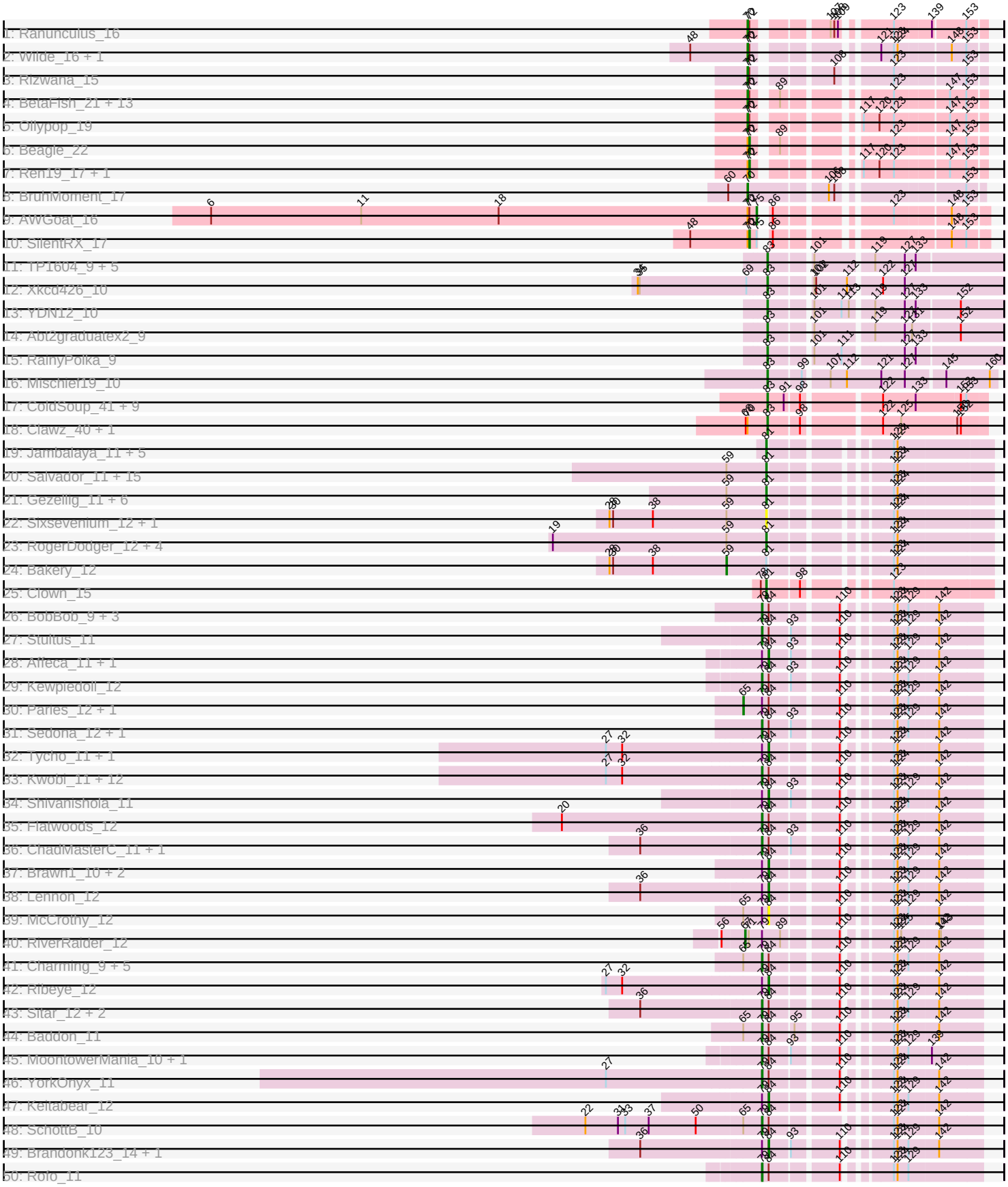
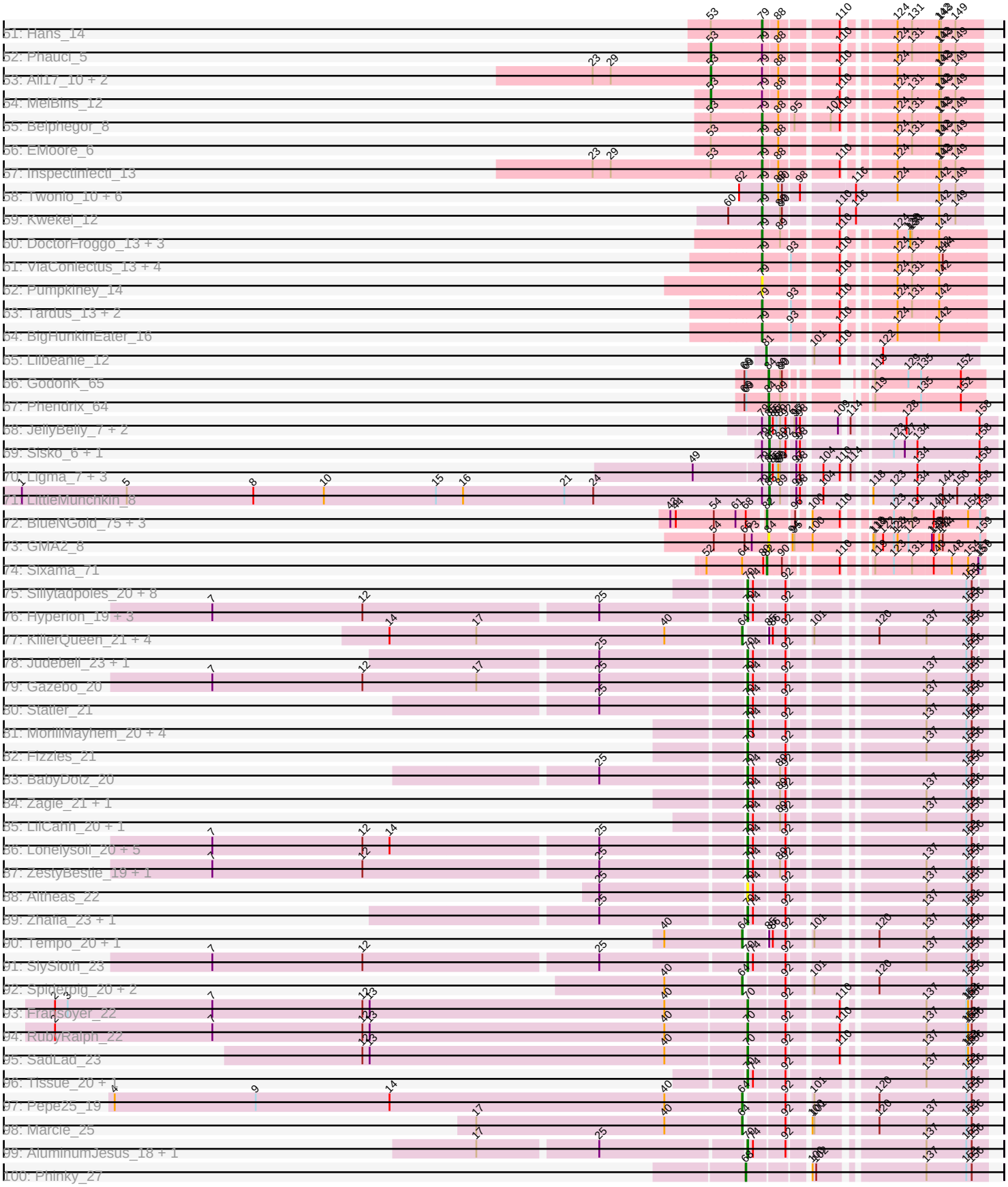
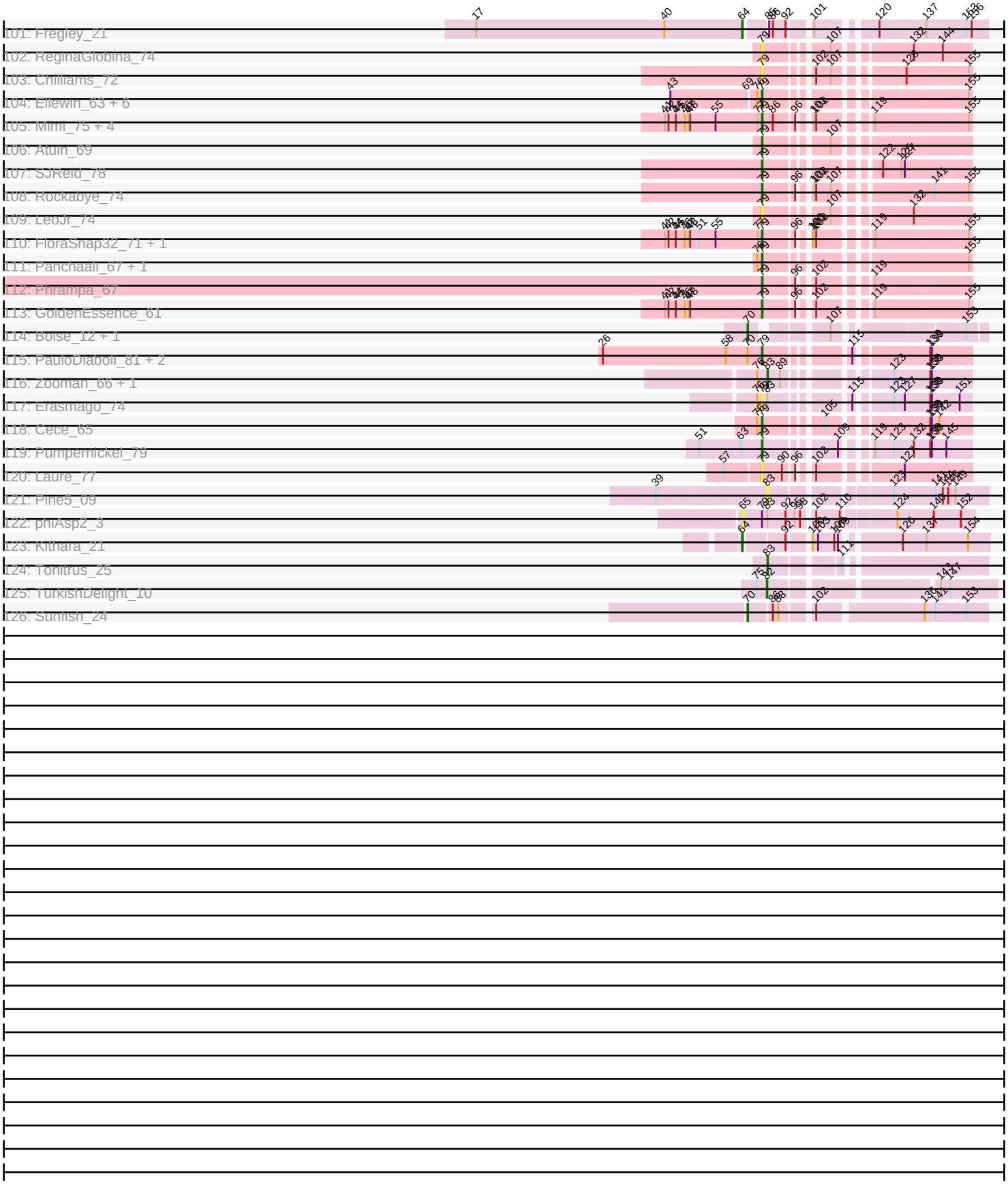
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1: Ranunculus_16
2: Wilde_16 + 1
3: Rizwana_15
4: BetaFish_21 + 13
5: Olypop_19
6: Beagle_22
7: Ren19_17 + 1
8: BrunMoment_17
9: AWGoat_16
10: SilentRX_17
11: TP1604_9 + 5
12: Xkcd426_10
13: YDN12_10
14: Abi2graduatex2_9
15: RainyPolka_9
16: Mischief19_10
17: ColdSoup_41 + 9
18: Clawz_40 + 1
19: Jambalaya_11 + 5
20: Salvador_11 + 15
21: Gezellig_11 + 6
22: Sixsevenium_12 + 1
23: RogerDodger_12 + 4
24: Bakery_12
25: Clown_15
26: BobBob_9 + 3
27: Stultus_11
28: Afleca_11 + 1
29: Kewpiedoll_12
30: Paries_12 + 1
31: Sedona_12 + 1
32: Tycho_11 + 1
33: Kwobi_11 + 12
34: Shivanishola_11
35: Flatwoods_12
36: ChadMasterC_11 + 1
37: Brawn1_10 + 2
38: Lennon_12
39: McCrothy_12
40: RiverRaider_12
41: Charming_9 + 5
42: Ribeye_12
43: Sitar_12 + 2
44: Baddon_11
45: MoontowerMania_10 + 1
46: YorkOnyx_11
47: Keitabear_12
48: SchottB_10
49: Brandonk123_14 + 1
50: Rolo_11

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I01: Fregley_21
I02: ReginaGlobina_74
I03: Chilliams_72
I04: Ellewin_63 + 6
I05: Mimi_75 + 4
I06: Atuin_69
I07: SJReid_78
I08: Rockabye_74
I09: LeoJr_74
I10: FloraSnap32_71 + 1
I11: Panchaali_67 + 1
I12: Phrampa_67
I13: GoldenEssence_61
I14: Boise_12 + 1
I15: PaulioDiaboli_81 + 2
I16: Zooman_66 + 1
I17: Erasmago_74
I18: Cece_65
I19: Pumpernickel_79
I20: Laure_77
I21: Pine5_09
I22: phiAsp2_3
I23: Kithara_21
I24: Tonitrus_25
I25: TurkishDelight_10
I26: Sunfish_24

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 347179 Report

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

Pham number 347179 has 294 members, 38 are drafts.

Phages represented in each track:
- Track 1 : Ranunculus_16
- Track 2 : Wilde_16, Tank_16
- Track 3 : Rizwana_15
- Track 4 : BetaFish_21, Forrestell_18, MellowYellow_18, Pointis_21, Odyssey395_23, Pureglobe5_23, RazzB_17, PhuzzTulsa_19, NyleyClemson_17, Popstraw_20, Hive_20, DogYard_21, Kubulix_22, RIPWilbur_19
- Track 5 : Ollypop_19
- Track 6 : Beagle_22
- Track 7 : Ren19_17, Nikan_17
- Track 8 : BruhMoment_17
- Track 9 : AWGoat_16
- Track 10 : SilentRX_17
- Track 11 : TP1604_9, Asis_9, Salete_9, BabyGotBac_9, Maih_9, BayC_9
- Track 12 : Xkcd426_10
- Track 13 : YDN12_10
- Track 14 : Abt2graduatex2_9
- Track 15 : RainyPolka_9
- Track 16 : Mischief19_10
- Track 17 : ColdSoup_41, Jollymon_40, Grumio_40, Soos_36, Sting_39, DonTron_40, Amo99_41, Purplicious_38, KingstonB_38, Stillion_39
- Track 18 : Clawz_40, Makar_41
- Track 19 : Jambalaya_11, Savbucketdawg_11, TillyBobJoe_11, Shinji_11, Portcullis_11, JohnPork_11
- Track 20 : Salvador_11, Arri_12, Danyall_11, Fugax_11, VanDeWege_12, SmokingBunny_11, Nubi_11, CoveyB_11, Togo_11, Mutzi_11, Evamon_11, PinkCoffee_11, Barb_11, KimmyK_11, ClamChowder_11, Twister6_11
- Track 21 : Gezellig_11, Phlop_11, Sendy_11, Egi03_11, Wizard_11, PullumCavea_11, Fireball_12
- Track 22 : Sixsevenium_12, SharkTale_11
- Track 23 : RogerDodger_12, CherryCola_12, YungMoney_11, Valary_12, Halo3_12
- Track 24 : Bakery_12
- Track 25 : Clown_15
- Track 26 : BobBob_9, Sanjuju_10, Angelicage_11, Jabberwocky_10
- Track 27 : Stultus_11
- Track 28 : Affeca_11, McKinley_12
- Track 29 : Kewpiedoll_12
- Track 30 : Paries_12, Tangent_9

• Track 31 : Sedona_12, Bibwit_11
• Track 32 : Tycho_11, Stichling_11
• Track 33 : Kwobi_11, Kroos_11, Tangerine_11, Gustavo_11, StorminNorm_11, Derg_7, Gaea_11, Ashertheman_11, Baumdotcom_11, LilHam_9, Bizzy_12, Saronaya_11, JKSyngboy_10
• Track 34 : Shivanishola_11
• Track 35 : Flatwoods_12
• Track 36 : ChadMasterC_11, Barsten_12
• Track 37 : Brawn1_10, Fitzgerald_10, Ailee_11
• Track 38 : Lennon_12
• Track 39 : McCrothy_12
• Track 40 : RiverRaider_12
• Track 41 : Charming_9, Fosterous_9, Galadriel_13, Kamashten_12, Thing3_12, Nordenberg_6
• Track 42 : Ribeye_12
• Track 43 : Sitar_12, FuegoCuervo_15, Vivi2_10
• Track 44 : Baddon_11
• Track 45 : MoontowerMania_10, Love_13
• Track 46 : YorkOnyx_11
• Track 47 : Keitabear_12
• Track 48 : SchottB_10
• Track 49 : Brandonk123_14, Geodirt_11
• Track 50 : Rofo_11
• Track 51 : Hans_14
• Track 52 : Phauci_5
• Track 53 : Ali17_10, Phinally_12, Leonard_12
• Track 54 : MelBins_12
• Track 55 : Belphegor_8
• Track 56 : EMoore_6
• Track 57 : Inspectinfecti_13
• Track 58 : Twonlo_10, Tiamoceli_13, EdmundFerry_11, Chickadee_12, RoadKill_10, GTE6_13, Dexdert_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 : Pumpkiney_14
• Track 63 : Tardus_13, APunk_14, Zitch_14
• Track 64 : BigHunkinEater_16
• Track 65 : Lilbeanie_12
• Track 66 : GodonK_65
• Track 67 : Phendrix_64
• Track 68 : JellyBelly_7, Mariokart_7, Coco2012_7
• Track 69 : Sisko_6, AnClar_6
• Track 70 : Ligma_7, Shatter_7, Fresco_7, Axumite_7
• Track 71 : LittleMunchkin_8
• Track 72 : BlueNGold_75, Boopy_76, Forza_76, Mareelih_75
• Track 73 : GMA2_8
• Track 74 : Sixama_71
• Track 75 : Sillytadpoles_20, Mentos_23, Grassboy_22, Rudy_19, Quammi_19, Teehee_22, Viceroy_20, Kyva_23, StrawberryJamm_23
• Track 76 : Hyperion_19, Mashley_18, Llemily_20, SallyK_22
• Track 77 : KillerQueen_21, CandC_19, Kelcole_19, Romm_21, RobinRose_21
• Track 78 : Judebell_23, Phabia_21

• Track 79 : Gazebo_20
• Track 80 : Statler_21
• Track 81 : MorillMayhem_20, BaconCheese_22, Nike_21, Blab_18, Squash_23
• Track 82 : Fizzles_21
• Track 83 : BabyDotz_20
• Track 84 : Zagie_21, Rowlf_17
• Track 85 : LilCahh_20, EverythinBagel_20
• Track 86 : Lonelysoil_20, Casend_22, Wheelie_20, Jehoshaphat_23, DonaldDuck_20, Wayne3_22
• Track 87 : ZestyBestie_19, FrankDeliGuy_18
• Track 88 : Altheas_22
• Track 89 : Zhafia_23, Namago_21
• Track 90 : Tempo_20, OneinaGillian_20
• Track 91 : SlySloth_23
• Track 92 : Spiderpig_20, BirdInFrench_20, Wilca_20
• Track 93 : Fransoyer_22
• Track 94 : RubyRalph_22
• Track 95 : SadLad_23
• Track 96 : Tissue_20, Mila11_22
• Track 97 : Pepe25_19
• Track 98 : Marcie_25
• Track 99 : AluminumJesus_18, WheelerS25_26
• Track 100 : Phinky_27
• Track 101 : Fregley_21
• Track 102 : ReginaGlobina_74
• Track 103 : Chilliams_72
• Track 104 : Ellewin_63, Emmetator_67, Artu_65, WaddleDee_62, DunneganBoMo_64, BooTeria_65, KSunshine22_69
• Track 105 : Mimi_75, Talia1610_75, FrostedClock_74, Bloom_79, Racecar_76
• Track 106 : Atuin_69
• Track 107 : SJReid_78
• Track 108 : Rockabye_74
• Track 109 : LeoJr_74
• Track 110 : FloraSnap32_71, Patbob_73
• Track 111 : Panchaali_67, Stewart25555_65
• Track 112 : Phrampa_67
• Track 113 : GoldenEssence_61
• Track 114 : Boise_12, RomansRevenge_12
• Track 115 : PauloDiaboli_81, Dodo_83, A3Wally_81
• Track 116 : Zooman_66, Big4_70
• Track 117 : Erasmago_74
• Track 118 : Cece_65
• Track 119 : Pumpernickel_79
• Track 120 : Laure_77
• Track 121 : Pine5_09
• Track 122 : phiAsp2_3
• Track 123 : Kithara_21
• Track 124 : Tonitrus_25
• Track 125 : TurkishDelight_10
• Track 126 : 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 85 of the 256 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A3Wally_81, APunk_14, Abblin_13, Angelicage_11, Artu_65, Asherthеman_11, Atuin_69, Baddon_11, Barsten_12, Baumdotcom_11, Belphegor_8, Bibwit_11, BigHunkinEater_16, Bizzy_12, Bloom_79, BobBob_9, BooTeria_65, Cece_65, ChadMasterC_11, Charming_9, Chickadee_12, Chilliams_72, Delrey21_13, Derg_7, Dexdert_13, DoctorFroggo_13, Dodo_83, DunneganBoMo_64, EMoore_6, EdmundFerry_11, Ellewin_63, Emmetator_67, Erasmago_74, Flatwoods_12, FloraSnap32_71, Fosterous_9, FrostedClock_74, FuegoCuervo_15, GTE6_13, Gaea_11, Galadriel_13, GoldenEssence_61, Gustavo_11, Hans_14, Inspectinfecti_13, JKSyngboy_10, Jabberwocky_10, KSunshine22_69, Kamashten_12, Kewpiedoll_12, Kroos_11, Kwekel_12, Kwobi_11, Laure_77, LeoJr_74, LilHam_9, Love_13, Mimi_75, MoontowerMania_10, Natkenzie_13, Nordenberg_6, Panchaali_67, Patbob_73, PauloDiaboli_81, Phrampa_67, Pumpernickel_79, Pumpkiney_14, Racecar_76, ReginaGlobina_74, RoadKill_10, Rockabye_74, Rofo_11, SJReid_78, Sampson_13, Sanjuju_10, Saronaya_11, SchottB_10, Scioto_13, Sedona_12, Sitar_12, Stewart25555_65, StorminNorm_11, Stultus_11, Talia1610_75, Tangerine_11, Tardus_13, Thing3_12, Tiamoceli_13, Twonlo_10, Verity_13, ViaConlectus_13, Vivi2_10, WaddleDee_62, YorkOnyx_11, Zipp_13, Zitch_14,

Genes that have the "Most Annotated" start but do not call it:
• Affeca_11, Ailee_11, Ali17_10, AnClar_6, Axumite_7, Brandonk123_14, Brawn1_10, Coco2012_7, Fitzgerald_10, Fresco_7, Geodirt_11, JellyBelly_7, Keitabear_12, Lennon_12, Leonard_12, Ligma_7, LittleMunchkin_8, Mariokart_7, McCrothy_12, McKinley_12, MelBins_12, Paries_12, Phauci_5, Phinally_12, Ribeye_12, RiverRaider_12, Shatter_7, Shivanishola_11, Sisko_6, Stichling_11, Tangent_9, Tycho_11, phiAsp2_3,

Genes that do not have the "Most Annotated" start:
• AWGoat_16, Abt2graduatex2_9, Altheas_22, AluminumJesus_18, Amo99_41, Arri_12, Asis_9, BabyDotz_20, BabyGotBac_9, BaconCheese_22, Bakery_12, Barb_11, BayC_9, Beagle_22, BetaFish_21, Big4_70, BirdInFrench_20, Blab_18, BlueNGold_75, Boise_12, Boopy_76, BruhMoment_17, CandC_19, Casend_22, CherryCola_12, ClamChowder_11, Clawz_40, Clown_15, ColdSoup_41, CoveyB_11, Danyall_11, DogYard_21, DonTron_40, DonaldDuck_20, Egi03_11, Evamon_11, EverythinBagel_20, Fireball_12, Fizzles_21, Forrestell_18, Forza_76, FrankDeliGuy_18, Fransoyer_22, Fregley_21, Fugax_11, GMA2_8, Gazebo_20, Gezellig_11, GodonK_65, Grassboy_22, Grumio_40, Halo3_12, Hive_20, Hyperion_19, Jambalaya_11, Jehoshaphat_23, JohnPork_11, Jollymon_40, Judebell_23, Kelcole_19, KillerQueen_21, KimmyK_11, KingstonB_38, Kithara_21, Kubulix_22, Kyva_23, LilCahh_20, Lilbeanie_12, Llemily_20, Lonelysoil_20, Maih_9, Makar_41, Marcie_25, Mareelih_75, Mashley_18, MellowYellow_18, Mentos_23, Mila11_22, Mischief19_10, MorillMayhem_20, Mutzi_11, Namago_21, Nikan_17, Nike_21, Nubi_11, NyleyClemson_17, Odyssey395_23, Ollypop_19, OneinaGillian_20, Pepe25_19, Phabia_21, Phendrix_64, Phinky_27, Phlop_11, PhuzzTulsa_19, Pine5_09, PinkCoffee_11, Pointis_21, Popstraw_20, Portcullis_11, PullumCavea_11, Pureglobe5_23, Purplicious_38, Quammi_19, RIPWilbur_19,

RainyPolka_9, Ranunculus_16, RazzB_17, Ren19_17, Rizwana_15, RobinRose_21, RogerDodger_12, RomansRevenge_12, Romm_21, Rowlf_17, RubyRalph_22, Rudy_19, SadLad_23, Salete_9, SallyK_22, Salvador_11, Savbucketdawg_11, Sendy_11, SharkTale_11, Shinji_11, SilentRX_17, Sillytadpoles_20, Sixama_71, Sixsevenium_12, SlySloth_23, SmokingBunny_11, Soos_36, Spiderpig_20, Squash_23, Statler_21, Stillion_39, Sting_39, StrawberryJamm_23, Sunfish_24, TP1604_9, Tank_16, Teehee_22, Tempo_20, TillyBobJoe_11, Tissue_20, Togo_11, Tonitrus_25, TurkishDelight_10, Twister6_11, Valary_12, VanDeWege_12, Viceroy_20, Wayne3_22, WheelerS25_26, Wheelie_20, Wilca_20, Wilde_16, Wizard_11, Xkcd426_10, YDN12_10, YungMoney_11, Zagie_21, ZestyBestie_19, Zhafia_23, Zooman_66,

Summary by start number:

Start 53:
• Found in 9 of 294 (3.1%) of genes in pham
• Manual Annotations of this start: 5 of 256
• 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 59:
• Found in 31 of 294 (10.5%) of genes in pham
• Manual Annotations of this start: 1 of 256
• Called 3.2% of time when present
• Phage (with cluster) where this start called: Bakery_12 (DC1),

Start 64:
• Found in 15 of 294 (5.1%) of genes in pham
• Manual Annotations of this start: 12 of 256
• Called 93.3% of time when present
• Phage (with cluster) where this start called: BirdInFrench_20 (EG), CandC_19 (EG), Fregley_21 (EG), Kelcole_19 (EG), KillerQueen_21 (EG), Kithara_21 (singleton), Marcie_25 (EG), OneinaGillian_20 (EG), Pepe25_19 (EG), RobinRose_21 (EG), Romm_21 (EG), Spiderpig_20 (EG), Tempo_20 (EG), Wilca_20 (EG),

Start 65:
• Found in 12 of 294 (4.1%) of genes in pham
• Manual Annotations of this start: 2 of 256
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Paries_12 (DE1), Tangent_9 (DE1), phiAsp2_3 (singleton),

Start 67:
• Found in 1 of 294 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 256
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RiverRaider_12 (DE1),

Start 68:
• Found in 7 of 294 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 256
• Called 14.3% of time when present

• Phage (with cluster) where this start called: Phinky_27 (EG),

Start 70:
• Found in 80 of 294 (27.2%) of genes in pham
• Manual Annotations of this start: 63 of 256
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Altheas_22 (EG), AluminumJesus_18 (EG), BabyDotz_20 (EG), BaconCheese_22 (EG), BetaFish_21 (AP2), Blab_18 (EG), Boise_12 (FT), BruhMoment_17 (AP3), Casend_22 (EG), DogYard_21 (AP2), DonaldDuck_20 (EG), EverythinBagel_20 (EG), Fizzles_21 (EG), Forrestell_18 (AP2), FrankDeliGuy_18 (EG), Fransoyer_22 (EG), Gazebo_20 (EG), Grassboy_22 (EG), Hive_20 (AP2), Hyperion_19 (EG), Jehoshaphat_23 (EG), Judebell_23 (EG), Kubulix_22 (AP2), Kyva_23 (EG), LilCahh_20 (EG), Llemily_20 (EG), Lonelysoil_20 (EG), Mashley_18 (EG), MellowYellow_18 (AP2), Mentos_23 (EG), Mila11_22 (EG), MorillMayhem_20 (EG), Namago_21 (EG), Nike_21 (EG), NyleyClemson_17 (AP2), Odyssey395_23 (AP2), Ollypop_19 (AP2), Phabia_21 (EG), PhuzzTulsa_19 (AP2), Pointis_21 (AP2), Popstraw_20 (AP2), Pureglobe5_23 (AP2), Quammi_19 (EG), RIPWilbur_19 (AP2), Ranunculus_16 (AP), RazzB_17 (AP2), Rizwana_15 (AP1), RomansRevenge_12 (FT), Rowlf_17 (EG), RubyRalph_22 (EG), Rudy_19 (EG), SadLad_23 (EG), SallyK_22 (EG), Sillytadpoles_20 (EG), SlySloth_23 (EG), Squash_23 (EG), Statler_21 (EG), StrawberryJamm_23 (EG), Sunfish_24 (singleton), Tank_16 (AP1), Teehee_22 (EG), Tissue_20 (EG), Viceroy_20 (EG), Wayne3_22 (EG), WheelerS25_26 (EG), Wheelie_20 (EG), Wilde_16 (AP1), Zagie_21 (EG), ZestyBestie_19 (EG), Zhafia_23 (EG),

Start 72:
• Found in 24 of 294 (8.2%) of genes in pham
• Manual Annotations of this start: 4 of 256
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Beagle_22 (AP2), Nikan_17 (AP2), Ren19_17 (AP2), SilentRX_17 (AP4),

Start 75:
• Found in 3 of 294 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 256
• Called 33.3% of time when present
• Phage (with cluster) where this start called: AWGoat_16 (AP4),

Start 79:
• Found in 129 of 294 (43.9%) of genes in pham
• Manual Annotations of this start: 85 of 256
• Called 74.4% of time when present
• Phage (with cluster) where this start called: A3Wally_81 (GD1), APunk_14 (DE4), Abblin_13 (DE4), Angelicage_11 (DE1), Artu_65 (FC), Ashertheman_11 (DE1), Atuin_69 (FC), Baddon_11 (DE1), Barsten_12 (DE1), Baumdotcom_11 (DE1), Belphegor_8 (DE2), Bibwit_11 (DE1), BigHunkinEater_16 (DE4), Bizzy_12 (DE1), Bloom_79 (FC), BobBob_9 (DE1), BooTeria_65 (FC), Cece_65 (GD3), ChadMasterC_11 (DE1), Charming_9 (DE1), Chickadee_12 (DE3), Chilliams_72 (FC), Delrey21_13 (DE4), Derg_7 (DE1), Dexdert_13 (DE3), DoctorFroggo_13 (DE4), Dodo_83 (GD1), DunneganBoMo_64 (FC), EMoore_6 (DE2), EdmundFerry_11 (DE3), Ellewin_63 (FC), Emmetator_67 (FC), Erasmago_74 (GD2), Flatwoods_12 (DE1), FloraSnap32_71 (FC), Fosterous_9 (DE1), FrostedClock_74 (FC), FuegoCuervo_15 (DE1), GTE6_13 (DE3), Gaea_11 (DE1), Galadriel_13 (DE1),

GoldenEssence_61 (FC), Gustavo_11 (DE1), Hans_14 (DE2), Inspectinfecti_13 (DE2), JKSyngboy_10 (DE1), Jabberwocky_10 (DE1), KSunshine22_69 (FC), Kamashten_12 (DE1), Kewpiedoll_12 (DE1), Kroos_11 (DE1), Kwekel_12 (DE3), Kwobi_11 (DE1), Laure_77 (UNK), LeoJr_74 (FC), LilHam_9 (DE1), Love_13 (DE1), Mimi_75 (FC), MoontowerMania_10 (DE1), Natkenzie_13 (DE4), Nordenberg_6 (DE1), Panchaali_67 (FC), Patbob_73 (FC), PauloDiaboli_81 (GD1), Phrampa_67 (FC), Pumpernickel_79 (GD4), Pumpkiney_14 (DE4), Racecar_76 (FC), ReginaGlobina_74 (FC), RoadKill_10 (DE3), Rockabye_74 (FC), Rofo_11 (DE1), SJReid_78 (FC), Sampson_13 (DE4), Sanjuju_10 (DE1), Saronaya_11 (DE1), SchottB_10 (DE1), Scioto_13 (DE4), Sedona_12 (DE1), Sitar_12 (DE1), Stewart25555_65 (FC), StorminNorm_11 (DE1), Stultus_11 (DE1), Talia1610_75 (FC), Tangerine_11 (DE1), Tardus_13 (DE4), Thing3_12 (DE1), Tiamoceli_13 (DE3), Twonlo_10 (DE3), Verity_13 (DE4), ViaConlectus_13 (DE4), Vivi2_10 (DE1), WaddleDee_62 (FC), YorkOnyx_11 (DE1), Zipp_13 (DE4), Zitch_14 (DE4),

Start 81:
• Found in 39 of 294 (13.3%) of genes in pham
• Manual Annotations of this start: 33 of 256
• Called 97.4% of time when present
• Phage (with cluster) where this start called: Arri_12 (DC1), Barb_11 (DC1), CherryCola_12 (DC1), ClamChowder_11 (DC1), Clown_15 (DC2), CoveyB_11 (DC1), Danyall_11 (DC1), Egi03_11 (DC1), Evamon_11 (DC1), Fireball_12 (DC1), Fugax_11 (DC1), Gezellig_11 (DC1), Halo3_12 (DC1), Jambalaya_11 (DC1), JohnPork_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), Sendy_11 (DC1), SharkTale_11 (DC1), Shinji_11 (DC1), Sixsevenium_12 (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 82:
• Found in 6 of 294 (2.0%) of genes in pham
• Manual Annotations of this start: 6 of 256
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_75 (DS), Boopy_76 (DS), Forza_76 (DS), Mareelih_75 (DS), Sixama_71 (DS), TurkishDelight_10 (singleton),

Start 83:
• Found in 29 of 294 (9.9%) of genes in pham
• Manual Annotations of this start: 21 of 256
• Called 93.1% of time when present
• Phage (with cluster) where this start called: Abt2graduatex2_9 (BG), Amo99_41 (CP), Asis_9 (BG), BabyGotBac_9 (BG), BayC_9 (BG), Big4_70 (GD2), Clawz_40 (CP), ColdSoup_41 (CP), DonTron_40 (CP), Grumio_40 (CP), Jollymon_40 (CP), KingstonB_38 (CP), Maih_9 (BG), Makar_41 (CP), Mischief19_10 (BG), Pine5_09 (singleton), Purplicious_38 (CP), RainyPolka_9 (BG), Salete_9 (BG), Soos_36 (CP), Stillion_39 (CP), Sting_39 (CP), TP1604_9 (BG), Tonitrus_25 (singleton), Xkcd426_10 (BG), YDN12_10 (BG), Zooman_66 (GD2),

Start 84:
• Found in 58 of 294 (19.7%) of genes in pham
• Manual Annotations of this start: 13 of 256

• Called 29.3% of time when present
• Phage (with cluster) where this start called: Affeca_11 (DE1), Ailee_11 (DE1), Brandonk123_14 (DE1), Brawn1_10 (DE1), Fitzgerald_10 (DE1), GMA2_8 (DS), Geodirt_11 (DE1), GodonK_65 (DK), Keitabear_12 (DE1), Lennon_12 (DE1), McCrothy_12 (DE1), McKinley_12 (DE1), Phendrix_64 (DK), Ribeye_12 (DE1), Shivanishola_11 (DE1), Stichling_11 (DE1), Tycho_11 (DE1),

Start 85:
• Found in 18 of 294 (6.1%) of genes in pham
• Manual Annotations of this start: 8 of 256
• Called 55.6% of time when present
• Phage (with cluster) where this start called: AnClar_6 (DR), Axumite_7 (DR), Coco2012_7 (DR), Fresco_7 (DR), JellyBelly_7 (DR), Ligma_7 (DR), LittleMunchkin_8 (DR), Mariokart_7 (DR), Shatter_7 (DR), Sisko_6 (DR),

Summary by clusters:

There are 26 clusters represented in this pham: GD1, singleton, BG, FT, DK, AP2, AP3, AP1, GD2, AP4, FC, GD3, GD4, DR, DS, UNK, EG, AP, CP, DC2, DC1, DE1, DE2, DE3, DE4, DE5,

Info for manual annotations of cluster AP:
•Start number 70 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:
•Start number 70 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:
•Start number 70 was manually annotated 12 times for cluster AP2.
•Start number 72 was manually annotated 3 times for cluster AP2.

Info for manual annotations of cluster AP3:
•Start number 70 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:
•Start number 72 was manually annotated 1 time for cluster AP4.
•Start number 75 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster BG:
•Start number 83 was manually annotated 11 times for cluster BG.

Info for manual annotations of cluster CP:
•Start number 83 was manually annotated 7 times for cluster CP.

Info for manual annotations of cluster DC1:
•Start number 59 was manually annotated 1 time for cluster DC1.
•Start number 81 was manually annotated 31 times for cluster DC1.

Info for manual annotations of cluster DC2:
•Start number 81 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:
•Start number 65 was manually annotated 2 times for cluster DE1.

•Start number 67 was manually annotated 1 time for cluster DE1.
•Start number 79 was manually annotated 39 times for cluster DE1.
•Start number 84 was manually annotated 11 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 53 was manually annotated 5 times for cluster DE2.
•Start number 79 was manually annotated 4 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 13 times for cluster DE4.

Info for manual annotations of cluster DE5:
•Start number 81 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DK:
•Start number 84 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DR:
•Start number 85 was manually annotated 8 times for cluster DR.

Info for manual annotations of cluster DS:
•Start number 82 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster EG:
•Start number 64 was manually annotated 11 times for cluster EG.
•Start number 68 was manually annotated 1 time for cluster EG.
•Start number 70 was manually annotated 44 times for cluster EG.

Info for manual annotations of cluster FC:
•Start number 79 was manually annotated 17 times for cluster FC.

Info for manual annotations of cluster FT:
•Start number 70 was manually annotated 1 time for cluster FT.

Info for manual annotations of cluster GD1:
•Start number 79 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 83 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 79 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 79 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_81 Start: 29548, Stop: 29832, Start Num: 79
Candidate Starts for A3Wally_81:
(26, 29287), (58, 29491), (Start: 70 @29527 has 63 MA's), (Start: 79 @29548 has 85 MA's), (115, 29659), (138, 29764), (139, 29767),

Gene: APunk_14 Start: 7109, Stop: 7426, Start Num: 79
Candidate Starts for APunk_14:
(Start: 79 @7109 has 85 MA's), (93, 7151), (110, 7220), (124, 7283), (131, 7307), (142, 7349),

Gene: AWGoat_16 Start: 8424, Stop: 8723, Start Num: 75
Candidate Starts for AWGoat_16:
(6, 7521), (11, 7770), (18, 7998), (Start: 70 @8409 has 63 MA's), (Start: 72 @8412 has 4 MA's), (Start: 75 @8424 has 1 MA's), (86, 8430), (123, 8583), (148, 8667), (153, 8691),

Gene: Abblin_13 Start: 6625, Stop: 6942, Start Num: 79
Candidate Starts for Abblin_13:
(Start: 79 @6625 has 85 MA's), (93, 6667), (110, 6736), (124, 6799), (131, 6823), (142, 6865), (144, 6871),

Gene: Abt2graduatex2_9 Start: 7673, Stop: 8023, Start Num: 83
Candidate Starts for Abt2graduatex2_9:
(Start: 83 @7673 has 21 MA's), (101, 7733), (119, 7820), (127, 7868), (131, 7877), (152, 7952),

Gene: Affeca_11 Start: 6351, Stop: 6650, Start Num: 84
Candidate Starts for Affeca_11:
(Start: 79 @6342 has 85 MA's), (Start: 84 @6351 has 13 MA's), (93, 6381), (110, 6450), (123, 6507), (124, 6513), (129, 6531), (142, 6579),

Gene: Ailee_11 Start: 7213, Stop: 7512, Start Num: 84
Candidate Starts for Ailee_11:
(Start: 79 @7204 has 85 MA's), (Start: 84 @7213 has 13 MA's), (110, 7312), (123, 7369), (124, 7375), (129, 7393), (142, 7441),

Gene: Ali17_10 Start: 6021, Stop: 6407, Start Num: 53
Candidate Starts for Ali17_10:
(23, 5826), (29, 5856), (Start: 53 @6021 has 5 MA's), (Start: 79 @6102 has 85 MA's), (88, 6123), (110, 6207), (124, 6270), (142, 6336), (143, 6339), (149, 6363),

Gene: Altheas_22 Start: 8371, Stop: 8715, Start Num: 70
Candidate Starts for Altheas_22:
(25, 8140), (Start: 70 @8371 has 63 MA's), (74, 8380), (92, 8428), (137, 8614), (153, 8680), (156, 8689),

Gene: AluminumJesus_18 Start: 7735, Stop: 8079, Start Num: 70
Candidate Starts for AluminumJesus_18:
(17, 7315), (25, 7504), (Start: 70 @7735 has 63 MA's), (74, 7744), (92, 7792), (137, 7978), (153, 8044), (156, 8053),

Gene: Amo99_41 Start: 17853, Stop: 18179, Start Num: 83
Candidate Starts for Amo99_41:
(Start: 83 @17853 has 21 MA's), (91, 17880), (98, 17901), (122, 18012), (133, 18066), (152, 18138), (153, 18147),

Gene: AnClar_6 Start: 5256, Stop: 5579, Start Num: 85
Candidate Starts for AnClar_6:
(Start: 79 @5244 has 85 MA's), (Start: 85 @5256 has 8 MA's), (89, 5274), (92, 5283), (97, 5295), (98, 5301), (123, 5412), (127, 5430), (134, 5451), (158, 5550),

Gene: Angelicage_11 Start: 6771, Stop: 7079, Start Num: 79
Candidate Starts for Angelicage_11:
(Start: 79 @6771 has 85 MA's), (Start: 84 @6780 has 13 MA's), (110, 6879), (123, 6936), (124, 6942), (129, 6960), (142, 7008),

Gene: Arri_12 Start: 5316, Stop: 5630, Start Num: 81
Candidate Starts for Arri_12:
(Start: 59 @5253 has 1 MA's), (Start: 81 @5316 has 33 MA's), (123, 5472), (124, 5478),

Gene: Artu_65 Start: 27608, Stop: 27892, Start Num: 79
Candidate Starts for Artu_65:
(43, 27464), (69, 27590), (76, 27602), (Start: 79 @27608 has 85 MA's), (155, 27887),

Gene: Ashertheman_11 Start: 5950, Stop: 6258, Start Num: 79
Candidate Starts for Ashertheman_11:
(27, 5698), (32, 5725), (Start: 79 @5950 has 85 MA's), (Start: 84 @5959 has 13 MA's), (110, 6058), (123, 6115), (124, 6121), (142, 6187),

Gene: Asis_9 Start: 7730, Stop: 8080, Start Num: 83
Candidate Starts for Asis_9:
(Start: 83 @7730 has 21 MA's), (101, 7790), (119, 7877), (127, 7925), (133, 7940),

Gene: Atuin_69 Start: 30721, Stop: 31002, Start Num: 79
Candidate Starts for Atuin_69:
(Start: 79 @30721 has 85 MA's), (107, 30805),

Gene: Axumite_7 Start: 4953, Stop: 5276, Start Num: 85
Candidate Starts for Axumite_7:
(49, 4833), (Start: 79 @4941 has 85 MA's), (Start: 85 @4953 has 8 MA's), (86, 4959), (87, 4965), (88, 4968), (89, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (134, 5148), (158, 5247),

Gene: BabyDotz_20 Start: 8186, Stop: 8524, Start Num: 70
Candidate Starts for BabyDotz_20:
(25, 7955), (Start: 70 @8186 has 63 MA's), (74, 8195), (89, 8234), (92, 8243), (153, 8495), (156, 8504),

Gene: BabyGotBac_9 Start: 7730, Stop: 8080, Start Num: 83
Candidate Starts for BabyGotBac_9:
(Start: 83 @7730 has 21 MA's), (101, 7790), (119, 7877), (127, 7925), (133, 7940),

Gene: BaconCheese_22 Start: 8883, Stop: 9227, Start Num: 70
Candidate Starts for BaconCheese_22:
(Start: 70 @8883 has 63 MA's), (74, 8892), (92, 8940), (137, 9126), (153, 9192), (156, 9201),

Gene: Baddon_11 Start: 6660, Stop: 6968, Start Num: 79
Candidate Starts for Baddon_11:
(Start: 65 @6630 has 2 MA's), (Start: 79 @6660 has 85 MA's), (Start: 84 @6669 has 13 MA's), (95, 6705), (110, 6768), (123, 6825), (124, 6831), (142, 6897),

Gene: Bakery_12 Start: 4954, Stop: 5331, Start Num: 59
Candidate Starts for Bakery_12:
(28, 4762), (30, 4768), (38, 4834), (Start: 59 @4954 has 1 MA's), (Start: 81 @5017 has 33 MA's), (123, 5173), (124, 5179),

Gene: Barb_11 Start: 5272, Stop: 5586, Start Num: 81
Candidate Starts for Barb_11:
(Start: 59 @5209 has 1 MA's), (Start: 81 @5272 has 33 MA's), (123, 5428), (124, 5434),

Gene: Barsten_12 Start: 6156, Stop: 6464, Start Num: 79
Candidate Starts for Barsten_12:
(36, 5964), (Start: 79 @6156 has 85 MA's), (Start: 84 @6165 has 13 MA's), (93, 6195), (110, 6264), (123, 6321), (124, 6327), (129, 6345), (142, 6393),

Gene: Baumdotcom_11 Start: 5973, Stop: 6281, Start Num: 79
Candidate Starts for Baumdotcom_11:
(27, 5721), (32, 5748), (Start: 79 @5973 has 85 MA's), (Start: 84 @5982 has 13 MA's), (110, 6081), (123, 6138), (124, 6144), (142, 6210),

Gene: BayC_9 Start: 7730, Stop: 8080, Start Num: 83
Candidate Starts for BayC_9:
(Start: 83 @7730 has 21 MA's), (101, 7790), (119, 7877), (127, 7925), (133, 7940),

Gene: Beagle_22 Start: 8934, Stop: 9242, Start Num: 72
Candidate Starts for Beagle_22:
(Start: 70 @8931 has 63 MA's), (Start: 72 @8934 has 4 MA's), (89, 8964), (123, 9105), (147, 9186), (153, 9213),

Gene: Belphegor_8 Start: 3927, Stop: 4235, Start Num: 79
Candidate Starts for Belphegor_8:
(Start: 53 @3846 has 5 MA's), (Start: 79 @3927 has 85 MA's), (88, 3951), (95, 3972), (107, 4020), (110, 4035), (124, 4098), (131, 4122), (142, 4164), (143, 4167), (149, 4191),

Gene: BetaFish_21 Start: 9134, Stop: 9445, Start Num: 70
Candidate Starts for BetaFish_21:
(Start: 70 @9134 has 63 MA's), (Start: 72 @9137 has 4 MA's), (89, 9167), (123, 9308), (147, 9389), (153, 9416),

Gene: Bibwit_11 Start: 7027, Stop: 7335, Start Num: 79
Candidate Starts for Bibwit_11:
(Start: 79 @7027 has 85 MA's), (Start: 84 @7036 has 13 MA's), (93, 7066), (110, 7135), (123, 7192), (124, 7198), (129, 7216), (142, 7264),

Gene: Big4_70 Start: 28857, Stop: 29132, Start Num: 83
Candidate Starts for Big4_70:
(76, 28842), (Start: 83 @28857 has 21 MA's), (89, 28878), (123, 29007), (138, 29064), (139, 29067),

Gene: BigHunkinEater_16 Start: 6556, Stop: 6873, Start Num: 79
Candidate Starts for BigHunkinEater_16:
(Start: 79 @6556 has 85 MA's), (93, 6598), (110, 6667), (124, 6730), (142, 6796),

Gene: BirdInFrench_20 Start: 7061, Stop: 7405, Start Num: 64

Candidate Starts for BirdInFrench_20:
(40, 6932), (Start: 64 @7061 has 12 MA's), (92, 7118), (101, 7148), (120, 7226), (153, 7370), (156, 7379),

Gene: Bizzy_12 Start: 6147, Stop: 6455, Start Num: 79
Candidate Starts for Bizzy_12:
(27, 5895), (32, 5922), (Start: 79 @6147 has 85 MA's), (Start: 84 @6156 has 13 MA's), (110, 6255), (123, 6312), (124, 6318), (142, 6384),

Gene: Blab_18 Start: 7511, Stop: 7855, Start Num: 70
Candidate Starts for Blab_18:
(Start: 70 @7511 has 63 MA's), (74, 7520), (92, 7568), (137, 7754), (153, 7820), (156, 7829),

Gene: Bloom_79 Start: 33362, Stop: 33646, Start Num: 79
Candidate Starts for Bloom_79:
(41, 33203), (42, 33209), (44, 33221), (45, 33224), (46, 33236), (47, 33242), (48, 33245), (55, 33287), (77, 33356), (Start: 79 @33362 has 85 MA's), (86, 33380), (96, 33410), (101, 33422), (102, 33425), (119, 33491), (155, 33641),

Gene: BlueNGold_75 Start: 31069, Stop: 31362, Start Num: 82
Candidate Starts for BlueNGold_75:
(43, 30928), (44, 30937), (54, 30994), (61, 31030), (Start: 68 @31045 has 1 MA's), (Start: 82 @31069 has 6 MA's), (96, 31108), (100, 31117), (110, 31162), (123, 31216), (131, 31246), (140, 31279), (144, 31294), (154, 31336), (159, 31354),

Gene: BobBob_9 Start: 5693, Stop: 6001, Start Num: 79
Candidate Starts for BobBob_9:
(Start: 79 @5693 has 85 MA's), (Start: 84 @5702 has 13 MA's), (110, 5801), (123, 5858), (124, 5864), (129, 5882), (142, 5930),

Gene: Boise_12 Start: 6049, Stop: 6360, Start Num: 70
Candidate Starts for Boise_12:
(Start: 70 @6049 has 63 MA's), (107, 6148), (153, 6331),

Gene: BooTeria_65 Start: 28063, Stop: 28347, Start Num: 79
Candidate Starts for BooTeria_65:
(43, 27919), (69, 28045), (76, 28057), (Start: 79 @28063 has 85 MA's), (155, 28342),

Gene: Boopy_76 Start: 31081, Stop: 31374, Start Num: 82
Candidate Starts for Boopy_76:
(43, 30940), (44, 30949), (54, 31006), (61, 31042), (Start: 68 @31057 has 1 MA's), (Start: 82 @31081 has 6 MA's), (96, 31120), (100, 31129), (110, 31174), (123, 31228), (131, 31258), (140, 31291), (144, 31306), (154, 31348), (159, 31366),

Gene: Brandonk123_14 Start: 6849, Stop: 7148, Start Num: 84
Candidate Starts for Brandonk123_14:
(36, 6648), (Start: 79 @6840 has 85 MA's), (Start: 84 @6849 has 13 MA's), (93, 6879), (110, 6948), (123, 7005), (124, 7011), (129, 7029), (142, 7077),

Gene: Brawn1_10 Start: 6532, Stop: 6831, Start Num: 84
Candidate Starts for Brawn1_10:
(Start: 79 @6523 has 85 MA's), (Start: 84 @6532 has 13 MA's), (110, 6631), (123, 6688), (124, 6694), (129, 6712), (142, 6760),

Gene: BruhMoment_17 Start: 8281, Stop: 8610, Start Num: 70
Candidate Starts for BruhMoment_17:
(60, 8251), (Start: 70 @8281 has 63 MA's), (106, 8398), (108, 8407), (153, 8584),

Gene: CandC_19 Start: 6747, Stop: 7091, Start Num: 64
Candidate Starts for CandC_19:
(14, 6162), (17, 6306), (40, 6618), (Start: 64 @6747 has 12 MA's), (Start: 85 @6777 has 8 MA's), (86, 6783), (92, 6804), (101, 6834), (120, 6912), (137, 6990), (153, 7056), (156, 7065),

Gene: Casend_22 Start: 8510, Stop: 8848, Start Num: 70
Candidate Starts for Casend_22:
(7, 7655), (12, 7904), (14, 7949), (25, 8279), (Start: 70 @8510 has 63 MA's), (74, 8519), (92, 8567), (153, 8819), (156, 8828),

Gene: Cece_65 Start: 27218, Stop: 27502, Start Num: 79
Candidate Starts for Cece_65:
(76, 27212), (Start: 79 @27218 has 85 MA's), (105, 27296), (138, 27434), (139, 27437), (142, 27449),

Gene: ChadMasterC_11 Start: 6428, Stop: 6736, Start Num: 79
Candidate Starts for ChadMasterC_11:
(36, 6236), (Start: 79 @6428 has 85 MA's), (Start: 84 @6437 has 13 MA's), (93, 6467), (110, 6536), (123, 6593), (124, 6599), (129, 6617), (142, 6665),

Gene: Charming_9 Start: 5695, Stop: 6003, Start Num: 79
Candidate Starts for Charming_9:
(Start: 65 @5665 has 2 MA's), (Start: 79 @5695 has 85 MA's), (Start: 84 @5704 has 13 MA's), (110, 5803), (123, 5860), (124, 5866), (129, 5884), (142, 5932),

Gene: CherryCola_12 Start: 5508, Stop: 5822, Start Num: 81
Candidate Starts for CherryCola_12:
(19, 5157), (Start: 59 @5445 has 1 MA's), (Start: 81 @5508 has 33 MA's), (123, 5664), (124, 5670),

Gene: Chickadee_12 Start: 5433, Stop: 5771, Start Num: 79
Candidate Starts for Chickadee_12:
(62, 5397), (Start: 79 @5433 has 85 MA's), (88, 5460), (90, 5466), (98, 5490), (116, 5568), (124, 5634), (142, 5700), (149, 5727),

Gene: Chilliams_72 Start: 33749, Stop: 34030, Start Num: 79
Candidate Starts for Chilliams_72:
(Start: 79 @33749 has 85 MA's), (102, 33812), (107, 33836), (128, 33926), (155, 34025),

Gene: ClamChowder_11 Start: 5272, Stop: 5586, Start Num: 81
Candidate Starts for ClamChowder_11:
(Start: 59 @5209 has 1 MA's), (Start: 81 @5272 has 33 MA's), (123, 5428), (124, 5434),

Gene: Clawz_40 Start: 17751, Stop: 18077, Start Num: 83
Candidate Starts for Clawz_40:
(Start: 68 @17715 has 1 MA's), (Start: 70 @17718 has 63 MA's), (Start: 83 @17751 has 21 MA's), (98, 17799), (122, 17910), (125, 17940), (150, 18030), (152, 18036),

Gene: Clown_15 Start: 8549, Stop: 8863, Start Num: 81
Candidate Starts for Clown_15:

(78, 8540), (Start: 81 @8549 has 33 MA's), (98, 8594), (123, 8705),

Gene: Coco2012_7 Start: 4960, Stop: 5283, Start Num: 85
Candidate Starts for Coco2012_7:
(Start: 79 @4948 has 85 MA's), (Start: 85 @4960 has 8 MA's), (86, 4966), (87, 4972), (89, 4978), (92, 4987), (95, 4996), (97, 4999), (98, 5005), (109, 5056), (114, 5065), (128, 5137), (158, 5254),

Gene: ColdSoup_41 Start: 17853, Stop: 18179, Start Num: 83
Candidate Starts for ColdSoup_41:
(Start: 83 @17853 has 21 MA's), (91, 17880), (98, 17901), (122, 18012), (133, 18066), (152, 18138), (153, 18147),

Gene: CoveyB_11 Start: 5144, Stop: 5458, Start Num: 81
Candidate Starts for CoveyB_11:
(Start: 59 @5081 has 1 MA's), (Start: 81 @5144 has 33 MA's), (123, 5300), (124, 5306),

Gene: Danyall_11 Start: 5144, Stop: 5458, Start Num: 81
Candidate Starts for Danyall_11:
(Start: 59 @5081 has 1 MA's), (Start: 81 @5144 has 33 MA's), (123, 5300), (124, 5306),

Gene: Delrey21_13 Start: 6898, Stop: 7215, Start Num: 79
Candidate Starts for Delrey21_13:
(Start: 79 @6898 has 85 MA's), (89, 6928), (110, 7009), (124, 7072), (129, 7090), (130, 7093), (131, 7096), (142, 7138),

Gene: Derg_7 Start: 5277, Stop: 5585, Start Num: 79
Candidate Starts for Derg_7:
(27, 5025), (32, 5052), (Start: 79 @5277 has 85 MA's), (Start: 84 @5286 has 13 MA's), (110, 5385), (123, 5442), (124, 5448), (142, 5514),

Gene: Dexdert_13 Start: 5891, Stop: 6229, Start Num: 79
Candidate Starts for Dexdert_13:
(62, 5855), (Start: 79 @5891 has 85 MA's), (88, 5918), (90, 5924), (98, 5948), (116, 6026), (124, 6092), (142, 6158), (149, 6185),

Gene: DoctorFroggo_13 Start: 6898, Stop: 7215, Start Num: 79
Candidate Starts for DoctorFroggo_13:
(Start: 79 @6898 has 85 MA's), (89, 6928), (110, 7009), (124, 7072), (129, 7090), (130, 7093), (131, 7096), (142, 7138),

Gene: Dodo_83 Start: 29870, Stop: 30154, Start Num: 79
Candidate Starts for Dodo_83:
(26, 29609), (58, 29813), (Start: 70 @29849 has 63 MA's), (Start: 79 @29870 has 85 MA's), (115, 29981), (138, 30086), (139, 30089),

Gene: DogYard_21 Start: 9001, Stop: 9312, Start Num: 70
Candidate Starts for DogYard_21:
(Start: 70 @9001 has 63 MA's), (Start: 72 @9004 has 4 MA's), (89, 9034), (123, 9175), (147, 9256), (153, 9283),

Gene: DonTron_40 Start: 17923, Stop: 18249, Start Num: 83
Candidate Starts for DonTron_40:

(Start: 83 @17923 has 21 MA's), (91, 17950), (98, 17971), (122, 18082), (133, 18136), (152, 18208), (153, 18217),

Gene: DonaldDuck_20 Start: 7856, Stop: 8194, Start Num: 70
Candidate Starts for DonaldDuck_20:
(7, 7001), (12, 7250), (14, 7295), (25, 7625), (Start: 70 @7856 has 63 MA's), (74, 7865), (92, 7913), (153, 8165), (156, 8174),

Gene: DunneganBoMo_64 Start: 27488, Stop: 27772, Start Num: 79
Candidate Starts for DunneganBoMo_64:
(43, 27344), (69, 27470), (76, 27482), (Start: 79 @27488 has 85 MA's), (155, 27767),

Gene: EMoore_6 Start: 4085, Stop: 4393, Start Num: 79
Candidate Starts for EMoore_6:
(Start: 53 @4004 has 5 MA's), (Start: 79 @4085 has 85 MA's), (88, 4109), (124, 4256), (131, 4280), (142, 4322), (143, 4325), (149, 4349),

Gene: EdmundFerry_11 Start: 5448, Stop: 5786, Start Num: 79
Candidate Starts for EdmundFerry_11:
(62, 5412), (Start: 79 @5448 has 85 MA's), (88, 5475), (90, 5481), (98, 5505), (116, 5583), (124, 5649), (142, 5715), (149, 5742),

Gene: Egi03_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Egi03_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: Ellewin_63 Start: 27215, Stop: 27499, Start Num: 79
Candidate Starts for Ellewin_63:
(43, 27071), (69, 27197), (76, 27209), (Start: 79 @27215 has 85 MA's), (155, 27494),

Gene: Emmetator_67 Start: 28235, Stop: 28519, Start Num: 79
Candidate Starts for Emmetator_67:
(43, 28091), (69, 28217), (76, 28229), (Start: 79 @28235 has 85 MA's), (155, 28514),

Gene: Erasmago_74 Start: 28535, Stop: 28819, Start Num: 79
Candidate Starts for Erasmago_74:
(76, 28529), (Start: 79 @28535 has 85 MA's), (Start: 83 @28544 has 21 MA's), (115, 28646), (123, 28694), (127, 28712), (138, 28751), (139, 28754), (151, 28799),

Gene: Evamon_11 Start: 5125, Stop: 5439, Start Num: 81
Candidate Starts for Evamon_11:
(Start: 59 @5062 has 1 MA's), (Start: 81 @5125 has 33 MA's), (123, 5281), (124, 5287),

Gene: EverythinBagel_20 Start: 8257, Stop: 8601, Start Num: 70
Candidate Starts for EverythinBagel_20:
(Start: 70 @8257 has 63 MA's), (74, 8266), (89, 8305), (92, 8314), (137, 8500), (153, 8566), (156, 8575),

Gene: Fireball_12 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Fireball_12:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: Fitzgerald_10 Start: 6630, Stop: 6929, Start Num: 84

Candidate Starts for Fitzgerald_10:
(Start: 79 @6621 has 85 MA's), (Start: 84 @6630 has 13 MA's), (110, 6729), (123, 6786), (124, 6792), (129, 6810), (142, 6858),

Gene: Fizzles_21 Start: 7811, Stop: 8155, Start Num: 70
Candidate Starts for Fizzles_21:
(Start: 70 @7811 has 63 MA's), (92, 7868), (137, 8054), (153, 8120), (156, 8129),

Gene: Flatwoods_12 Start: 6151, Stop: 6459, Start Num: 79
Candidate Starts for Flatwoods_12:
(20, 5824), (Start: 79 @6151 has 85 MA's), (Start: 84 @6160 has 13 MA's), (110, 6259), (123, 6316), (124, 6322), (142, 6388),

Gene: FloraSnap32_71 Start: 31817, Stop: 32101, Start Num: 79
Candidate Starts for FloraSnap32_71:
(41, 31658), (42, 31664), (44, 31676), (45, 31679), (46, 31691), (47, 31697), (48, 31700), (51, 31715), (55, 31742), (77, 31811), (Start: 79 @31817 has 85 MA's), (96, 31865), (100, 31874), (101, 31877), (102, 31880), (119, 31946), (155, 32096),

Gene: Forrestell_18 Start: 7645, Stop: 7956, Start Num: 70
Candidate Starts for Forrestell_18:
(Start: 70 @7645 has 63 MA's), (Start: 72 @7648 has 4 MA's), (89, 7678), (123, 7819), (147, 7900), (153, 7927),

Gene: Forza_76 Start: 30997, Stop: 31290, Start Num: 82
Candidate Starts for Forza_76:
(43, 30856), (44, 30865), (54, 30922), (61, 30958), (Start: 68 @30973 has 1 MA's), (Start: 82 @30997 has 6 MA's), (96, 31036), (100, 31045), (110, 31090), (123, 31144), (131, 31174), (140, 31207), (144, 31222), (154, 31264), (159, 31282),

Gene: Fosterous_9 Start: 5693, Stop: 6001, Start Num: 79
Candidate Starts for Fosterous_9:
(Start: 65 @5663 has 2 MA's), (Start: 79 @5693 has 85 MA's), (Start: 84 @5702 has 13 MA's), (110, 5801), (123, 5858), (124, 5864), (129, 5882), (142, 5930),

Gene: FrankDeliGuy_18 Start: 7715, Stop: 8053, Start Num: 70
Candidate Starts for FrankDeliGuy_18:
(7, 6860), (12, 7109), (25, 7484), (Start: 70 @7715 has 63 MA's), (74, 7724), (89, 7763), (92, 7772), (137, 7958), (153, 8024), (156, 8033),

Gene: Fransoyer_22 Start: 8000, Stop: 8341, Start Num: 70
Candidate Starts for Fransoyer_22:
(2, 6860), (3, 6881), (7, 7121), (12, 7370), (13, 7382), (40, 7868), (Start: 70 @8000 has 63 MA's), (92, 8057), (110, 8129), (137, 8243), (153, 8309), (154, 8312), (156, 8318),

Gene: Fregley_21 Start: 7285, Stop: 7629, Start Num: 64
Candidate Starts for Fregley_21:
(17, 6844), (40, 7156), (Start: 64 @7285 has 12 MA's), (Start: 85 @7315 has 8 MA's), (86, 7321), (92, 7342), (101, 7372), (120, 7450), (137, 7528), (153, 7594), (156, 7603),

Gene: Fresco_7 Start: 4953, Stop: 5276, Start Num: 85
Candidate Starts for Fresco_7:

(49, 4833), (Start: 79 @4941 has 85 MA's), (Start: 85 @4953 has 8 MA's), (86, 4959), (87, 4965), (88, 4968), (89, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (134, 5148), (158, 5247),

Gene: FrostedClock_74 Start: 32850, Stop: 33134, Start Num: 79
Candidate Starts for FrostedClock_74:
(41, 32691), (42, 32697), (44, 32709), (45, 32712), (46, 32724), (47, 32730), (48, 32733), (55, 32775), (77, 32844), (Start: 79 @32850 has 85 MA's), (86, 32868), (96, 32898), (101, 32910), (102, 32913), (119, 32979), (155, 33129),

Gene: FuegoCuervo_15 Start: 6443, Stop: 6751, Start Num: 79
Candidate Starts for FuegoCuervo_15:
(36, 6251), (Start: 79 @6443 has 85 MA's), (Start: 84 @6452 has 13 MA's), (110, 6551), (123, 6608), (124, 6614), (129, 6632), (142, 6680),

Gene: Fugax_11 Start: 5272, Stop: 5586, Start Num: 81
Candidate Starts for Fugax_11:
(Start: 59 @5209 has 1 MA's), (Start: 81 @5272 has 33 MA's), (123, 5428), (124, 5434),

Gene: GMA2_8 Start: 5906, Stop: 6217, Start Num: 84
Candidate Starts for GMA2_8:
(54, 5816), (66, 5867), (73, 5879), (Start: 84 @5906 has 13 MA's), (94, 5939), (95, 5942), (100, 5972), (118, 6038), (119, 6041), (122, 6053), (123, 6071), (124, 6077), (129, 6095), (139, 6131), (140, 6134), (142, 6143), (144, 6149), (159, 6209),

Gene: GTE6_13 Start: 5949, Stop: 6287, Start Num: 79
Candidate Starts for GTE6_13:
(62, 5913), (Start: 79 @5949 has 85 MA's), (88, 5976), (90, 5982), (98, 6006), (116, 6084), (124, 6150), (142, 6216), (149, 6243),

Gene: Gaea_11 Start: 5953, Stop: 6261, Start Num: 79
Candidate Starts for Gaea_11:
(27, 5701), (32, 5728), (Start: 79 @5953 has 85 MA's), (Start: 84 @5962 has 13 MA's), (110, 6061), (123, 6118), (124, 6124), (142, 6190),

Gene: Galadriel_13 Start: 6461, Stop: 6769, Start Num: 79
Candidate Starts for Galadriel_13:
(Start: 65 @6431 has 2 MA's), (Start: 79 @6461 has 85 MA's), (Start: 84 @6470 has 13 MA's), (110, 6569), (123, 6626), (124, 6632), (129, 6650), (142, 6698),

Gene: Gazebo_20 Start: 8077, Stop: 8421, Start Num: 70
Candidate Starts for Gazebo_20:
(7, 7222), (12, 7471), (17, 7657), (25, 7846), (Start: 70 @8077 has 63 MA's), (74, 8086), (92, 8134), (137, 8320), (153, 8386), (156, 8395),

Gene: Geodirt_11 Start: 6477, Stop: 6776, Start Num: 84
Candidate Starts for Geodirt_11:
(36, 6276), (Start: 79 @6468 has 85 MA's), (Start: 84 @6477 has 13 MA's), (93, 6507), (110, 6576), (123, 6633), (124, 6639), (129, 6657), (142, 6705),

Gene: Gezellig_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Gezellig_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: GodonK_65 Start: 24414, Stop: 24695, Start Num: 84
Candidate Starts for GodonK_65:
(66, 24390), (69, 24393), (Start: 84 @24414 has 13 MA's), (89, 24432), (90, 24435), (119, 24519), (129, 24573), (135, 24594), (152, 24657),

Gene: GoldenEssence_61 Start: 27155, Stop: 27439, Start Num: 79
Candidate Starts for GoldenEssence_61:
(41, 26996), (42, 27002), (44, 27014), (45, 27017), (46, 27029), (47, 27035), (48, 27038), (Start: 79 @27155 has 85 MA's), (96, 27203), (102, 27218), (119, 27284), (155, 27434),

Gene: Grassboy_22 Start: 8532, Stop: 8870, Start Num: 70
Candidate Starts for Grassboy_22:
(Start: 70 @8532 has 63 MA's), (74, 8541), (92, 8589), (153, 8841), (156, 8850),

Gene: Grumio_40 Start: 17361, Stop: 17687, Start Num: 83
Candidate Starts for Grumio_40:
(Start: 83 @17361 has 21 MA's), (91, 17388), (98, 17409), (122, 17520), (133, 17574), (152, 17646), (153, 17655),

Gene: Gustavo_11 Start: 5950, Stop: 6258, Start Num: 79
Candidate Starts for Gustavo_11:
(27, 5698), (32, 5725), (Start: 79 @5950 has 85 MA's), (Start: 84 @5959 has 13 MA's), (110, 6058), (123, 6115), (124, 6121), (142, 6187),

Gene: Halo3_12 Start: 5583, Stop: 5888, Start Num: 81
Candidate Starts for Halo3_12:
(19, 5232), (Start: 59 @5520 has 1 MA's), (Start: 81 @5583 has 33 MA's), (123, 5739), (124, 5745),

Gene: Hans_14 Start: 6642, Stop: 6947, Start Num: 79
Candidate Starts for Hans_14:
(Start: 53 @6561 has 5 MA's), (Start: 79 @6642 has 85 MA's), (88, 6663), (110, 6747), (124, 6810), (131, 6834), (142, 6876), (143, 6879), (149, 6903),

Gene: Hive_20 Start: 9015, Stop: 9326, Start Num: 70
Candidate Starts for Hive_20:
(Start: 70 @9015 has 63 MA's), (Start: 72 @9018 has 4 MA's), (89, 9048), (123, 9189), (147, 9270), (153, 9297),

Gene: Hyperion_19 Start: 7780, Stop: 8124, Start Num: 70
Candidate Starts for Hyperion_19:
(7, 6925), (12, 7174), (25, 7549), (Start: 70 @7780 has 63 MA's), (74, 7789), (92, 7837), (153, 8089), (156, 8098),

Gene: Inspectinfecti_13 Start: 7159, Stop: 7464, Start Num: 79
Candidate Starts for Inspectinfecti_13:
(23, 6883), (29, 6913), (Start: 53 @7078 has 5 MA's), (Start: 79 @7159 has 85 MA's), (88, 7180), (110, 7264), (124, 7327), (142, 7393), (143, 7396), (149, 7420),

Gene: JKSyngboy_10 Start: 6461, Stop: 6769, Start Num: 79
Candidate Starts for JKSyngboy_10:
(27, 6209), (32, 6236), (Start: 79 @6461 has 85 MA's), (Start: 84 @6470 has 13 MA's), (110, 6569), (123, 6626), (124, 6632), (142, 6698),

Gene: Jabberwocky_10 Start: 6623, Stop: 6931, Start Num: 79
Candidate Starts for Jabberwocky_10:
(Start: 79 @6623 has 85 MA's), (Start: 84 @6632 has 13 MA's), (110, 6731), (123, 6788), (124, 6794), (129, 6812), (142, 6860),

Gene: Jambalaya_11 Start: 4956, Stop: 5270, Start Num: 81
Candidate Starts for Jambalaya_11:
(Start: 81 @4956 has 33 MA's), (123, 5112), (124, 5118),

Gene: Jehoshaphat_23 Start: 8775, Stop: 9113, Start Num: 70
Candidate Starts for Jehoshaphat_23:
(7, 7920), (12, 8169), (14, 8214), (25, 8544), (Start: 70 @8775 has 63 MA's), (74, 8784), (92, 8832), (153, 9084), (156, 9093),

Gene: JellyBelly_7 Start: 4960, Stop: 5283, Start Num: 85
Candidate Starts for JellyBelly_7:
(Start: 79 @4948 has 85 MA's), (Start: 85 @4960 has 8 MA's), (86, 4966), (87, 4972), (89, 4978), (92, 4987), (95, 4996), (97, 4999), (98, 5005), (109, 5056), (114, 5065), (128, 5137), (158, 5254),

Gene: JohnPork_11 Start: 5204, Stop: 5518, Start Num: 81
Candidate Starts for JohnPork_11:
(Start: 81 @5204 has 33 MA's), (123, 5360), (124, 5366),

Gene: Jollymon_40 Start: 17853, Stop: 18179, Start Num: 83
Candidate Starts for Jollymon_40:
(Start: 83 @17853 has 21 MA's), (91, 17880), (98, 17901), (122, 18012), (133, 18066), (152, 18138), (153, 18147),

Gene: Judebell_23 Start: 8316, Stop: 8654, Start Num: 70
Candidate Starts for Judebell_23:
(25, 8085), (Start: 70 @8316 has 63 MA's), (74, 8325), (92, 8373), (153, 8625), (156, 8634),

Gene: KSunshine22_69 Start: 28755, Stop: 29039, Start Num: 79
Candidate Starts for KSunshine22_69:
(43, 28611), (69, 28737), (76, 28749), (Start: 79 @28755 has 85 MA's), (155, 29034),

Gene: Kamashten_12 Start: 6782, Stop: 7090, Start Num: 79
Candidate Starts for Kamashten_12:
(Start: 65 @6752 has 2 MA's), (Start: 79 @6782 has 85 MA's), (Start: 84 @6791 has 13 MA's), (110, 6890), (123, 6947), (124, 6953), (129, 6971), (142, 7019),

Gene: Keitabear_12 Start: 7843, Stop: 8142, Start Num: 84
Candidate Starts for Keitabear_12:
(Start: 79 @7834 has 85 MA's), (Start: 84 @7843 has 13 MA's), (110, 7942), (123, 7999), (124, 8005), (129, 8023), (142, 8071),

Gene: Kelcole_19 Start: 7138, Stop: 7482, Start Num: 64
Candidate Starts for Kelcole_19:
(14, 6553), (17, 6697), (40, 7009), (Start: 64 @7138 has 12 MA's), (Start: 85 @7168 has 8 MA's), (86, 7174), (92, 7195), (101, 7225), (120, 7303), (137, 7381), (153, 7447), (156, 7456),

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

Candidate Starts for Kewpiedoll_12:
(Start: 79 @6184 has 85 MA's), (Start: 84 @6193 has 13 MA's), (93, 6223), (110, 6292), (123, 6349), (124, 6355), (129, 6373), (142, 6421),

Gene: KillerQueen_21 Start: 6954, Stop: 7298, Start Num: 64
Candidate Starts for KillerQueen_21:
(14, 6369), (17, 6513), (40, 6825), (Start: 64 @6954 has 12 MA's), (Start: 85 @6984 has 8 MA's), (86, 6990), (92, 7011), (101, 7041), (120, 7119), (137, 7197), (153, 7263), (156, 7272),

Gene: KimmyK_11 Start: 5272, Stop: 5586, Start Num: 81
Candidate Starts for KimmyK_11:
(Start: 59 @5209 has 1 MA's), (Start: 81 @5272 has 33 MA's), (123, 5428), (124, 5434),

Gene: KingstonB_38 Start: 17361, Stop: 17687, Start Num: 83
Candidate Starts for KingstonB_38:
(Start: 83 @17361 has 21 MA's), (91, 17388), (98, 17409), (122, 17520), (133, 17574), (152, 17646), (153, 17655),

Gene: Kithara_21 Start: 9380, Stop: 9730, Start Num: 64
Candidate Starts for Kithara_21:
(Start: 64 @9380 has 12 MA's), (92, 9440), (100, 9467), (103, 9476), (108, 9503), (109, 9509), (126, 9587), (137, 9626), (154, 9695),

Gene: Kroos_11 Start: 6114, Stop: 6422, Start Num: 79
Candidate Starts for Kroos_11:
(27, 5862), (32, 5889), (Start: 79 @6114 has 85 MA's), (Start: 84 @6123 has 13 MA's), (110, 6222), (123, 6279), (124, 6285), (142, 6351),

Gene: Kubulix_22 Start: 9130, Stop: 9441, Start Num: 70
Candidate Starts for Kubulix_22:
(Start: 70 @9130 has 63 MA's), (Start: 72 @9133 has 4 MA's), (89, 9163), (123, 9304), (147, 9385), (153, 9412),

Gene: Kwekel_12 Start: 5442, Stop: 5780, Start Num: 79
Candidate Starts for Kwekel_12:
(60, 5388), (Start: 79 @5442 has 85 MA's), (89, 5472), (90, 5475), (110, 5553), (116, 5577), (142, 5709), (149, 5736),

Gene: Kwobi_11 Start: 5953, Stop: 6261, Start Num: 79
Candidate Starts for Kwobi_11:
(27, 5701), (32, 5728), (Start: 79 @5953 has 85 MA's), (Start: 84 @5962 has 13 MA's), (110, 6061), (123, 6118), (124, 6124), (142, 6190),

Gene: Kyva_23 Start: 8567, Stop: 8905, Start Num: 70
Candidate Starts for Kyva_23:
(Start: 70 @8567 has 63 MA's), (74, 8576), (92, 8624), (153, 8876), (156, 8885),

Gene: Laure_77 Start: 33462, Stop: 33746, Start Num: 79
Candidate Starts for Laure_77:
(57, 33405), (Start: 79 @33462 has 85 MA's), (90, 33495), (96, 33510), (102, 33525), (127, 33639),

Gene: Lennon_12 Start: 7052, Stop: 7351, Start Num: 84
Candidate Starts for Lennon_12:

(36, 6851), (Start: 79 @7043 has 85 MA's), (Start: 84 @7052 has 13 MA's), (110, 7151), (123, 7208), (124, 7214), (129, 7232), (142, 7280),

Gene: LeoJr_74 Start: 30861, Stop: 31142, Start Num: 79
Candidate Starts for LeoJr_74:
(Start: 79 @30861 has 85 MA's), (107, 30945), (132, 31050),

Gene: Leonard_12 Start: 6673, Stop: 7059, Start Num: 53
Candidate Starts for Leonard_12:
(23, 6478), (29, 6508), (Start: 53 @6673 has 5 MA's), (Start: 79 @6754 has 85 MA's), (88, 6775), (110, 6859), (124, 6922), (142, 6988), (143, 6991), (149, 7015),

Gene: Ligma_7 Start: 4953, Stop: 5276, Start Num: 85
Candidate Starts for Ligma_7:
(49, 4833), (Start: 79 @4941 has 85 MA's), (Start: 85 @4953 has 8 MA's), (86, 4959), (87, 4965), (88, 4968), (89, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (134, 5148), (158, 5247),

Gene: LilCahh_20 Start: 7885, Stop: 8229, Start Num: 70
Candidate Starts for LilCahh_20:
(Start: 70 @7885 has 63 MA's), (74, 7894), (89, 7933), (92, 7942), (137, 8128), (153, 8194), (156, 8203),

Gene: LilHam_9 Start: 5269, Stop: 5577, Start Num: 79
Candidate Starts for LilHam_9:
(27, 5017), (32, 5044), (Start: 79 @5269 has 85 MA's), (Start: 84 @5278 has 13 MA's), (110, 5377), (123, 5434), (124, 5440), (142, 5506),

Gene: Lilbeanie_12 Start: 4954, Stop: 5247, Start Num: 81
Candidate Starts for Lilbeanie_12:
(Start: 81 @4954 has 33 MA's), (101, 5011), (110, 5053), (122, 5092),

Gene: LittleMunchkin_8 Start: 6237, Stop: 6560, Start Num: 85
Candidate Starts for LittleMunchkin_8:
(1, 4998), (5, 5172), (8, 5382), (10, 5499), (15, 5685), (16, 5730), (21, 5898), (24, 5946), (Start: 79 @6225 has 85 MA's), (Start: 85 @6237 has 8 MA's), (89, 6255), (97, 6276), (98, 6282), (104, 6309), (118, 6360), (123, 6393), (134, 6432), (144, 6471), (150, 6495), (158, 6531),

Gene: Llemily_20 Start: 7551, Stop: 7889, Start Num: 70
Candidate Starts for Llemily_20:
(7, 6696), (12, 6945), (25, 7320), (Start: 70 @7551 has 63 MA's), (74, 7560), (92, 7608), (153, 7860), (156, 7869),

Gene: Lonelysoil_20 Start: 7796, Stop: 8134, Start Num: 70
Candidate Starts for Lonelysoil_20:
(7, 6941), (12, 7190), (14, 7235), (25, 7565), (Start: 70 @7796 has 63 MA's), (74, 7805), (92, 7853), (153, 8105), (156, 8114),

Gene: Love_13 Start: 6772, Stop: 7080, Start Num: 79
Candidate Starts for Love_13:
(Start: 79 @6772 has 85 MA's), (Start: 84 @6781 has 13 MA's), (93, 6811), (110, 6880), (123, 6937), (124, 6943), (129, 6961), (139, 6997),

Gene: Maih_9 Start: 7729, Stop: 8079, Start Num: 83
Candidate Starts for Maih_9:
(Start: 83 @7729 has 21 MA's), (101, 7789), (119, 7876), (127, 7924), (133, 7939),

Gene: Makar_41 Start: 17820, Stop: 18146, Start Num: 83
Candidate Starts for Makar_41:
(Start: 68 @17784 has 1 MA's), (Start: 70 @17787 has 63 MA's), (Start: 83 @17820 has 21 MA's), (98, 17868), (122, 17979), (125, 18009), (150, 18099), (152, 18105),

Gene: Marcie_25 Start: 7843, Stop: 8187, Start Num: 64
Candidate Starts for Marcie_25:
(17, 7402), (40, 7714), (Start: 64 @7843 has 12 MA's), (92, 7900), (100, 7927), (101, 7930), (120, 8008), (137, 8086), (153, 8152), (156, 8161),

Gene: Mareelih_75 Start: 30499, Stop: 30792, Start Num: 82
Candidate Starts for Mareelih_75:
(43, 30358), (44, 30367), (54, 30424), (61, 30460), (Start: 68 @30475 has 1 MA's), (Start: 82 @30499 has 6 MA's), (96, 30538), (100, 30547), (110, 30592), (123, 30646), (131, 30676), (140, 30709), (144, 30724), (154, 30766), (159, 30784),

Gene: Mariokart_7 Start: 4960, Stop: 5283, Start Num: 85
Candidate Starts for Mariokart_7:
(Start: 79 @4948 has 85 MA's), (Start: 85 @4960 has 8 MA's), (86, 4966), (87, 4972), (89, 4978), (92, 4987), (95, 4996), (97, 4999), (98, 5005), (109, 5056), (114, 5065), (128, 5137), (158, 5254),

Gene: Mashley_18 Start: 7591, Stop: 7935, Start Num: 70
Candidate Starts for Mashley_18:
(7, 6736), (12, 6985), (25, 7360), (Start: 70 @7591 has 63 MA's), (74, 7600), (92, 7648), (153, 7900), (156, 7909),

Gene: McCrothy_12 Start: 6647, Stop: 6946, Start Num: 84
Candidate Starts for McCrothy_12:
(Start: 65 @6608 has 2 MA's), (Start: 79 @6638 has 85 MA's), (Start: 84 @6647 has 13 MA's), (110, 6746), (123, 6803), (124, 6809), (129, 6827), (142, 6875),

Gene: McKinley_12 Start: 7140, Stop: 7439, Start Num: 84
Candidate Starts for McKinley_12:
(Start: 79 @7131 has 85 MA's), (Start: 84 @7140 has 13 MA's), (93, 7170), (110, 7239), (123, 7296), (124, 7302), (129, 7320), (142, 7368),

Gene: MelBins_12 Start: 6449, Stop: 6835, Start Num: 53
Candidate Starts for MelBins_12:
(Start: 53 @6449 has 5 MA's), (Start: 79 @6530 has 85 MA's), (88, 6551), (110, 6635), (124, 6698), (131, 6722), (142, 6764), (143, 6767), (149, 6791),

Gene: MellowYellow_18 Start: 7675, Stop: 7986, Start Num: 70
Candidate Starts for MellowYellow_18:
(Start: 70 @7675 has 63 MA's), (Start: 72 @7678 has 4 MA's), (89, 7708), (123, 7849), (147, 7930), (153, 7957),

Gene: Mentos_23 Start: 9130, Stop: 9468, Start Num: 70
Candidate Starts for Mentos_23:
(Start: 70 @9130 has 63 MA's), (74, 9139), (92, 9187), (153, 9439), (156, 9448),

Gene: Mila11_22 Start: 8666, Stop: 9010, Start Num: 70
Candidate Starts for Mila11_22:
(Start: 70 @8666 has 63 MA's), (74, 8675), (92, 8723), (137, 8909), (153, 8975), (156, 8984),

Gene: Mimi_75 Start: 32709, Stop: 32993, Start Num: 79
Candidate Starts for Mimi_75:
(41, 32550), (42, 32556), (44, 32568), (45, 32571), (46, 32583), (47, 32589), (48, 32592), (55, 32634), (77, 32703), (Start: 79 @32709 has 85 MA's), (86, 32727), (96, 32757), (101, 32769), (102, 32772), (119, 32838), (155, 32988),

Gene: Mischief19_10 Start: 9272, Stop: 9619, Start Num: 83
Candidate Starts for Mischief19_10:
(Start: 83 @9272 has 21 MA's), (99, 9323), (107, 9359), (112, 9386), (121, 9440), (127, 9479), (145, 9536), (160, 9608),

Gene: MoontowerMania_10 Start: 6171, Stop: 6479, Start Num: 79
Candidate Starts for MoontowerMania_10:
(Start: 79 @6171 has 85 MA's), (Start: 84 @6180 has 13 MA's), (93, 6210), (110, 6279), (123, 6336), (124, 6342), (129, 6360), (139, 6396),

Gene: MorillMayhem_20 Start: 7599, Stop: 7943, Start Num: 70
Candidate Starts for MorillMayhem_20:
(Start: 70 @7599 has 63 MA's), (74, 7608), (92, 7656), (137, 7842), (153, 7908), (156, 7917),

Gene: Mutzi_11 Start: 5144, Stop: 5458, Start Num: 81
Candidate Starts for Mutzi_11:
(Start: 59 @5081 has 1 MA's), (Start: 81 @5144 has 33 MA's), (123, 5300), (124, 5306),

Gene: Namago_21 Start: 7611, Stop: 7955, Start Num: 70
Candidate Starts for Namago_21:
(25, 7380), (Start: 70 @7611 has 63 MA's), (74, 7620), (92, 7668), (137, 7854), (153, 7920), (156, 7929),

Gene: Natkenzie_13 Start: 6625, Stop: 6942, Start Num: 79
Candidate Starts for Natkenzie_13:
(Start: 79 @6625 has 85 MA's), (93, 6667), (110, 6736), (124, 6799), (131, 6823), (142, 6865), (144, 6871),

Gene: Nikan_17 Start: 8151, Stop: 8459, Start Num: 72
Candidate Starts for Nikan_17:
(Start: 70 @8148 has 63 MA's), (Start: 72 @8151 has 4 MA's), (117, 8274), (120, 8298), (123, 8322), (147, 8403), (153, 8430),

Gene: Nike_21 Start: 8517, Stop: 8861, Start Num: 70
Candidate Starts for Nike_21:
(Start: 70 @8517 has 63 MA's), (74, 8526), (92, 8574), (137, 8760), (153, 8826), (156, 8835),

Gene: Nordenberg_6 Start: 4315, Stop: 4623, Start Num: 79
Candidate Starts for Nordenberg_6:
(Start: 65 @4285 has 2 MA's), (Start: 79 @4315 has 85 MA's), (Start: 84 @4324 has 13 MA's), (110, 4423), (123, 4480), (124, 4486), (129, 4504), (142, 4552),

Gene: Nubi_11 Start: 5144, Stop: 5449, Start Num: 81
Candidate Starts for Nubi_11:
(Start: 59 @5081 has 1 MA's), (Start: 81 @5144 has 33 MA's), (123, 5300), (124, 5306),

Gene: NyleyClemson_17 Start: 7617, Stop: 7928, Start Num: 70
Candidate Starts for NyleyClemson_17:
(Start: 70 @7617 has 63 MA's), (Start: 72 @7620 has 4 MA's), (89, 7650), (123, 7791), (147, 7872), (153, 7899),

Gene: Odyssey395_23 Start: 9132, Stop: 9443, Start Num: 70
Candidate Starts for Odyssey395_23:
(Start: 70 @9132 has 63 MA's), (Start: 72 @9135 has 4 MA's), (89, 9165), (123, 9306), (147, 9387), (153, 9414),

Gene: Ollypop_19 Start: 8113, Stop: 8424, Start Num: 70
Candidate Starts for Ollypop_19:
(Start: 70 @8113 has 63 MA's), (Start: 72 @8116 has 4 MA's), (117, 8239), (120, 8263), (123, 8287), (147, 8368), (153, 8395),

Gene: OneinaGillian_20 Start: 6820, Stop: 7164, Start Num: 64
Candidate Starts for OneinaGillian_20:
(40, 6691), (Start: 64 @6820 has 12 MA's), (Start: 85 @6850 has 8 MA's), (86, 6856), (92, 6877), (101, 6907), (120, 6985), (137, 7063), (153, 7129), (156, 7138),

Gene: Panchaali_67 Start: 28341, Stop: 28625, Start Num: 79
Candidate Starts for Panchaali_67:
(76, 28335), (Start: 79 @28341 has 85 MA's), (155, 28620),

Gene: Paries_12 Start: 6433, Stop: 6771, Start Num: 65
Candidate Starts for Paries_12:
(Start: 65 @6433 has 2 MA's), (Start: 79 @6463 has 85 MA's), (Start: 84 @6472 has 13 MA's), (110, 6571), (123, 6628), (124, 6634), (129, 6652), (142, 6700),

Gene: Patbob_73 Start: 33002, Stop: 33286, Start Num: 79
Candidate Starts for Patbob_73:
(41, 32843), (42, 32849), (44, 32861), (45, 32864), (46, 32876), (47, 32882), (48, 32885), (51, 32900), (55, 32927), (77, 32996), (Start: 79 @33002 has 85 MA's), (96, 33050), (100, 33059), (101, 33062), (102, 33065), (119, 33131), (155, 33281),

Gene: PauloDiaboli_81 Start: 28905, Stop: 29189, Start Num: 79
Candidate Starts for PauloDiaboli_81:
(26, 28644), (58, 28848), (Start: 70 @28884 has 63 MA's), (Start: 79 @28905 has 85 MA's), (115, 29016), (138, 29121), (139, 29124),

Gene: Pepe25_19 Start: 7078, Stop: 7422, Start Num: 64
Candidate Starts for Pepe25_19:
(4, 6037), (9, 6271), (14, 6493), (40, 6949), (Start: 64 @7078 has 12 MA's), (92, 7135), (101, 7165), (120, 7243), (153, 7387), (156, 7396),

Gene: Phabia_21 Start: 7969, Stop: 8307, Start Num: 70
Candidate Starts for Phabia_21:
(25, 7738), (Start: 70 @7969 has 63 MA's), (74, 7978), (92, 8026), (153, 8278), (156, 8287),

Gene: Phauci_5 Start: 3202, Stop: 3588, Start Num: 53
Candidate Starts for Phauci_5:
(Start: 53 @3202 has 5 MA's), (Start: 79 @3283 has 85 MA's), (88, 3304), (110, 3388), (124, 3451), (131, 3475), (142, 3517), (143, 3520), (149, 3544),

Gene: Phendrix_64 Start: 24262, Stop: 24543, Start Num: 84
Candidate Starts for Phendrix_64:
(66, 24238), (69, 24241), (Start: 84 @24262 has 13 MA's), (89, 24280), (119, 24367), (135, 24442), (152, 24505),

Gene: Phinally_12 Start: 6670, Stop: 7056, Start Num: 53
Candidate Starts for Phinally_12:
(23, 6475), (29, 6505), (Start: 53 @6670 has 5 MA's), (Start: 79 @6751 has 85 MA's), (88, 6772), (110, 6856), (124, 6919), (142, 6985), (143, 6988), (149, 7012),

Gene: Phinky_27 Start: 8832, Stop: 9176, Start Num: 68
Candidate Starts for Phinky_27:
(Start: 68 @8832 has 1 MA's), (100, 8916), (102, 8922), (137, 9075), (153, 9141), (156, 9150),

Gene: Phlop_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Phlop_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: Phrampa_67 Start: 30028, Stop: 30312, Start Num: 79
Candidate Starts for Phrampa_67:
(Start: 79 @30028 has 85 MA's), (96, 30076), (102, 30091), (119, 30157),

Gene: PhuzzTulsa_19 Start: 8919, Stop: 9230, Start Num: 70
Candidate Starts for PhuzzTulsa_19:
(Start: 70 @8919 has 63 MA's), (Start: 72 @8922 has 4 MA's), (89, 8952), (123, 9093), (147, 9174), (153, 9201),

Gene: Pine5_09 Start: 5622, Stop: 5945, Start Num: 83
Candidate Starts for Pine5_09:
(39, 5445), (Start: 83 @5622 has 21 MA's), (123, 5793), (141, 5859), (144, 5871), (146, 5880), (149, 5892),

Gene: PinkCoffee_11 Start: 5281, Stop: 5595, Start Num: 81
Candidate Starts for PinkCoffee_11:
(Start: 59 @5218 has 1 MA's), (Start: 81 @5281 has 33 MA's), (123, 5437), (124, 5443),

Gene: Pointis_21 Start: 9130, Stop: 9441, Start Num: 70
Candidate Starts for Pointis_21:
(Start: 70 @9130 has 63 MA's), (Start: 72 @9133 has 4 MA's), (89, 9163), (123, 9304), (147, 9385), (153, 9412),

Gene: Popstraw_20 Start: 8919, Stop: 9230, Start Num: 70
Candidate Starts for Popstraw_20:
(Start: 70 @8919 has 63 MA's), (Start: 72 @8922 has 4 MA's), (89, 8952), (123, 9093), (147, 9174), (153, 9201),

Gene: Portcullis_11 Start: 5204, Stop: 5518, Start Num: 81
Candidate Starts for Portcullis_11:

(Start: 81 @5204 has 33 MA's), (123, 5360), (124, 5366),

Gene: PullumCavea_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for PullumCavea_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: Pumpernickel_79 Start: 31092, Stop: 31376, Start Num: 79
Candidate Starts for Pumpernickel_79:
(51, 30990), (63, 31059), (Start: 79 @31092 has 85 MA's), (109, 31191), (119, 31221), (123, 31251), (132, 31284), (138, 31308), (139, 31311), (145, 31335),

Gene: Pumpkiney_14 Start: 5859, Stop: 6176, Start Num: 79
Candidate Starts for Pumpkiney_14:
(Start: 79 @5859 has 85 MA's), (110, 5970), (124, 6033), (131, 6057), (142, 6099),

Gene: Pureglobe5_23 Start: 9146, Stop: 9457, Start Num: 70
Candidate Starts for Pureglobe5_23:
(Start: 70 @9146 has 63 MA's), (Start: 72 @9149 has 4 MA's), (89, 9179), (123, 9320), (147, 9401), (153, 9428),

Gene: Purplicious_38 Start: 17102, Stop: 17428, Start Num: 83
Candidate Starts for Purplicious_38:
(Start: 83 @17102 has 21 MA's), (91, 17129), (98, 17150), (122, 17261), (133, 17315), (152, 17387), (153, 17396),

Gene: Quammi_19 Start: 7540, Stop: 7878, Start Num: 70
Candidate Starts for Quammi_19:
(Start: 70 @7540 has 63 MA's), (74, 7549), (92, 7597), (153, 7849), (156, 7858),

Gene: RIPWilbur_19 Start: 8282, Stop: 8593, Start Num: 70
Candidate Starts for RIPWilbur_19:
(Start: 70 @8282 has 63 MA's), (Start: 72 @8285 has 4 MA's), (89, 8315), (123, 8456), (147, 8537), (153, 8564),

Gene: Racecar_76 Start: 33362, Stop: 33646, Start Num: 79
Candidate Starts for Racecar_76:
(41, 33203), (42, 33209), (44, 33221), (45, 33224), (46, 33236), (47, 33242), (48, 33245), (55, 33287), (77, 33356), (Start: 79 @33362 has 85 MA's), (86, 33380), (96, 33410), (101, 33422), (102, 33425), (119, 33491), (155, 33641),

Gene: RainyPolka_9 Start: 7682, Stop: 8032, Start Num: 83
Candidate Starts for RainyPolka_9:
(Start: 83 @7682 has 21 MA's), (101, 7742), (111, 7787), (127, 7877), (133, 7892),

Gene: Ranunculus_16 Start: 8071, Stop: 8382, Start Num: 70
Candidate Starts for Ranunculus_16:
(Start: 70 @8071 has 63 MA's), (Start: 72 @8074 has 4 MA's), (107, 8170), (108, 8176), (109, 8182), (123, 8245), (139, 8302), (153, 8353),

Gene: RazzB_17 Start: 7445, Stop: 7756, Start Num: 70
Candidate Starts for RazzB_17:
(Start: 70 @7445 has 63 MA's), (Start: 72 @7448 has 4 MA's), (89, 7478), (123, 7619), (147, 7700), (153, 7727),

Gene: ReginaGlobina_74 Start: 31418, Stop: 31699, Start Num: 79
Candidate Starts for ReginaGlobina_74:
(Start: 79 @31418 has 85 MA's), (107, 31502), (132, 31607), (144, 31652),

Gene: Ren19_17 Start: 8151, Stop: 8459, Start Num: 72
Candidate Starts for Ren19_17:
(Start: 70 @8148 has 63 MA's), (Start: 72 @8151 has 4 MA's), (117, 8274), (120, 8298), (123, 8322), (147, 8403), (153, 8430),

Gene: Ribeye_12 Start: 6157, Stop: 6456, Start Num: 84
Candidate Starts for Ribeye_12:
(27, 5896), (32, 5923), (Start: 79 @6148 has 85 MA's), (Start: 84 @6157 has 13 MA's), (110, 6256), (123, 6313), (124, 6319), (142, 6385),

Gene: RiverRaider_12 Start: 5677, Stop: 6012, Start Num: 67
Candidate Starts for RiverRaider_12:
(56, 5644), (Start: 67 @5677 has 1 MA's), (71, 5683), (Start: 79 @5704 has 85 MA's), (89, 5731), (110, 5812), (123, 5869), (124, 5875), (125, 5881), (142, 5941), (143, 5944),

Gene: Rizwana_15 Start: 8050, Stop: 8361, Start Num: 70
Candidate Starts for Rizwana_15:
(Start: 70 @8050 has 63 MA's), (Start: 72 @8053 has 4 MA's), (108, 8155), (123, 8224), (153, 8332),

Gene: RoadKill_10 Start: 4904, Stop: 5242, Start Num: 79
Candidate Starts for RoadKill_10:
(62, 4868), (Start: 79 @4904 has 85 MA's), (88, 4931), (90, 4937), (98, 4961), (116, 5039), (124, 5105), (142, 5171), (149, 5198),

Gene: RobinRose_21 Start: 6973, Stop: 7317, Start Num: 64
Candidate Starts for RobinRose_21:
(14, 6388), (17, 6532), (40, 6844), (Start: 64 @6973 has 12 MA's), (Start: 85 @7003 has 8 MA's), (86, 7009), (92, 7030), (101, 7060), (120, 7138), (137, 7216), (153, 7282), (156, 7291),

Gene: Rockabye_74 Start: 34104, Stop: 34385, Start Num: 79
Candidate Starts for Rockabye_74:
(Start: 79 @34104 has 85 MA's), (96, 34152), (101, 34164), (102, 34167), (107, 34191), (141, 34326), (155, 34380),

Gene: Rofo_11 Start: 6703, Stop: 7011, Start Num: 79
Candidate Starts for Rofo_11:
(Start: 79 @6703 has 85 MA's), (Start: 84 @6712 has 13 MA's), (110, 6811), (123, 6868), (124, 6874), (129, 6892),

Gene: RogerDodger_12 Start: 5508, Stop: 5822, Start Num: 81
Candidate Starts for RogerDodger_12:
(19, 5157), (Start: 59 @5445 has 1 MA's), (Start: 81 @5508 has 33 MA's), (123, 5664), (124, 5670),

Gene: RomansRevenge_12 Start: 6049, Stop: 6360, Start Num: 70
Candidate Starts for RomansRevenge_12:
(Start: 70 @6049 has 63 MA's), (107, 6148), (153, 6331),

Gene: Romm_21 Start: 6973, Stop: 7317, Start Num: 64

Candidate Starts for Romm_21:
(14, 6388), (17, 6532), (40, 6844), (Start: 64 @6973 has 12 MA's), (Start: 85 @7003 has 8 MA's), (86, 7009), (92, 7030), (101, 7060), (120, 7138), (137, 7216), (153, 7282), (156, 7291),

Gene: Rowlf_17 Start: 7306, Stop: 7644, Start Num: 70
Candidate Starts for Rowlf_17:
(Start: 70 @7306 has 63 MA's), (74, 7315), (89, 7354), (92, 7363), (137, 7549), (153, 7615), (156, 7624),

Gene: RubyRalph_22 Start: 7934, Stop: 8275, Start Num: 70
Candidate Starts for RubyRalph_22:
(2, 6794), (7, 7055), (12, 7304), (13, 7316), (40, 7802), (Start: 70 @7934 has 63 MA's), (92, 7991), (110, 8063), (137, 8177), (153, 8243), (154, 8246), (156, 8252),

Gene: Rudy_19 Start: 7540, Stop: 7878, Start Num: 70
Candidate Starts for Rudy_19:
(Start: 70 @7540 has 63 MA's), (74, 7549), (92, 7597), (153, 7849), (156, 7858),

Gene: SJReid_78 Start: 34582, Stop: 34863, Start Num: 79
Candidate Starts for SJReid_78:
(Start: 79 @34582 has 85 MA's), (122, 34720), (125, 34750), (127, 34756),

Gene: SadLad_23 Start: 8391, Stop: 8732, Start Num: 70
Candidate Starts for SadLad_23:
(12, 7761), (13, 7773), (40, 8259), (Start: 70 @8391 has 63 MA's), (92, 8448), (110, 8520), (137, 8634), (153, 8700), (154, 8703), (156, 8709),

Gene: Salete_9 Start: 7730, Stop: 8080, Start Num: 83
Candidate Starts for Salete_9:
(Start: 83 @7730 has 21 MA's), (101, 7790), (119, 7877), (127, 7925), (133, 7940),

Gene: SallyK_22 Start: 8701, Stop: 9039, Start Num: 70
Candidate Starts for SallyK_22:
(7, 7846), (12, 8095), (25, 8470), (Start: 70 @8701 has 63 MA's), (74, 8710), (92, 8758), (153, 9010), (156, 9019),

Gene: Salvador_11 Start: 5123, Stop: 5437, Start Num: 81
Candidate Starts for Salvador_11:
(Start: 59 @5060 has 1 MA's), (Start: 81 @5123 has 33 MA's), (123, 5279), (124, 5285),

Gene: Sampson_13 Start: 6570, Stop: 6887, Start Num: 79
Candidate Starts for Sampson_13:
(Start: 79 @6570 has 85 MA's), (93, 6612), (110, 6681), (124, 6744), (131, 6768), (142, 6810), (144, 6816),

Gene: Sanjuju_10 Start: 6661, Stop: 6969, Start Num: 79
Candidate Starts for Sanjuju_10:
(Start: 79 @6661 has 85 MA's), (Start: 84 @6670 has 13 MA's), (110, 6769), (123, 6826), (124, 6832), (129, 6850), (142, 6898),

Gene: Saronaya_11 Start: 5950, Stop: 6258, Start Num: 79
Candidate Starts for Saronaya_11:

(27, 5698), (32, 5725), (Start: 79 @5950 has 85 MA's), (Start: 84 @5959 has 13 MA's), (110, 6058), (123, 6115), (124, 6121), (142, 6187),

Gene: Savbucketdawg_11 Start: 4956, Stop: 5270, Start Num: 81
Candidate Starts for Savbucketdawg_11:
(Start: 81 @4956 has 33 MA's), (123, 5112), (124, 5118),

Gene: SchottB_10 Start: 6126, Stop: 6434, Start Num: 79
Candidate Starts for SchottB_10:
(22, 5841), (31, 5895), (33, 5907), (37, 5946), (50, 6024), (Start: 65 @6096 has 2 MA's), (Start: 79 @6126 has 85 MA's), (Start: 84 @6135 has 13 MA's), (123, 6291), (124, 6297), (142, 6363),

Gene: Scioto_13 Start: 6625, Stop: 6942, Start Num: 79
Candidate Starts for Scioto_13:
(Start: 79 @6625 has 85 MA's), (93, 6667), (110, 6736), (124, 6799), (131, 6823), (142, 6865), (144, 6871),

Gene: Sedona_12 Start: 7669, Stop: 7977, Start Num: 79
Candidate Starts for Sedona_12:
(Start: 79 @7669 has 85 MA's), (Start: 84 @7678 has 13 MA's), (93, 7708), (110, 7777), (123, 7834), (124, 7840), (129, 7858), (142, 7906),

Gene: Sendy_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Sendy_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: SharkTale_11 Start: 5865, Stop: 6179, Start Num: 81
Candidate Starts for SharkTale_11:
(28, 5610), (30, 5616), (38, 5682), (Start: 59 @5802 has 1 MA's), (Start: 81 @5865 has 33 MA's), (123, 6021), (124, 6027),

Gene: Shatter_7 Start: 4953, Stop: 5276, Start Num: 85
Candidate Starts for Shatter_7:
(49, 4833), (Start: 79 @4941 has 85 MA's), (Start: 85 @4953 has 8 MA's), (86, 4959), (87, 4965), (88, 4968), (89, 4971), (97, 4992), (98, 4998), (104, 5025), (110, 5052), (114, 5058), (134, 5148), (158, 5247),

Gene: Shinji_11 Start: 5145, Stop: 5459, Start Num: 81
Candidate Starts for Shinji_11:
(Start: 81 @5145 has 33 MA's), (123, 5301), (124, 5307),

Gene: Shivanishola_11 Start: 6886, Stop: 7185, Start Num: 84
Candidate Starts for Shivanishola_11:
(Start: 79 @6877 has 85 MA's), (Start: 84 @6886 has 13 MA's), (93, 6916), (110, 6985), (123, 7042), (124, 7048), (129, 7066), (142, 7114),

Gene: SilentRX_17 Start: 8205, Stop: 8516, Start Num: 72
Candidate Starts for SilentRX_17:
(48, 8109), (Start: 70 @8202 has 63 MA's), (Start: 72 @8205 has 4 MA's), (Start: 75 @8217 has 1 MA's), (86, 8223), (148, 8460), (153, 8484),

Gene: Sillytadpoles_20 Start: 7538, Stop: 7876, Start Num: 70
Candidate Starts for Sillytadpoles_20:

(Start: 70 @7538 has 63 MA's), (74, 7547), (92, 7595), (153, 7847), (156, 7856),

Gene: Sisko_6 Start: 4758, Stop: 5081, Start Num: 85
Candidate Starts for Sisko_6:
(Start: 79 @4746 has 85 MA's), (Start: 85 @4758 has 8 MA's), (89, 4776), (92, 4785), (97, 4797), (98, 4803), (123, 4914), (127, 4932), (134, 4953), (158, 5052),

Gene: Sitar_12 Start: 7043, Stop: 7351, Start Num: 79
Candidate Starts for Sitar_12:
(36, 6851), (Start: 79 @7043 has 85 MA's), (Start: 84 @7052 has 13 MA's), (110, 7151), (123, 7208), (124, 7214), (129, 7232), (142, 7280),

Gene: Sixama_71 Start: 29707, Stop: 30000, Start Num: 82
Candidate Starts for Sixama_71:
(52, 29611), (Start: 64 @29668 has 12 MA's), (80, 29701), (Start: 82 @29707 has 6 MA's), (90, 29731), (110, 29800), (119, 29824), (123, 29854), (131, 29884), (140, 29917), (148, 29947), (154, 29974), (157, 29989), (159, 29992),

Gene: Sixsevenium_12 Start: 5017, Stop: 5331, Start Num: 81
Candidate Starts for Sixsevenium_12:
(28, 4762), (30, 4768), (38, 4834), (Start: 59 @4954 has 1 MA's), (Start: 81 @5017 has 33 MA's), (123, 5173), (124, 5179),

Gene: SlySloth_23 Start: 8492, Stop: 8830, Start Num: 70
Candidate Starts for SlySloth_23:
(7, 7637), (12, 7886), (25, 8261), (Start: 70 @8492 has 63 MA's), (74, 8501), (92, 8549), (137, 8735), (153, 8801), (156, 8810),

Gene: SmokingBunny_11 Start: 5123, Stop: 5437, Start Num: 81
Candidate Starts for SmokingBunny_11:
(Start: 59 @5060 has 1 MA's), (Start: 81 @5123 has 33 MA's), (123, 5279), (124, 5285),

Gene: Soos_36 Start: 17090, Stop: 17416, Start Num: 83
Candidate Starts for Soos_36:
(Start: 83 @17090 has 21 MA's), (91, 17117), (98, 17138), (122, 17249), (133, 17303), (152, 17375), (153, 17384),

Gene: Spiderpig_20 Start: 7061, Stop: 7405, Start Num: 64
Candidate Starts for Spiderpig_20:
(40, 6932), (Start: 64 @7061 has 12 MA's), (92, 7118), (101, 7148), (120, 7226), (153, 7370), (156, 7379),

Gene: Squash_23 Start: 8572, Stop: 8916, Start Num: 70
Candidate Starts for Squash_23:
(Start: 70 @8572 has 63 MA's), (74, 8581), (92, 8629), (137, 8815), (153, 8881), (156, 8890),

Gene: Statler_21 Start: 8077, Stop: 8421, Start Num: 70
Candidate Starts for Statler_21:
(25, 7846), (Start: 70 @8077 has 63 MA's), (74, 8086), (92, 8134), (137, 8320), (153, 8386), (156, 8395),

Gene: Stewart25555_65 Start: 27748, Stop: 28032, Start Num: 79
Candidate Starts for Stewart25555_65:

(76, 27742), (Start: 79 @27748 has 85 MA's), (155, 28027),

Gene: Stichling_11 Start: 5346, Stop: 5645, Start Num: 84
Candidate Starts for Stichling_11:
(27, 5085), (32, 5112), (Start: 79 @5337 has 85 MA's), (Start: 84 @5346 has 13 MA's), (110, 5445), (123, 5502), (124, 5508), (142, 5574),

Gene: Stillion_39 Start: 17675, Stop: 18001, Start Num: 83
Candidate Starts for Stillion_39:
(Start: 83 @17675 has 21 MA's), (91, 17702), (98, 17723), (122, 17834), (133, 17888), (152, 17960), (153, 17969),

Gene: Sting_39 Start: 17529, Stop: 17855, Start Num: 83
Candidate Starts for Sting_39:
(Start: 83 @17529 has 21 MA's), (91, 17556), (98, 17577), (122, 17688), (133, 17742), (152, 17814), (153, 17823),

Gene: StorminNorm_11 Start: 5953, Stop: 6261, Start Num: 79
Candidate Starts for StorminNorm_11:
(27, 5701), (32, 5728), (Start: 79 @5953 has 85 MA's), (Start: 84 @5962 has 13 MA's), (110, 6061), (123, 6118), (124, 6124), (142, 6190),

Gene: StrawberryJamm_23 Start: 7840, Stop: 8178, Start Num: 70
Candidate Starts for StrawberryJamm_23:
(Start: 70 @7840 has 63 MA's), (74, 7849), (92, 7897), (153, 8149), (156, 8158),

Gene: Stultus_11 Start: 6867, Stop: 7175, Start Num: 79
Candidate Starts for Stultus_11:
(Start: 79 @6867 has 85 MA's), (Start: 84 @6876 has 13 MA's), (93, 6906), (110, 6975), (123, 7032), (124, 7038), (129, 7056), (142, 7104),

Gene: Sunfish_24 Start: 9142, Stop: 9498, Start Num: 70
Candidate Starts for Sunfish_24:
(Start: 70 @9142 has 63 MA's), (86, 9175), (88, 9184), (102, 9229), (136, 9394), (141, 9412), (153, 9463),

Gene: TP1604_9 Start: 7730, Stop: 8080, Start Num: 83
Candidate Starts for TP1604_9:
(Start: 83 @7730 has 21 MA's), (101, 7790), (119, 7877), (127, 7925), (133, 7940),

Gene: Talia1610_75 Start: 32727, Stop: 33011, Start Num: 79
Candidate Starts for Talia1610_75:
(41, 32568), (42, 32574), (44, 32586), (45, 32589), (46, 32601), (47, 32607), (48, 32610), (55, 32652), (77, 32721), (Start: 79 @32727 has 85 MA's), (86, 32745), (96, 32775), (101, 32787), (102, 32790), (119, 32856), (155, 33006),

Gene: Tangent_9 Start: 5665, Stop: 6003, Start Num: 65
Candidate Starts for Tangent_9:
(Start: 65 @5665 has 2 MA's), (Start: 79 @5695 has 85 MA's), (Start: 84 @5704 has 13 MA's), (110, 5803), (123, 5860), (124, 5866), (129, 5884), (142, 5932),

Gene: Tangerine_11 Start: 5962, Stop: 6270, Start Num: 79
Candidate Starts for Tangerine_11:

(27, 5710), (32, 5737), (Start: 79 @5962 has 85 MA's), (Start: 84 @5971 has 13 MA's), (110, 6070), (123, 6127), (124, 6133), (142, 6199),

Gene: Tank_16 Start: 8065, Stop: 8376, Start Num: 70
Candidate Starts for Tank_16:
(48, 7972), (Start: 70 @8065 has 63 MA's), (Start: 72 @8068 has 4 MA's), (121, 8218), (123, 8239), (124, 8245), (148, 8323), (153, 8347),

Gene: Tardus_13 Start: 5665, Stop: 5982, Start Num: 79
Candidate Starts for Tardus_13:
(Start: 79 @5665 has 85 MA's), (93, 5707), (110, 5776), (124, 5839), (131, 5863), (142, 5905),

Gene: Teehee_22 Start: 8775, Stop: 9113, Start Num: 70
Candidate Starts for Teehee_22:
(Start: 70 @8775 has 63 MA's), (74, 8784), (92, 8832), (153, 9084), (156, 9093),

Gene: Tempo_20 Start: 7165, Stop: 7509, Start Num: 64
Candidate Starts for Tempo_20:
(40, 7036), (Start: 64 @7165 has 12 MA's), (Start: 85 @7195 has 8 MA's), (86, 7201), (92, 7222), (101, 7252), (120, 7330), (137, 7408), (153, 7474), (156, 7483),

Gene: Thing3_12 Start: 6782, Stop: 7090, Start Num: 79
Candidate Starts for Thing3_12:
(Start: 65 @6752 has 2 MA's), (Start: 79 @6782 has 85 MA's), (Start: 84 @6791 has 13 MA's), (110, 6890), (123, 6947), (124, 6953), (129, 6971), (142, 7019),

Gene: Tiamoceli_13 Start: 6287, Stop: 6625, Start Num: 79
Candidate Starts for Tiamoceli_13:
(62, 6251), (Start: 79 @6287 has 85 MA's), (88, 6314), (90, 6320), (98, 6344), (116, 6422), (124, 6488), (142, 6554), (149, 6581),

Gene: TillyBobJoe_11 Start: 4959, Stop: 5273, Start Num: 81
Candidate Starts for TillyBobJoe_11:
(Start: 81 @4959 has 33 MA's), (123, 5115), (124, 5121),

Gene: Tissue_20 Start: 7909, Stop: 8253, Start Num: 70
Candidate Starts for Tissue_20:
(Start: 70 @7909 has 63 MA's), (74, 7918), (92, 7966), (137, 8152), (153, 8218), (156, 8227),

Gene: Togo_11 Start: 5123, Stop: 5437, Start Num: 81
Candidate Starts for Togo_11:
(Start: 59 @5060 has 1 MA's), (Start: 81 @5123 has 33 MA's), (123, 5279), (124, 5285),

Gene: Tonitrus_25 Start: 14059, Stop: 14370, Start Num: 83
Candidate Starts for Tonitrus_25:
(Start: 83 @14059 has 21 MA's), (111, 14158),

Gene: TurkishDelight_10 Start: 6065, Stop: 6391, Start Num: 82
Candidate Starts for TurkishDelight_10:
(Start: 75 @6050 has 1 MA's), (Start: 82 @6065 has 6 MA's), (143, 6305), (147, 6317),

Gene: Twister6_11 Start: 5055, Stop: 5369, Start Num: 81
Candidate Starts for Twister6_11:

(Start: 59 @4992 has 1 MA's), (Start: 81 @5055 has 33 MA's), (123, 5211), (124, 5217),

Gene: Twonlo_10 Start: 4904, Stop: 5242, Start Num: 79
Candidate Starts for Twonlo_10:
(62, 4868), (Start: 79 @4904 has 85 MA's), (88, 4931), (90, 4937), (98, 4961), (116, 5039), (124, 5105), (142, 5171), (149, 5198),

Gene: Tycho_11 Start: 5971, Stop: 6270, Start Num: 84
Candidate Starts for Tycho_11:
(27, 5710), (32, 5737), (Start: 79 @5962 has 85 MA's), (Start: 84 @5971 has 13 MA's), (110, 6070), (123, 6127), (124, 6133), (142, 6199),

Gene: Valary_12 Start: 5508, Stop: 5822, Start Num: 81
Candidate Starts for Valary_12:
(19, 5157), (Start: 59 @5445 has 1 MA's), (Start: 81 @5508 has 33 MA's), (123, 5664), (124, 5670),

Gene: VanDeWege_12 Start: 5436, Stop: 5750, Start Num: 81
Candidate Starts for VanDeWege_12:
(Start: 59 @5373 has 1 MA's), (Start: 81 @5436 has 33 MA's), (123, 5592), (124, 5598),

Gene: Verity_13 Start: 6898, Stop: 7215, Start Num: 79
Candidate Starts for Verity_13:
(Start: 79 @6898 has 85 MA's), (89, 6928), (110, 7009), (124, 7072), (129, 7090), (130, 7093), (131, 7096), (142, 7138),

Gene: ViaConlectus_13 Start: 6625, Stop: 6942, Start Num: 79
Candidate Starts for ViaConlectus_13:
(Start: 79 @6625 has 85 MA's), (93, 6667), (110, 6736), (124, 6799), (131, 6823), (142, 6865), (144, 6871),

Gene: Viceroy_20 Start: 7540, Stop: 7878, Start Num: 70
Candidate Starts for Viceroy_20:
(Start: 70 @7540 has 63 MA's), (74, 7549), (92, 7597), (153, 7849), (156, 7858),

Gene: Vivi2_10 Start: 5856, Stop: 6164, Start Num: 79
Candidate Starts for Vivi2_10:
(36, 5664), (Start: 79 @5856 has 85 MA's), (Start: 84 @5865 has 13 MA's), (110, 5964), (123, 6021), (124, 6027), (129, 6045), (142, 6093),

Gene: WaddleDee_62 Start: 27340, Stop: 27624, Start Num: 79
Candidate Starts for WaddleDee_62:
(43, 27196), (69, 27322), (76, 27334), (Start: 79 @27340 has 85 MA's), (155, 27619),

Gene: Wayne3_22 Start: 8505, Stop: 8843, Start Num: 70
Candidate Starts for Wayne3_22:
(7, 7650), (12, 7899), (14, 7944), (25, 8274), (Start: 70 @8505 has 63 MA's), (74, 8514), (92, 8562), (153, 8814), (156, 8823),

Gene: WheelerS25_26 Start: 9288, Stop: 9632, Start Num: 70
Candidate Starts for WheelerS25_26:
(17, 8868), (25, 9057), (Start: 70 @9288 has 63 MA's), (74, 9297), (92, 9345), (137, 9531), (153, 9597), (156, 9606),

Gene: Wheelie_20 Start: 7856, Stop: 8194, Start Num: 70
Candidate Starts for Wheelie_20:
(7, 7001), (12, 7250), (14, 7295), (25, 7625), (Start: 70 @7856 has 63 MA's), (74, 7865), (92, 7913), (153, 8165), (156, 8174),

Gene: Wilca_20 Start: 7061, Stop: 7405, Start Num: 64
Candidate Starts for Wilca_20:
(40, 6932), (Start: 64 @7061 has 12 MA's), (92, 7118), (101, 7148), (120, 7226), (153, 7370), (156, 7379),

Gene: Wilde_16 Start: 7993, Stop: 8304, Start Num: 70
Candidate Starts for Wilde_16:
(48, 7900), (Start: 70 @7993 has 63 MA's), (Start: 72 @7996 has 4 MA's), (121, 8146), (123, 8167), (124, 8173), (148, 8251), (153, 8275),

Gene: Wizard_11 Start: 5251, Stop: 5565, Start Num: 81
Candidate Starts for Wizard_11:
(Start: 59 @5188 has 1 MA's), (Start: 81 @5251 has 33 MA's), (123, 5407), (124, 5413),

Gene: Xkcd426_10 Start: 8759, Stop: 9115, Start Num: 83
Candidate Starts for Xkcd426_10:
(34, 8549), (35, 8552), (69, 8729), (Start: 83 @8759 has 21 MA's), (101, 8819), (102, 8822), (112, 8873), (122, 8918), (127, 8954),

Gene: YDN12_10 Start: 7676, Stop: 8026, Start Num: 83
Candidate Starts for YDN12_10:
(Start: 83 @7676 has 21 MA's), (101, 7736), (111, 7781), (113, 7793), (119, 7823), (127, 7871), (133, 7886), (152, 7955),

Gene: YorkOnyx_11 Start: 5911, Stop: 6219, Start Num: 79
Candidate Starts for YorkOnyx_11:
(27, 5659), (Start: 79 @5911 has 85 MA's), (Start: 84 @5920 has 13 MA's), (110, 6019), (123, 6076), (124, 6082), (142, 6148),

Gene: YungMoney_11 Start: 6205, Stop: 6510, Start Num: 81
Candidate Starts for YungMoney_11:
(19, 5854), (Start: 59 @6142 has 1 MA's), (Start: 81 @6205 has 33 MA's), (123, 6361), (124, 6367),

Gene: Zagie_21 Start: 8043, Stop: 8381, Start Num: 70
Candidate Starts for Zagie_21:
(Start: 70 @8043 has 63 MA's), (74, 8052), (89, 8091), (92, 8100), (137, 8286), (153, 8352), (156, 8361),

Gene: ZestyBestie_19 Start: 7713, Stop: 8051, Start Num: 70
Candidate Starts for ZestyBestie_19:
(7, 6858), (12, 7107), (25, 7482), (Start: 70 @7713 has 63 MA's), (74, 7722), (89, 7761), (92, 7770), (137, 7956), (153, 8022), (156, 8031),

Gene: Zhafia_23 Start: 8281, Stop: 8625, Start Num: 70
Candidate Starts for Zhafia_23:
(25, 8050), (Start: 70 @8281 has 63 MA's), (74, 8290), (92, 8338), (137, 8524), (153, 8590), (156, 8599),

Gene: Zipp_13 Start: 7043, Stop: 7360, Start Num: 79
Candidate Starts for Zipp_13:
(Start: 79 @7043 has 85 MA's), (89, 7073), (110, 7154), (124, 7217), (129, 7235), (130, 7238), (131, 7241), (142, 7283),

Gene: Zitch_14 Start: 6362, Stop: 6679, Start Num: 79
Candidate Starts for Zitch_14:
(Start: 79 @6362 has 85 MA's), (93, 6404), (110, 6473), (124, 6536), (131, 6560), (142, 6602),

Gene: Zooman_66 Start: 27525, Stop: 27800, Start Num: 83
Candidate Starts for Zooman_66:
(76, 27510), (Start: 83 @27525 has 21 MA's), (89, 27546), (123, 27675), (138, 27732), (139, 27735),

Gene: phiAsp2_3 Start: 663, Stop: 1013, Start Num: 65
Candidate Starts for phiAsp2_3:
(Start: 65 @663 has 2 MA's), (Start: 79 @693 has 85 MA's), (Start: 83 @702 has 21 MA's), (92, 732), (95, 747), (98, 756), (102, 771), (110, 810), (124, 888), (140, 945), (152, 990),