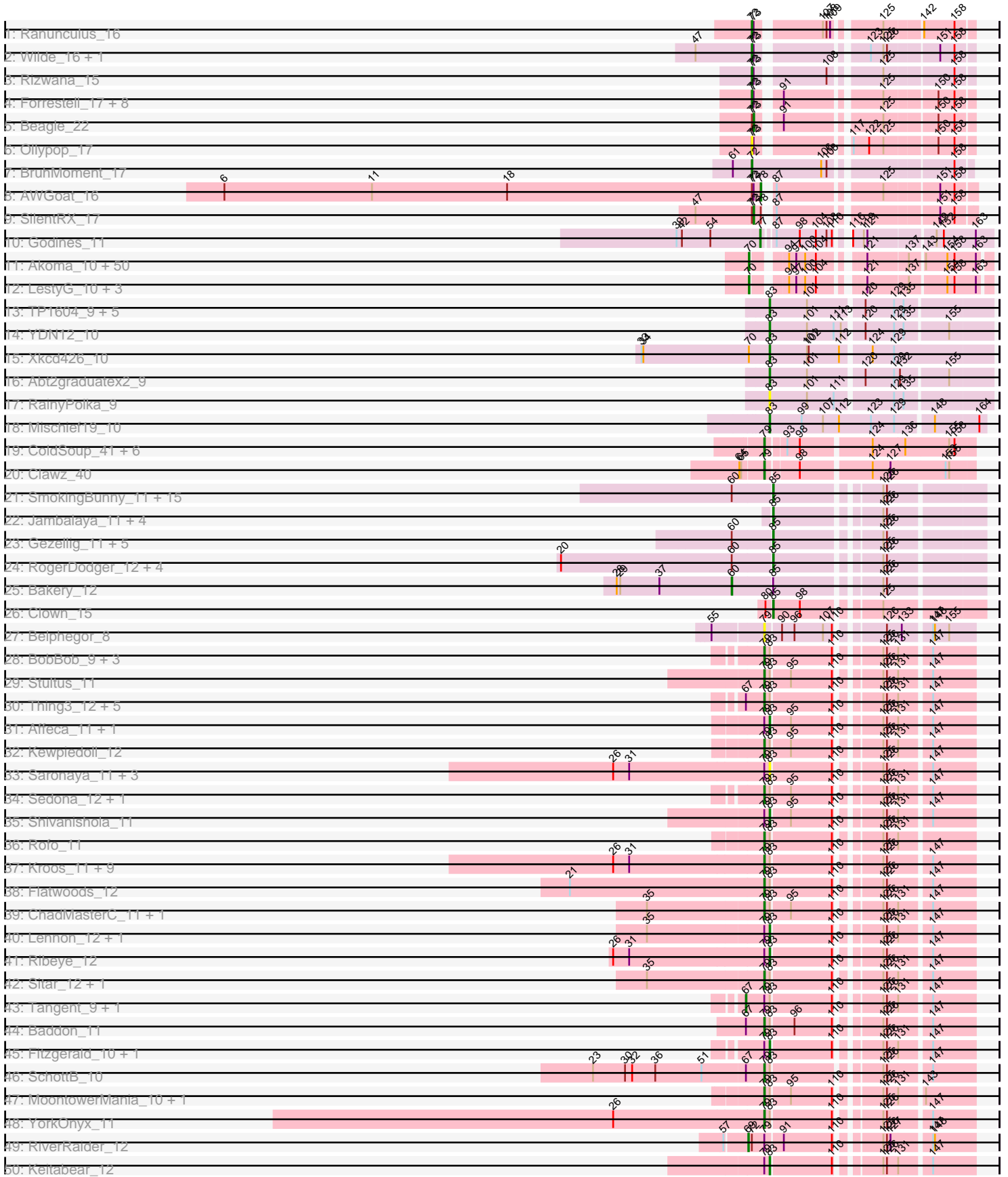
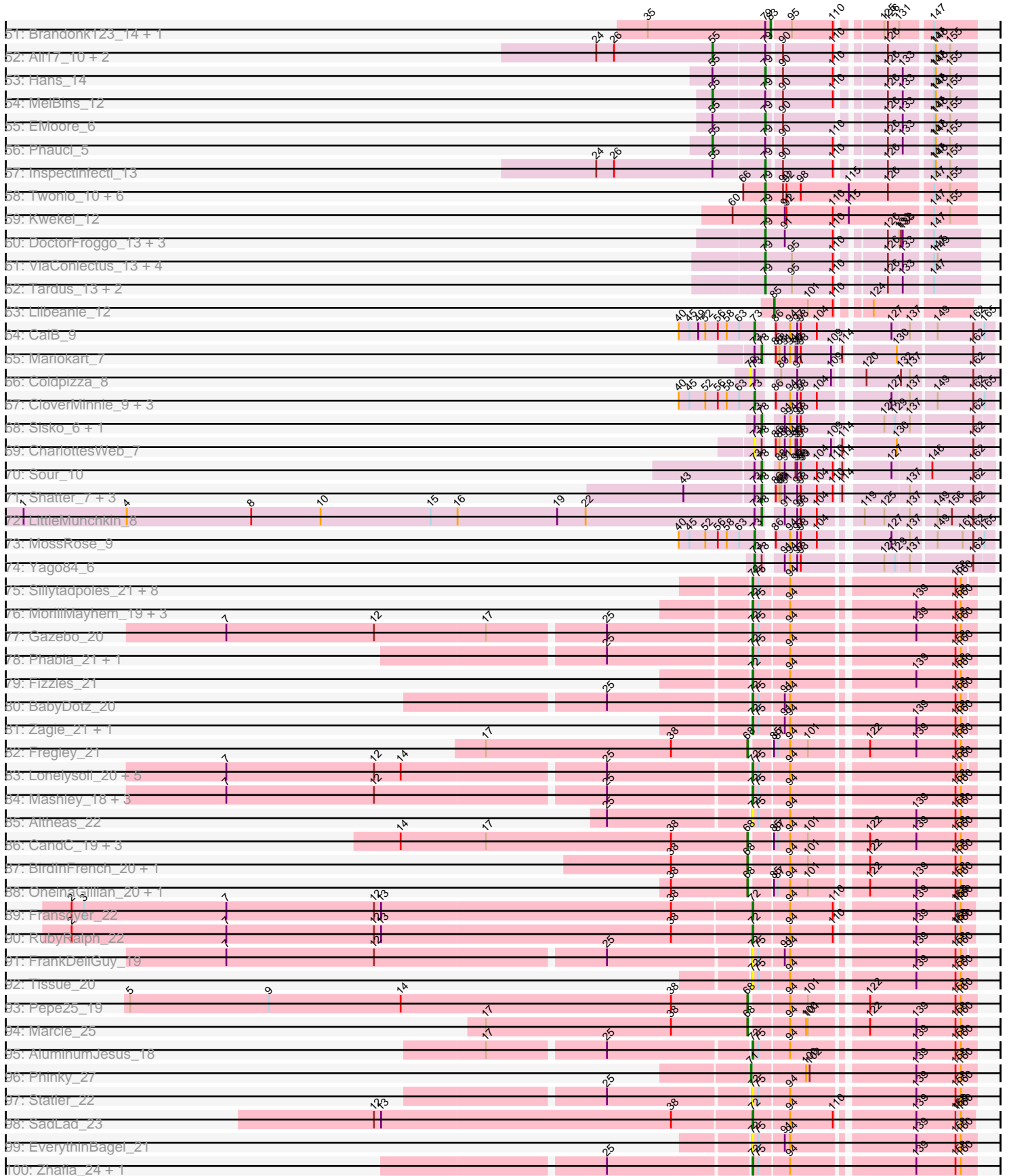


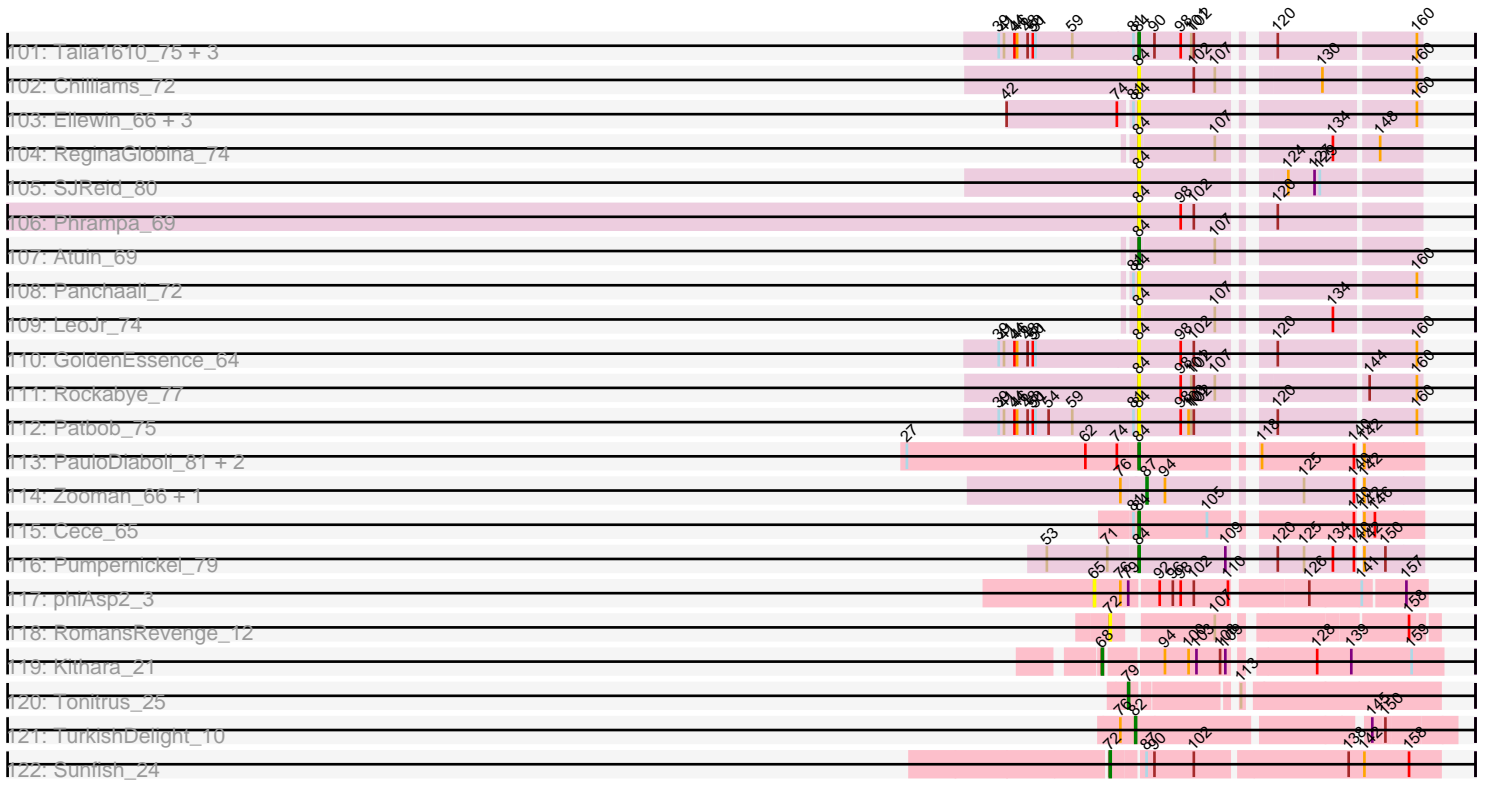
Pham 215752



Pham 215752



Pham 215752



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 215752 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215752 has 312 members, 72 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_16
- Track 2 : Wilde_16, Tank_16
- Track 3 : Rizwana_15
- Track 4 : Forrestell_17, NyleyClemson_18, MellowYellow_18, Pointis_21, Odyssey395_23, Pureglobe5_23, RazzB_16, DogYard_20, Kubulix_21
- Track 5 : Beagle_22
- Track 6 : Ollypop_17
- Track 7 : BruhMoment_17
- Track 8 : AWGoat_16
- Track 9 : SilentRX_17
- Track 10 : Godines_11
- Track 11 : Akoma_10, Marley1013_10, Gervas_10, OrangeOswald_10, HarveySr_10, Deenasa_10, MmasiCarm_10, Yinz_10, Tydolla_10, SynergyX_10, Heathcliff_10, Corofin_10, Nozo_10, Kronus_9, Bernardo_10, TinyTerror_10, Casbah_9, Chentzyk_9, Rita1961_10, Gadget_11, Yahalom_10, Philly_9, GlenHope_11, Devonte_10, RagingRooster_10, Chandler_10, Baloo_10, Chalmers_10, Morty007_10, Phaedrus_9, Phlyer_10, Audrey_10, Briakila_10, Obutu_10, Pipefish_10, Neos5_10, Ben11_9, Marlia_10, Phayeta_10, Jackstina_9, Daisy_10, SlippinJimmy_10, Olivio_9, Shenandoah_10, Halfpint_9, RomaT_10, ChaChing_10, Kamiyu_10, Abinghost_10, Compostia_10, Mortcellus_9
- Track 12 : LestyG_10, Athena_11, SwainyDoc_10, Glubnar_10
- Track 13 : TP1604_9, Asis_9, BabyGotBac_9, Salete_9, Maih_9, BayC_9
- Track 14 : YDN12_10
- Track 15 : Xkcd426_10
- Track 16 : Abt2graduatex2_9
- Track 17 : RainyPolka_9
- Track 18 : Mischief19_10
- Track 19 : ColdSoup_41, Jollymon_41, Soos_36, Sting_39, DonTron_40, Amo99_41, KingstonB_40
- Track 20 : Clawz_40
- Track 21 : SmokingBunny_11, Salvador_11, Twister6_11, Arri_12, Danyall_11, VanDeWege_12, PinkCoffee_11, Nubi_11, Fugax_11, Togo_11, Mutzi_11, Evamon_11, KimmyK_11, ClamChowder_11, CoveyB_11, Barb_11
- Track 22 : Jambalaya_11, Savbucketdawg_11, TillyBobJoe_11, Shinji_11, Portcullis_11
- Track 23 : Gezellig_11, Phlop_11, Egi03_12, Wizard_11, Fireball_12, PullumCavea_11

- Track 24 : RogerDodger_12, CherryCola_13, YungMoney_11, Valary_12, Halo3_12
- Track 25 : Bakery_12
- Track 26 : Clown_15
- Track 27 : Belphegor_8
- Track 28 : BobBob_9, Sanjuju_10, Angelicage_11, Jabberwocky_10
- Track 29 : Stultus_11
- Track 30 : Thing3_12, Kamashten_12, Charming_9, Fosterous_9, Galadriel_13, Nordenberg_6
- Track 31 : Affeca_11, McKinley_12
- Track 32 : Kewpiedoll_12
- Track 33 : Saronaya_11, Tycho_11, Kwobi_11, Gustavo_11
- Track 34 : Sedona_12, Bibwit_11
- Track 35 : Shivanishola_11
- Track 36 : Rofo_11
- Track 37 : Kroos_11, Derg_7, StorminNorm_11, Gaea_11, Ashertheman_11, Baumdotcom_11, Tangerine_11, LilHam_9, Bizzy_12, JKSyngboy_10
- Track 38 : Flatwoods_12
- Track 39 : ChadMasterC_11, Barsten_12
- Track 40 : Lennon_12, FuegoCuervo_15
- Track 41 : Ribeye_12
- Track 42 : Sitar_12, Vivi2_10
- Track 43 : Tangent_9, Paries_12
- Track 44 : Baddon_11
- Track 45 : Fitzgerald_10, Ailee_11
- Track 46 : SchottB_10
- Track 47 : MoontowerMania_10, Love_13
- Track 48 : YorkOnyx_11
- Track 49 : RiverRaider_12
- Track 50 : Keitabear_12
- Track 51 : Brandonk123_14, Geodirt_11
- Track 52 : Ali17_10, Phinally_12, Leonard_12
- Track 53 : Hans_14
- Track 54 : MelBins_12
- Track 55 : EMoore_6
- Track 56 : Phauci_5
- Track 57 : Inspectinfecti_13
- Track 58 : Twonlo_10, Tiamoceli_13, Chickadee_12, RoadKill_10, EdmundFerry_11, GTE6_13, Dextert_13
- Track 59 : Kwekel_12
- Track 60 : DoctorFroggo_13, Verity_13, Zipp_13, Delrey21_13
- Track 61 : ViaConlectus_13, Natkenzie_13, Sampson_13, Scioto_13, Abblin_13
- Track 62 : Tardus_13, APunk_14, Zitch_14
- Track 63 : Lilbeanie_12
- Track 64 : CaiB_9
- Track 65 : Mariokart_7
- Track 66 : Coldpizza_8
- Track 67 : CloverMinnie_9, Wooper_9, MakoManhole_9, AnarQue_9
- Track 68 : Sisko_6, AnClar_6
- Track 69 : CharlottesWeb_7
- Track 70 : Sour_10
- Track 71 : Shatter_7, Axumite_7, Fresco_7, Ligma_7
- Track 72 : LittleMunchkin_8
- Track 73 : MossRose_9

- Track 74 : Yago84_6
- Track 75 : Sillytadpoles_21, Grassboy_22, StrawberryJamm_23, Rudy_19, Quammi_19, Viceroy_20, Kyva_23, Mentos_25, Teehee_22
- Track 76 : MorillMayhem_19, Nike_21, Blab_18, Squash_23
- Track 77 : Gazebo_20
- Track 78 : Phabia_21, Judebell_23
- Track 79 : Fizzles_21
- Track 80 : BabyDotz_20
- Track 81 : Zagie_21, Rowlf_17
- Track 82 : Fregley_21
- Track 83 : Lonelysoil_20, Casend_22, Wheelie_20, Jehoshaphat_23, DonaldDuck_21, Wayne3_22
- Track 84 : Mashley_18, Llemily_21, Hyperion_19, SallyK_22
- Track 85 : Altheas_22
- Track 86 : CandC_19, Kelcole_19, Romm_21, RobinRose_21
- Track 87 : BirdInFrench_20, Wilca_20
- Track 88 : OneinaGillian_20, Tempo_20
- Track 89 : Fransoyer_22
- Track 90 : RubyRalph_22
- Track 91 : FrankDeliGuy_19
- Track 92 : Tissue_20
- Track 93 : Pepe25_19
- Track 94 : Marcie_25
- Track 95 : AluminumJesus_18
- Track 96 : Phinky_27
- Track 97 : Statler_22
- Track 98 : SadLad_23
- Track 99 : EverythinBagel_21
- Track 100 : Zhafia_24, Namago_21
- Track 101 : Talia1610_75, Racecar_76, Mimi_75, Bloom_79
- Track 102 : Chilliams_72
- Track 103 : Ellewin_66, DunneganBoMo_68, WaddleDee_68, KSunshine22_69
- Track 104 : ReginaGlobina_74
- Track 105 : SJReid_80
- Track 106 : Phrampa_69
- Track 107 : Atuin_69
- Track 108 : Panchaali_72
- Track 109 : LeoJr_74
- Track 110 : GoldenEssence_64
- Track 111 : Rockabye_77
- Track 112 : Patbob_75
- Track 113 : PauloDiaboli_81, Dodo_81, A3Wally_81
- Track 114 : Zooman_66, Big4_70
- Track 115 : Cece_65
- Track 116 : Pumpernickel_79
- Track 117 : phiAsp2_3
- Track 118 : RomansRevenge_12
- Track 119 : Kithara_21
- Track 120 : Tonitrus_25
- Track 121 : TurkishDelight_10
- Track 122 : Sunfish_24

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

The start number called the most often in the published annotations is 79, it was called in 55 of the 240 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- APunk_14, Abblin_13, Amo99_41, Angelicage_11, Ashertheman_11, Baddon_11, Barsten_12, Baumdotcom_11, Belphegor_8, Bibwit_11, Bizzy_12, BobBob_9, ChadMasterC_11, Charming_9, Chickadee_12, Clawz_40, ColdSoup_41, Delrey21_13, Derg_7, Dexpert_13, DoctorFroggo_13, DonTron_40, EMOore_6, EdmundFerry_11, Flatwoods_12, Fosterous_9, GTE6_13, Gaea_11, Galadriel_13, Hans_14, Inspectinfecti_13, JKSyngboy_10, Jabberwocky_10, Jollymon_41, Kamashten_12, Kewpiedoll_12, KingstonB_40, Kroos_11, Kwekel_12, LilHam_9, Love_13, MoontowerMania_10, Natkenzie_13, Nordenberg_6, RoadKill_10, Rofo_11, Sampson_13, Sanjuju_10, SchottB_10, Scioto_13, Sedona_12, Sitar_12, Soos_36, Sting_39, StorminNorm_11, Stultus_11, Tangerine_11, Tardus_13, Thing3_12, Tiamoceli_13, Tonitrus_25, Twonlo_10, Verity_13, ViaConlectus_13, Vivi2_10, YorkOnyx_11, Zipp_13, Zitch_14,

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

- Affeca_11, Ailee_11, Ali17_10, Brandonk123_14, Fitzgerald_10, FuegoCuervo_15, Geodirt_11, Gustavo_11, Keitabear_12, Kwobi_11, Lennon_12, Leonard_12, McKinley_12, MelBins_12, Paries_12, Phauci_5, Phinally_12, Ribeye_12, RiverRaider_12, Saronaya_11, Shivanishola_11, Tangent_9, Tycho_11, phiAsp2_3,

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

- A3Wally_81, AWGoat_16, Abinghost_10, Abt2graduatex2_9, Akoma_10, Altheas_22, AluminumJesus_18, AnClar_6, AnarQue_9, Arri_12, Asis_9, Athena_11, Atuin_69, Audrey_10, Axumite_7, BabyDotz_20, BabyGotBac_9, Bakery_12, Baloo_10, Barb_11, BayC_9, Beagle_22, Ben11_9, Bernardo_10, Big4_70, BirdInFrench_20, Blab_18, Bloom_79, Briakila_10, BruhMoment_17, CaiB_9, CandC_19, Casbah_9, Casend_22, Cece_65, ChaChing_10, Chalmers_10, Chandler_10, CharlottesWeb_7, Chentzyk_9, CherryCola_13, Chilliams_72, ClamChowder_11, CloverMinnie_9, Clown_15, Coldpizza_8, Compostia_10, Corofin_10, CoveyB_11, Daisy_10, Danyall_11, Deenasa_10, Devonte_10, Dodo_81, DogYard_20, DonaldDuck_21, DunneganBoMo_68, Egi03_12, Ellewin_66, Evamon_11, EverythinBagel_21, Fireball_12, Fizzles_21, Forrestell_17, FrankDeliGuy_19, Fransoyer_22, Fregley_21, Fresco_7, Fugax_11, Gadget_11, Gazebo_20, Gervas_10, Gezellig_11, GlenHope_11, Glubnar_10, Godines_11, GoldenEssence_64, Grassboy_22, Halfpint_9, Halo3_12, HarveySr_10, Heathcliff_10, Hyperion_19, Jackstina_9, Jambalaya_11, Jehoshaphat_23, Judebell_23, KSunshine22_69, Kamiyu_10, Kelcole_19, KimmyK_11, Kithara_21, Kronus_9, Kubulix_21, Kyva_23, LeoJr_74, LestyG_10, Ligma_7, Lilbeanie_12, LittleMunchkin_8, Llemily_21, Lonelysoil_20, Maih_9, MakoManhole_9, Marcie_25, Mariokart_7, Marley1013_10, Marlia_10, Mashley_18, MellowYellow_18, Mentos_25, Mimi_75, Mischief19_10, MmasiCarm_10, MorillMayhem_19, Mortcellus_9, Morty007_10, MossRose_9, Mutzi_11, Namago_21, Neos5_10, Nike_21, Nozo_10, Nubi_11, NyleyClemson_18, Obutu_10, Odyssey395_23, Olivio_9, Ollypop_17, OneinaGillian_20, OrangeOswald_10, Panchaali_72, Patbob_75, PauloDiaboli_81, Pepe25_19, Phabia_21, Phaedruss_9, Phayeta_10, Philly_9, Phinky_27, Phlop_11, Phlyer_10, Phrampa_69, PinkCoffee_11, Pipefish_10, Pointis_21, Portcullis_11, PullumCavea_11, Pumpernickel_79, Pureglobe5_23, Quammi_19, Racecar_76,

RagingRooster_10, RainyPolka_9, Ranunculus_16, RazzB_16, ReginaGlobina_74, Rita1961_10, Rizwana_15, RobinRose_21, Rockabye_77, RogerDodger_12, RomaT_10, RomansRevenge_12, Romm_21, Rowlf_17, RubyRalph_22, Rudy_19, SJReid_80, SadLad_23, Saletе_9, SallyK_22, Salvador_11, Savbucketdawg_11, Shatter_7, Shenandoah_10, Shinji_11, SilentRX_17, Sillytadpoles_21, Sisko_6, SlippinJimmy_10, SmokingBunny_11, Sour_10, Squash_23, Statler_22, StrawberryJamm_23, Sunfish_24, SwainyDoc_10, SynergyX_10, TP1604_9, Talia1610_75, Tank_16, Teehee_22, Tempo_20, TillyBobJoe_11, TinyTerror_10, Tissue_20, Togo_11, TurkishDelight_10, Twister6_11, Tydolla_10, Valary_12, VanDeWege_12, Viceroy_20, WaddleDee_68, Wayne3_22, Wheelie_20, Wilca_20, Wilde_16, Wizard_11, Wooper_9, Xkcd426_10, YDN12_10, Yago84_6, Yahalom_10, Yinz_10, YungMoney_11, Zagie_21, Zhafia_24, Zooman_66,

Summary by start number:

Start 55:

- Found in 9 of 312 (2.9%) of genes in pham
- Manual Annotations of this start: 5 of 240
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Ali17_10 (DE2), Leonard_12 (DE2), MelBins_12 (DE2), Phauci_5 (DE2), Phinally_12 (DE2),

Start 60:

- Found in 29 of 312 (9.3%) of genes in pham
- Manual Annotations of this start: 1 of 240
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Bakery_12 (DC1),

Start 65:

- Found in 2 of 312 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: phiAsp2_3 (singleton),

Start 67:

- Found in 10 of 312 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 240
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Paries_12 (DE1), Tangent_9 (DE1),

Start 68:

- Found in 12 of 312 (3.8%) of genes in pham
- Manual Annotations of this start: 11 of 240
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdInFrench_20 (EG), CandC_19 (EG), Fregley_21 (EG), Kelcole_19 (EG), Kithara_21 (singleton), Marcie_25 (EG), OneinaGillian_20 (EG), Pepe25_19 (EG), RobinRose_21 (EG), Romm_21 (EG), Tempo_20 (EG), Wilca_20 (EG),

Start 69:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 240
- Called 100.0% of time when present

- Phage (with cluster) where this start called: RiverRaider_12 (DE1),

Start 70:

- Found in 57 of 312 (18.3%) of genes in pham
- Manual Annotations of this start: 45 of 240
- Called 98.2% of time when present
- Phage (with cluster) where this start called: Abinghost_10 (B3), Akoma_10 (B3), Athena_11 (B3), Audrey_10 (B3), Baloo_10 (B3), Ben11_9 (B3), Bernardo_10 (B3), Briakila_10 (B3), Casbah_9 (B3), ChaChing_10 (B3), Chalmers_10 (B3), Chandler_10 (B3), Chentzyk_9 (B3), Coldpizza_8 (DR), Compostia_10 (B3), Corofin_10 (B3), Daisy_10 (B3), Deenasa_10 (B3), Devonte_10 (B3), Gadget_11 (B3), Gervas_10 (B3), GlenHope_11 (B3), Glubnar_10 (B3), Halfpint_9 (B3), HarveySr_10 (B3), Heathcliff_10 (B3), Jackstina_9 (B3), Kamiyu_10 (B3), Kronus_9 (B3), LestyG_10 (B3), Marley1013_10 (B3), Marlia_10 (B3), MmasiCarm_10 (B3), Mortcellus_9 (B3), Morty007_10 (B3), Neos5_10 (B3), Nozo_10 (B3), Obutu_10 (B3), Olivio_9 (B3), OrangeOswald_10 (B3), Phaedrus_9 (B3), Phayeta_10 (B3), Philly_9 (B3), Phlyer_10 (B3), Pipefish_10 (B3), RagingRooster_10 (B3), Rita1961_10 (B3), RomaT_10 (B3), Shenandoah_10 (B3), SlippinJimmy_10 (B3), SwainyDoc_10 (B3), SynergyX_10 (B3), TinyTerror_10 (B3), Tydolla_10 (B3), Yahalom_10 (B3), Yinz_10 (B3),

Start 71:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 240
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Phinky_27 (EG),

Start 72:

- Found in 62 of 312 (19.9%) of genes in pham
- Manual Annotations of this start: 39 of 240
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Altheas_22 (EG), AluminumJesus_18 (EG), BabyDotz_20 (EG), Blab_18 (EG), BruhMoment_17 (AP3), Casend_22 (EG), DogYard_20 (AP2), DonaldDuck_21 (EG), EverythinBagel_21 (EG), Fizzles_21 (EG), Forrestell_17 (AP2), FrankDeliGuy_19 (EG), Fransoyer_22 (EG), Gazebo_20 (EG), Grassboy_22 (EG), Hyperion_19 (EG), Jehoshaphat_23 (EG), Judebell_23 (EG), Kubulix_21 (AP2), Kyva_23 (EG), Llemily_21 (EG), Lonelysoil_20 (EG), Mashley_18 (EG), MellowYellow_18 (AP2), Mentos_25 (EG), MorillMayhem_19 (EG), Namago_21 (EG), Nike_21 (EG), NyleyClemson_18 (AP2), Odyssey395_23 (AP2), Ollypop_17 (AP2), Phabia_21 (EG), Pointis_21 (AP2), Pureglobe5_23 (AP2), Quammi_19 (EG), Ranunculus_16 (AP), RazzB_16 (AP2), Rizwana_15 (AP1), RomansRevenge_12 (singleton), Rowlf_17 (EG), RubyRalph_22 (EG), Rudy_19 (EG), SadLad_23 (EG), SallyK_22 (EG), Sillytadpoles_21 (EG), Squash_23 (EG), Statler_22 (EG), StrawberryJamm_23 (EG), Sunfish_24 (singleton), Tank_16 (AP1), Teehee_22 (EG), Tissue_20 (EG), Viceroy_20 (EG), Wayne3_22 (EG), Wheelie_20 (EG), Wilde_16 (AP1), Zagie_21 (EG), Zhafia_24 (EG),

Start 73:

- Found in 35 of 312 (11.2%) of genes in pham
- Manual Annotations of this start: 9 of 240
- Called 28.6% of time when present
- Phage (with cluster) where this start called: AnarQue_9 (DR), Beagle_22 (AP2), CaiB_9 (DR), CharlottesWeb_7 (DR), CloverMinnie_9 (DR), MakoManhole_9 (DR),

MossRose_9 (DR), SilentRX_17 (AP4), Wooper_9 (DR), Yago84_6 (DR),

Start 77:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 240
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Godines_11 (B2),

Start 78:

- Found in 13 of 312 (4.2%) of genes in pham
- Manual Annotations of this start: 10 of 240
- Called 76.9% of time when present
- Phage (with cluster) where this start called: AWGoat_16 (AP4), AnClar_6 (DR), Axumite_7 (DR), Fresco_7 (DR), Ligma_7 (DR), LittleMunchkin_8 (DR), Mariokart_7 (DR), Shatter_7 (DR), Sisko_6 (DR), Sour_10 (DR),

Start 79:

- Found in 92 of 312 (29.5%) of genes in pham
- Manual Annotations of this start: 55 of 240
- Called 73.9% of time when present
- Phage (with cluster) where this start called: APunk_14 (DE4), Abblin_13 (DE4), Amo99_41 (CP), Angelicage_11 (DE1), Ashertheman_11 (DE1), Baddon_11 (DE1), Barsten_12 (DE1), Baumdotcom_11 (DE1), Belphegor_8 (DE), Bibwit_11 (DE1), Bizzy_12 (DE1), BobBob_9 (DE1), ChadMasterC_11 (DE1), Charming_9 (DE1), Chickadee_12 (DE3), Clawz_40 (CP), ColdSoup_41 (CP), Delrey21_13 (DE4), Derg_7 (DE1), Dexdert_13 (DE3), DoctorFroggo_13 (DE4), DonTron_40 (CP), EMOore_6 (DE2), EdmundFerry_11 (DE3), Flatwoods_12 (DE1), Fosterous_9 (DE1), GTE6_13 (DE3), Gaea_11 (DE1), Galadriel_13 (DE1), Hans_14 (DE2), Inspectinfecti_13 (DE2), JKSyngboy_10 (DE1), Jabberwocky_10 (DE1), Jollymon_41 (CP), Kamashten_12 (DE1), Kewpiedoll_12 (DE1), KingstonB_40 (CP), Kroos_11 (DE1), Kwekel_12 (DE3), LilHam_9 (DE1), Love_13 (DE1), MoontowerMania_10 (DE1), Natkenzie_13 (DE4), Nordenberg_6 (DE1), RoadKill_10 (DE3), Rofo_11 (DE1), Sampson_13 (DE4), Sanjuju_10 (DE1), SchottB_10 (DE1), Scioto_13 (DE4), Sedona_12 (DE1), Sitar_12 (DE1), Soos_36 (CP), Sting_39 (CP), StorminNorm_11 (DE1), Stultus_11 (DE1), Tangerine_11 (DE1), Tardus_13 (DE4), Thing3_12 (DE1), Tiamoceli_13 (DE3), Tonitrus_25 (singleton), Twonlo_10 (DE3), Verity_13 (DE4), ViaConlectus_13 (DE4), Vivi2_10 (DE1), YorkOnyx_11 (DE1), Zipp_13 (DE4), Zitch_14 (DE4),

Start 82:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 240
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TurkishDelight_10 (singleton),

Start 83:

- Found in 63 of 312 (20.2%) of genes in pham
- Manual Annotations of this start: 20 of 240
- Called 41.3% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_9 (BG), Affeca_11 (DE1), Ailee_11 (DE1), Asis_9 (BG), BabyGotBac_9 (BG), BayC_9 (BG), Brandonk123_14 (DE1), Fitzgerald_10 (DE1), FuegoCuervo_15 (DE1), Geodirt_11 (DE1), Gustavo_11 (DE1), Keitabear_12 (DE1), Kwobi_11 (DE1), Lennon_12 (DE1),

Maih_9 (BG), McKinley_12 (DE1), Mischief19_10 (BG), RainyPolka_9 (BG), Ribeye_12 (DE1), Salete_9 (BG), Saronaya_11 (DE1), Shivanishola_11 (DE1), TP1604_9 (BG), Tycho_11 (DE1), Xkcd426_10 (BG), YDN12_10 (BG),

Start 84:

- Found in 23 of 312 (7.4%) of genes in pham
- Manual Annotations of this start: 8 of 240
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_81 (GD1), Atuin_69 (FC), Bloom_79 (FC), Cece_65 (GD3), Chilliams_72 (FC), Dodo_81 (GD1), DunneganBoMo_68 (FC), Ellewin_66 (FC), GoldenEssence_64 (FC), KSunshine22_69 (FC), LeoJr_74 (FC), Mimi_75 (FC), Panchaali_72 (FC), Patbob_75 (FC), PauloDiaboli_81 (GD1), Phrampa_69 (FC), Pumpernickel_79 (GD4), Racecar_76 (FC), ReginaGlobina_74 (FC), Rockabye_77 (FC), SJReid_80 (FC), Talia1610_75 (FC), WaddleDee_68 (FC),

Start 85:

- Found in 42 of 312 (13.5%) of genes in pham
- Manual Annotations of this start: 29 of 240
- Called 81.0% of time when present
- Phage (with cluster) where this start called: Arri_12 (DC1), Barb_11 (DC1), CherryCola_13 (DC1), ClamChowder_11 (DC1), Clown_15 (DC2), CoveyB_11 (DC1), Danyall_11 (DC1), Egi03_12 (DC1), Evamon_11 (DC1), Fireball_12 (DC1), Fugax_11 (DC1), Gezellig_11 (DC1), Halo3_12 (DC1), Jambalaya_11 (DC1), KimmyK_11 (DC1), Lilbeanie_12 (DE5), Mutzi_11 (DC1), Nubi_11 (DC1), Phlop_11 (DC1), PinkCoffee_11 (DC1), Portcullis_11 (DC1), PullumCavea_11 (DC1), RogerDodger_12 (DC1), Salvador_11 (DC1), Savbucketdawg_11 (DC1), Shinji_11 (DC1), SmokingBunny_11 (DC1), TillyBobJoe_11 (DC1), Togo_11 (DC1), Twister6_11 (DC1), Valary_12 (DC1), VanDeWege_12 (DC1), Wizard_11 (DC1), YungMoney_11 (DC1),

Start 87:

- Found in 13 of 312 (4.2%) of genes in pham
- Manual Annotations of this start: 2 of 240
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Big4_70 (GD2), Zooman_66 (GD2),

Summary by clusters:

There are 25 clusters represented in this pham: GD1, singleton, BG, GD4, AP2, AP3, AP1, GD2, AP4, FC, GD3, DR, DE, EG, AP, CP, DC2, DC1, DE1, DE2, DE3, DE4, DE5, B2, B3,

Info for manual annotations of cluster AP:

- Start number 72 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 72 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 72 was manually annotated 4 times for cluster AP2.
- Start number 73 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 72 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 73 was manually annotated 1 time for cluster AP4.
- Start number 78 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster B2:

- Start number 77 was manually annotated 1 time for cluster B2.

Info for manual annotations of cluster B3:

- Start number 70 was manually annotated 45 times for cluster B3.

Info for manual annotations of cluster BG:

- Start number 83 was manually annotated 10 times for cluster BG.

Info for manual annotations of cluster CP:

- Start number 79 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster DC1:

- Start number 60 was manually annotated 1 time for cluster DC1.
- Start number 85 was manually annotated 27 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 85 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 67 was manually annotated 2 times for cluster DE1.
- Start number 69 was manually annotated 1 time for cluster DE1.
- Start number 79 was manually annotated 32 times for cluster DE1.
- Start number 83 was manually annotated 10 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 55 was manually annotated 5 times for cluster DE2.
- Start number 79 was manually annotated 3 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 79 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 79 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 85 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DR:

- Start number 73 was manually annotated 7 times for cluster DR.
- Start number 78 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster EG:

- Start number 68 was manually annotated 10 times for cluster EG.
- Start number 71 was manually annotated 1 time for cluster EG.

•Start number 72 was manually annotated 29 times for cluster EG.

Info for manual annotations of cluster FC:

•Start number 84 was manually annotated 4 times for cluster FC.

Info for manual annotations of cluster GD1:

•Start number 84 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 87 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

•Start number 84 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 84 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_81 Start: 29548, Stop: 29832, Start Num: 84

Candidate Starts for A3Wally_81:

(27, 29287), (62, 29491), (74, 29527), (Start: 84 @29548 has 8 MA's), (118, 29659), (140, 29764), (142, 29767),

Gene: APunk_14 Start: 7109, Stop: 7426, Start Num: 79

Candidate Starts for APunk_14:

(Start: 79 @7109 has 55 MA's), (95, 7151), (110, 7220), (126, 7283), (133, 7307), (147, 7349),

Gene: AWGoat_16 Start: 8424, Stop: 8723, Start Num: 78

Candidate Starts for AWGoat_16:

(6, 7521), (11, 7770), (18, 7998), (Start: 72 @8409 has 39 MA's), (Start: 73 @8412 has 9 MA's), (Start: 78 @8424 has 10 MA's), (Start: 87 @8430 has 2 MA's), (125, 8583), (151, 8667), (158, 8691),

Gene: Abblin_13 Start: 6625, Stop: 6942, Start Num: 79

Candidate Starts for Abblin_13:

(Start: 79 @6625 has 55 MA's), (95, 6667), (110, 6736), (126, 6799), (133, 6823), (147, 6865), (149, 6871),

Gene: Abinghost_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Abinghost_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Abt2graduatex2_9 Start: 7673, Stop: 8023, Start Num: 83

Candidate Starts for Abt2graduatex2_9:

(Start: 83 @7673 has 20 MA's), (101, 7733), (120, 7820), (129, 7868), (132, 7877), (155, 7952),

Gene: Affeca_11 Start: 6351, Stop: 6650, Start Num: 83

Candidate Starts for Affeca_11:

(Start: 79 @6342 has 55 MA's), (Start: 83 @6351 has 20 MA's), (95, 6381), (110, 6450), (125, 6507), (126, 6513), (131, 6531), (147, 6579),

Gene: Ailee_11 Start: 7213, Stop: 7512, Start Num: 83

Candidate Starts for Ailee_11:

(Start: 79 @7204 has 55 MA's), (Start: 83 @7213 has 20 MA's), (110, 7312), (125, 7369), (126, 7375), (131, 7393), (147, 7441),

Gene: Akoma_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Akoma_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Ali17_10 Start: 6021, Stop: 6407, Start Num: 55

Candidate Starts for Ali17_10:

(24, 5826), (26, 5856), (Start: 55 @6021 has 5 MA's), (Start: 79 @6102 has 55 MA's), (90, 6123), (110, 6207), (126, 6270), (147, 6336), (148, 6339), (155, 6363),

Gene: Altheas_22 Start: 8371, Stop: 8715, Start Num: 72

Candidate Starts for Altheas_22:

(25, 8140), (Start: 72 @8371 has 39 MA's), (75, 8380), (94, 8428), (139, 8614), (158, 8680), (160, 8689),

Gene: AluminumJesus_18 Start: 7735, Stop: 8079, Start Num: 72

Candidate Starts for AluminumJesus_18:

(17, 7315), (25, 7504), (Start: 72 @7735 has 39 MA's), (75, 7744), (94, 7792), (139, 7978), (158, 8044), (160, 8053),

Gene: Amo99_41 Start: 17853, Stop: 18179, Start Num: 79

Candidate Starts for Amo99_41:

(Start: 79 @17853 has 55 MA's), (93, 17880), (98, 17901), (124, 18012), (136, 18066), (155, 18138), (158, 18147),

Gene: AnClar_6 Start: 5256, Stop: 5579, Start Num: 78

Candidate Starts for AnClar_6:

(Start: 73 @5244 has 9 MA's), (Start: 78 @5256 has 10 MA's), (91, 5274), (94, 5283), (97, 5295), (98, 5301), (125, 5412), (129, 5430), (137, 5451), (162, 5550),

Gene: AnarQue_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for AnarQue_9:

(40, 6293), (45, 6311), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (162, 6725), (165, 6740),

Gene: Angelicage_11 Start: 6771, Stop: 7079, Start Num: 79

Candidate Starts for Angelicage_11:

(Start: 79 @6771 has 55 MA's), (Start: 83 @6780 has 20 MA's), (110, 6879), (125, 6936), (126, 6942), (131, 6960), (147, 7008),

Gene: Arri_12 Start: 5316, Stop: 5630, Start Num: 85

Candidate Starts for Arri_12:

(Start: 60 @5253 has 1 MA's), (Start: 85 @5316 has 29 MA's), (125, 5472), (126, 5478),

Gene: Ashertheman_11 Start: 5950, Stop: 6258, Start Num: 79

Candidate Starts for Ashertheman_11:

(26, 5698), (31, 5725), (Start: 79 @5950 has 55 MA's), (Start: 83 @5959 has 20 MA's), (110, 6058), (125, 6115), (126, 6121), (147, 6187),

Gene: Asis_9 Start: 7730, Stop: 8080, Start Num: 83

Candidate Starts for Asis_9:

(Start: 83 @7730 has 20 MA's), (101, 7790), (120, 7877), (129, 7925), (135, 7940),

Gene: Athena_11 Start: 6712, Stop: 7047, Start Num: 70

Candidate Starts for Athena_11:

(Start: 70 @6712 has 45 MA's), (94, 6754), (97, 6766), (100, 6781), (104, 6799), (121, 6856), (137, 6922), (154, 6979), (158, 6991), (163, 7027),

Gene: Atuin_69 Start: 30721, Stop: 31002, Start Num: 84

Candidate Starts for Atuin_69:

(Start: 84 @30721 has 8 MA's), (107, 30805),

Gene: Audrey_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Audrey_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Axumite_7 Start: 4953, Stop: 5276, Start Num: 78

Candidate Starts for Axumite_7:

(43, 4833), (Start: 73 @4941 has 9 MA's), (Start: 78 @4953 has 10 MA's), (86, 4959), (88, 4965), (89, 4968), (91, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (137, 5148), (162, 5247),

Gene: BabyDotz_20 Start: 8186, Stop: 8524, Start Num: 72

Candidate Starts for BabyDotz_20:

(25, 7955), (Start: 72 @8186 has 39 MA's), (75, 8195), (91, 8234), (94, 8243), (158, 8495), (160, 8504),

Gene: BabyGotBac_9 Start: 7730, Stop: 8080, Start Num: 83

Candidate Starts for BabyGotBac_9:

(Start: 83 @7730 has 20 MA's), (101, 7790), (120, 7877), (129, 7925), (135, 7940),

Gene: Baddon_11 Start: 6660, Stop: 6968, Start Num: 79

Candidate Starts for Baddon_11:

(Start: 67 @6630 has 2 MA's), (Start: 79 @6660 has 55 MA's), (Start: 83 @6669 has 20 MA's), (96, 6705), (110, 6768), (125, 6825), (126, 6831), (147, 6897),

Gene: Bakery_12 Start: 4954, Stop: 5331, Start Num: 60

Candidate Starts for Bakery_12:

(28, 4762), (29, 4768), (37, 4834), (Start: 60 @4954 has 1 MA's), (Start: 85 @5017 has 29 MA's), (125, 5173), (126, 5179),

Gene: Baloo_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Baloo_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Barb_11 Start: 5272, Stop: 5586, Start Num: 85

Candidate Starts for Barb_11:

(Start: 60 @5209 has 1 MA's), (Start: 85 @5272 has 29 MA's), (125, 5428), (126, 5434),

Gene: Barsten_12 Start: 6156, Stop: 6464, Start Num: 79

Candidate Starts for Barsten_12:

(35, 5964), (Start: 79 @6156 has 55 MA's), (Start: 83 @6165 has 20 MA's), (95, 6195), (110, 6264), (125, 6321), (126, 6327), (131, 6345), (147, 6393),

Gene: Baumdotcom_11 Start: 5973, Stop: 6281, Start Num: 79

Candidate Starts for Baumdotcom_11:

(26, 5721), (31, 5748), (Start: 79 @5973 has 55 MA's), (Start: 83 @5982 has 20 MA's), (110, 6081), (125, 6138), (126, 6144), (147, 6210),

Gene: BayC_9 Start: 7730, Stop: 8080, Start Num: 83

Candidate Starts for BayC_9:

(Start: 83 @7730 has 20 MA's), (101, 7790), (120, 7877), (129, 7925), (135, 7940),

Gene: Beagle_22 Start: 8934, Stop: 9242, Start Num: 73

Candidate Starts for Beagle_22:

(Start: 72 @8931 has 39 MA's), (Start: 73 @8934 has 9 MA's), (91, 8964), (125, 9105), (150, 9186), (158, 9213),

Gene: Belphegor_8 Start: 3927, Stop: 4235, Start Num: 79

Candidate Starts for Belphegor_8:

(Start: 55 @3846 has 5 MA's), (Start: 79 @3927 has 55 MA's), (90, 3951), (96, 3972), (107, 4020), (110, 4035), (126, 4098), (133, 4122), (147, 4164), (148, 4167), (155, 4191),

Gene: Ben11_9 Start: 5797, Stop: 6132, Start Num: 70

Candidate Starts for Ben11_9:

(Start: 70 @5797 has 45 MA's), (94, 5839), (97, 5851), (100, 5866), (104, 5884), (121, 5941), (137, 6007), (143, 6028), (154, 6064), (158, 6076), (163, 6112),

Gene: Bernardo_10 Start: 5977, Stop: 6312, Start Num: 70

Candidate Starts for Bernardo_10:

(Start: 70 @5977 has 45 MA's), (94, 6019), (97, 6031), (100, 6046), (104, 6064), (121, 6121), (137, 6187), (143, 6208), (154, 6244), (158, 6256), (163, 6292),

Gene: Bibwit_11 Start: 7027, Stop: 7335, Start Num: 79

Candidate Starts for Bibwit_11:

(Start: 79 @7027 has 55 MA's), (Start: 83 @7036 has 20 MA's), (95, 7066), (110, 7135), (125, 7192), (126, 7198), (131, 7216), (147, 7264),

Gene: Big4_70 Start: 28857, Stop: 29132, Start Num: 87

Candidate Starts for Big4_70:

(76, 28842), (Start: 87 @28857 has 2 MA's), (94, 28878), (125, 29007), (140, 29064), (142, 29067),

Gene: BirdInFrench_20 Start: 7061, Stop: 7405, Start Num: 68

Candidate Starts for BirdInFrench_20:

(38, 6932), (Start: 68 @7061 has 11 MA's), (94, 7118), (101, 7148), (122, 7226), (158, 7370), (160, 7379),

Gene: Bizzy_12 Start: 6147, Stop: 6455, Start Num: 79

Candidate Starts for Bizzy_12:

(26, 5895), (31, 5922), (Start: 79 @6147 has 55 MA's), (Start: 83 @6156 has 20 MA's), (110, 6255), (125, 6312), (126, 6318), (147, 6384),

Gene: Blab_18 Start: 7511, Stop: 7855, Start Num: 72

Candidate Starts for Blab_18:

(Start: 72 @7511 has 39 MA's), (75, 7520), (94, 7568), (139, 7754), (158, 7820), (160, 7829),

Gene: Bloom_79 Start: 33362, Stop: 33646, Start Num: 84

Candidate Starts for Bloom_79:

(39, 33203), (41, 33209), (44, 33221), (46, 33224), (48, 33236), (50, 33242), (51, 33245), (59, 33287), (81, 33356), (Start: 84 @33362 has 8 MA's), (90, 33380), (98, 33410), (101, 33422), (102, 33425), (120, 33491), (160, 33641),

Gene: BobBob_9 Start: 5693, Stop: 6001, Start Num: 79

Candidate Starts for BobBob_9:

(Start: 79 @5693 has 55 MA's), (Start: 83 @5702 has 20 MA's), (110, 5801), (125, 5858), (126, 5864), (131, 5882), (147, 5930),

Gene: Brandonk123_14 Start: 6849, Stop: 7148, Start Num: 83

Candidate Starts for Brandonk123_14:

(35, 6648), (Start: 79 @6840 has 55 MA's), (Start: 83 @6849 has 20 MA's), (95, 6879), (110, 6948), (125, 7005), (126, 7011), (131, 7029), (147, 7077),

Gene: Briakila_10 Start: 6738, Stop: 7073, Start Num: 70

Candidate Starts for Briakila_10:

(Start: 70 @6738 has 45 MA's), (94, 6780), (97, 6792), (100, 6807), (104, 6825), (121, 6882), (137, 6948), (143, 6969), (154, 7005), (158, 7017), (163, 7053),

Gene: BruhMoment_17 Start: 8281, Stop: 8610, Start Num: 72

Candidate Starts for BruhMoment_17:

(61, 8251), (Start: 72 @8281 has 39 MA's), (106, 8398), (108, 8407), (158, 8584),

Gene: CaiB_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for CaiB_9:

(40, 6293), (45, 6311), (49, 6326), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (162, 6725), (165, 6740),

Gene: CandC_19 Start: 6747, Stop: 7091, Start Num: 68

Candidate Starts for CandC_19:

(14, 6162), (17, 6306), (38, 6618), (Start: 68 @6747 has 11 MA's), (Start: 85 @6777 has 29 MA's), (Start: 87 @6783 has 2 MA's), (94, 6804), (101, 6834), (122, 6912), (139, 6990), (158, 7056), (160, 7065),

Gene: Casbah_9 Start: 5798, Stop: 6133, Start Num: 70

Candidate Starts for Casbah_9:

(Start: 70 @5798 has 45 MA's), (94, 5840), (97, 5852), (100, 5867), (104, 5885), (121, 5942), (137, 6008), (143, 6029), (154, 6065), (158, 6077), (163, 6113),

Gene: Casend_22 Start: 8510, Stop: 8848, Start Num: 72

Candidate Starts for Casend_22:

(7, 7655), (12, 7904), (14, 7949), (25, 8279), (Start: 72 @8510 has 39 MA's), (75, 8519), (94, 8567), (158, 8819), (160, 8828),

Gene: Cece_65 Start: 27218, Stop: 27502, Start Num: 84

Candidate Starts for Cece_65:

(81, 27212), (Start: 84 @27218 has 8 MA's), (105, 27296), (140, 27434), (142, 27437), (146, 27449),

Gene: ChaChing_10 Start: 5964, Stop: 6299, Start Num: 70

Candidate Starts for ChaChing_10:

(Start: 70 @5964 has 45 MA's), (94, 6006), (97, 6018), (100, 6033), (104, 6051), (121, 6108), (137, 6174), (143, 6195), (154, 6231), (158, 6243), (163, 6279),

Gene: ChadMasterC_11 Start: 6428, Stop: 6736, Start Num: 79

Candidate Starts for ChadMasterC_11:

(35, 6236), (Start: 79 @6428 has 55 MA's), (Start: 83 @6437 has 20 MA's), (95, 6467), (110, 6536), (125, 6593), (126, 6599), (131, 6617), (147, 6665),

Gene: Chalmers_10 Start: 6739, Stop: 7074, Start Num: 70

Candidate Starts for Chalmers_10:

(Start: 70 @6739 has 45 MA's), (94, 6781), (97, 6793), (100, 6808), (104, 6826), (121, 6883), (137, 6949), (143, 6970), (154, 7006), (158, 7018), (163, 7054),

Gene: Chandler_10 Start: 6712, Stop: 7047, Start Num: 70

Candidate Starts for Chandler_10:

(Start: 70 @6712 has 45 MA's), (94, 6754), (97, 6766), (100, 6781), (104, 6799), (121, 6856), (137, 6922), (143, 6943), (154, 6979), (158, 6991), (163, 7027),

Gene: CharlottesWeb_7 Start: 4948, Stop: 5283, Start Num: 73

Candidate Starts for CharlottesWeb_7:

(Start: 73 @4948 has 9 MA's), (Start: 78 @4960 has 10 MA's), (86, 4966), (88, 4972), (91, 4978), (94, 4987), (96, 4996), (97, 4999), (98, 5005), (109, 5056), (114, 5065), (130, 5137), (162, 5254),

Gene: Charming_9 Start: 5695, Stop: 6003, Start Num: 79

Candidate Starts for Charming_9:

(Start: 67 @5665 has 2 MA's), (Start: 79 @5695 has 55 MA's), (Start: 83 @5704 has 20 MA's), (110, 5803), (125, 5860), (126, 5866), (131, 5884), (147, 5932),

Gene: Chentzyk_9 Start: 5825, Stop: 6160, Start Num: 70

Candidate Starts for Chentzyk_9:

(Start: 70 @5825 has 45 MA's), (94, 5867), (97, 5879), (100, 5894), (104, 5912), (121, 5969), (137, 6035), (143, 6056), (154, 6092), (158, 6104), (163, 6140),

Gene: CherryCola_13 Start: 5508, Stop: 5822, Start Num: 85

Candidate Starts for CherryCola_13:

(20, 5157), (Start: 60 @5445 has 1 MA's), (Start: 85 @5508 has 29 MA's), (125, 5664), (126, 5670),

Gene: Chickadee_12 Start: 5433, Stop: 5771, Start Num: 79

Candidate Starts for Chickadee_12:

(66, 5397), (Start: 79 @5433 has 55 MA's), (90, 5460), (92, 5466), (98, 5490), (115, 5568), (126, 5634), (147, 5700), (155, 5727),

Gene: Chilliams_72 Start: 33749, Stop: 34030, Start Num: 84

Candidate Starts for Chilliams_72:

(Start: 84 @33749 has 8 MA's), (102, 33812), (107, 33836), (130, 33926), (160, 34025),

Gene: ClamChowder_11 Start: 5272, Stop: 5586, Start Num: 85

Candidate Starts for ClamChowder_11:

(Start: 60 @5209 has 1 MA's), (Start: 85 @5272 has 29 MA's), (125, 5428), (126, 5434),

Gene: Clawz_40 Start: 17751, Stop: 18077, Start Num: 79

Candidate Starts for Clawz_40:

(64, 17715), (65, 17718), (Start: 79 @17751 has 55 MA's), (98, 17799), (124, 17910), (127, 17940), (153, 18030), (155, 18036),

Gene: CloverMinnie_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for CloverMinnie_9:

(40, 6293), (45, 6311), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (162, 6725), (165, 6740),

Gene: Clown_15 Start: 8549, Stop: 8863, Start Num: 85

Candidate Starts for Clown_15:

(80, 8540), (Start: 85 @8549 has 29 MA's), (98, 8594), (125, 8705),

Gene: ColdSoup_41 Start: 17853, Stop: 18179, Start Num: 79

Candidate Starts for ColdSoup_41:

(Start: 79 @17853 has 55 MA's), (93, 17880), (98, 17901), (124, 18012), (136, 18066), (155, 18138), (158, 18147),

Gene: Coldpizza_8 Start: 6855, Stop: 7208, Start Num: 70

Candidate Starts for Coldpizza_8:

(Start: 70 @6855 has 45 MA's), (Start: 73 @6861 has 9 MA's), (89, 6888), (97, 6912), (109, 6969), (120, 6999), (132, 7053), (137, 7068), (162, 7167),

Gene: Compostia_10 Start: 5957, Stop: 6292, Start Num: 70

Candidate Starts for Compostia_10:

(Start: 70 @5957 has 45 MA's), (94, 5999), (97, 6011), (100, 6026), (104, 6044), (121, 6101), (137, 6167), (143, 6188), (154, 6224), (158, 6236), (163, 6272),

Gene: Corofin_10 Start: 5974, Stop: 6309, Start Num: 70

Candidate Starts for Corofin_10:

(Start: 70 @5974 has 45 MA's), (94, 6016), (97, 6028), (100, 6043), (104, 6061), (121, 6118), (137, 6184), (143, 6205), (154, 6241), (158, 6253), (163, 6289),

Gene: CoveyB_11 Start: 5144, Stop: 5458, Start Num: 85

Candidate Starts for CoveyB_11:

(Start: 60 @5081 has 1 MA's), (Start: 85 @5144 has 29 MA's), (125, 5300), (126, 5306),

Gene: Daisy_10 Start: 5952, Stop: 6287, Start Num: 70

Candidate Starts for Daisy_10:

(Start: 70 @5952 has 45 MA's), (94, 5994), (97, 6006), (100, 6021), (104, 6039), (121, 6096), (137, 6162), (143, 6183), (154, 6219), (158, 6231), (163, 6267),

Gene: Danyall_11 Start: 5144, Stop: 5458, Start Num: 85

Candidate Starts for Danyall_11:

(Start: 60 @5081 has 1 MA's), (Start: 85 @5144 has 29 MA's), (125, 5300), (126, 5306),

Gene: Deenasa_10 Start: 6712, Stop: 7047, Start Num: 70

Candidate Starts for Deenasa_10:

(Start: 70 @6712 has 45 MA's), (94, 6754), (97, 6766), (100, 6781), (104, 6799), (121, 6856), (137, 6922), (143, 6943), (154, 6979), (158, 6991), (163, 7027),

Gene: Delrey21_13 Start: 6898, Stop: 7215, Start Num: 79

Candidate Starts for Delrey21_13:

(Start: 79 @6898 has 55 MA's), (91, 6928), (110, 7009), (126, 7072), (131, 7090), (132, 7093), (133, 7096), (147, 7138),

Gene: Derg_7 Start: 5277, Stop: 5585, Start Num: 79

Candidate Starts for Derg_7:

(26, 5025), (31, 5052), (Start: 79 @5277 has 55 MA's), (Start: 83 @5286 has 20 MA's), (110, 5385), (125, 5442), (126, 5448), (147, 5514),

Gene: Devonte_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Devonte_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Dxdert_13 Start: 5891, Stop: 6229, Start Num: 79

Candidate Starts for Dxdert_13:

(66, 5855), (Start: 79 @5891 has 55 MA's), (90, 5918), (92, 5924), (98, 5948), (115, 6026), (126, 6092), (147, 6158), (155, 6185),

Gene: DoctorFroggo_13 Start: 6898, Stop: 7215, Start Num: 79

Candidate Starts for DoctorFroggo_13:

(Start: 79 @6898 has 55 MA's), (91, 6928), (110, 7009), (126, 7072), (131, 7090), (132, 7093), (133, 7096), (147, 7138),

Gene: Dodo_81 Start: 29870, Stop: 30154, Start Num: 84

Candidate Starts for Dodo_81:

(27, 29609), (62, 29813), (74, 29849), (Start: 84 @29870 has 8 MA's), (118, 29981), (140, 30086), (142, 30089),

Gene: DogYard_20 Start: 9001, Stop: 9312, Start Num: 72

Candidate Starts for DogYard_20:

(Start: 72 @9001 has 39 MA's), (Start: 73 @9004 has 9 MA's), (91, 9034), (125, 9175), (150, 9256), (158, 9283),

Gene: DonTron_40 Start: 17923, Stop: 18249, Start Num: 79

Candidate Starts for DonTron_40:

(Start: 79 @17923 has 55 MA's), (93, 17950), (98, 17971), (124, 18082), (136, 18136), (155, 18208), (158, 18217),

Gene: DonaldDuck_21 Start: 7856, Stop: 8194, Start Num: 72

Candidate Starts for DonaldDuck_21:

(7, 7001), (12, 7250), (14, 7295), (25, 7625), (Start: 72 @7856 has 39 MA's), (75, 7865), (94, 7913), (158, 8165), (160, 8174),

Gene: DunneganBoMo_68 Start: 27488, Stop: 27772, Start Num: 84

Candidate Starts for DunneganBoMo_68:

(42, 27344), (74, 27470), (81, 27482), (Start: 84 @27488 has 8 MA's), (160, 27767),

Gene: EMoore_6 Start: 4085, Stop: 4393, Start Num: 79

Candidate Starts for EMoore_6:

(Start: 55 @4004 has 5 MA's), (Start: 79 @4085 has 55 MA's), (90, 4109), (126, 4256), (133, 4280), (147, 4322), (148, 4325), (155, 4349),

Gene: EdmundFerry_11 Start: 5448, Stop: 5786, Start Num: 79

Candidate Starts for EdmundFerry_11:

(66, 5412), (Start: 79 @5448 has 55 MA's), (90, 5475), (92, 5481), (98, 5505), (115, 5583), (126, 5649), (147, 5715), (155, 5742),

Gene: Egi03_12 Start: 5251, Stop: 5565, Start Num: 85

Candidate Starts for Egi03_12:

(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: Ellewin_66 Start: 27215, Stop: 27499, Start Num: 84

Candidate Starts for Ellewin_66:

(42, 27071), (74, 27197), (81, 27209), (Start: 84 @27215 has 8 MA's), (160, 27494),

Gene: Evamon_11 Start: 5125, Stop: 5439, Start Num: 85

Candidate Starts for Evamon_11:

(Start: 60 @5062 has 1 MA's), (Start: 85 @5125 has 29 MA's), (125, 5281), (126, 5287),

Gene: EverythinBagel_21 Start: 8257, Stop: 8601, Start Num: 72

Candidate Starts for EverythinBagel_21:

(Start: 72 @8257 has 39 MA's), (75, 8266), (91, 8305), (94, 8314), (139, 8500), (158, 8566), (160, 8575),

Gene: Fireball_12 Start: 5251, Stop: 5565, Start Num: 85

Candidate Starts for Fireball_12:

(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: Fitzgerald_10 Start: 6630, Stop: 6929, Start Num: 83

Candidate Starts for Fitzgerald_10:

(Start: 79 @6621 has 55 MA's), (Start: 83 @6630 has 20 MA's), (110, 6729), (125, 6786), (126, 6792), (131, 6810), (147, 6858),

Gene: Fizzles_21 Start: 7811, Stop: 8155, Start Num: 72

Candidate Starts for Fizzles_21:

(Start: 72 @7811 has 39 MA's), (94, 7868), (139, 8054), (158, 8120), (160, 8129),

Gene: Flatwoods_12 Start: 6151, Stop: 6459, Start Num: 79

Candidate Starts for Flatwoods_12:

(21, 5824), (Start: 79 @6151 has 55 MA's), (Start: 83 @6160 has 20 MA's), (110, 6259), (125, 6316), (126, 6322), (147, 6388),

Gene: Forrestell_17 Start: 7645, Stop: 7956, Start Num: 72

Candidate Starts for Forrestell_17:

(Start: 72 @7645 has 39 MA's), (Start: 73 @7648 has 9 MA's), (91, 7678), (125, 7819), (150, 7900), (158, 7927),

Gene: Fosterous_9 Start: 5693, Stop: 6001, Start Num: 79

Candidate Starts for Fosterous_9:

(Start: 67 @5663 has 2 MA's), (Start: 79 @5693 has 55 MA's), (Start: 83 @5702 has 20 MA's), (110, 5801), (125, 5858), (126, 5864), (131, 5882), (147, 5930),

Gene: FrankDeliGuy_19 Start: 7715, Stop: 8053, Start Num: 72

Candidate Starts for FrankDeliGuy_19:

(7, 6860), (12, 7109), (25, 7484), (Start: 72 @7715 has 39 MA's), (75, 7724), (91, 7763), (94, 7772), (139, 7958), (158, 8024), (160, 8033),

Gene: Fransoyer_22 Start: 8000, Stop: 8341, Start Num: 72

Candidate Starts for Fransoyer_22:

(2, 6860), (3, 6881), (7, 7121), (12, 7370), (13, 7382), (38, 7868), (Start: 72 @8000 has 39 MA's), (94, 8057), (110, 8129), (139, 8243), (158, 8309), (159, 8312), (160, 8318),

Gene: Fregley_21 Start: 7285, Stop: 7629, Start Num: 68

Candidate Starts for Fregley_21:

(17, 6844), (38, 7156), (Start: 68 @7285 has 11 MA's), (Start: 85 @7315 has 29 MA's), (Start: 87 @7321 has 2 MA's), (94, 7342), (101, 7372), (122, 7450), (139, 7528), (158, 7594), (160, 7603),

Gene: Fresco_7 Start: 4953, Stop: 5276, Start Num: 78

Candidate Starts for Fresco_7:

(43, 4833), (Start: 73 @4941 has 9 MA's), (Start: 78 @4953 has 10 MA's), (86, 4959), (88, 4965), (89, 4968), (91, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (137, 5148), (162, 5247),

Gene: FuegoCuervo_15 Start: 6452, Stop: 6751, Start Num: 83

Candidate Starts for FuegoCuervo_15:

(35, 6251), (Start: 79 @6443 has 55 MA's), (Start: 83 @6452 has 20 MA's), (110, 6551), (125, 6608), (126, 6614), (131, 6632), (147, 6680),

Gene: Fugax_11 Start: 5272, Stop: 5586, Start Num: 85

Candidate Starts for Fugax_11:

(Start: 60 @5209 has 1 MA's), (Start: 85 @5272 has 29 MA's), (125, 5428), (126, 5434),

Gene: GTE6_13 Start: 5949, Stop: 6287, Start Num: 79

Candidate Starts for GTE6_13:

(66, 5913), (Start: 79 @5949 has 55 MA's), (90, 5976), (92, 5982), (98, 6006), (115, 6084), (126, 6150), (147, 6216), (155, 6243),

Gene: Gadget_11 Start: 5953, Stop: 6288, Start Num: 70

Candidate Starts for Gadget_11:

(Start: 70 @5953 has 45 MA's), (94, 5995), (97, 6007), (100, 6022), (104, 6040), (121, 6097), (137, 6163), (143, 6184), (154, 6220), (158, 6232), (163, 6268),

Gene: Gaea_11 Start: 5953, Stop: 6261, Start Num: 79

Candidate Starts for Gaea_11:

(26, 5701), (31, 5728), (Start: 79 @5953 has 55 MA's), (Start: 83 @5962 has 20 MA's), (110, 6061), (125, 6118), (126, 6124), (147, 6190),

Gene: Galadriel_13 Start: 6461, Stop: 6769, Start Num: 79

Candidate Starts for Galadriel_13:

(Start: 67 @6431 has 2 MA's), (Start: 79 @6461 has 55 MA's), (Start: 83 @6470 has 20 MA's), (110, 6569), (125, 6626), (126, 6632), (131, 6650), (147, 6698),

Gene: Gazebo_20 Start: 8077, Stop: 8421, Start Num: 72

Candidate Starts for Gazebo_20:

(7, 7222), (12, 7471), (17, 7657), (25, 7846), (Start: 72 @8077 has 39 MA's), (75, 8086), (94, 8134), (139, 8320), (158, 8386), (160, 8395),

Gene: Geodirt_11 Start: 6477, Stop: 6776, Start Num: 83

Candidate Starts for Geodirt_11:

(35, 6276), (Start: 79 @6468 has 55 MA's), (Start: 83 @6477 has 20 MA's), (95, 6507), (110, 6576), (125, 6633), (126, 6639), (131, 6657), (147, 6705),

Gene: Gervas_10 Start: 5944, Stop: 6279, Start Num: 70

Candidate Starts for Gervas_10:

(Start: 70 @5944 has 45 MA's), (94, 5986), (97, 5998), (100, 6013), (104, 6031), (121, 6088), (137, 6154), (143, 6175), (154, 6211), (158, 6223), (163, 6259),

Gene: Gezellig_11 Start: 5251, Stop: 5565, Start Num: 85

Candidate Starts for Gezellig_11:

(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: GlenHope_11 Start: 5963, Stop: 6298, Start Num: 70

Candidate Starts for GlenHope_11:

(Start: 70 @5963 has 45 MA's), (94, 6005), (97, 6017), (100, 6032), (104, 6050), (121, 6107), (137, 6173), (143, 6194), (154, 6230), (158, 6242), (163, 6278),

Gene: Glubnar_10 Start: 5953, Stop: 6288, Start Num: 70

Candidate Starts for Glubnar_10:

(Start: 70 @5953 has 45 MA's), (94, 5995), (97, 6007), (100, 6022), (104, 6040), (121, 6097), (137, 6163), (154, 6220), (158, 6232), (163, 6268),

Gene: Godines_11 Start: 7363, Stop: 7701, Start Num: 77

Candidate Starts for Godines_11:

(39, 7225), (42, 7234), (54, 7282), (Start: 77 @7363 has 1 MA's), (Start: 87 @7378 has 2 MA's), (98, 7417), (104, 7444), (108, 7462), (110, 7471), (116, 7480), (119, 7495), (121, 7501), (149, 7606), (152, 7618), (163, 7672),

Gene: GoldenEssence_64 Start: 27155, Stop: 27439, Start Num: 84

Candidate Starts for GoldenEssence_64:

(39, 26996), (41, 27002), (44, 27014), (46, 27017), (48, 27029), (50, 27035), (51, 27038), (Start: 84 @27155 has 8 MA's), (98, 27203), (102, 27218), (120, 27284), (160, 27434),

Gene: Grassboy_22 Start: 8532, Stop: 8870, Start Num: 72

Candidate Starts for Grassboy_22:

(Start: 72 @8532 has 39 MA's), (75, 8541), (94, 8589), (158, 8841), (160, 8850),

Gene: Gustavo_11 Start: 5959, Stop: 6258, Start Num: 83

Candidate Starts for Gustavo_11:

(26, 5698), (31, 5725), (Start: 79 @5950 has 55 MA's), (Start: 83 @5959 has 20 MA's), (110, 6058), (125, 6115), (126, 6121), (147, 6187),

Gene: Halfpint_9 Start: 5798, Stop: 6133, Start Num: 70

Candidate Starts for Halfpint_9:

(Start: 70 @5798 has 45 MA's), (94, 5840), (97, 5852), (100, 5867), (104, 5885), (121, 5942), (137, 6008), (143, 6029), (154, 6065), (158, 6077), (163, 6113),

Gene: Halo3_12 Start: 5583, Stop: 5888, Start Num: 85

Candidate Starts for Halo3_12:

(20, 5232), (Start: 60 @5520 has 1 MA's), (Start: 85 @5583 has 29 MA's), (125, 5739), (126, 5745),

Gene: Hans_14 Start: 6642, Stop: 6947, Start Num: 79

Candidate Starts for Hans_14:

(Start: 55 @6561 has 5 MA's), (Start: 79 @6642 has 55 MA's), (90, 6663), (110, 6747), (126, 6810), (133, 6834), (147, 6876), (148, 6879), (155, 6903),

Gene: HarveySr_10 Start: 5950, Stop: 6285, Start Num: 70

Candidate Starts for HarveySr_10:

(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: Heathcliff_10 Start: 5944, Stop: 6279, Start Num: 70

Candidate Starts for Heathcliff_10:

(Start: 70 @5944 has 45 MA's), (94, 5986), (97, 5998), (100, 6013), (104, 6031), (121, 6088), (137, 6154), (143, 6175), (154, 6211), (158, 6223), (163, 6259),

Gene: Hyperion_19 Start: 7780, Stop: 8124, Start Num: 72

Candidate Starts for Hyperion_19:

(7, 6925), (12, 7174), (25, 7549), (Start: 72 @7780 has 39 MA's), (75, 7789), (94, 7837), (158, 8089), (160, 8098),

Gene: Inspectinfecti_13 Start: 7159, Stop: 7464, Start Num: 79

Candidate Starts for Inspectinfecti_13:

(24, 6883), (26, 6913), (Start: 55 @7078 has 5 MA's), (Start: 79 @7159 has 55 MA's), (90, 7180), (110, 7264), (126, 7327), (147, 7393), (148, 7396), (155, 7420),

Gene: JKSyngboy_10 Start: 6461, Stop: 6769, Start Num: 79

Candidate Starts for JKSyngboy_10:

(26, 6209), (31, 6236), (Start: 79 @6461 has 55 MA's), (Start: 83 @6470 has 20 MA's), (110, 6569), (125, 6626), (126, 6632), (147, 6698),

Gene: Jabberwocky_10 Start: 6623, Stop: 6931, Start Num: 79

Candidate Starts for Jabberwocky_10:

(Start: 79 @6623 has 55 MA's), (Start: 83 @6632 has 20 MA's), (110, 6731), (125, 6788), (126, 6794), (131, 6812), (147, 6860),

Gene: Jackstina_9 Start: 5866, Stop: 6201, Start Num: 70

Candidate Starts for Jackstina_9:

(Start: 70 @5866 has 45 MA's), (94, 5908), (97, 5920), (100, 5935), (104, 5953), (121, 6010), (137, 6076), (143, 6097), (154, 6133), (158, 6145), (163, 6181),

Gene: Jambalaya_11 Start: 4956, Stop: 5270, Start Num: 85

Candidate Starts for Jambalaya_11:

(Start: 85 @4956 has 29 MA's), (125, 5112), (126, 5118),

Gene: Jehoshaphat_23 Start: 8775, Stop: 9113, Start Num: 72

Candidate Starts for Jehoshaphat_23:

(7, 7920), (12, 8169), (14, 8214), (25, 8544), (Start: 72 @8775 has 39 MA's), (75, 8784), (94, 8832), (158, 9084), (160, 9093),

Gene: Jollymon_41 Start: 17853, Stop: 18179, Start Num: 79

Candidate Starts for Jollymon_41:

(Start: 79 @17853 has 55 MA's), (93, 17880), (98, 17901), (124, 18012), (136, 18066), (155, 18138), (158, 18147),

Gene: Judebell_23 Start: 8316, Stop: 8654, Start Num: 72

Candidate Starts for Judebell_23:

(25, 8085), (Start: 72 @8316 has 39 MA's), (75, 8325), (94, 8373), (158, 8625), (160, 8634),

Gene: KSunshine22_69 Start: 28755, Stop: 29039, Start Num: 84

Candidate Starts for KSunshine22_69:

(42, 28611), (74, 28737), (81, 28749), (Start: 84 @28755 has 8 MA's), (160, 29034),

Gene: Kamashten_12 Start: 6782, Stop: 7090, Start Num: 79

Candidate Starts for Kamashten_12:

(Start: 67 @6752 has 2 MA's), (Start: 79 @6782 has 55 MA's), (Start: 83 @6791 has 20 MA's), (110, 6890), (125, 6947), (126, 6953), (131, 6971), (147, 7019),

Gene: Kamiyu_10 Start: 5944, Stop: 6279, Start Num: 70

Candidate Starts for Kamiyu_10:

(Start: 70 @5944 has 45 MA's), (94, 5986), (97, 5998), (100, 6013), (104, 6031), (121, 6088), (137, 6154), (143, 6175), (154, 6211), (158, 6223), (163, 6259),

Gene: Keitabear_12 Start: 7843, Stop: 8142, Start Num: 83

Candidate Starts for Keitabear_12:

(Start: 79 @7834 has 55 MA's), (Start: 83 @7843 has 20 MA's), (110, 7942), (125, 7999), (126, 8005), (131, 8023), (147, 8071),

Gene: Kelcole_19 Start: 7138, Stop: 7482, Start Num: 68

Candidate Starts for Kelcole_19:

(14, 6553), (17, 6697), (38, 7009), (Start: 68 @7138 has 11 MA's), (Start: 85 @7168 has 29 MA's), (Start: 87 @7174 has 2 MA's), (94, 7195), (101, 7225), (122, 7303), (139, 7381), (158, 7447), (160, 7456),

Gene: Kewpiedoll_12 Start: 6184, Stop: 6492, Start Num: 79

Candidate Starts for Kewpiedoll_12:

(Start: 79 @6184 has 55 MA's), (Start: 83 @6193 has 20 MA's), (95, 6223), (110, 6292), (125, 6349), (126, 6355), (131, 6373), (147, 6421),

Gene: KimmyK_11 Start: 5272, Stop: 5586, Start Num: 85

Candidate Starts for KimmyK_11:

(Start: 60 @5209 has 1 MA's), (Start: 85 @5272 has 29 MA's), (125, 5428), (126, 5434),

Gene: KingstonB_40 Start: 17361, Stop: 17687, Start Num: 79

Candidate Starts for KingstonB_40:

(Start: 79 @17361 has 55 MA's), (93, 17388), (98, 17409), (124, 17520), (136, 17574), (155, 17646), (158, 17655),

Gene: Kithara_21 Start: 9380, Stop: 9730, Start Num: 68

Candidate Starts for Kithara_21:

(Start: 68 @9380 has 11 MA's), (94, 9440), (100, 9467), (103, 9476), (108, 9503), (109, 9509), (128, 9587), (139, 9626), (159, 9695),

Gene: Kronus_9 Start: 6559, Stop: 6894, Start Num: 70

Candidate Starts for Kronus_9:

(Start: 70 @6559 has 45 MA's), (94, 6601), (97, 6613), (100, 6628), (104, 6646), (121, 6703), (137, 6769), (143, 6790), (154, 6826), (158, 6838), (163, 6874),

Gene: Kroos_11 Start: 6114, Stop: 6422, Start Num: 79

Candidate Starts for Kroos_11:

(26, 5862), (31, 5889), (Start: 79 @6114 has 55 MA's), (Start: 83 @6123 has 20 MA's), (110, 6222), (125, 6279), (126, 6285), (147, 6351),

Gene: Kubulix_21 Start: 9130, Stop: 9441, Start Num: 72

Candidate Starts for Kubulix_21:

(Start: 72 @9130 has 39 MA's), (Start: 73 @9133 has 9 MA's), (91, 9163), (125, 9304), (150, 9385), (158, 9412),

Gene: Kwekel_12 Start: 5442, Stop: 5780, Start Num: 79

Candidate Starts for Kwekel_12:

(Start: 60 @5388 has 1 MA's), (Start: 79 @5442 has 55 MA's), (91, 5472), (92, 5475), (110, 5553), (115, 5577), (147, 5709), (155, 5736),

Gene: Kwobi_11 Start: 5962, Stop: 6261, Start Num: 83

Candidate Starts for Kwobi_11:

(26, 5701), (31, 5728), (Start: 79 @5953 has 55 MA's), (Start: 83 @5962 has 20 MA's), (110, 6061), (125, 6118), (126, 6124), (147, 6190),

Gene: Kyva_23 Start: 8567, Stop: 8905, Start Num: 72

Candidate Starts for Kyva_23:

(Start: 72 @8567 has 39 MA's), (75, 8576), (94, 8624), (158, 8876), (160, 8885),

Gene: Lennon_12 Start: 7052, Stop: 7351, Start Num: 83

Candidate Starts for Lennon_12:

(35, 6851), (Start: 79 @7043 has 55 MA's), (Start: 83 @7052 has 20 MA's), (110, 7151), (125, 7208), (126, 7214), (131, 7232), (147, 7280),

Gene: LeoJr_74 Start: 30861, Stop: 31142, Start Num: 84

Candidate Starts for LeoJr_74:

(Start: 84 @30861 has 8 MA's), (107, 30945), (134, 31050),

Gene: Leonard_12 Start: 6673, Stop: 7059, Start Num: 55

Candidate Starts for Leonard_12:

(24, 6478), (26, 6508), (Start: 55 @6673 has 5 MA's), (Start: 79 @6754 has 55 MA's), (90, 6775), (110, 6859), (126, 6922), (147, 6988), (148, 6991), (155, 7015),

Gene: LestyG_10 Start: 5953, Stop: 6288, Start Num: 70

Candidate Starts for LestyG_10:

(Start: 70 @5953 has 45 MA's), (94, 5995), (97, 6007), (100, 6022), (104, 6040), (121, 6097), (137, 6163), (154, 6220), (158, 6232), (163, 6268),

Gene: Ligma_7 Start: 4953, Stop: 5276, Start Num: 78

Candidate Starts for Ligma_7:

(43, 4833), (Start: 73 @4941 has 9 MA's), (Start: 78 @4953 has 10 MA's), (86, 4959), (88, 4965), (89, 4968), (91, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (137, 5148), (162, 5247),

Gene: LilHam_9 Start: 5269, Stop: 5577, Start Num: 79

Candidate Starts for LilHam_9:

(26, 5017), (31, 5044), (Start: 79 @5269 has 55 MA's), (Start: 83 @5278 has 20 MA's), (110, 5377), (125, 5434), (126, 5440), (147, 5506),

Gene: Lilbeanie_12 Start: 4954, Stop: 5247, Start Num: 85

Candidate Starts for Lilbeanie_12:

(Start: 85 @4954 has 29 MA's), (101, 5011), (110, 5053), (124, 5092),

Gene: LittleMunchkin_8 Start: 6237, Stop: 6560, Start Num: 78

Candidate Starts for LittleMunchkin_8:

(1, 4998), (4, 5172), (8, 5382), (10, 5499), (15, 5685), (16, 5730), (19, 5898), (22, 5946), (Start: 73 @6225 has 9 MA's), (Start: 78 @6237 has 10 MA's), (91, 6255), (97, 6276), (98, 6282), (104, 6309), (119, 6360), (125, 6393), (137, 6432), (149, 6471), (156, 6495), (162, 6531),

Gene: Llemily_21 Start: 7551, Stop: 7889, Start Num: 72

Candidate Starts for Llemily_21:

(7, 6696), (12, 6945), (25, 7320), (Start: 72 @7551 has 39 MA's), (75, 7560), (94, 7608), (158, 7860), (160, 7869),

Gene: Lonelysoil_20 Start: 7796, Stop: 8134, Start Num: 72

Candidate Starts for Lonelysoil_20:

(7, 6941), (12, 7190), (14, 7235), (25, 7565), (Start: 72 @7796 has 39 MA's), (75, 7805), (94, 7853), (158, 8105), (160, 8114),

Gene: Love_13 Start: 6772, Stop: 7080, Start Num: 79

Candidate Starts for Love_13:

(Start: 79 @6772 has 55 MA's), (Start: 83 @6781 has 20 MA's), (95, 6811), (110, 6880), (125, 6937), (126, 6943), (131, 6961), (143, 6997),

Gene: Maih_9 Start: 7729, Stop: 8079, Start Num: 83

Candidate Starts for Maih_9:

(Start: 83 @7729 has 20 MA's), (101, 7789), (120, 7876), (129, 7924), (135, 7939),

Gene: MakoManhole_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for MakoManhole_9:

(40, 6293), (45, 6311), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (162, 6725), (165, 6740),

Gene: Marcie_25 Start: 7843, Stop: 8187, Start Num: 68

Candidate Starts for Marcie_25:

(17, 7402), (38, 7714), (Start: 68 @7843 has 11 MA's), (94, 7900), (100, 7927), (101, 7930), (122, 8008), (139, 8086), (158, 8152), (160, 8161),

Gene: Mariokart_7 Start: 4960, Stop: 5283, Start Num: 78

Candidate Starts for Mariokart_7:

(Start: 73 @4948 has 9 MA's), (Start: 78 @4960 has 10 MA's), (86, 4966), (88, 4972), (91, 4978), (94, 4987), (96, 4996), (97, 4999), (98, 5005), (109, 5056), (114, 5065), (130, 5137), (162, 5254),

Gene: Marley1013_10 Start: 6739, Stop: 7074, Start Num: 70

Candidate Starts for Marley1013_10:

(Start: 70 @6739 has 45 MA's), (94, 6781), (97, 6793), (100, 6808), (104, 6826), (121, 6883), (137, 6949), (143, 6970), (154, 7006), (158, 7018), (163, 7054),

Gene: Marlia_10 Start: 5944, Stop: 6279, Start Num: 70

Candidate Starts for Marlia_10:

(Start: 70 @5944 has 45 MA's), (94, 5986), (97, 5998), (100, 6013), (104, 6031), (121, 6088), (137, 6154), (143, 6175), (154, 6211), (158, 6223), (163, 6259),

Gene: Mashley_18 Start: 7591, Stop: 7935, Start Num: 72

Candidate Starts for Mashley_18:

(7, 6736), (12, 6985), (25, 7360), (Start: 72 @7591 has 39 MA's), (75, 7600), (94, 7648), (158, 7900), (160, 7909),

Gene: McKinley_12 Start: 7140, Stop: 7439, Start Num: 83

Candidate Starts for McKinley_12:

(Start: 79 @7131 has 55 MA's), (Start: 83 @7140 has 20 MA's), (95, 7170), (110, 7239), (125, 7296), (126, 7302), (131, 7320), (147, 7368),

Gene: MelBins_12 Start: 6449, Stop: 6835, Start Num: 55

Candidate Starts for MelBins_12:

(Start: 55 @6449 has 5 MA's), (Start: 79 @6530 has 55 MA's), (90, 6551), (110, 6635), (126, 6698), (133, 6722), (147, 6764), (148, 6767), (155, 6791),

Gene: MellowYellow_18 Start: 7675, Stop: 7986, Start Num: 72

Candidate Starts for MellowYellow_18:

(Start: 72 @7675 has 39 MA's), (Start: 73 @7678 has 9 MA's), (91, 7708), (125, 7849), (150, 7930), (158, 7957),

Gene: Mentos_25 Start: 9130, Stop: 9468, Start Num: 72

Candidate Starts for Mentos_25:

(Start: 72 @9130 has 39 MA's), (75, 9139), (94, 9187), (158, 9439), (160, 9448),

Gene: Mimi_75 Start: 32709, Stop: 32993, Start Num: 84

Candidate Starts for Mimi_75:

(39, 32550), (41, 32556), (44, 32568), (46, 32571), (48, 32583), (50, 32589), (51, 32592), (59, 32634), (81, 32703), (Start: 84 @32709 has 8 MA's), (90, 32727), (98, 32757), (101, 32769), (102, 32772), (120, 32838), (160, 32988),

Gene: Mischief19_10 Start: 9272, Stop: 9619, Start Num: 83

Candidate Starts for Mischief19_10:

(Start: 83 @9272 has 20 MA's), (99, 9323), (107, 9359), (112, 9386), (123, 9440), (129, 9479), (148, 9536), (164, 9608),

Gene: MmasiCarm_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for MmasiCarm_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: MoontowerMania_10 Start: 6171, Stop: 6479, Start Num: 79

Candidate Starts for MoontowerMania_10:

(Start: 79 @6171 has 55 MA's), (Start: 83 @6180 has 20 MA's), (95, 6210), (110, 6279), (125, 6336), (126, 6342), (131, 6360), (143, 6396),

Gene: MorillMayhem_19 Start: 7599, Stop: 7943, Start Num: 72

Candidate Starts for MorillMayhem_19:

(Start: 72 @7599 has 39 MA's), (75, 7608), (94, 7656), (139, 7842), (158, 7908), (160, 7917),

Gene: Mortcellus_9 Start: 6587, Stop: 6922, Start Num: 70

Candidate Starts for Mortcellus_9:

(Start: 70 @6587 has 45 MA's), (94, 6629), (97, 6641), (100, 6656), (104, 6674), (121, 6731), (137, 6797), (143, 6818), (154, 6854), (158, 6866), (163, 6902),

Gene: Morty007_10 Start: 6739, Stop: 7074, Start Num: 70

Candidate Starts for Morty007_10:

(Start: 70 @6739 has 45 MA's), (94, 6781), (97, 6793), (100, 6808), (104, 6826), (121, 6883), (137, 6949), (143, 6970), (154, 7006), (158, 7018), (163, 7054),

Gene: MossRose_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for MossRose_9:

(40, 6293), (45, 6311), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (161, 6707), (162, 6725), (165, 6740),

Gene: Mutzi_11 Start: 5144, Stop: 5458, Start Num: 85

Candidate Starts for Mutzi_11:

(Start: 60 @5081 has 1 MA's), (Start: 85 @5144 has 29 MA's), (125, 5300), (126, 5306),

Gene: Namago_21 Start: 7611, Stop: 7955, Start Num: 72

Candidate Starts for Namago_21:

(25, 7380), (Start: 72 @7611 has 39 MA's), (75, 7620), (94, 7668), (139, 7854), (158, 7920), (160, 7929),

Gene: Natkenzie_13 Start: 6625, Stop: 6942, Start Num: 79

Candidate Starts for Natkenzie_13:

(Start: 79 @6625 has 55 MA's), (95, 6667), (110, 6736), (126, 6799), (133, 6823), (147, 6865), (149, 6871),

Gene: Neos5_10 Start: 6739, Stop: 7074, Start Num: 70

Candidate Starts for Neos5_10:

(Start: 70 @6739 has 45 MA's), (94, 6781), (97, 6793), (100, 6808), (104, 6826), (121, 6883), (137, 6949), (143, 6970), (154, 7006), (158, 7018), (163, 7054),

Gene: Nike_21 Start: 8517, Stop: 8861, Start Num: 72

Candidate Starts for Nike_21:

(Start: 72 @8517 has 39 MA's), (75, 8526), (94, 8574), (139, 8760), (158, 8826), (160, 8835),

Gene: Nordenberg_6 Start: 4315, Stop: 4623, Start Num: 79

Candidate Starts for Nordenberg_6:

(Start: 67 @4285 has 2 MA's), (Start: 79 @4315 has 55 MA's), (Start: 83 @4324 has 20 MA's), (110, 4423), (125, 4480), (126, 4486), (131, 4504), (147, 4552),

Gene: Nozo_10 Start: 6711, Stop: 7046, Start Num: 70

Candidate Starts for Nozo_10:

(Start: 70 @6711 has 45 MA's), (94, 6753), (97, 6765), (100, 6780), (104, 6798), (121, 6855), (137, 6921), (143, 6942), (154, 6978), (158, 6990), (163, 7026),

Gene: Nubi_11 Start: 5144, Stop: 5449, Start Num: 85

Candidate Starts for Nubi_11:

(Start: 60 @5081 has 1 MA's), (Start: 85 @5144 has 29 MA's), (125, 5300), (126, 5306),

Gene: NyleyClemson_18 Start: 7617, Stop: 7928, Start Num: 72

Candidate Starts for NyleyClemson_18:

(Start: 72 @7617 has 39 MA's), (Start: 73 @7620 has 9 MA's), (91, 7650), (125, 7791), (150, 7872), (158, 7899),

Gene: Obutu_10 Start: 5950, Stop: 6285, Start Num: 70

Candidate Starts for Obutu_10:

(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: Odyssey395_23 Start: 9132, Stop: 9443, Start Num: 72

Candidate Starts for Odyssey395_23:

(Start: 72 @9132 has 39 MA's), (Start: 73 @9135 has 9 MA's), (91, 9165), (125, 9306), (150, 9387), (158, 9414),

Gene: Olivio_9 Start: 5798, Stop: 6133, Start Num: 70

Candidate Starts for Olivio_9:

(Start: 70 @5798 has 45 MA's), (94, 5840), (97, 5852), (100, 5867), (104, 5885), (121, 5942), (137, 6008), (143, 6029), (154, 6065), (158, 6077), (163, 6113),

Gene: Ollypop_17 Start: 8113, Stop: 8424, Start Num: 72

Candidate Starts for Ollypop_17:

(Start: 72 @8113 has 39 MA's), (Start: 73 @8116 has 9 MA's), (117, 8239), (122, 8263), (125, 8287), (150, 8368), (158, 8395),

Gene: OneinaGillian_20 Start: 6820, Stop: 7164, Start Num: 68

Candidate Starts for OneinaGillian_20:

(38, 6691), (Start: 68 @6820 has 11 MA's), (Start: 85 @6850 has 29 MA's), (Start: 87 @6856 has 2 MA's), (94, 6877), (101, 6907), (122, 6985), (139, 7063), (158, 7129), (160, 7138),

Gene: OrangeOswald_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for OrangeOswald_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Panchaali_72 Start: 28341, Stop: 28625, Start Num: 84

Candidate Starts for Panchaali_72:

(81, 28335), (Start: 84 @28341 has 8 MA's), (160, 28620),

Gene: Paries_12 Start: 6433, Stop: 6771, Start Num: 67

Candidate Starts for Paries_12:

(Start: 67 @6433 has 2 MA's), (Start: 79 @6463 has 55 MA's), (Start: 83 @6472 has 20 MA's), (110, 6571), (125, 6628), (126, 6634), (131, 6652), (147, 6700),

Gene: Patbob_75 Start: 33002, Stop: 33286, Start Num: 84

Candidate Starts for Patbob_75:

(39, 32843), (41, 32849), (44, 32861), (46, 32864), (48, 32876), (50, 32882), (51, 32885), (54, 32900), (59, 32927), (81, 32996), (Start: 84 @33002 has 8 MA's), (98, 33050), (100, 33059), (101, 33062), (102, 33065), (120, 33131), (160, 33281),

Gene: PauloDiaboli_81 Start: 28905, Stop: 29189, Start Num: 84
Candidate Starts for PauloDiaboli_81:
(27, 28644), (62, 28848), (74, 28884), (Start: 84 @28905 has 8 MA's), (118, 29016), (140, 29121),
(142, 29124),

Gene: Pepe25_19 Start: 7078, Stop: 7422, Start Num: 68
Candidate Starts for Pepe25_19:
(5, 6037), (9, 6271), (14, 6493), (38, 6949), (Start: 68 @7078 has 11 MA's), (94, 7135), (101, 7165),
(122, 7243), (158, 7387), (160, 7396),

Gene: Phabia_21 Start: 7969, Stop: 8307, Start Num: 72
Candidate Starts for Phabia_21:
(25, 7738), (Start: 72 @7969 has 39 MA's), (75, 7978), (94, 8026), (158, 8278), (160, 8287),

Gene: Phaedrus_9 Start: 5866, Stop: 6201, Start Num: 70
Candidate Starts for Phaedrus_9:
(Start: 70 @5866 has 45 MA's), (94, 5908), (97, 5920), (100, 5935), (104, 5953), (121, 6010), (137,
6076), (143, 6097), (154, 6133), (158, 6145), (163, 6181),

Gene: Phauci_5 Start: 3202, Stop: 3588, Start Num: 55
Candidate Starts for Phauci_5:
(Start: 55 @3202 has 5 MA's), (Start: 79 @3283 has 55 MA's), (90, 3304), (110, 3388), (126, 3451),
(133, 3475), (147, 3517), (148, 3520), (155, 3544),

Gene: Phayeta_10 Start: 5825, Stop: 6160, Start Num: 70
Candidate Starts for Phayeta_10:
(Start: 70 @5825 has 45 MA's), (94, 5867), (97, 5879), (100, 5894), (104, 5912), (121, 5969), (137,
6035), (143, 6056), (154, 6092), (158, 6104), (163, 6140),

Gene: Philly_9 Start: 5839, Stop: 6174, Start Num: 70
Candidate Starts for Philly_9:
(Start: 70 @5839 has 45 MA's), (94, 5881), (97, 5893), (100, 5908), (104, 5926), (121, 5983), (137,
6049), (143, 6070), (154, 6106), (158, 6118), (163, 6154),

Gene: Phinally_12 Start: 6670, Stop: 7056, Start Num: 55
Candidate Starts for Phinally_12:
(24, 6475), (26, 6505), (Start: 55 @6670 has 5 MA's), (Start: 79 @6751 has 55 MA's), (90, 6772), (110,
6856), (126, 6919), (147, 6985), (148, 6988), (155, 7012),

Gene: Phinky_27 Start: 8832, Stop: 9176, Start Num: 71
Candidate Starts for Phinky_27:
(Start: 71 @8832 has 1 MA's), (100, 8916), (102, 8922), (139, 9075), (158, 9141), (160, 9150),

Gene: Phlop_11 Start: 5251, Stop: 5565, Start Num: 85
Candidate Starts for Phlop_11:
(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: Phlyer_10 Start: 6706, Stop: 7041, Start Num: 70
Candidate Starts for Phlyer_10:
(Start: 70 @6706 has 45 MA's), (94, 6748), (97, 6760), (100, 6775), (104, 6793), (121, 6850), (137,
6916), (143, 6937), (154, 6973), (158, 6985), (163, 7021),

Gene: Phrampa_69 Start: 30028, Stop: 30312, Start Num: 84
Candidate Starts for Phrampa_69:
(Start: 84 @30028 has 8 MA's), (98, 30076), (102, 30091), (120, 30157),

Gene: PinkCoffee_11 Start: 5281, Stop: 5595, Start Num: 85
Candidate Starts for PinkCoffee_11:
(Start: 60 @5218 has 1 MA's), (Start: 85 @5281 has 29 MA's), (125, 5437), (126, 5443),

Gene: Pipefish_10 Start: 6844, Stop: 7179, Start Num: 70
Candidate Starts for Pipefish_10:
(Start: 70 @6844 has 45 MA's), (94, 6886), (97, 6898), (100, 6913), (104, 6931), (121, 6988), (137, 7054), (143, 7075), (154, 7111), (158, 7123), (163, 7159),

Gene: Pointis_21 Start: 9130, Stop: 9441, Start Num: 72
Candidate Starts for Pointis_21:
(Start: 72 @9130 has 39 MA's), (Start: 73 @9133 has 9 MA's), (91, 9163), (125, 9304), (150, 9385), (158, 9412),

Gene: Portcullis_11 Start: 5204, Stop: 5518, Start Num: 85
Candidate Starts for Portcullis_11:
(Start: 85 @5204 has 29 MA's), (125, 5360), (126, 5366),

Gene: PullumCavea_11 Start: 5251, Stop: 5565, Start Num: 85
Candidate Starts for PullumCavea_11:
(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: Pumpernickel_79 Start: 31092, Stop: 31376, Start Num: 84
Candidate Starts for Pumpernickel_79:
(53, 30990), (Start: 71 @31059 has 1 MA's), (Start: 84 @31092 has 8 MA's), (109, 31191), (120, 31221), (125, 31251), (134, 31284), (140, 31308), (142, 31311), (150, 31335),

Gene: Pureglobe5_23 Start: 9146, Stop: 9457, Start Num: 72
Candidate Starts for Pureglobe5_23:
(Start: 72 @9146 has 39 MA's), (Start: 73 @9149 has 9 MA's), (91, 9179), (125, 9320), (150, 9401), (158, 9428),

Gene: Quammi_19 Start: 7540, Stop: 7878, Start Num: 72
Candidate Starts for Quammi_19:
(Start: 72 @7540 has 39 MA's), (75, 7549), (94, 7597), (158, 7849), (160, 7858),

Gene: Racecar_76 Start: 33362, Stop: 33646, Start Num: 84
Candidate Starts for Racecar_76:
(39, 33203), (41, 33209), (44, 33221), (46, 33224), (48, 33236), (50, 33242), (51, 33245), (59, 33287), (81, 33356), (Start: 84 @33362 has 8 MA's), (90, 33380), (98, 33410), (101, 33422), (102, 33425), (120, 33491), (160, 33641),

Gene: RagingRooster_10 Start: 5950, Stop: 6285, Start Num: 70
Candidate Starts for RagingRooster_10:
(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: RainyPolka_9 Start: 7682, Stop: 8032, Start Num: 83
Candidate Starts for RainyPolka_9:

(Start: 83 @7682 has 20 MA's), (101, 7742), (111, 7787), (129, 7877), (135, 7892),

Gene: Ranunculus_16 Start: 8071, Stop: 8382, Start Num: 72

Candidate Starts for Ranunculus_16:

(Start: 72 @8071 has 39 MA's), (Start: 73 @8074 has 9 MA's), (107, 8170), (108, 8176), (109, 8182), (125, 8245), (142, 8302), (158, 8353),

Gene: RazzB_16 Start: 7445, Stop: 7756, Start Num: 72

Candidate Starts for RazzB_16:

(Start: 72 @7445 has 39 MA's), (Start: 73 @7448 has 9 MA's), (91, 7478), (125, 7619), (150, 7700), (158, 7727),

Gene: ReginaGlobina_74 Start: 31418, Stop: 31699, Start Num: 84

Candidate Starts for ReginaGlobina_74:

(Start: 84 @31418 has 8 MA's), (107, 31502), (134, 31607), (148, 31652),

Gene: Ribeye_12 Start: 6157, Stop: 6456, Start Num: 83

Candidate Starts for Ribeye_12:

(26, 5896), (31, 5923), (Start: 79 @6148 has 55 MA's), (Start: 83 @6157 has 20 MA's), (110, 6256), (125, 6313), (126, 6319), (147, 6385),

Gene: Rita1961_10 Start: 5950, Stop: 6285, Start Num: 70

Candidate Starts for Rita1961_10:

(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: RiverRaider_12 Start: 5677, Stop: 6012, Start Num: 69

Candidate Starts for RiverRaider_12:

(57, 5644), (Start: 69 @5677 has 1 MA's), (Start: 72 @5683 has 39 MA's), (Start: 79 @5704 has 55 MA's), (91, 5731), (110, 5812), (125, 5869), (126, 5875), (127, 5881), (147, 5941), (148, 5944),

Gene: Rizwana_15 Start: 8050, Stop: 8361, Start Num: 72

Candidate Starts for Rizwana_15:

(Start: 72 @8050 has 39 MA's), (Start: 73 @8053 has 9 MA's), (108, 8155), (125, 8224), (158, 8332),

Gene: RoadKill_10 Start: 4904, Stop: 5242, Start Num: 79

Candidate Starts for RoadKill_10:

(66, 4868), (Start: 79 @4904 has 55 MA's), (90, 4931), (92, 4937), (98, 4961), (115, 5039), (126, 5105), (147, 5171), (155, 5198),

Gene: RobinRose_21 Start: 6973, Stop: 7317, Start Num: 68

Candidate Starts for RobinRose_21:

(14, 6388), (17, 6532), (38, 6844), (Start: 68 @6973 has 11 MA's), (Start: 85 @7003 has 29 MA's), (Start: 87 @7009 has 2 MA's), (94, 7030), (101, 7060), (122, 7138), (139, 7216), (158, 7282), (160, 7291),

Gene: Rockabye_77 Start: 34104, Stop: 34385, Start Num: 84

Candidate Starts for Rockabye_77:

(Start: 84 @34104 has 8 MA's), (98, 34152), (101, 34164), (102, 34167), (107, 34191), (144, 34326), (160, 34380),

Gene: Rofo_11 Start: 6703, Stop: 7011, Start Num: 79

Candidate Starts for Rofo_11:

(Start: 79 @6703 has 55 MA's), (Start: 83 @6712 has 20 MA's), (110, 6811), (125, 6868), (126, 6874), (131, 6892),

Gene: RogerDodger_12 Start: 5508, Stop: 5822, Start Num: 85

Candidate Starts for RogerDodger_12:

(20, 5157), (Start: 60 @5445 has 1 MA's), (Start: 85 @5508 has 29 MA's), (125, 5664), (126, 5670),

Gene: RomaT_10 Start: 6712, Stop: 7047, Start Num: 70

Candidate Starts for RomaT_10:

(Start: 70 @6712 has 45 MA's), (94, 6754), (97, 6766), (100, 6781), (104, 6799), (121, 6856), (137, 6922), (143, 6943), (154, 6979), (158, 6991), (163, 7027),

Gene: RomansRevenge_12 Start: 6049, Stop: 6360, Start Num: 72

Candidate Starts for RomansRevenge_12:

(Start: 72 @6049 has 39 MA's), (107, 6148), (158, 6331),

Gene: Romm_21 Start: 6973, Stop: 7317, Start Num: 68

Candidate Starts for Romm_21:

(14, 6388), (17, 6532), (38, 6844), (Start: 68 @6973 has 11 MA's), (Start: 85 @7003 has 29 MA's), (Start: 87 @7009 has 2 MA's), (94, 7030), (101, 7060), (122, 7138), (139, 7216), (158, 7282), (160, 7291),

Gene: Rowlf_17 Start: 7306, Stop: 7644, Start Num: 72

Candidate Starts for Rowlf_17:

(Start: 72 @7306 has 39 MA's), (75, 7315), (91, 7354), (94, 7363), (139, 7549), (158, 7615), (160, 7624),

Gene: RubyRalph_22 Start: 7934, Stop: 8275, Start Num: 72

Candidate Starts for RubyRalph_22:

(2, 6794), (7, 7055), (12, 7304), (13, 7316), (38, 7802), (Start: 72 @7934 has 39 MA's), (94, 7991), (110, 8063), (139, 8177), (158, 8243), (159, 8246), (160, 8252),

Gene: Rudy_19 Start: 7540, Stop: 7878, Start Num: 72

Candidate Starts for Rudy_19:

(Start: 72 @7540 has 39 MA's), (75, 7549), (94, 7597), (158, 7849), (160, 7858),

Gene: SJReid_80 Start: 34582, Stop: 34863, Start Num: 84

Candidate Starts for SJReid_80:

(Start: 84 @34582 has 8 MA's), (124, 34720), (127, 34750), (129, 34756),

Gene: SadLad_23 Start: 8391, Stop: 8732, Start Num: 72

Candidate Starts for SadLad_23:

(12, 7761), (13, 7773), (38, 8259), (Start: 72 @8391 has 39 MA's), (94, 8448), (110, 8520), (139, 8634), (158, 8700), (159, 8703), (160, 8709),

Gene: Salete_9 Start: 7730, Stop: 8080, Start Num: 83

Candidate Starts for Salete_9:

(Start: 83 @7730 has 20 MA's), (101, 7790), (120, 7877), (129, 7925), (135, 7940),

Gene: SallyK_22 Start: 8701, Stop: 9039, Start Num: 72

Candidate Starts for SallyK_22:

(7, 7846), (12, 8095), (25, 8470), (Start: 72 @8701 has 39 MA's), (75, 8710), (94, 8758), (158, 9010), (160, 9019),

Gene: Salvador_11 Start: 5123, Stop: 5437, Start Num: 85

Candidate Starts for Salvador_11:

(Start: 60 @5060 has 1 MA's), (Start: 85 @5123 has 29 MA's), (125, 5279), (126, 5285),

Gene: Sampson_13 Start: 6570, Stop: 6887, Start Num: 79

Candidate Starts for Sampson_13:

(Start: 79 @6570 has 55 MA's), (95, 6612), (110, 6681), (126, 6744), (133, 6768), (147, 6810), (149, 6816),

Gene: Sanjuju_10 Start: 6661, Stop: 6969, Start Num: 79

Candidate Starts for Sanjuju_10:

(Start: 79 @6661 has 55 MA's), (Start: 83 @6670 has 20 MA's), (110, 6769), (125, 6826), (126, 6832), (131, 6850), (147, 6898),

Gene: Saronaya_11 Start: 5959, Stop: 6258, Start Num: 83

Candidate Starts for Saronaya_11:

(26, 5698), (31, 5725), (Start: 79 @5950 has 55 MA's), (Start: 83 @5959 has 20 MA's), (110, 6058), (125, 6115), (126, 6121), (147, 6187),

Gene: Savbucketdawg_11 Start: 4956, Stop: 5270, Start Num: 85

Candidate Starts for Savbucketdawg_11:

(Start: 85 @4956 has 29 MA's), (125, 5112), (126, 5118),

Gene: SchottB_10 Start: 6126, Stop: 6434, Start Num: 79

Candidate Starts for SchottB_10:

(23, 5841), (30, 5895), (32, 5907), (36, 5946), (51, 6024), (Start: 67 @6096 has 2 MA's), (Start: 79 @6126 has 55 MA's), (Start: 83 @6135 has 20 MA's), (125, 6291), (126, 6297), (147, 6363),

Gene: Scioto_13 Start: 6625, Stop: 6942, Start Num: 79

Candidate Starts for Scioto_13:

(Start: 79 @6625 has 55 MA's), (95, 6667), (110, 6736), (126, 6799), (133, 6823), (147, 6865), (149, 6871),

Gene: Sedona_12 Start: 7669, Stop: 7977, Start Num: 79

Candidate Starts for Sedona_12:

(Start: 79 @7669 has 55 MA's), (Start: 83 @7678 has 20 MA's), (95, 7708), (110, 7777), (125, 7834), (126, 7840), (131, 7858), (147, 7906),

Gene: Shatter_7 Start: 4953, Stop: 5276, Start Num: 78

Candidate Starts for Shatter_7:

(43, 4833), (Start: 73 @4941 has 9 MA's), (Start: 78 @4953 has 10 MA's), (86, 4959), (88, 4965), (89, 4968), (91, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (137, 5148), (162, 5247),

Gene: Shenandoah_10 Start: 5949, Stop: 6284, Start Num: 70

Candidate Starts for Shenandoah_10:

(Start: 70 @5949 has 45 MA's), (94, 5991), (97, 6003), (100, 6018), (104, 6036), (121, 6093), (137, 6159), (143, 6180), (154, 6216), (158, 6228), (163, 6264),

Gene: Shinji_11 Start: 5145, Stop: 5459, Start Num: 85

Candidate Starts for Shinji_11:

(Start: 85 @5145 has 29 MA's), (125, 5301), (126, 5307),

Gene: Shivanishola_11 Start: 6886, Stop: 7185, Start Num: 83
Candidate Starts for Shivanishola_11:
(Start: 79 @6877 has 55 MA's), (Start: 83 @6886 has 20 MA's), (95, 6916), (110, 6985), (125, 7042),
(126, 7048), (131, 7066), (147, 7114),

Gene: SilentRX_17 Start: 8205, Stop: 8516, Start Num: 73
Candidate Starts for SilentRX_17:
(47, 8109), (Start: 72 @8202 has 39 MA's), (Start: 73 @8205 has 9 MA's), (Start: 78 @8217 has 10
MA's), (Start: 87 @8223 has 2 MA's), (151, 8460), (158, 8484),

Gene: Sillytadpoles_21 Start: 7538, Stop: 7876, Start Num: 72
Candidate Starts for Sillytadpoles_21:
(Start: 72 @7538 has 39 MA's), (75, 7547), (94, 7595), (158, 7847), (160, 7856),

Gene: Sisko_6 Start: 4758, Stop: 5081, Start Num: 78
Candidate Starts for Sisko_6:
(Start: 73 @4746 has 9 MA's), (Start: 78 @4758 has 10 MA's), (91, 4776), (94, 4785), (97, 4797), (98,
4803), (125, 4914), (129, 4932), (137, 4953), (162, 5052),

Gene: Sitar_12 Start: 7043, Stop: 7351, Start Num: 79
Candidate Starts for Sitar_12:
(35, 6851), (Start: 79 @7043 has 55 MA's), (Start: 83 @7052 has 20 MA's), (110, 7151), (125, 7208),
(126, 7214), (131, 7232), (147, 7280),

Gene: SlippinJimmy_10 Start: 6711, Stop: 7046, Start Num: 70
Candidate Starts for SlippinJimmy_10:
(Start: 70 @6711 has 45 MA's), (94, 6753), (97, 6765), (100, 6780), (104, 6798), (121, 6855), (137,
6921), (143, 6942), (154, 6978), (158, 6990), (163, 7026),

Gene: SmokingBunny_11 Start: 5123, Stop: 5437, Start Num: 85
Candidate Starts for SmokingBunny_11:
(Start: 60 @5060 has 1 MA's), (Start: 85 @5123 has 29 MA's), (125, 5279), (126, 5285),

Gene: Soos_36 Start: 17090, Stop: 17416, Start Num: 79
Candidate Starts for Soos_36:
(Start: 79 @17090 has 55 MA's), (93, 17117), (98, 17138), (124, 17249), (136, 17303), (155, 17375),
(158, 17384),

Gene: Sour_10 Start: 6612, Stop: 6938, Start Num: 78
Candidate Starts for Sour_10:
(Start: 73 @6600 has 9 MA's), (Start: 78 @6612 has 10 MA's), (88, 6624), (91, 6630), (96, 6648), (97,
6651), (98, 6657), (99, 6660), (104, 6684), (110, 6711), (114, 6717), (127, 6780), (146, 6837), (162,
6906),

Gene: Squash_23 Start: 8572, Stop: 8916, Start Num: 72
Candidate Starts for Squash_23:
(Start: 72 @8572 has 39 MA's), (75, 8581), (94, 8629), (139, 8815), (158, 8881), (160, 8890),

Gene: Statler_22 Start: 8077, Stop: 8421, Start Num: 72
Candidate Starts for Statler_22:
(25, 7846), (Start: 72 @8077 has 39 MA's), (75, 8086), (94, 8134), (139, 8320), (158, 8386), (160,
8395),

Gene: Sting_39 Start: 17529, Stop: 17855, Start Num: 79

Candidate Starts for Sting_39:

(Start: 79 @17529 has 55 MA's), (93, 17556), (98, 17577), (124, 17688), (136, 17742), (155, 17814), (158, 17823),

Gene: StorminNorm_11 Start: 5953, Stop: 6261, Start Num: 79

Candidate Starts for StorminNorm_11:

(26, 5701), (31, 5728), (Start: 79 @5953 has 55 MA's), (Start: 83 @5962 has 20 MA's), (110, 6061), (125, 6118), (126, 6124), (147, 6190),

Gene: StrawberryJamm_23 Start: 7840, Stop: 8178, Start Num: 72

Candidate Starts for StrawberryJamm_23:

(Start: 72 @7840 has 39 MA's), (75, 7849), (94, 7897), (158, 8149), (160, 8158),

Gene: Stultus_11 Start: 6867, Stop: 7175, Start Num: 79

Candidate Starts for Stultus_11:

(Start: 79 @6867 has 55 MA's), (Start: 83 @6876 has 20 MA's), (95, 6906), (110, 6975), (125, 7032), (126, 7038), (131, 7056), (147, 7104),

Gene: Sunfish_24 Start: 9142, Stop: 9498, Start Num: 72

Candidate Starts for Sunfish_24:

(Start: 72 @9142 has 39 MA's), (Start: 87 @9175 has 2 MA's), (90, 9184), (102, 9229), (138, 9394), (142, 9412), (158, 9463),

Gene: SwainyDoc_10 Start: 5947, Stop: 6282, Start Num: 70

Candidate Starts for SwainyDoc_10:

(Start: 70 @5947 has 45 MA's), (94, 5989), (97, 6001), (100, 6016), (104, 6034), (121, 6091), (137, 6157), (154, 6214), (158, 6226), (163, 6262),

Gene: SynergyX_10 Start: 5950, Stop: 6285, Start Num: 70

Candidate Starts for SynergyX_10:

(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: TP1604_9 Start: 7730, Stop: 8080, Start Num: 83

Candidate Starts for TP1604_9:

(Start: 83 @7730 has 20 MA's), (101, 7790), (120, 7877), (129, 7925), (135, 7940),

Gene: Talia1610_75 Start: 32727, Stop: 33011, Start Num: 84

Candidate Starts for Talia1610_75:

(39, 32568), (41, 32574), (44, 32586), (46, 32589), (48, 32601), (50, 32607), (51, 32610), (59, 32652), (81, 32721), (Start: 84 @32727 has 8 MA's), (90, 32745), (98, 32775), (101, 32787), (102, 32790), (120, 32856), (160, 33006),

Gene: Tangent_9 Start: 5665, Stop: 6003, Start Num: 67

Candidate Starts for Tangent_9:

(Start: 67 @5665 has 2 MA's), (Start: 79 @5695 has 55 MA's), (Start: 83 @5704 has 20 MA's), (110, 5803), (125, 5860), (126, 5866), (131, 5884), (147, 5932),

Gene: Tangerine_11 Start: 5962, Stop: 6270, Start Num: 79

Candidate Starts for Tangerine_11:

(26, 5710), (31, 5737), (Start: 79 @5962 has 55 MA's), (Start: 83 @5971 has 20 MA's), (110, 6070), (125, 6127), (126, 6133), (147, 6199),

Gene: Tank_16 Start: 8065, Stop: 8376, Start Num: 72

Candidate Starts for Tank_16:

(47, 7972), (Start: 72 @8065 has 39 MA's), (Start: 73 @8068 has 9 MA's), (123, 8218), (125, 8239), (126, 8245), (151, 8323), (158, 8347),

Gene: Tardus_13 Start: 5665, Stop: 5982, Start Num: 79

Candidate Starts for Tardus_13:

(Start: 79 @5665 has 55 MA's), (95, 5707), (110, 5776), (126, 5839), (133, 5863), (147, 5905),

Gene: Teehee_22 Start: 8775, Stop: 9113, Start Num: 72

Candidate Starts for Teehee_22:

(Start: 72 @8775 has 39 MA's), (75, 8784), (94, 8832), (158, 9084), (160, 9093),

Gene: Tempo_20 Start: 7165, Stop: 7509, Start Num: 68

Candidate Starts for Tempo_20:

(38, 7036), (Start: 68 @7165 has 11 MA's), (Start: 85 @7195 has 29 MA's), (Start: 87 @7201 has 2 MA's), (94, 7222), (101, 7252), (122, 7330), (139, 7408), (158, 7474), (160, 7483),

Gene: Thing3_12 Start: 6782, Stop: 7090, Start Num: 79

Candidate Starts for Thing3_12:

(Start: 67 @6752 has 2 MA's), (Start: 79 @6782 has 55 MA's), (Start: 83 @6791 has 20 MA's), (110, 6890), (125, 6947), (126, 6953), (131, 6971), (147, 7019),

Gene: Tiamoceli_13 Start: 6287, Stop: 6625, Start Num: 79

Candidate Starts for Tiamoceli_13:

(66, 6251), (Start: 79 @6287 has 55 MA's), (90, 6314), (92, 6320), (98, 6344), (115, 6422), (126, 6488), (147, 6554), (155, 6581),

Gene: TillyBobJoe_11 Start: 4959, Stop: 5273, Start Num: 85

Candidate Starts for TillyBobJoe_11:

(Start: 85 @4959 has 29 MA's), (125, 5115), (126, 5121),

Gene: TinyTerror_10 Start: 5952, Stop: 6287, Start Num: 70

Candidate Starts for TinyTerror_10:

(Start: 70 @5952 has 45 MA's), (94, 5994), (97, 6006), (100, 6021), (104, 6039), (121, 6096), (137, 6162), (143, 6183), (154, 6219), (158, 6231), (163, 6267),

Gene: Tissue_20 Start: 7909, Stop: 8253, Start Num: 72

Candidate Starts for Tissue_20:

(Start: 72 @7909 has 39 MA's), (75, 7918), (94, 7966), (139, 8152), (158, 8218), (160, 8227),

Gene: Togo_11 Start: 5123, Stop: 5437, Start Num: 85

Candidate Starts for Togo_11:

(Start: 60 @5060 has 1 MA's), (Start: 85 @5123 has 29 MA's), (125, 5279), (126, 5285),

Gene: Tonitrus_25 Start: 14059, Stop: 14370, Start Num: 79

Candidate Starts for Tonitrus_25:

(Start: 79 @14059 has 55 MA's), (113, 14158),

Gene: TurkishDelight_10 Start: 6065, Stop: 6391, Start Num: 82

Candidate Starts for TurkishDelight_10:
(76, 6050), (Start: 82 @6065 has 1 MA's), (145, 6305), (150, 6317),

Gene: Twister6_11 Start: 5055, Stop: 5369, Start Num: 85
Candidate Starts for Twister6_11:
(Start: 60 @4992 has 1 MA's), (Start: 85 @5055 has 29 MA's), (125, 5211), (126, 5217),

Gene: Twonlo_10 Start: 4904, Stop: 5242, Start Num: 79
Candidate Starts for Twonlo_10:
(66, 4868), (Start: 79 @4904 has 55 MA's), (90, 4931), (92, 4937), (98, 4961), (115, 5039), (126, 5105),
(147, 5171), (155, 5198),

Gene: Tycho_11 Start: 5971, Stop: 6270, Start Num: 83
Candidate Starts for Tycho_11:
(26, 5710), (31, 5737), (Start: 79 @5962 has 55 MA's), (Start: 83 @5971 has 20 MA's), (110, 6070),
(125, 6127), (126, 6133), (147, 6199),

Gene: Tydolla_10 Start: 6711, Stop: 7046, Start Num: 70
Candidate Starts for Tydolla_10:
(Start: 70 @6711 has 45 MA's), (94, 6753), (97, 6765), (100, 6780), (104, 6798), (121, 6855), (137,
6921), (143, 6942), (154, 6978), (158, 6990), (163, 7026),

Gene: Valary_12 Start: 5508, Stop: 5822, Start Num: 85
Candidate Starts for Valary_12:
(20, 5157), (Start: 60 @5445 has 1 MA's), (Start: 85 @5508 has 29 MA's), (125, 5664), (126, 5670),

Gene: VanDeWege_12 Start: 5436, Stop: 5750, Start Num: 85
Candidate Starts for VanDeWege_12:
(Start: 60 @5373 has 1 MA's), (Start: 85 @5436 has 29 MA's), (125, 5592), (126, 5598),

Gene: Verity_13 Start: 6898, Stop: 7215, Start Num: 79
Candidate Starts for Verity_13:
(Start: 79 @6898 has 55 MA's), (91, 6928), (110, 7009), (126, 7072), (131, 7090), (132, 7093), (133,
7096), (147, 7138),

Gene: ViaConlectus_13 Start: 6625, Stop: 6942, Start Num: 79
Candidate Starts for ViaConlectus_13:
(Start: 79 @6625 has 55 MA's), (95, 6667), (110, 6736), (126, 6799), (133, 6823), (147, 6865), (149,
6871),

Gene: Viceroy_20 Start: 7540, Stop: 7878, Start Num: 72
Candidate Starts for Viceroy_20:
(Start: 72 @7540 has 39 MA's), (75, 7549), (94, 7597), (158, 7849), (160, 7858),

Gene: Vivi2_10 Start: 5856, Stop: 6164, Start Num: 79
Candidate Starts for Vivi2_10:
(35, 5664), (Start: 79 @5856 has 55 MA's), (Start: 83 @5865 has 20 MA's), (110, 5964), (125, 6021),
(126, 6027), (131, 6045), (147, 6093),

Gene: WaddleDee_68 Start: 27340, Stop: 27624, Start Num: 84
Candidate Starts for WaddleDee_68:
(42, 27196), (74, 27322), (81, 27334), (Start: 84 @27340 has 8 MA's), (160, 27619),

Gene: Wayne3_22 Start: 8505, Stop: 8843, Start Num: 72

Candidate Starts for Wayne3_22:

(7, 7650), (12, 7899), (14, 7944), (25, 8274), (Start: 72 @8505 has 39 MA's), (75, 8514), (94, 8562), (158, 8814), (160, 8823),

Gene: Wheelie_20 Start: 7856, Stop: 8194, Start Num: 72

Candidate Starts for Wheelie_20:

(7, 7001), (12, 7250), (14, 7295), (25, 7625), (Start: 72 @7856 has 39 MA's), (75, 7865), (94, 7913), (158, 8165), (160, 8174),

Gene: Wilca_20 Start: 7061, Stop: 7405, Start Num: 68

Candidate Starts for Wilca_20:

(38, 6932), (Start: 68 @7061 has 11 MA's), (94, 7118), (101, 7148), (122, 7226), (158, 7370), (160, 7379),

Gene: Wilde_16 Start: 7993, Stop: 8304, Start Num: 72

Candidate Starts for Wilde_16:

(47, 7900), (Start: 72 @7993 has 39 MA's), (Start: 73 @7996 has 9 MA's), (123, 8146), (125, 8167), (126, 8173), (151, 8251), (158, 8275),

Gene: Wizard_11 Start: 5251, Stop: 5565, Start Num: 85

Candidate Starts for Wizard_11:

(Start: 60 @5188 has 1 MA's), (Start: 85 @5251 has 29 MA's), (125, 5407), (126, 5413),

Gene: Wooper_9 Start: 6416, Stop: 6754, Start Num: 73

Candidate Starts for Wooper_9:

(40, 6293), (45, 6311), (52, 6338), (56, 6359), (58, 6371), (63, 6392), (Start: 73 @6416 has 9 MA's), (86, 6434), (94, 6455), (97, 6467), (98, 6473), (104, 6500), (127, 6599), (137, 6626), (149, 6665), (162, 6725), (165, 6740),

Gene: Xkcd426_10 Start: 8759, Stop: 9115, Start Num: 83

Candidate Starts for Xkcd426_10:

(33, 8549), (34, 8552), (Start: 70 @8729 has 45 MA's), (Start: 83 @8759 has 20 MA's), (101, 8819), (102, 8822), (112, 8873), (124, 8918), (129, 8954),

Gene: YDN12_10 Start: 7676, Stop: 8026, Start Num: 83

Candidate Starts for YDN12_10:

(Start: 83 @7676 has 20 MA's), (101, 7736), (111, 7781), (113, 7793), (120, 7823), (129, 7871), (135, 7886), (155, 7955),

Gene: Yago84_6 Start: 4755, Stop: 5090, Start Num: 73

Candidate Starts for Yago84_6:

(Start: 73 @4755 has 9 MA's), (Start: 78 @4767 has 10 MA's), (91, 4785), (94, 4794), (97, 4806), (98, 4812), (125, 4923), (129, 4941), (137, 4962), (162, 5061),

Gene: Yahalom_10 Start: 5950, Stop: 6285, Start Num: 70

Candidate Starts for Yahalom_10:

(Start: 70 @5950 has 45 MA's), (94, 5992), (97, 6004), (100, 6019), (104, 6037), (121, 6094), (137, 6160), (143, 6181), (154, 6217), (158, 6229), (163, 6265),

Gene: Yinz_10 Start: 5976, Stop: 6311, Start Num: 70

Candidate Starts for Yinz_10:

(Start: 70 @5976 has 45 MA's), (94, 6018), (97, 6030), (100, 6045), (104, 6063), (121, 6120), (137, 6186), (143, 6207), (154, 6243), (158, 6255), (163, 6291),

Gene: YorkOnyx_11 Start: 5911, Stop: 6219, Start Num: 79

Candidate Starts for YorkOnyx_11:

(26, 5659), (Start: 79 @5911 has 55 MA's), (Start: 83 @5920 has 20 MA's), (110, 6019), (125, 6076), (126, 6082), (147, 6148),

Gene: YungMoney_11 Start: 6205, Stop: 6510, Start Num: 85

Candidate Starts for YungMoney_11:

(20, 5854), (Start: 60 @6142 has 1 MA's), (Start: 85 @6205 has 29 MA's), (125, 6361), (126, 6367),

Gene: Zagie_21 Start: 8043, Stop: 8381, Start Num: 72

Candidate Starts for Zagie_21:

(Start: 72 @8043 has 39 MA's), (75, 8052), (91, 8091), (94, 8100), (139, 8286), (158, 8352), (160, 8361),

Gene: Zhafia_24 Start: 8281, Stop: 8625, Start Num: 72

Candidate Starts for Zhafia_24:

(25, 8050), (Start: 72 @8281 has 39 MA's), (75, 8290), (94, 8338), (139, 8524), (158, 8590), (160, 8599),

Gene: Zipp_13 Start: 7043, Stop: 7360, Start Num: 79

Candidate Starts for Zipp_13:

(Start: 79 @7043 has 55 MA's), (91, 7073), (110, 7154), (126, 7217), (131, 7235), (132, 7238), (133, 7241), (147, 7283),

Gene: Zitch_14 Start: 6362, Stop: 6679, Start Num: 79

Candidate Starts for Zitch_14:

(Start: 79 @6362 has 55 MA's), (95, 6404), (110, 6473), (126, 6536), (133, 6560), (147, 6602),

Gene: Zooman_66 Start: 27525, Stop: 27800, Start Num: 87

Candidate Starts for Zooman_66:

(76, 27510), (Start: 87 @27525 has 2 MA's), (94, 27546), (125, 27675), (140, 27732), (142, 27735),

Gene: phiAsp2_3 Start: 663, Stop: 1013, Start Num: 65

Candidate Starts for phiAsp2_3:

(65, 663), (76, 693), (Start: 79 @702 has 55 MA's), (92, 732), (96, 747), (98, 756), (102, 771), (110, 810), (126, 888), (141, 945), (157, 990),