50, 54939), (66, 54864), (75, 54792), (106, 54726), (108, 54720), (113, 54714), (121, 54687),

Gene: Legolas_63 Start: 54832, Stop: 54374, Start Num: 35
Candidate Starts for Legolas_63:
(Start: 35 @54832 has 346 MA's), (49, 54736), (50, 54727), (66, 54652), (75, 54580), (106, 54514), (108, 54508), (113, 54502), (121, 54475),

Gene: Lehmann_63 Start: 54604, Stop: 54146, Start Num: 35
Candidate Starts for Lehmann_63:
(Start: 35 @54604 has 346 MA's), (49, 54508), (50, 54499), (66, 54424), (75, 54352), (106, 54286), (108, 54280), (113, 54274), (121, 54247), (150, 54178),

Gene: LeiMonet_64 Start: 54955, Stop: 54491, Start Num: 35
Candidate Starts for LeiMonet_64:

(Start: 35 @54955 has 346 MA's), (49, 54859), (50, 54850), (66, 54775), (75, 54703), (106, 54637), (108, 54631), (113, 54625), (121, 54598),

Gene: LemonSlice_62 Start: 54423, Stop: 53965, Start Num: 35
Candidate Starts for LemonSlice_62:
(Start: 35 @54423 has 346 MA's), (49, 54327), (50, 54318), (66, 54243), (75, 54171), (106, 54105), (108, 54099), (113, 54093), (121, 54066),

Gene: Lephleur_59 Start: 53359, Stop: 52871, Start Num: 37
Candidate Starts for Lephleur_59:
(1, 54094), (2, 54004), (22, 53461), (Start: 37 @53359 has 36 MA's), (42, 53326), (49, 53266), (58, 53224), (66, 53221), (69, 53191), (74, 53152), (75, 53149), (76, 53146), (102, 53071), (114, 53032), (115, 53026), (121, 53008), (135, 52975), (142, 52957), (154, 52912),

Gene: LestyG_60 Start: 54490, Stop: 54038, Start Num: 34
Candidate Starts for LestyG_60:
(Start: 18 @54622 has 2 MA's), (19, 54601), (Start: 34 @54490 has 20 MA's), (Start: 35 @54487 has 346 MA's), (49, 54391), (66, 54325), (69, 54295), (75, 54253), (86, 54223), (88, 54220), (92, 54211), (98, 54196), (116, 54163),

Gene: Ligma_53 Start: 46714, Stop: 46265, Start Num: 35
Candidate Starts for Ligma_53:
(Start: 35 @46714 has 346 MA's), (42, 46672), (49, 46612), (127, 46360), (133, 46348),

Gene: LilSmirk_59 Start: 53353, Stop: 52862, Start Num: 37
Candidate Starts for LilSmirk_59:
(22, 53455), (Start: 37 @53353 has 36 MA's), (42, 53320), (49, 53260), (58, 53218), (66, 53215), (69, 53185), (74, 53146), (75, 53143), (76, 53140), (102, 53065), (114, 53026), (115, 53020), (121, 53002), (135, 52969), (142, 52951), (154, 52906),

Gene: LittleMinkey_65 Start: 55034, Stop: 54459, Start Num: 29
Candidate Starts for LittleMinkey_65:
(Start: 29 @55034 has 3 MA's), (69, 54836), (74, 54797), (102, 54722), (144, 54596), (173, 54494), (177, 54482),

Gene: LittleMunchkin_54 Start: 49386, Stop: 48961, Start Num: 33
Candidate Starts for LittleMunchkin_54:
(Start: 33 @49386 has 1 MA's), (42, 49338), (43, 49323), (49, 49278), (69, 49218), (72, 49185), (74, 49179), (98, 49131), (99, 49128), (104, 49125),

Gene: LizLemon_59 Start: 53475, Stop: 52984, Start Num: 37
Candidate Starts for LizLemon_59:
(1, 54255), (2, 54165), (7, 54039), (8, 54015), (22, 53577), (Start: 37 @53475 has 36 MA's), (42, 53442), (49, 53382), (58, 53340), (66, 53337), (69, 53307), (74, 53268), (75, 53265), (76, 53262), (102, 53187), (114, 53148), (115, 53142), (121, 53124), (135, 53091), (142, 53073), (154, 53028),

Gene: Longacauda_62 Start: 54858, Stop: 54394, Start Num: 35
Candidate Starts for Longacauda_62:
(Start: 35 @54858 has 346 MA's), (49, 54762), (50, 54753), (66, 54678), (75, 54606), (106, 54540), (108, 54534), (113, 54528), (121, 54501),

Gene: Lopsy_60 Start: 54151, Stop: 53693, Start Num: 35
Candidate Starts for Lopsy_60:

(Start: 35 @54151 has 346 MA's), (49, 54055), (50, 54046), (66, 53971), (75, 53899), (106, 53833), (108, 53827), (113, 53821), (121, 53794),

Gene: LostAndPhound_62 Start: 55037, Stop: 54579, Start Num: 35
Candidate Starts for LostAndPhound_62:
(Start: 35 @55037 has 346 MA's), (49, 54941), (50, 54932), (66, 54857), (75, 54785), (106, 54719), (108, 54713), (113, 54707), (121, 54680),

Gene: LuckyMarjie_59 Start: 54213, Stop: 53755, Start Num: 35
Candidate Starts for LuckyMarjie_59:
(Start: 35 @54213 has 346 MA's), (49, 54117), (50, 54108), (66, 54033), (75, 53961), (106, 53895), (108, 53889), (113, 53883), (121, 53856),

Gene: Lulumae_59 Start: 54198, Stop: 53740, Start Num: 35
Candidate Starts for Lulumae_59:
(Start: 35 @54198 has 346 MA's), (49, 54102), (50, 54093), (66, 54018), (75, 53946), (106, 53880), (108, 53874), (113, 53868), (121, 53841),

Gene: Lulwa_59 Start: 53795, Stop: 53337, Start Num: 35
Candidate Starts for Lulwa_59:
(Start: 35 @53795 has 346 MA's), (49, 53699), (50, 53690), (66, 53615), (75, 53543), (106, 53477), (108, 53471), (113, 53465), (121, 53438),

Gene: Lumine_62 Start: 54682, Stop: 54224, Start Num: 35
Candidate Starts for Lumine_62:
(Start: 35 @54682 has 346 MA's), (49, 54586), (50, 54577), (66, 54502), (75, 54430), (106, 54364), (108, 54358), (113, 54352), (121, 54325),

Gene: MRabcd_61 Start: 54806, Stop: 54348, Start Num: 35
Candidate Starts for MRabcd_61:
(Start: 35 @54806 has 346 MA's), (49, 54710), (50, 54701), (66, 54626), (75, 54554), (106, 54488), (108, 54482), (113, 54476), (121, 54449),

Gene: Mag7_62 Start: 54642, Stop: 54184, Start Num: 35
Candidate Starts for Mag7_62:
(Start: 35 @54642 has 346 MA's), (49, 54546), (50, 54537), (66, 54462), (75, 54390), (106, 54324), (108, 54318), (113, 54312), (121, 54285),

Gene: Magic8_62 Start: 54800, Stop: 54336, Start Num: 35
Candidate Starts for Magic8_62:
(Start: 35 @54800 has 346 MA's), (49, 54704), (50, 54695), (66, 54620), (75, 54548), (106, 54482), (108, 54476), (113, 54470), (121, 54443),

Gene: MakoManhole_53 Start: 48044, Stop: 47469, Start Num: 34
Candidate Starts for MakoManhole_53:
(Start: 34 @48044 has 20 MA's), (46, 47963), (70, 47825), (109, 47693), (110, 47690), (128, 47636), (134, 47630), (152, 47570), (166, 47510),

Gene: Mana_60 Start: 54478, Stop: 54020, Start Num: 35
Candidate Starts for Mana_60:
(Start: 35 @54478 has 346 MA's), (49, 54382), (50, 54373), (66, 54298), (75, 54226), (106, 54160), (108, 54154), (113, 54148), (121, 54121),

Gene: Manad_61 Start: 54762, Stop: 54304, Start Num: 35
Candidate Starts for Manad_61:
(Start: 35 @54762 has 346 MA's), (49, 54666), (50, 54657), (66, 54582), (75, 54510), (106, 54444), (108, 54438), (113, 54432), (121, 54405),

Gene: Mariokart_52 Start: 46387, Stop: 45935, Start Num: 35
Candidate Starts for Mariokart_52:
(24, 46480), (Start: 35 @46387 has 346 MA's), (44, 46327), (48, 46291), (70, 46201), (72, 46180), (127, 46036), (133, 46024),

Gene: Marley1013_62 Start: 55685, Stop: 55236, Start Num: 35
Candidate Starts for Marley1013_62:
(Start: 18 @55820 has 2 MA's), (19, 55799), (Start: 34 @55688 has 20 MA's), (Start: 35 @55685 has 346 MA's), (49, 55589), (66, 55523), (69, 55493), (86, 55421), (88, 55418), (92, 55409), (98, 55394), (116, 55361),

Gene: Marlia_63 Start: 55433, Stop: 54954, Start Num: 34
Candidate Starts for Marlia_63:
(Start: 34 @55433 has 20 MA's), (Start: 35 @55430 has 346 MA's), (49, 55334), (66, 55268), (69, 55238), (75, 55196), (86, 55166), (88, 55163), (92, 55154), (98, 55139), (116, 55082),

Gene: Maru_61 Start: 54917, Stop: 54459, Start Num: 35
Candidate Starts for Maru_61:
(Start: 35 @54917 has 346 MA's), (49, 54821), (50, 54812), (66, 54737), (75, 54665), (106, 54599), (108, 54593), (113, 54587), (121, 54560),

Gene: Maskar_63 Start: 54718, Stop: 54254, Start Num: 35
Candidate Starts for Maskar_63:
(Start: 35 @54718 has 346 MA's), (49, 54622), (50, 54613), (66, 54538), (75, 54466), (106, 54400), (108, 54394), (113, 54388), (121, 54361),

Gene: MasterPo_59 Start: 53371, Stop: 52880, Start Num: 37
Candidate Starts for MasterPo_59:
(Start: 37 @53371 has 36 MA's), (42, 53338), (49, 53278), (58, 53236), (66, 53233), (69, 53203), (74, 53164), (75, 53161), (76, 53158), (102, 53083), (114, 53044), (115, 53038), (121, 53020), (135, 52987), (142, 52969), (154, 52924),

Gene: Matalotodo_61 Start: 55030, Stop: 54572, Start Num: 35
Candidate Starts for Matalotodo_61:
(Start: 35 @55030 has 346 MA's), (49, 54934), (50, 54925), (66, 54850), (75, 54778), (106, 54712), (108, 54706), (113, 54700), (121, 54673),

Gene: Mcshane_60 Start: 54476, Stop: 54018, Start Num: 35
Candidate Starts for Mcshane_60:
(Start: 35 @54476 has 346 MA's), (49, 54380), (50, 54371), (66, 54296), (75, 54224), (106, 54158), (108, 54152), (113, 54146), (121, 54119),

Gene: Mecca_61 Start: 55041, Stop: 54583, Start Num: 35
Candidate Starts for Mecca_61:
(Start: 35 @55041 has 346 MA's), (49, 54945), (50, 54936), (66, 54861), (75, 54789), (106, 54723), (108, 54717), (113, 54711), (121, 54684),

Gene: Megamind20_62 Start: 54464, Stop: 54006, Start Num: 35

Candidate Starts for Megamind20_62:
(Start: 35 @54464 has 346 MA's), (49, 54368), (50, 54359), (66, 54284), (75, 54212), (106, 54146), (108, 54140), (113, 54134), (121, 54107),

Gene: Megatron_62 Start: 54990, Stop: 54532, Start Num: 35
Candidate Starts for Megatron_62:
(Start: 35 @54990 has 346 MA's), (49, 54894), (50, 54885), (66, 54810), (75, 54738), (106, 54672), (108, 54666), (113, 54660), (121, 54633),

Gene: Melc17_61 Start: 55307, Stop: 54849, Start Num: 35
Candidate Starts for Melc17_61:
(Start: 35 @55307 has 346 MA's), (49, 55211), (50, 55202), (66, 55127), (75, 55055), (106, 54989), (108, 54983), (113, 54977), (121, 54950),

Gene: MelsMeow_62 Start: 54771, Stop: 54307, Start Num: 35
Candidate Starts for MelsMeow_62:
(Start: 35 @54771 has 346 MA's), (49, 54675), (50, 54666), (66, 54591), (75, 54519), (106, 54453), (108, 54447), (113, 54441), (121, 54414),

Gene: Mesh1_63 Start: 55054, Stop: 54596, Start Num: 35
Candidate Starts for Mesh1_63:
(Start: 35 @55054 has 346 MA's), (49, 54958), (50, 54949), (66, 54874), (75, 54802), (106, 54736), (108, 54730), (113, 54724), (121, 54697),

Gene: Mesmerelda_61 Start: 55034, Stop: 54576, Start Num: 35
Candidate Starts for Mesmerelda_61:
(Start: 35 @55034 has 346 MA's), (49, 54938), (50, 54929), (66, 54854), (75, 54782), (106, 54716), (108, 54710), (113, 54704), (121, 54677),

Gene: MichaelPhcott_62 Start: 54639, Stop: 54181, Start Num: 35
Candidate Starts for MichaelPhcott_62:
(Start: 35 @54639 has 346 MA's), (49, 54543), (50, 54534), (66, 54459), (75, 54387), (106, 54321), (108, 54315), (113, 54309), (121, 54282),

Gene: Mikota_60 Start: 54017, Stop: 53559, Start Num: 35
Candidate Starts for Mikota_60:
(Start: 35 @54017 has 346 MA's), (49, 53921), (50, 53912), (66, 53837), (75, 53765), (106, 53699), (108, 53693), (113, 53687), (121, 53660),

Gene: MiniBoss_59 Start: 53823, Stop: 53365, Start Num: 35
Candidate Starts for MiniBoss_59:
(Start: 35 @53823 has 346 MA's), (49, 53727), (50, 53718), (66, 53643), (75, 53571), (106, 53505), (108, 53499), (113, 53493), (121, 53466),

Gene: MitKao_61 Start: 54488, Stop: 54030, Start Num: 35
Candidate Starts for MitKao_61:
(Start: 35 @54488 has 346 MA's), (49, 54392), (50, 54383), (66, 54308), (75, 54236), (106, 54170), (108, 54164), (113, 54158), (121, 54131),

Gene: MmasiCarm_63 Start: 55414, Stop: 54938, Start Num: 35
Candidate Starts for MmasiCarm_63:
(Start: 18 @55549 has 2 MA's), (19, 55528), (Start: 34 @55417 has 20 MA's), (Start: 35 @55414 has 346 MA's), (49, 55318), (66, 55252), (69, 55222), (86, 55150), (88, 55147), (92, 55138), (98, 55123),

(116, 55066),

Gene: Morgushi_61 Start: 54477, Stop: 54019, Start Num: 35
Candidate Starts for Morgushi_61:
(Start: 35 @54477 has 346 MA's), (49, 54381), (50, 54372), (66, 54297), (75, 54225), (106, 54159), (108, 54153), (113, 54147), (121, 54120),

Gene: Mortcellus_62 Start: 56075, Stop: 55593, Start Num: 34
Candidate Starts for Mortcellus_62:
(Start: 18 @56207 has 2 MA's), (19, 56186), (Start: 34 @56075 has 20 MA's), (Start: 35 @56072 has 346 MA's), (49, 55976), (66, 55910), (69, 55880), (86, 55808), (88, 55805), (92, 55796), (98, 55781), (116, 55724),

Gene: Morty_62 Start: 55005, Stop: 54541, Start Num: 35
Candidate Starts for Morty_62:
(Start: 35 @55005 has 346 MA's), (49, 54909), (50, 54900), (66, 54825), (75, 54753), (106, 54687), (108, 54681), (113, 54675), (121, 54648),

Gene: Morty007_61 Start: 55820, Stop: 55236, Start Num: 18
Candidate Starts for Morty007_61:
(Start: 18 @55820 has 2 MA's), (19, 55799), (Start: 34 @55688 has 20 MA's), (Start: 35 @55685 has 346 MA's), (49, 55589), (66, 55523), (69, 55493), (86, 55421), (88, 55418), (92, 55409), (98, 55394), (116, 55361),

Gene: Mosaic_60 Start: 54482, Stop: 54024, Start Num: 35
Candidate Starts for Mosaic_60:
(Start: 35 @54482 has 346 MA's), (49, 54386), (50, 54377), (66, 54302), (75, 54230), (106, 54164), (108, 54158), (113, 54152), (121, 54125),

Gene: MossRose_55 Start: 48597, Stop: 48031, Start Num: 34
Candidate Starts for MossRose_55:
(Start: 34 @48597 has 20 MA's), (46, 48516), (70, 48378), (109, 48246), (110, 48243), (128, 48198), (134, 48192), (152, 48132), (163, 48087),

Gene: MrPhizzler_64 Start: 54945, Stop: 54487, Start Num: 35
Candidate Starts for MrPhizzler_64:
(Start: 35 @54945 has 346 MA's), (49, 54849), (50, 54840), (66, 54765), (75, 54693), (106, 54627), (108, 54621), (113, 54615), (121, 54588),

Gene: Mulan_61 Start: 54716, Stop: 54258, Start Num: 35
Candidate Starts for Mulan_61:
(Start: 35 @54716 has 346 MA's), (49, 54620), (50, 54611), (66, 54536), (75, 54464), (106, 54398), (108, 54392), (113, 54386), (121, 54359),

Gene: Mulaychimus_63 Start: 55431, Stop: 54955, Start Num: 35
Candidate Starts for Mulaychimus_63:
(9, 55824), (11, 55698), (12, 55680), (Start: 18 @55566 has 2 MA's), (19, 55545), (Start: 34 @55434 has 20 MA's), (Start: 35 @55431 has 346 MA's), (49, 55335), (66, 55269), (69, 55239), (86, 55167), (88, 55164), (92, 55155), (98, 55140), (116, 55083),

Gene: Murdoc_60 Start: 54478, Stop: 54020, Start Num: 35
Candidate Starts for Murdoc_60:

(Start: 35 @54478 has 346 MA's), (49, 54382), (50, 54373), (66, 54298), (75, 54226), (106, 54160), (108, 54154), (113, 54148), (121, 54121),

Gene: Mutante_61 Start: 54488, Stop: 54030, Start Num: 35
Candidate Starts for Mutante_61:
(Start: 35 @54488 has 346 MA's), (49, 54392), (50, 54383), (66, 54308), (75, 54236), (106, 54170), (108, 54164), (113, 54158), (121, 54131),

Gene: NHagos_54 Start: 47410, Stop: 46808, Start Num: 34
Candidate Starts for NHagos_54:
(Start: 34 @47410 has 20 MA's), (67, 47227), (78, 47149), (94, 47110), (110, 47056), (111, 47050), (163, 46861),

Gene: Nacho_0063 Start: 55236, Stop: 54778, Start Num: 35
Candidate Starts for Nacho_0063:
(Start: 35 @55236 has 346 MA's), (49, 55140), (50, 55131), (66, 55056), (75, 54984), (106, 54918), (108, 54912), (113, 54906), (121, 54879),

Gene: Nathan_62 Start: 54569, Stop: 54111, Start Num: 35
Candidate Starts for Nathan_62:
(Start: 35 @54569 has 346 MA's), (49, 54473), (50, 54464), (66, 54389), (75, 54317), (106, 54251), (108, 54245), (113, 54239), (121, 54212),

Gene: Nehme_62 Start: 55024, Stop: 54560, Start Num: 35
Candidate Starts for Nehme_62:
(Start: 35 @55024 has 346 MA's), (49, 54928), (50, 54919), (66, 54844), (75, 54772), (106, 54706), (108, 54700), (113, 54694), (121, 54667),

Gene: Neos5_61 Start: 55147, Stop: 54698, Start Num: 35
Candidate Starts for Neos5_61:
(Start: 18 @55282 has 2 MA's), (19, 55261), (Start: 34 @55150 has 20 MA's), (Start: 35 @55147 has 346 MA's), (49, 55051), (66, 54985), (69, 54955), (86, 54883), (88, 54880), (92, 54871), (98, 54856), (116, 54823),

Gene: Newman_60 Start: 54514, Stop: 54056, Start Num: 35
Candidate Starts for Newman_60:
(Start: 35 @54514 has 346 MA's), (49, 54418), (50, 54409), (66, 54334), (75, 54262), (106, 54196), (108, 54190), (113, 54184), (121, 54157),

Gene: NiaNia_64 Start: 54511, Stop: 54053, Start Num: 35
Candidate Starts for NiaNia_64:
(Start: 35 @54511 has 346 MA's), (49, 54415), (50, 54406), (66, 54331), (75, 54259), (106, 54193), (108, 54187), (113, 54181), (121, 54154),

Gene: Nicole21_62 Start: 54767, Stop: 54309, Start Num: 35
Candidate Starts for Nicole21_62:
(Start: 35 @54767 has 346 MA's), (49, 54671), (50, 54662), (66, 54587), (75, 54515), (106, 54449), (108, 54443), (113, 54437), (121, 54410),

Gene: Nigel_56 Start: 54670, Stop: 54173, Start Num: 27
Candidate Starts for Nigel_56:
(Start: 27 @54670 has 6 MA's), (49, 54559), (50, 54550), (59, 54511), (64, 54505), (71, 54454), (74, 54436), (75, 54433), (77, 54427), (103, 54355), (123, 54286),

Gene: Nova1_64 Start: 54827, Stop: 54363, Start Num: 35
Candidate Starts for Nova1_64:
(Start: 35 @54827 has 346 MA's), (49, 54731), (50, 54722), (66, 54647), (75, 54575), (106, 54509), (108, 54503), (113, 54497), (121, 54470),

Gene: Nozo_62 Start: 55768, Stop: 55292, Start Num: 35
Candidate Starts for Nozo_62:
(Start: 18 @55903 has 2 MA's), (19, 55882), (Start: 34 @55771 has 20 MA's), (Start: 35 @55768 has 346 MA's), (49, 55672), (66, 55606), (69, 55576), (86, 55504), (88, 55501), (92, 55492), (98, 55477), (116, 55420),

Gene: Numberten_61 Start: 54711, Stop: 54253, Start Num: 35
Candidate Starts for Numberten_61:
(Start: 35 @54711 has 346 MA's), (49, 54615), (50, 54606), (66, 54531), (75, 54459), (106, 54393), (108, 54387), (113, 54381), (121, 54354),

Gene: Nyala_60 Start: 54486, Stop: 54028, Start Num: 35
Candidate Starts for Nyala_60:
(Start: 35 @54486 has 346 MA's), (49, 54390), (50, 54381), (66, 54306), (75, 54234), (106, 54168), (108, 54162), (113, 54156), (121, 54129),

Gene: OSmaximus_63 Start: 55232, Stop: 54774, Start Num: 35
Candidate Starts for OSmaximus_63:
(Start: 35 @55232 has 346 MA's), (49, 55136), (50, 55127), (66, 55052), (75, 54980), (106, 54914), (108, 54908), (113, 54902), (121, 54875),

Gene: Obutu_63 Start: 55367, Stop: 54891, Start Num: 35
Candidate Starts for Obutu_63:
(9, 55760), (11, 55634), (12, 55616), (Start: 18 @55502 has 2 MA's), (19, 55481), (Start: 34 @55370 has 20 MA's), (Start: 35 @55367 has 346 MA's), (49, 55271), (66, 55205), (69, 55175), (86, 55103), (88, 55100), (92, 55091), (98, 55076), (116, 55019),

Gene: Olak_60 Start: 54489, Stop: 54031, Start Num: 35
Candidate Starts for Olak_60:
(Start: 35 @54489 has 346 MA's), (49, 54393), (50, 54384), (66, 54309), (75, 54237), (106, 54171), (108, 54165), (113, 54159), (121, 54132),

Gene: Oline_62 Start: 54590, Stop: 54132, Start Num: 35
Candidate Starts for Oline_62:
(Start: 35 @54590 has 346 MA's), (49, 54494), (50, 54485), (66, 54410), (75, 54338), (106, 54272), (108, 54266), (113, 54260), (121, 54233),

Gene: Olive_61 Start: 54702, Stop: 54244, Start Num: 35
Candidate Starts for Olive_61:
(Start: 35 @54702 has 346 MA's), (49, 54606), (50, 54597), (66, 54522), (75, 54450), (106, 54384), (108, 54378), (113, 54372), (121, 54345),

Gene: OliverWalter_60 Start: 54521, Stop: 54063, Start Num: 35
Candidate Starts for OliverWalter_60:
(Start: 35 @54521 has 346 MA's), (49, 54425), (50, 54416), (66, 54341), (75, 54269), (106, 54203), (108, 54197), (113, 54191), (121, 54164),

Gene: Olivio_62 Start: 55226, Stop: 54750, Start Num: 35
Candidate Starts for Olivio_62:
(Start: 18 @55361 has 2 MA's), (19, 55340), (Start: 34 @55229 has 20 MA's), (Start: 35 @55226 has 346 MA's), (49, 55130), (66, 55064), (69, 55034), (86, 54962), (88, 54959), (92, 54950), (98, 54935), (116, 54878),

Gene: Omniscient_62 Start: 55349, Stop: 54891, Start Num: 35
Candidate Starts for Omniscient_62:
(Start: 35 @55349 has 346 MA's), (49, 55253), (50, 55244), (66, 55169), (75, 55097), (106, 55031), (108, 55025), (113, 55019), (121, 54992),

Gene: OneBrain_64 Start: 54752, Stop: 54294, Start Num: 35
Candidate Starts for OneBrain_64:
(Start: 35 @54752 has 346 MA's), (49, 54656), (50, 54647), (66, 54572), (75, 54500), (106, 54434), (108, 54428), (113, 54422), (121, 54395),

Gene: Oosterbaan_61 Start: 54768, Stop: 54310, Start Num: 35
Candidate Starts for Oosterbaan_61:
(Start: 35 @54768 has 346 MA's), (49, 54672), (50, 54663), (66, 54588), (75, 54516), (106, 54450), (108, 54444), (113, 54438), (121, 54411),

Gene: Opia_59 Start: 53365, Stop: 52874, Start Num: 37
Candidate Starts for Opia_59:
(1, 54145), (2, 54055), (7, 53929), (8, 53905), (22, 53467), (Start: 37 @53365 has 36 MA's), (42, 53332), (49, 53272), (58, 53230), (66, 53227), (69, 53197), (74, 53158), (75, 53155), (76, 53152), (102, 53077), (114, 53038), (115, 53032), (121, 53014), (135, 52981), (142, 52963), (154, 52918),

Gene: OrangeOswald_62 Start: 55009, Stop: 54533, Start Num: 35
Candidate Starts for OrangeOswald_62:
(Start: 18 @55144 has 2 MA's), (19, 55123), (Start: 34 @55012 has 20 MA's), (Start: 35 @55009 has 346 MA's), (49, 54913), (66, 54847), (69, 54817), (86, 54745), (88, 54742), (92, 54733), (98, 54718), (116, 54661),

Gene: Orfeu_60 Start: 55025, Stop: 54567, Start Num: 35
Candidate Starts for Orfeu_60:
(Start: 35 @55025 has 346 MA's), (49, 54929), (50, 54920), (66, 54845), (75, 54773), (106, 54707), (108, 54701), (113, 54695), (121, 54668),

Gene: Orion_63 Start: 54430, Stop: 53972, Start Num: 35
Candidate Starts for Orion_63:
(Start: 35 @54430 has 346 MA's), (49, 54334), (50, 54325), (66, 54250), (75, 54178), (106, 54112), (108, 54106), (113, 54100), (121, 54073),

Gene: Orwigg_61 Start: 54410, Stop: 53952, Start Num: 35
Candidate Starts for Orwigg_61:
(Start: 35 @54410 has 346 MA's), (49, 54314), (50, 54305), (66, 54230), (75, 54158), (106, 54092), (108, 54086), (113, 54080), (121, 54053),

Gene: PG1_62 Start: 55001, Stop: 54543, Start Num: 35
Candidate Starts for PG1_62:
(Start: 35 @55001 has 346 MA's), (49, 54905), (50, 54896), (66, 54821), (75, 54749), (106, 54683), (108, 54677), (113, 54671), (121, 54644),

Gene: Pacifista_60 Start: 54485, Stop: 54027, Start Num: 35
Candidate Starts for Pacifista_60:
(Start: 35 @54485 has 346 MA's), (49, 54389), (50, 54380), (66, 54305), (75, 54233), (106, 54167), (108, 54161), (113, 54155), (121, 54128),

Gene: PallasAthena_62 Start: 54493, Stop: 54029, Start Num: 35
Candidate Starts for PallasAthena_62:
(Start: 35 @54493 has 346 MA's), (49, 54397), (50, 54388), (66, 54313), (75, 54241), (106, 54175), (108, 54169), (113, 54163), (121, 54136),

Gene: PenguinLover67_57 Start: 55284, Stop: 54688, Start Num: 32
Candidate Starts for PenguinLover67_57:
(21, 55380), (Start: 32 @55284 has 3 MA's), (49, 55176), (59, 55137), (71, 55083), (74, 55065), (95, 55011), (126, 54915), (139, 54888), (140, 54885), (151, 54840), (180, 54708),

Gene: Phaedrus_58 Start: 54577, Stop: 53966, Start Num: 18
Candidate Starts for Phaedrus_58:
(Start: 18 @54577 has 2 MA's), (19, 54556), (Start: 34 @54445 has 20 MA's), (Start: 35 @54442 has 346 MA's), (49, 54346), (66, 54280), (69, 54250), (86, 54178), (88, 54175), (92, 54166), (98, 54151), (116, 54094),

Gene: Phamished_63 Start: 54698, Stop: 54234, Start Num: 35
Candidate Starts for Phamished_63:
(Start: 35 @54698 has 346 MA's), (49, 54602), (50, 54593), (66, 54518), (75, 54446), (106, 54380), (108, 54374), (113, 54368), (121, 54341),

Gene: Phantasmagoria_59 Start: 53363, Stop: 52872, Start Num: 37
Candidate Starts for Phantasmagoria_59:
(22, 53465), (Start: 37 @53363 has 36 MA's), (42, 53330), (49, 53270), (58, 53228), (66, 53225), (69, 53195), (74, 53156), (75, 53153), (76, 53150), (102, 53075), (114, 53036), (115, 53030), (121, 53012), (135, 52979), (142, 52961), (154, 52916),

Gene: Phareon_60 Start: 54207, Stop: 53749, Start Num: 35
Candidate Starts for Phareon_60:
(Start: 35 @54207 has 346 MA's), (49, 54111), (50, 54102), (66, 54027), (75, 53955), (106, 53889), (108, 53883), (113, 53877), (121, 53850),

Gene: PhatCats2014_62 Start: 55006, Stop: 54548, Start Num: 35
Candidate Starts for PhatCats2014_62:
(Start: 35 @55006 has 346 MA's), (49, 54910), (50, 54901), (66, 54826), (75, 54754), (106, 54688), (108, 54682), (113, 54676), (121, 54649),

Gene: PhatLouie_63 Start: 55024, Stop: 54566, Start Num: 35
Candidate Starts for PhatLouie_63:
(Start: 35 @55024 has 346 MA's), (49, 54928), (50, 54919), (66, 54844), (75, 54772), (106, 54706), (108, 54700), (113, 54694), (121, 54667),

Gene: Phayeta_64 Start: 55269, Stop: 54793, Start Num: 35
Candidate Starts for Phayeta_64:
(Start: 34 @55272 has 20 MA's), (Start: 35 @55269 has 346 MA's), (49, 55173), (66, 55107), (69, 55077), (86, 55005), (88, 55002), (92, 54993), (98, 54978), (116, 54921),

Gene: PhenghisKhan_62 Start: 54655, Stop: 54191, Start Num: 35

Candidate Starts for PhenghisKhan_62:
(Start: 35 @54655 has 346 MA's), (49, 54559), (50, 54550), (66, 54475), (75, 54403), (106, 54337), (108, 54331), (113, 54325), (121, 54298),

Gene: Pherdinand_63 Start: 54769, Stop: 54311, Start Num: 35
Candidate Starts for Pherdinand_63:
(Start: 35 @54769 has 346 MA's), (49, 54673), (50, 54664), (66, 54589), (75, 54517), (106, 54451), (108, 54445), (113, 54439), (121, 54412),

Gene: Phergie_63 Start: 54647, Stop: 54183, Start Num: 35
Candidate Starts for Phergie_63:
(Start: 35 @54647 has 346 MA's), (49, 54551), (50, 54542), (66, 54467), (75, 54395), (106, 54329), (108, 54323), (113, 54317), (121, 54290),

Gene: Philly_61 Start: 54829, Stop: 54353, Start Num: 35
Candidate Starts for Philly_61:
(9, 55222), (11, 55096), (12, 55078), (Start: 18 @54964 has 2 MA's), (19, 54943), (Start: 34 @54832 has 20 MA's), (Start: 35 @54829 has 346 MA's), (49, 54733), (66, 54667), (69, 54637), (86, 54565), (88, 54562), (92, 54553), (98, 54538), (116, 54481),

Gene: Phipps_61 Start: 54278, Stop: 53820, Start Num: 35
Candidate Starts for Phipps_61:
(Start: 35 @54278 has 346 MA's), (49, 54182), (50, 54173), (66, 54098), (75, 54026), (106, 53960), (108, 53954), (113, 53948), (121, 53921),

Gene: Phleuron_62 Start: 54642, Stop: 54184, Start Num: 35
Candidate Starts for Phleuron_62:
(Start: 35 @54642 has 346 MA's), (49, 54546), (50, 54537), (66, 54462), (75, 54390), (106, 54324), (108, 54318), (113, 54312), (121, 54285),

Gene: Phlyer_62 Start: 55723, Stop: 55235, Start Num: 35
Candidate Starts for Phlyer_62:
(Start: 18 @55858 has 2 MA's), (19, 55837), (Start: 34 @55726 has 20 MA's), (Start: 35 @55723 has 346 MA's), (49, 55627), (66, 55561), (69, 55531), (75, 55489), (86, 55459), (88, 55456), (92, 55447), (98, 55432), (116, 55369),

Gene: PhrankReynolds_61 Start: 54652, Stop: 54188, Start Num: 35
Candidate Starts for PhrankReynolds_61:
(Start: 35 @54652 has 346 MA's), (49, 54556), (50, 54547), (66, 54472), (75, 54400), (106, 54334), (108, 54328), (113, 54322), (121, 54295),

Gene: PhrodoBaggins_62 Start: 54872, Stop: 54408, Start Num: 35
Candidate Starts for PhrodoBaggins_62:
(Start: 35 @54872 has 346 MA's), (49, 54776), (50, 54767), (66, 54692), (75, 54620), (106, 54554), (108, 54548), (113, 54542), (121, 54515),

Gene: Phunky_60 Start: 54504, Stop: 54046, Start Num: 35
Candidate Starts for Phunky_60:
(Start: 35 @54504 has 346 MA's), (49, 54408), (50, 54399), (66, 54324), (75, 54252), (106, 54186), (108, 54180), (113, 54174), (121, 54147),

Gene: Piglet_0061 Start: 54978, Stop: 54520, Start Num: 35
Candidate Starts for Piglet_0061:

(Start: 35 @54978 has 346 MA's), (49, 54882), (50, 54873), (66, 54798), (75, 54726), (106, 54660), (108, 54654), (113, 54648), (121, 54621),

Gene: PinheadLarry_62 Start: 55003, Stop: 54545, Start Num: 35
Candidate Starts for PinheadLarry_62:
(Start: 35 @55003 has 346 MA's), (49, 54907), (50, 54898), (66, 54823), (75, 54751), (106, 54685), (108, 54679), (113, 54673), (121, 54646),

Gene: Pinkman_61 Start: 54590, Stop: 54126, Start Num: 35
Candidate Starts for Pinkman_61:
(Start: 35 @54590 has 346 MA's), (49, 54494), (50, 54485), (66, 54410), (75, 54338), (106, 54272), (108, 54266), (113, 54260), (121, 54233),

Gene: Pipefish_63 Start: 55749, Stop: 55264, Start Num: 34
Candidate Starts for Pipefish_63:
(Start: 34 @55749 has 20 MA's), (Start: 35 @55746 has 346 MA's), (49, 55650), (66, 55584), (69, 55554), (75, 55512), (86, 55482), (88, 55479), (92, 55470), (98, 55455), (116, 55395),

Gene: Pipsqueak_60 Start: 54434, Stop: 53976, Start Num: 35
Candidate Starts for Pipsqueak_60:
(Start: 35 @54434 has 346 MA's), (49, 54338), (50, 54329), (66, 54254), (75, 54182), (106, 54116), (108, 54110), (113, 54104), (121, 54077),

Gene: Placalicious_62 Start: 55535, Stop: 55077, Start Num: 35
Candidate Starts for Placalicious_62:
(Start: 35 @55535 has 346 MA's), (49, 55439), (50, 55430), (66, 55355), (75, 55283), (106, 55217), (108, 55211), (113, 55205), (121, 55178),

Gene: Plata_62 Start: 54742, Stop: 54278, Start Num: 35
Candidate Starts for Plata_62:
(Start: 35 @54742 has 346 MA's), (49, 54646), (50, 54637), (66, 54562), (75, 54490), (106, 54424), (108, 54418), (113, 54412), (121, 54385),

Gene: Plmatters_60 Start: 54508, Stop: 54050, Start Num: 35
Candidate Starts for Plmatters_60:
(Start: 35 @54508 has 346 MA's), (49, 54412), (50, 54403), (66, 54328), (75, 54256), (106, 54190), (108, 54184), (113, 54178), (121, 54151),

Gene: Podrick_60 Start: 54287, Stop: 53829, Start Num: 35
Candidate Starts for Podrick_60:
(Start: 35 @54287 has 346 MA's), (49, 54191), (50, 54182), (66, 54107), (75, 54035), (106, 53969), (108, 53963), (113, 53957), (121, 53930),

Gene: Pops_61 Start: 54693, Stop: 54235, Start Num: 35
Candidate Starts for Pops_61:
(Start: 35 @54693 has 346 MA's), (49, 54597), (50, 54588), (66, 54513), (75, 54441), (106, 54375), (108, 54369), (113, 54363), (121, 54336),

Gene: Potter_60 Start: 54499, Stop: 54041, Start Num: 35
Candidate Starts for Potter_60:
(Start: 35 @54499 has 346 MA's), (49, 54403), (50, 54394), (66, 54319), (75, 54247), (106, 54181), (108, 54175), (113, 54169), (121, 54142),

Gene: Prickles_63 Start: 54999, Stop: 54541, Start Num: 35
Candidate Starts for Prickles_63:
(Start: 35 @54999 has 346 MA's), (49, 54903), (50, 54894), (66, 54819), (75, 54747), (106, 54681), (108, 54675), (113, 54669), (121, 54642),

Gene: PrinceCharming_59 Start: 53459, Stop: 52968, Start Num: 37
Candidate Starts for PrinceCharming_59:
(Start: 37 @53459 has 36 MA's), (42, 53426), (49, 53366), (58, 53324), (66, 53321), (69, 53291), (74, 53252), (75, 53249), (76, 53246), (102, 53171), (114, 53132), (115, 53126), (121, 53108), (135, 53075), (142, 53057), (154, 53012),

Gene: ProfessorX_61 Start: 54498, Stop: 54040, Start Num: 35
Candidate Starts for ProfessorX_61:
(Start: 35 @54498 has 346 MA's), (49, 54402), (50, 54393), (66, 54318), (75, 54246), (106, 54180), (108, 54174), (113, 54168), (121, 54141),

Gene: Puhltonio_61 Start: 54773, Stop: 54315, Start Num: 35
Candidate Starts for Puhltonio_61:
(Start: 35 @54773 has 346 MA's), (49, 54677), (50, 54668), (66, 54593), (75, 54521), (106, 54455), (108, 54449), (113, 54443), (121, 54416),

Gene: QueenBeane_61 Start: 54805, Stop: 54347, Start Num: 35
Candidate Starts for QueenBeane_61:
(Start: 35 @54805 has 346 MA's), (49, 54709), (50, 54700), (66, 54625), (75, 54553), (106, 54487), (108, 54481), (113, 54475), (121, 54448),

Gene: Quesadilla_59 Start: 55551, Stop: 54994, Start Num: 32
Candidate Starts for Quesadilla_59:
(21, 55647), (Start: 32 @55551 has 3 MA's), (40, 55533), (47, 55467), (49, 55443), (59, 55404), (71, 55350), (74, 55332), (103, 55254), (126, 55182), (139, 55155), (151, 55107), (161, 55062), (162, 55059), (170, 55023), (172, 55014), (174, 55008),

Gene: Quisquiliae_62 Start: 54766, Stop: 54308, Start Num: 35
Candidate Starts for Quisquiliae_62:
(Start: 35 @54766 has 346 MA's), (49, 54670), (50, 54661), (66, 54586), (75, 54514), (106, 54448), (108, 54442), (113, 54436), (121, 54409),

Gene: Qyrzula_54 Start: 53476, Stop: 52985, Start Num: 37
Candidate Starts for Qyrzula_54:
(2, 54166), (7, 54040), (8, 54016), (22, 53578), (Start: 37 @53476 has 36 MA's), (42, 53443), (49, 53383), (58, 53341), (66, 53338), (69, 53308), (74, 53269), (75, 53266), (76, 53263), (102, 53188), (114, 53149), (115, 53143), (121, 53125), (135, 53092), (142, 53074), (154, 53029),

Gene: RagingRooster_61 Start: 54660, Stop: 54181, Start Num: 34
Candidate Starts for RagingRooster_61:
(Start: 18 @54792 has 2 MA's), (19, 54771), (Start: 34 @54660 has 20 MA's), (Start: 35 @54657 has 346 MA's), (49, 54561), (66, 54495), (69, 54465), (86, 54393), (88, 54390), (92, 54381), (98, 54366), (116, 54309),

Gene: RedMaple_63 Start: 55241, Stop: 54783, Start Num: 35
Candidate Starts for RedMaple_63:
(Start: 35 @55241 has 346 MA's), (49, 55145), (50, 55136), (57, 55097), (66, 55061), (75, 54989), (106, 54923), (108, 54917), (113, 54911), (121, 54884),

Gene: RedRaider89_62 Start: 54932, Stop: 54474, Start Num: 35
Candidate Starts for RedRaider89_62:
(Start: 35 @54932 has 346 MA's), (49, 54836), (50, 54827), (66, 54752), (75, 54680), (106, 54614), (108, 54608), (113, 54602), (121, 54575),

Gene: Rhinoforte_59 Start: 53472, Stop: 52984, Start Num: 37
Candidate Starts for Rhinoforte_59:
(Start: 37 @53472 has 36 MA's), (42, 53439), (49, 53379), (58, 53337), (66, 53334), (69, 53304), (74, 53265), (75, 53262), (76, 53259), (102, 53184), (114, 53145), (115, 53139), (121, 53121), (135, 53088), (136, 53085), (142, 53070), (154, 53025),

Gene: Rich_59 Start: 56438, Stop: 55833, Start Num: 35
Candidate Starts for Rich_59:
(13, 56660), (20, 56555), (Start: 35 @56438 has 346 MA's), (42, 56396), (50, 56327), (64, 56282), (69, 56252), (71, 56231), (74, 56213), (102, 56138), (118, 56087), (140, 56036), (145, 56024), (146, 56015), (160, 55952),

Gene: Ricotta_61 Start: 54498, Stop: 54040, Start Num: 35
Candidate Starts for Ricotta_61:
(Start: 35 @54498 has 346 MA's), (49, 54402), (50, 54393), (66, 54318), (75, 54246), (106, 54180), (108, 54174), (113, 54168), (121, 54141),

Gene: Riggan_62 Start: 54798, Stop: 54340, Start Num: 35
Candidate Starts for Riggan_62:
(Start: 35 @54798 has 346 MA's), (49, 54702), (50, 54693), (66, 54618), (75, 54546), (106, 54480), (108, 54474), (113, 54468), (121, 54441),

Gene: Rimu_61 Start: 54966, Stop: 54508, Start Num: 35
Candidate Starts for Rimu_61:
(Start: 35 @54966 has 346 MA's), (49, 54870), (50, 54861), (66, 54786), (75, 54714), (106, 54648), (108, 54642), (113, 54636), (121, 54609),

Gene: Rinkes_57 Start: 55106, Stop: 54540, Start Num: 26
Candidate Starts for Rinkes_57:
(10, 55361), (16, 55250), (Start: 26 @55106 has 1 MA's), (31, 55091), (49, 54983), (50, 54974), (63, 54917), (69, 54887), (75, 54845), (87, 54818), (89, 54815), (96, 54800), (113, 54752), (121, 54725), (132, 54707), (146, 54665), (148, 54656), (178, 54554), (179, 54551),

Gene: Rita1961_63 Start: 55367, Stop: 54891, Start Num: 35
Candidate Starts for Rita1961_63:
(Start: 18 @55502 has 2 MA's), (19, 55481), (Start: 34 @55370 has 20 MA's), (Start: 35 @55367 has 346 MA's), (49, 55271), (66, 55205), (69, 55175), (86, 55103), (88, 55100), (92, 55091), (98, 55076), (116, 55019),

Gene: Riverton_61 Start: 54726, Stop: 54268, Start Num: 35
Candidate Starts for Riverton_61:
(Start: 35 @54726 has 346 MA's), (49, 54630), (50, 54621), (66, 54546), (75, 54474), (106, 54408), (108, 54402), (113, 54396), (121, 54369),

Gene: Robyn_61 Start: 54645, Stop: 54187, Start Num: 35
Candidate Starts for Robyn_61:

(Start: 35 @54645 has 346 MA's), (49, 54549), (50, 54540), (66, 54465), (75, 54393), (106, 54327), (108, 54321), (113, 54315), (121, 54288), (150, 54219),

Gene: Roliet_59 Start: 53840, Stop: 53382, Start Num: 35
Candidate Starts for Roliet_59:
(Start: 35 @53840 has 346 MA's), (49, 53744), (50, 53735), (66, 53660), (75, 53588), (106, 53522), (108, 53516), (113, 53510), (121, 53483),

Gene: RomaT_62 Start: 55569, Stop: 55090, Start Num: 34
Candidate Starts for RomaT_62:
(Start: 18 @55701 has 2 MA's), (19, 55680), (Start: 34 @55569 has 20 MA's), (Start: 35 @55566 has 346 MA's), (49, 55470), (66, 55404), (69, 55374), (86, 55302), (88, 55299), (92, 55290), (98, 55275), (116, 55218),

Gene: Roscoe_62 Start: 54944, Stop: 54486, Start Num: 35
Candidate Starts for Roscoe_62:
(Start: 35 @54944 has 346 MA's), (49, 54848), (50, 54839), (66, 54764), (75, 54692), (106, 54626), (108, 54620), (113, 54614), (121, 54587),

Gene: Rosebush_58 Start: 53499, Stop: 53011, Start Num: 37
Candidate Starts for Rosebush_58:
(Start: 37 @53499 has 36 MA's), (42, 53466), (49, 53406), (58, 53364), (66, 53361), (69, 53331), (74, 53292), (75, 53289), (76, 53286), (102, 53211), (114, 53172), (115, 53166), (121, 53148), (135, 53115), (142, 53097), (154, 53052),

Gene: Roy17_60 Start: 54198, Stop: 53740, Start Num: 35
Candidate Starts for Roy17_60:
(Start: 35 @54198 has 346 MA's), (49, 54102), (50, 54093), (66, 54018), (75, 53946), (106, 53880), (108, 53874), (113, 53868), (121, 53841),

Gene: SDcharge11_61 Start: 54012, Stop: 53554, Start Num: 35
Candidate Starts for SDcharge11_61:
(Start: 35 @54012 has 346 MA's), (49, 53916), (50, 53907), (66, 53832), (75, 53760), (106, 53694), (108, 53688), (113, 53682), (121, 53655),

Gene: Sabella_58 Start: 53335, Stop: 52856, Start Num: 37
Candidate Starts for Sabella_58:
(Start: 37 @53335 has 36 MA's), (42, 53302), (49, 53242), (58, 53200), (66, 53197), (69, 53167), (74, 53128), (75, 53125), (76, 53122), (114, 53017), (115, 53011), (121, 52993), (135, 52960), (142, 52942), (154, 52897),

Gene: Salazzle_63 Start: 54864, Stop: 54400, Start Num: 35
Candidate Starts for Salazzle_63:
(Start: 35 @54864 has 346 MA's), (49, 54768), (50, 54759), (66, 54684), (75, 54612), (106, 54546), (108, 54540), (113, 54534), (121, 54507),

Gene: SallyH_64 Start: 54752, Stop: 54294, Start Num: 35
Candidate Starts for SallyH_64:
(Start: 35 @54752 has 346 MA's), (49, 54656), (50, 54647), (66, 54572), (75, 54500), (106, 54434), (108, 54428), (113, 54422), (121, 54395),

Gene: Samaymay_61 Start: 54805, Stop: 54347, Start Num: 35
Candidate Starts for Samaymay_61:

(Start: 35 @54805 has 346 MA's), (49, 54709), (50, 54700), (66, 54625), (75, 54553), (106, 54487), (108, 54481), (113, 54475), (121, 54448),

Gene: SassyCat97_60 Start: 54490, Stop: 54032, Start Num: 35
Candidate Starts for SassyCat97_60:
(Start: 35 @54490 has 346 MA's), (49, 54394), (50, 54385), (66, 54310), (75, 54238), (106, 54172), (108, 54166), (113, 54160), (121, 54133),

Gene: Schadenfreude_61 Start: 54370, Stop: 53912, Start Num: 35
Candidate Starts for Schadenfreude_61:
(Start: 35 @54370 has 346 MA's), (49, 54274), (50, 54265), (66, 54190), (75, 54118), (106, 54052), (108, 54046), (113, 54040), (121, 54013),

Gene: Schueller_62 Start: 54727, Stop: 54269, Start Num: 35
Candidate Starts for Schueller_62:
(Start: 35 @54727 has 346 MA's), (49, 54631), (50, 54622), (66, 54547), (75, 54475), (106, 54409), (108, 54403), (113, 54397), (121, 54370),

Gene: Scoot17C_62 Start: 54432, Stop: 53974, Start Num: 35
Candidate Starts for Scoot17C_62:
(Start: 35 @54432 has 346 MA's), (49, 54336), (50, 54327), (66, 54252), (75, 54180), (106, 54114), (108, 54108), (113, 54102), (121, 54075),

Gene: Scrick_62 Start: 54504, Stop: 54046, Start Num: 35
Candidate Starts for Scrick_62:
(Start: 35 @54504 has 346 MA's), (49, 54408), (50, 54399), (66, 54324), (75, 54252), (106, 54186), (108, 54180), (113, 54174), (121, 54147),

Gene: Selr12_62 Start: 54514, Stop: 54056, Start Num: 35
Candidate Starts for Selr12_62:
(Start: 35 @54514 has 346 MA's), (49, 54418), (50, 54409), (66, 54334), (75, 54262), (106, 54196), (108, 54190), (113, 54184), (121, 54157),

Gene: Septica_62 Start: 54742, Stop: 54284, Start Num: 35
Candidate Starts for Septica_62:
(Start: 35 @54742 has 346 MA's), (49, 54646), (50, 54637), (66, 54562), (75, 54490), (106, 54424), (108, 54418), (113, 54412), (121, 54385),

Gene: Serendipity_61 Start: 54787, Stop: 54329, Start Num: 35
Candidate Starts for Serendipity_61:
(Start: 35 @54787 has 346 MA's), (49, 54691), (50, 54682), (66, 54607), (75, 54535), (106, 54469), (108, 54463), (113, 54457), (121, 54430),

Gene: Serpentine_0061 Start: 54870, Stop: 54412, Start Num: 35
Candidate Starts for Serpentine_0061:
(Start: 35 @54870 has 346 MA's), (49, 54774), (50, 54765), (66, 54690), (75, 54618), (106, 54552), (108, 54546), (113, 54540), (121, 54513),

Gene: ShadowBud_62 Start: 54763, Stop: 54305, Start Num: 35
Candidate Starts for ShadowBud_62:
(Start: 35 @54763 has 346 MA's), (49, 54667), (50, 54658), (66, 54583), (75, 54511), (106, 54445), (108, 54439), (113, 54433), (121, 54406),

Gene: Shatter_53 Start: 46714, Stop: 46265, Start Num: 35
Candidate Starts for Shatter_53:
(Start: 35 @46714 has 346 MA's), (42, 46672), (49, 46612), (127, 46360), (133, 46348),

Gene: Sheila_59 Start: 53872, Stop: 53414, Start Num: 35
Candidate Starts for Sheila_59:
(Start: 35 @53872 has 346 MA's), (49, 53776), (50, 53767), (66, 53692), (75, 53620), (106, 53554), (108, 53548), (113, 53542), (121, 53515),

Gene: Shenandoah_61 Start: 54634, Stop: 54158, Start Num: 35
Candidate Starts for Shenandoah_61:
(Start: 18 @54769 has 2 MA's), (19, 54748), (Start: 34 @54637 has 20 MA's), (Start: 35 @54634 has 346 MA's), (49, 54538), (66, 54472), (69, 54442), (86, 54370), (88, 54367), (92, 54358), (98, 54343), (116, 54286),

Gene: ShiVal_59 Start: 54509, Stop: 54051, Start Num: 35
Candidate Starts for ShiVal_59:
(Start: 35 @54509 has 346 MA's), (49, 54413), (50, 54404), (66, 54329), (75, 54257), (106, 54191), (108, 54185), (113, 54179), (121, 54152),

Gene: Sigman_62 Start: 54465, Stop: 54007, Start Num: 35
Candidate Starts for Sigman_62:
(Start: 35 @54465 has 346 MA's), (49, 54369), (50, 54360), (66, 54285), (75, 54213), (106, 54147), (108, 54141), (113, 54135), (121, 54108),

Gene: SilverBell_62 Start: 54750, Stop: 54292, Start Num: 35
Candidate Starts for SilverBell_62:
(Start: 35 @54750 has 346 MA's), (49, 54654), (50, 54645), (66, 54570), (75, 54498), (106, 54432), (108, 54426), (113, 54420), (121, 54393),

Gene: Simielle_61 Start: 54469, Stop: 54011, Start Num: 35
Candidate Starts for Simielle_61:
(Start: 35 @54469 has 346 MA's), (49, 54373), (50, 54364), (66, 54289), (75, 54217), (106, 54151), (108, 54145), (113, 54139), (121, 54112),

Gene: SirBeauregard_62 Start: 55035, Stop: 54577, Start Num: 35
Candidate Starts for SirBeauregard_62:
(Start: 35 @55035 has 346 MA's), (49, 54939), (50, 54930), (66, 54855), (75, 54783), (106, 54717), (108, 54711), (113, 54705), (121, 54678),

Gene: Sisko_51 Start: 46752, Stop: 46276, Start Num: 30
Candidate Starts for Sisko_51:
(15, 46959), (Start: 30 @46752 has 4 MA's), (49, 46641), (53, 46614), (74, 46503), (129, 46377), (144, 46338),

Gene: Skippy_62 Start: 54723, Stop: 54265, Start Num: 35
Candidate Starts for Skippy_62:
(Start: 35 @54723 has 346 MA's), (49, 54627), (50, 54618), (66, 54543), (75, 54471), (106, 54405), (108, 54399), (113, 54393), (121, 54366),

Gene: Slatt_62 Start: 54788, Stop: 54330, Start Num: 35
Candidate Starts for Slatt_62:

(Start: 35 @54788 has 346 MA's), (49, 54692), (50, 54683), (66, 54608), (75, 54536), (106, 54470), (108, 54464), (113, 54458), (121, 54431),

Gene: SlippinJimmy_64 Start: 56167, Stop: 55691, Start Num: 35
Candidate Starts for SlippinJimmy_64:
(Start: 18 @56302 has 2 MA's), (19, 56281), (Start: 34 @56170 has 20 MA's), (Start: 35 @56167 has 346 MA's), (49, 56071), (66, 56005), (69, 55975), (86, 55903), (88, 55900), (92, 55891), (98, 55876), (116, 55819),

Gene: Soile_62 Start: 55018, Stop: 54554, Start Num: 35
Candidate Starts for Soile_62:
(Start: 35 @55018 has 346 MA's), (49, 54922), (50, 54913), (66, 54838), (75, 54766), (106, 54700), (108, 54694), (113, 54688), (121, 54661),

Gene: Solosis_60 Start: 54484, Stop: 54026, Start Num: 35
Candidate Starts for Solosis_60:
(Start: 35 @54484 has 346 MA's), (49, 54388), (50, 54379), (66, 54304), (75, 54232), (106, 54166), (108, 54160), (113, 54154), (121, 54127),

Gene: Sophia_60 Start: 54478, Stop: 54020, Start Num: 35
Candidate Starts for Sophia_60:
(Start: 35 @54478 has 346 MA's), (49, 54382), (50, 54373), (66, 54298), (75, 54226), (106, 54160), (108, 54154), (113, 54148), (121, 54121),

Gene: Soto_60 Start: 54045, Stop: 53587, Start Num: 35
Candidate Starts for Soto_60:
(Start: 35 @54045 has 346 MA's), (49, 53949), (50, 53940), (66, 53865), (75, 53793), (106, 53727), (108, 53721), (113, 53715), (121, 53688),

Gene: Sour_55 Start: 49917, Stop: 49447, Start Num: 34
Candidate Starts for Sour_55:
(Start: 34 @49917 has 20 MA's), (42, 49872), (49, 49812), (69, 49722), (72, 49689), (74, 49683), (80, 49671), (120, 49563), (127, 49551), (139, 49524),

Gene: Spartan300_61 Start: 54706, Stop: 54248, Start Num: 35
Candidate Starts for Spartan300_61:
(Start: 35 @54706 has 346 MA's), (49, 54610), (50, 54601), (66, 54526), (75, 54454), (106, 54388), (108, 54382), (113, 54376), (121, 54349),

Gene: Squid_61 Start: 54490, Stop: 54032, Start Num: 35
Candidate Starts for Squid_61:
(Start: 35 @54490 has 346 MA's), (49, 54394), (50, 54385), (66, 54310), (75, 54238), (106, 54172), (108, 54166), (113, 54160), (121, 54133),

Gene: Squiggle_62 Start: 54498, Stop: 54040, Start Num: 35
Candidate Starts for Squiggle_62:
(Start: 35 @54498 has 346 MA's), (49, 54402), (50, 54393), (66, 54318), (75, 54246), (106, 54180), (108, 54174), (113, 54168), (121, 54141),

Gene: Stinger_56 Start: 54216, Stop: 53488, Start Num: 27
Candidate Starts for Stinger_56:
(Start: 27 @54216 has 6 MA's), (49, 54099), (50, 54090), (59, 54051), (64, 54045), (74, 53976), (75, 53973), (103, 53895), (119, 53838), (137, 53802), (157, 53730), (158, 53727), (160, 53718), (165,

53694), (167, 53688), (171, 53667), (176, 53652), (181, 53625), (183, 53607), (184, 53589), (185, 53583), (187, 53571), (188, 53562), (189, 53511), (190, 53499),

Gene: Struggle_62 Start: 54581, Stop: 54117, Start Num: 35
Candidate Starts for Struggle_62:
(Start: 35 @54581 has 346 MA's), (49, 54485), (50, 54476), (66, 54401), (75, 54329), (106, 54263), (108, 54257), (113, 54251), (121, 54224),

Gene: Suffolk_60 Start: 53993, Stop: 53535, Start Num: 35
Candidate Starts for Suffolk_60:
(Start: 35 @53993 has 346 MA's), (49, 53897), (50, 53888), (66, 53813), (75, 53741), (106, 53675), (108, 53669), (113, 53663), (121, 53636),

Gene: Surely_61 Start: 54780, Stop: 54322, Start Num: 35
Candidate Starts for Surely_61:
(Start: 35 @54780 has 346 MA's), (49, 54684), (50, 54675), (66, 54600), (75, 54528), (106, 54462), (108, 54456), (113, 54450), (121, 54423),

Gene: SwainyDoc_63 Start: 55396, Stop: 54920, Start Num: 35
Candidate Starts for SwainyDoc_63:
(Start: 34 @55399 has 20 MA's), (Start: 35 @55396 has 346 MA's), (49, 55300), (66, 55234), (69, 55204), (86, 55132), (88, 55129), (92, 55120), (98, 55105), (116, 55048),

Gene: Swiphy_63 Start: 55024, Stop: 54566, Start Num: 35
Candidate Starts for Swiphy_63:
(Start: 35 @55024 has 346 MA's), (49, 54928), (50, 54919), (66, 54844), (75, 54772), (106, 54706), (108, 54700), (113, 54694), (121, 54667),

Gene: Swish_63 Start: 54754, Stop: 54296, Start Num: 35
Candidate Starts for Swish_63:
(Start: 35 @54754 has 346 MA's), (49, 54658), (50, 54649), (66, 54574), (75, 54502), (106, 54436), (108, 54430), (113, 54424), (121, 54397),

Gene: SynergyX_62 Start: 55006, Stop: 54530, Start Num: 35
Candidate Starts for SynergyX_62:
(Start: 18 @55141 has 2 MA's), (19, 55120), (Start: 34 @55009 has 20 MA's), (Start: 35 @55006 has 346 MA's), (49, 54910), (66, 54844), (69, 54814), (86, 54742), (88, 54739), (92, 54730), (98, 54715), (116, 54658),

Gene: TA17A_60 Start: 53340, Stop: 52858, Start Num: 37
Candidate Starts for TA17A_60:
(2, 53991), (7, 53865), (8, 53850), (Start: 37 @53340 has 36 MA's), (42, 53307), (49, 53247), (58, 53205), (66, 53202), (69, 53172), (74, 53133), (75, 53130), (76, 53127), (114, 53022), (115, 53016), (121, 52998), (135, 52965), (142, 52947), (154, 52902),

Gene: TallGrassMM_61 Start: 54394, Stop: 53936, Start Num: 35
Candidate Starts for TallGrassMM_61:
(Start: 35 @54394 has 346 MA's), (49, 54298), (50, 54289), (66, 54214), (75, 54142), (106, 54076), (108, 54070), (113, 54064), (121, 54037),

Gene: Taraxa_64 Start: 54381, Stop: 53917, Start Num: 35
Candidate Starts for Taraxa_64:

(Start: 35 @54381 has 346 MA's), (49, 54285), (50, 54276), (66, 54201), (75, 54129), (106, 54063), (108, 54057), (113, 54051), (121, 54024),

Gene: Telesworld_59 Start: 54599, Stop: 54141, Start Num: 35
Candidate Starts for Telesworld_59:
(Start: 35 @54599 has 346 MA's), (49, 54503), (50, 54494), (66, 54419), (75, 54347), (106, 54281), (108, 54275), (113, 54269), (121, 54242),

Gene: Thora_61 Start: 54776, Stop: 54318, Start Num: 35
Candidate Starts for Thora_61:
(Start: 35 @54776 has 346 MA's), (49, 54680), (50, 54671), (66, 54596), (75, 54524), (106, 54458), (108, 54452), (113, 54446), (121, 54419),

Gene: ThreeOh3D2_63 Start: 54997, Stop: 54539, Start Num: 35
Candidate Starts for ThreeOh3D2_63:
(Start: 35 @54997 has 346 MA's), (49, 54901), (50, 54892), (66, 54817), (75, 54745), (106, 54679), (108, 54673), (113, 54667), (121, 54640),

Gene: Thunderbird_61 Start: 54736, Stop: 54272, Start Num: 35
Candidate Starts for Thunderbird_61:
(Start: 35 @54736 has 346 MA's), (49, 54640), (50, 54631), (66, 54556), (75, 54484), (106, 54418), (108, 54412), (113, 54406), (121, 54379),

Gene: Timmi_60 Start: 54479, Stop: 54021, Start Num: 35
Candidate Starts for Timmi_60:
(Start: 35 @54479 has 346 MA's), (49, 54383), (50, 54374), (66, 54299), (75, 54227), (106, 54161), (108, 54155), (113, 54149), (121, 54122),

Gene: Tinciduntsolum_60 Start: 53502, Stop: 53014, Start Num: 37
Candidate Starts for Tinciduntsolum_60:
(Start: 37 @53502 has 36 MA's), (42, 53469), (49, 53409), (58, 53367), (66, 53364), (69, 53334), (74, 53295), (75, 53292), (76, 53289), (102, 53214), (114, 53175), (115, 53169), (121, 53151), (135, 53118), (142, 53100), (154, 53055),

Gene: TinyTerror_63 Start: 55427, Stop: 54951, Start Num: 35
Candidate Starts for TinyTerror_63:
(9, 55823), (11, 55697), (12, 55679), (Start: 18 @55565 has 2 MA's), (19, 55544), (Start: 34 @55430 has 20 MA's), (Start: 35 @55427 has 346 MA's), (49, 55331), (66, 55265), (69, 55235), (86, 55163), (88, 55160), (92, 55151), (98, 55136), (116, 55079),

Gene: TomBombadil_61 Start: 54764, Stop: 54306, Start Num: 35
Candidate Starts for TomBombadil_61:
(Start: 35 @54764 has 346 MA's), (49, 54668), (50, 54659), (66, 54584), (75, 54512), (106, 54446), (108, 54440), (113, 54434), (121, 54407),

Gene: Tomlarah_62 Start: 55333, Stop: 54875, Start Num: 35
Candidate Starts for Tomlarah_62:
(Start: 35 @55333 has 346 MA's), (49, 55237), (50, 55228), (66, 55153), (75, 55081), (106, 55015), (108, 55009), (113, 55003), (121, 54976),

Gene: Toni_61 Start: 54926, Stop: 54468, Start Num: 35
Candidate Starts for Toni_61:

(Start: 35 @54926 has 346 MA's), (49, 54830), (50, 54821), (66, 54746), (75, 54674), (106, 54608), (108, 54602), (113, 54596), (121, 54569),

Gene: TooFast2Furius_61 Start: 54745, Stop: 54287, Start Num: 35
Candidate Starts for TooFast2Furius_61:
(Start: 35 @54745 has 346 MA's), (49, 54649), (50, 54640), (66, 54565), (75, 54493), (106, 54427), (108, 54421), (113, 54415), (121, 54388),

Gene: Tooj_60 Start: 54149, Stop: 53691, Start Num: 35
Candidate Starts for Tooj_60:
(Start: 35 @54149 has 346 MA's), (49, 54053), (50, 54044), (66, 53969), (75, 53897), (106, 53831), (108, 53825), (113, 53819), (121, 53792),

Gene: TraderJ_56 Start: 48929, Stop: 48354, Start Num: 34
Candidate Starts for TraderJ_56:
(Start: 34 @48929 has 20 MA's), (46, 48848), (70, 48710), (109, 48578), (110, 48575), (128, 48521), (134, 48515), (152, 48455), (163, 48410),

Gene: Tres_59 Start: 53356, Stop: 52868, Start Num: 37
Candidate Starts for Tres_59:
(Start: 37 @53356 has 36 MA's), (42, 53323), (49, 53263), (58, 53221), (66, 53218), (69, 53188), (74, 53149), (75, 53146), (76, 53143), (102, 53068), (114, 53029), (115, 53023), (121, 53005), (135, 52972), (142, 52954), (154, 52909),

Gene: Triad_63 Start: 53934, Stop: 53476, Start Num: 35
Candidate Starts for Triad_63:
(Start: 35 @53934 has 346 MA's), (49, 53838), (50, 53829), (66, 53754), (75, 53682), (106, 53616), (108, 53610), (113, 53604), (121, 53577), (150, 53508),

Gene: True_60 Start: 54489, Stop: 54031, Start Num: 35
Candidate Starts for True_60:
(Start: 35 @54489 has 346 MA's), (49, 54393), (50, 54384), (66, 54309), (75, 54237), (106, 54171), (108, 54165), (113, 54159), (121, 54132),

Gene: Trypo_64 Start: 55161, Stop: 54703, Start Num: 35
Candidate Starts for Trypo_64:
(Start: 35 @55161 has 346 MA's), (49, 55065), (50, 55056), (66, 54981), (75, 54909), (106, 54843), (108, 54837), (113, 54831), (121, 54804),

Gene: Tydolla_59 Start: 55039, Stop: 54590, Start Num: 35
Candidate Starts for Tydolla_59:
(Start: 18 @55174 has 2 MA's), (19, 55153), (Start: 34 @55042 has 20 MA's), (Start: 35 @55039 has 346 MA's), (49, 54943), (66, 54877), (69, 54847), (86, 54775), (88, 54772), (92, 54763), (98, 54748), (116, 54715),

Gene: TyrionL_62 Start: 54586, Stop: 54128, Start Num: 35
Candidate Starts for TyrionL_62:
(Start: 35 @54586 has 346 MA's), (49, 54490), (50, 54481), (66, 54406), (75, 54334), (106, 54268), (108, 54262), (113, 54256), (121, 54229),

Gene: UAch1_61 Start: 54720, Stop: 54262, Start Num: 35
Candidate Starts for UAch1_61:

(Start: 35 @54720 has 346 MA's), (49, 54624), (50, 54615), (66, 54540), (75, 54468), (106, 54402), (108, 54396), (113, 54390), (121, 54363),

Gene: UncleHowie_60 Start: 54191, Stop: 53733, Start Num: 35
Candidate Starts for UncleHowie_60:
(Start: 35 @54191 has 346 MA's), (49, 54095), (50, 54086), (66, 54011), (75, 53939), (106, 53873), (108, 53867), (113, 53861), (121, 53834),

Gene: Usavi_61 Start: 54859, Stop: 54401, Start Num: 35
Candidate Starts for Usavi_61:
(Start: 35 @54859 has 346 MA's), (49, 54763), (50, 54754), (66, 54679), (75, 54607), (106, 54541), (108, 54535), (113, 54529), (121, 54502),

Gene: Vaishali24_60 Start: 54394, Stop: 53936, Start Num: 35
Candidate Starts for Vaishali24_60:
(Start: 35 @54394 has 346 MA's), (49, 54298), (50, 54289), (66, 54214), (75, 54142), (106, 54076), (108, 54070), (113, 54064), (121, 54037), (150, 53968),

Gene: Valjean_61 Start: 54716, Stop: 54258, Start Num: 35
Candidate Starts for Valjean_61:
(Start: 35 @54716 has 346 MA's), (49, 54620), (50, 54611), (66, 54536), (75, 54464), (106, 54398), (108, 54392), (113, 54386), (121, 54359),

Gene: Vaticameos_58 Start: 53024, Stop: 52566, Start Num: 35
Candidate Starts for Vaticameos_58:
(Start: 35 @53024 has 346 MA's), (49, 52928), (50, 52919), (66, 52844), (75, 52772), (106, 52706), (108, 52700), (113, 52694), (121, 52667),

Gene: Vectra_63 Start: 54842, Stop: 54384, Start Num: 35
Candidate Starts for Vectra_63:
(Start: 35 @54842 has 346 MA's), (49, 54746), (50, 54737), (66, 54662), (75, 54590), (106, 54524), (108, 54518), (113, 54512), (121, 54485),

Gene: Veritas_63 Start: 54854, Stop: 54396, Start Num: 35
Candidate Starts for Veritas_63:
(Start: 35 @54854 has 346 MA's), (49, 54758), (50, 54749), (66, 54674), (75, 54602), (106, 54536), (108, 54530), (113, 54524), (121, 54497),

Gene: Vic9_00059 Start: 54201, Stop: 53710, Start Num: 37
Candidate Starts for Vic9_00059:
(Start: 37 @54201 has 36 MA's), (42, 54168), (49, 54108), (58, 54066), (66, 54063), (69, 54033), (74, 53994), (75, 53991), (76, 53988), (102, 53913), (114, 53874), (115, 53868), (121, 53850), (135, 53817), (142, 53799), (154, 53754),

Gene: Vincenzo_58 Start: 56434, Stop: 55724, Start Num: 27
Candidate Starts for Vincenzo_58:
(Start: 27 @56434 has 6 MA's), (Start: 36 @56416 has 1 MA's), (40, 56410), (49, 56320), (59, 56272), (64, 56266), (74, 56197), (75, 56194), (95, 56143), (103, 56131), (119, 56074), (157, 55966), (159, 55960), (167, 55924), (171, 55903), (176, 55888), (183, 55843), (184, 55825), (190, 55735),

Gene: Virapocalypse_62 Start: 54815, Stop: 54357, Start Num: 35
Candidate Starts for Virapocalypse_62:

(Start: 35 @54815 has 346 MA's), (49, 54719), (50, 54710), (66, 54635), (75, 54563), (106, 54497), (108, 54491), (113, 54485), (121, 54458),

Gene: Virgeve_61 Start: 54452, Stop: 53994, Start Num: 35
Candidate Starts for Virgeve_61:
(Start: 35 @54452 has 346 MA's), (49, 54356), (50, 54347), (66, 54272), (75, 54200), (106, 54134), (108, 54128), (113, 54122), (121, 54095),

Gene: Vista_61 Start: 54492, Stop: 54034, Start Num: 35
Candidate Starts for Vista_61:
(Start: 35 @54492 has 346 MA's), (49, 54396), (50, 54387), (66, 54312), (75, 54240), (106, 54174), (108, 54168), (113, 54162), (121, 54135),

Gene: Vivaldi_63 Start: 54950, Stop: 54492, Start Num: 35
Candidate Starts for Vivaldi_63:
(Start: 35 @54950 has 346 MA's), (49, 54854), (50, 54845), (66, 54770), (75, 54698), (106, 54632), (108, 54626), (113, 54620), (121, 54593),

Gene: Vortex_61 Start: 54474, Stop: 54016, Start Num: 35
Candidate Starts for Vortex_61:
(Start: 35 @54474 has 346 MA's), (49, 54378), (50, 54369), (66, 54294), (75, 54222), (106, 54156), (108, 54150), (113, 54144), (121, 54117),

Gene: Wallhey_62 Start: 54596, Stop: 54132, Start Num: 35
Candidate Starts for Wallhey_62:
(Start: 35 @54596 has 346 MA's), (49, 54500), (50, 54491), (66, 54416), (75, 54344), (106, 54278), (108, 54272), (113, 54266), (121, 54239),

Gene: Waterdiva_61 Start: 54853, Stop: 54395, Start Num: 35
Candidate Starts for Waterdiva_61:
(Start: 35 @54853 has 346 MA's), (49, 54757), (50, 54748), (66, 54673), (75, 54601), (106, 54535), (108, 54529), (113, 54523), (121, 54496),

Gene: Weher20_61 Start: 55296, Stop: 54838, Start Num: 35
Candidate Starts for Weher20_61:
(Start: 35 @55296 has 346 MA's), (49, 55200), (50, 55191), (66, 55116), (75, 55044), (106, 54978), (108, 54972), (113, 54966), (121, 54939),

Gene: West99_59 Start: 53499, Stop: 53011, Start Num: 37
Candidate Starts for West99_59:
(22, 53601), (Start: 37 @53499 has 36 MA's), (42, 53466), (49, 53406), (58, 53364), (66, 53361), (69, 53331), (74, 53292), (75, 53289), (76, 53286), (102, 53211), (114, 53172), (115, 53166), (121, 53148), (135, 53115), (142, 53097), (154, 53052),

Gene: Windsor_61 Start: 55039, Stop: 54581, Start Num: 35
Candidate Starts for Windsor_61:
(Start: 35 @55039 has 346 MA's), (49, 54943), (50, 54934), (66, 54859), (75, 54787), (106, 54721), (108, 54715), (113, 54709), (121, 54682),

Gene: Wooper_56 Start: 48938, Stop: 48363, Start Num: 34
Candidate Starts for Wooper_56:
(Start: 34 @48938 has 20 MA's), (46, 48857), (70, 48719), (109, 48587), (110, 48584), (128, 48530), (134, 48524), (152, 48464), (163, 48419),

Gene: Xavier_60 Start: 54481, Stop: 54023, Start Num: 35
Candidate Starts for Xavier_60:
(Start: 35 @54481 has 346 MA's), (49, 54385), (50, 54376), (66, 54301), (75, 54229), (106, 54163), (108, 54157), (113, 54151), (121, 54124),

Gene: Yago84_51 Start: 46827, Stop: 46351, Start Num: 30
Candidate Starts for Yago84_51:
(Start: 30 @46827 has 4 MA's), (49, 46716), (53, 46689), (74, 46578), (129, 46452), (144, 46413),

Gene: Yahalom_60 Start: 54813, Stop: 54364, Start Num: 35
Candidate Starts for Yahalom_60:
(9, 55206), (11, 55080), (12, 55062), (Start: 18 @54948 has 2 MA's), (19, 54927), (Start: 34 @54816 has 20 MA's), (Start: 35 @54813 has 346 MA's), (49, 54717), (66, 54651), (69, 54621), (75, 54579), (86, 54549), (88, 54546), (92, 54537), (98, 54522), (116, 54489),

Gene: Yeshua_56 Start: 48915, Stop: 48340, Start Num: 34
Candidate Starts for Yeshua_56:
(Start: 34 @48915 has 20 MA's), (46, 48834), (70, 48696), (109, 48564), (110, 48561), (128, 48507), (134, 48501), (152, 48441), (163, 48396),

Gene: Yinz_62 Start: 54877, Stop: 54386, Start Num: 34
Candidate Starts for Yinz_62:
(Start: 34 @54877 has 20 MA's), (Start: 35 @54874 has 346 MA's), (49, 54778), (66, 54712), (69, 54682), (86, 54610), (88, 54607), (92, 54598), (98, 54583), (116, 54526),

Gene: Yoshand_63 Start: 54767, Stop: 54309, Start Num: 35
Candidate Starts for Yoshand_63:
(Start: 35 @54767 has 346 MA's), (49, 54671), (50, 54662), (66, 54587), (75, 54515), (106, 54449), (108, 54443), (113, 54437), (121, 54410),

Gene: YouGoGlencoco_62 Start: 54719, Stop: 54261, Start Num: 35
Candidate Starts for YouGoGlencoco_62:
(Start: 35 @54719 has 346 MA's), (49, 54623), (50, 54614), (66, 54539), (75, 54467), (106, 54401), (108, 54395), (113, 54389), (121, 54362),

Gene: Zaider_62 Start: 54960, Stop: 54502, Start Num: 35
Candidate Starts for Zaider_62:
(Start: 35 @54960 has 346 MA's), (49, 54864), (50, 54855), (66, 54780), (75, 54708), (106, 54642), (108, 54636), (113, 54630), (121, 54603),

Gene: Zelda_62 Start: 55121, Stop: 54663, Start Num: 35
Candidate Starts for Zelda_62:
(Start: 35 @55121 has 346 MA's), (49, 55025), (50, 55016), (66, 54941), (75, 54869), (106, 54803), (108, 54797), (113, 54791), (121, 54764),

Gene: Zenteno07_64 Start: 54876, Stop: 54409, Start Num: 29
Candidate Starts for Zenteno07_64:
(3, 55491), (6, 55386), (16, 55005), (Start: 29 @54876 has 3 MA's), (69, 54678), (72, 54645), (75, 54636), (130, 54504),

Gene: Zonia_63 Start: 55047, Stop: 54583, Start Num: 35
Candidate Starts for Zonia_63:

(Start: 35 @55047 has 346 MA's), (49, 54951), (50, 54942), (66, 54867), (75, 54795), (106, 54729), (108, 54723), (113, 54717), (121, 54690),