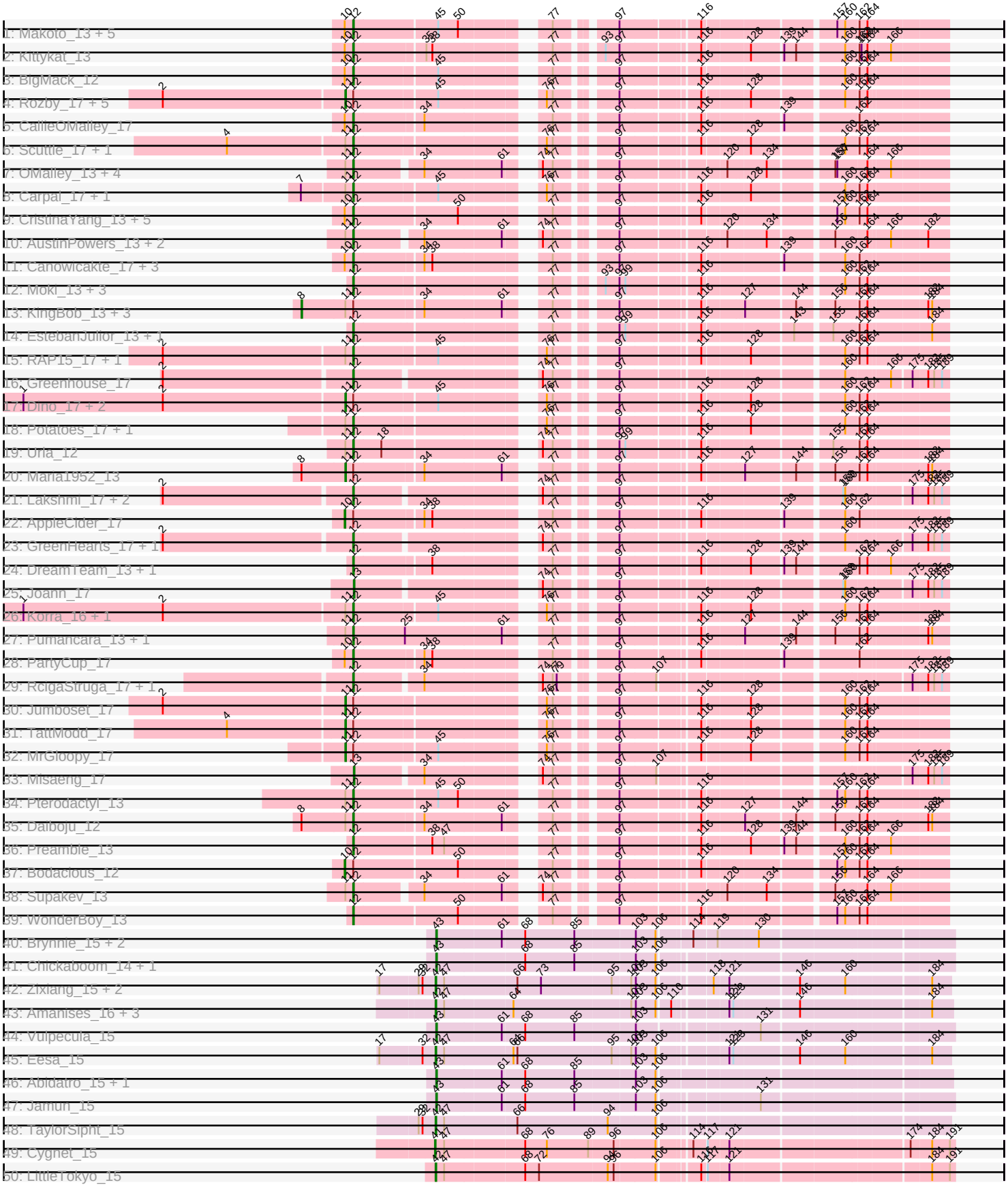
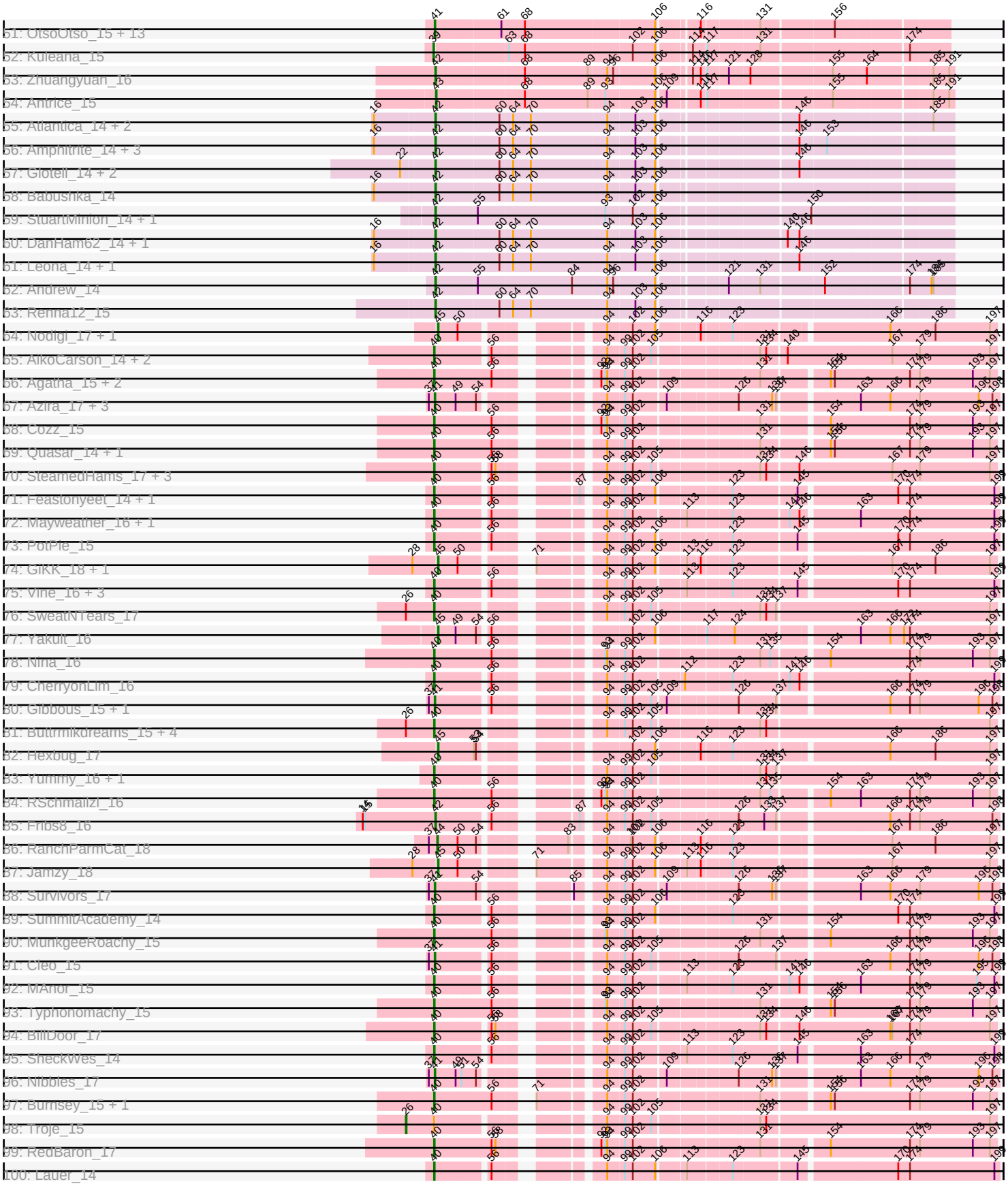
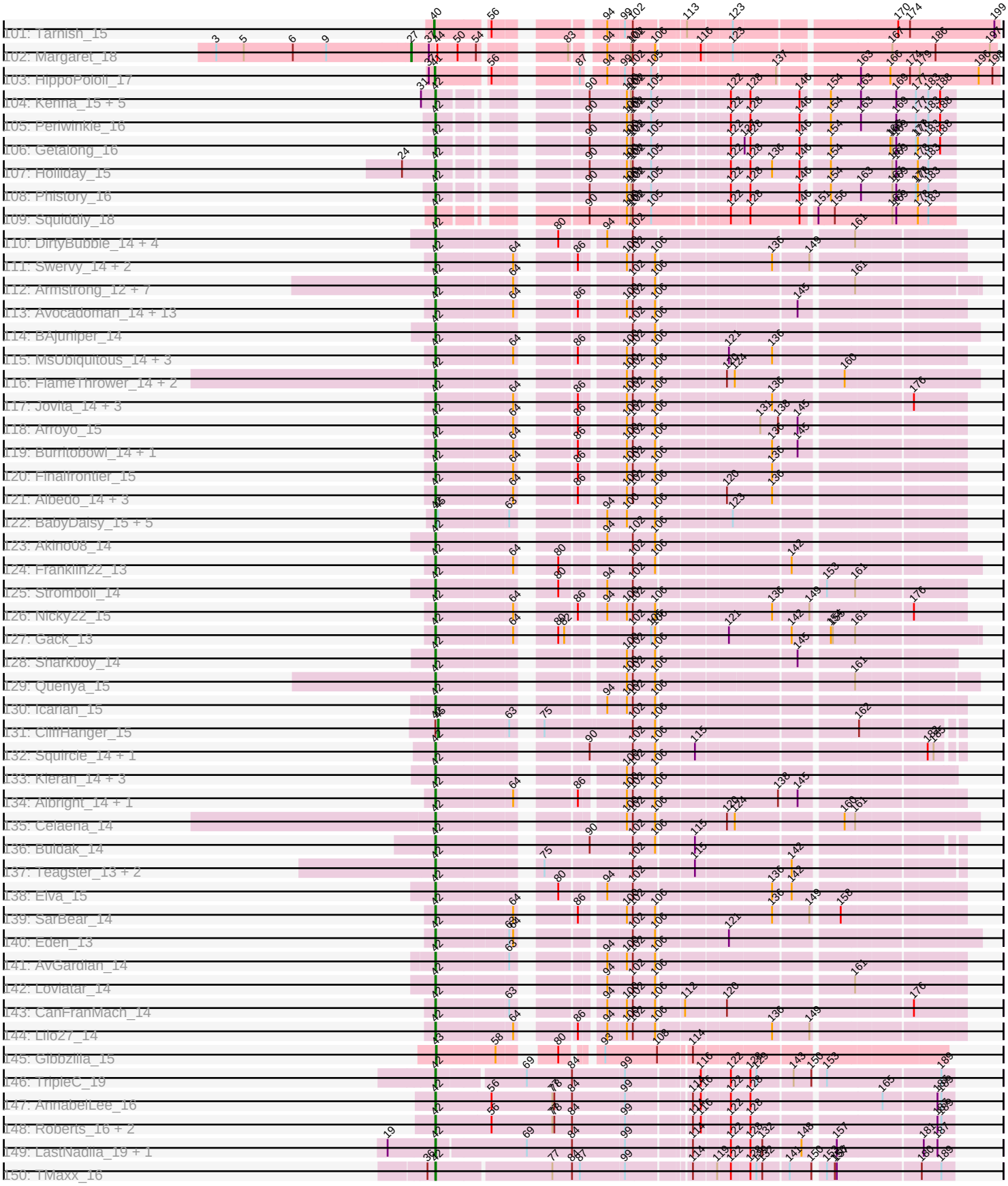
Pham 347159


1: Makoto_13 + 5
2: Kittykat_13
3: BigMack_12
4: Rozby_17 + 5
5: CallieOMalley_17
6: Scuttle_17 + 1
7: OMalley_13 + 4
8: Carpal_17 + 1
9: CristinaYang_13 + 5
10: AustinPowers_13 + 2
11: Canowicakte_17 + 3
12: Moki_13 + 3
13: KingBob_13 + 3
14: EstebanJulior_13 + 1
15: RAP15_17 + 1
16: Greenhouse_17
17: Dino_17 + 2
18: Potatoes_17 + 1
19: Una_12
20: Maria1952_13
21: Lakshmi_17 + 2
22: AppleCider_17
23: GreenHearts_17 + 1
24: DreamTeam_13 + 1
25: Joann_17
26: Korra_16 + 1
27: Pumancara_13 + 1
28: PartyCup_17
29: RcigaStruga_17 + 1
30: Jumboset_17
31: TattModd_17
32: MrGloopy_17
33: Misaeng_17
34: Pterodactyl_13
35: Daiboju_12
36: Preamble_13
37: Bodacious_12
38: Supakev_13
39: WonderBoy_13
40: Brynnie_15 + 2
41: Chickaboom_14 + 1
42: Zixiang_15 + 2
43: Amanises_16 + 3
44: Vulpecula_15
45: Eesa_15
46: Abidatro_15 + 1
47: Jamun_15
48: TaylorSpht_15
49: Cygnet_15
50: LittleTokyo_15

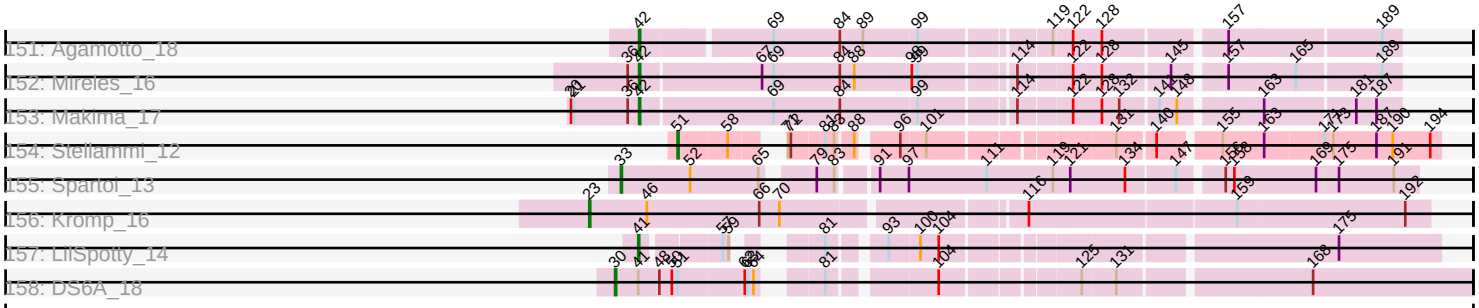
Pham 347159


51: OtsoOtso_15 + 13
52: Kuleana_15
53: Zhuangyuan_16
54: Antrice_15
55: Atlantica_14 + 2
56: Amphitrite_14 + 3
57: Glotell_14 + 2
58: Babushka_14
59: StuartMinion_14 + 1
60: DanHam62_14 + 1
61: Leona_14 + 1
62: Andrew_14
63: Renna12_15
64: Noodgi_17 + 1
65: AikoCarson_14 + 2
66: Agatha_15 + 2
67: Azira_17 + 3
68: Cozz_15
69: Quasar_14 + 1
70: SteamedHams_17 + 3
71: Feastonyeet_14 + 1
72: Mayweather_16 + 1
73: PotPie_15
74: GIKK_18 + 1
75: Vine_16 + 3
76: SweatNTears_17
77: Yakult_16
78: Nina_16
79: CherryonLim_16
80: Gibbous_15 + 1
81: Buttrmilkdreams_15 + 4
82: Hexbug_17
83: Yummy_16 + 1
84: RSchmaltzi_16
85: Fribs8_16
86: RanchParmCat_18
87: Jamzy_18
88: Survivors_17
89: SummitAcademy_14
90: MunkgeeRoachy_15
91: Cleo_15
92: MAnor_15
93: Typhonomachy_15
94: BillDoor_17
95: SheckWes_14
96: Nibbles_17
97: Burnsey_15 + 1
98: Troje_15
99: RedBaron_17
100: Lauer_14

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151: Agamotto_18
152: Mireles_16
153: Makima_17
154: Stellammi_12
155: Spartoi_13
156: Kromp_16
157: LilSpotty_14
158: DS6A_18

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 347159 Report

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

Pham number 347159 has 317 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Makoto_13, PitaDog_13, Lucy_13, DrRobert_13, OurGirlNessie_13, Christian_13
• Track 2 : Kittykat_13
• Track 3 : BigMack_12
• Track 4 : Rozby_17, Immaculata_17, Glenn_17, Savage2526_17, MeganNoll_16, Kalizoi_17
• Track 5 : CallieOMalley_17
• Track 6 : Scuttle_17, Riverdale_17
• Track 7 : OMalley_13, Eunoia_13, Aledel_12, Riovina_13, Chridison_13
• Track 8 : Carpal_17, Beethoven_17
• Track 9 : CristinaYang_13, Lasagna_13, LilStuart_13, ChewChew_13, Lennox_13, Nancia_13
• Track 10 : AustinPowers_13, HunterDalle_13, Vulture_13
• Track 11 : Canowicakte_17, Wayne_16, Litotes_17, Suppi_17
• Track 12 : Moki_13, Huckleberry_13, HeadNerd_12, Bennie_13
• Track 13 : KingBob_13, Sergei_13, Herb_13, Temper16_13
• Track 14 : EstebanJulior_13, MamaPearl_13
• Track 15 : RAP15_17, Vallejo_17
• Track 16 : Greenhouse_17
• Track 17 : Dino_17, BrotherBLo_17, Zorro_17
• Track 18 : Potatoes_17, Cholula_17
• Track 19 : Urla_12
• Track 20 : Maria1952_13
• Track 21 : Lakshmi_17, Albanese_17, Oxynfrius_17
• Track 22 : AppleCider_17
• Track 23 : GreenHearts_17, Nubia_16
• Track 24 : DreamTeam_13, Gisselle_13
• Track 25 : Joann_17
• Track 26 : Korra_16, Wawa_17
• Track 27 : Pumancara_13, PinkFriday_13
• Track 28 : PartyCup_17
• Track 29 : RcigaStruga_17, Huntingdon_17
• Track 30 : Jumboset_17
• Track 31 : TattModd_17
• Track 32 : MrGloopy_17
• Track 33 : Misaeng_17
• Track 34 : Pterodactyl_13

• Track 35 : Daiboju_12
• Track 36 : Preamble_13
• Track 37 : Bodacious_12
• Track 38 : Supakev_13
• Track 39 : WonderBoy_13
• Track 40 : Brynnie_15, Basilisk_15, Ruchi_15
• Track 41 : Chickaboom_14, WileyE_14
• Track 42 : Zixiang_15, Niblet_15, Chicken_15
• Track 43 : Amanises_16, Shen_16, Orcanus_15, Toad24_16
• Track 44 : Vulpecula_15
• Track 45 : Eesa_15
• Track 46 : Abidatro_15, Galaxy_15
• Track 47 : Jamun_15
• Track 48 : TaylorSipht_15
• Track 49 : Cygnet_15
• Track 50 : LittleTokyo_15
• Track 51 : OtsoOtso_15, Melons_16, Pineda_16, Amelia_16, Polka_15, Cote_16, Lunar_15, PhirstandPhine_16, Daob_16, Coral_15, Kepler_15, HannahPhantana_16, Colusalem_15, Jerole_16
• Track 52 : Kuleana_15
• Track 53 : Zhuangyuan_16
• Track 54 : Antrice_15
• Track 55 : Atlantica_14, Fingolfin_14, Juno112_14
• Track 56 : Amphitrite_14, HamCheese_13, PhluffyCoco_14, Laphuphu24k_13
• Track 57 : Glotell_14, KHumphrey_14, AmiCi24_14
• Track 58 : Babushka_14
• Track 59 : StuartMinion_14, AlexMinion_14
• Track 60 : DanHam62_14, RedFox_14
• Track 61 : Leona_14, Azaz_14
• Track 62 : Andrew_14
• Track 63 : Renna12_15
• Track 64 : Nodigi_17, Orla_17
• Track 65 : AikoCarson_14, Amok_14, Emalyn_14
• Track 66 : Agatha_15, GoldHunter_15, Axym_15
• Track 67 : Azira_17, Wolfwood_17, Zareef_17, MaVan_17
• Track 68 : Cozz_15
• Track 69 : Quasar_14, Bubble_15
• Track 70 : SteamedHams_17, Tolls_17, AndPeggy_14, Yarn_14
• Track 71 : Feastonyeet_14, BigChungus_14
• Track 72 : Mayweather_16, Pons_15
• Track 73 : PotPie_15
• Track 74 : GiKK_18, Button_16
• Track 75 : Vine_16, KayGee_15, Elinal_16, Yucky_15
• Track 76 : SweatNTears_17
• Track 77 : Yakult_16
• Track 78 : Nina_16
• Track 79 : CherryonLim_16
• Track 80 : Gibbous_15, Dre3_15
• Track 81 : Buttrmlkdreams_15, Biskit_16, SketchMex_14, MScarn_17, Blondies_16
• Track 82 : Hexbug_17
• Track 83 : Yummy_16, Horseradish_16
• Track 84 : RSchmailzl_16
• Track 85 : Fribs8_16

• Track 86 : RanchParmCat_18
• Track 87 : Jamzy_18
• Track 88 : Survivors_17
• Track 89 : SummitAcademy_14
• Track 90 : MunkgeeRoachy_15
• Track 91 : Cleo_15
• Track 92 : MAnor_15
• Track 93 : Typhonomachy_15
• Track 94 : BillDoor_17
• Track 95 : SheckWes_14
• Track 96 : Nibbles_17
• Track 97 : Burnsey_15, Socotra_16
• Track 98 : Troje_15
• Track 99 : RedBaron_17
• Track 100 : Lauer_14
• Track 101 : Tarnish_15
• Track 102 : Margaret_18
• Track 103 : HippoPololi_17
• Track 104 : Kenna_15, Lutum_16, Leroy_16, BENtherdunthat_16, Horus_16, Asapag_16
• Track 105 : Periwinkle_16
• Track 106 : Getalong_16
• Track 107 : Holliday_15
• Track 108 : Phistory_16
• Track 109 : Squiddly_18
• Track 110 : DirtyBubble_14, Stoor_14, PondAmelia_15, SanaSana_15, BabyYoda_14
• Track 111 : Swervy_14, AylexOG_15, Slay_14
• Track 112 : Armstrong_12, Clayda5_13, Coltrane_12, Vitas_13, Rollins_12, Brahms_12, Bernstein_12, Skylord_13
• Track 113 : Avocadoman_14, Cashington_14, Abigail_14, DickRichards_14, PhigPhack_14, Kenzers_14, CroZenni_14, SansAfet_14, Johnathan_14, BelmontSKP_15, LimaBean_14, Lynlen_14, Bengal_14, AnnaLie_15
• Track 114 : BAjuniper_14
• Track 115 : MsUbiquitous_14, CupcakePrincess_14, TukTuk_14, Jabb_14
• Track 116 : FlameThrower_14, Bachaco_14, Katzastrophic_14
• Track 117 : Jovita_14, QMacho_15, Pecas_14, Eula_14
• Track 118 : Arroyo_15
• Track 119 : Burritobowl_14, Milomuff_15
• Track 120 : Finalfrontier_15
• Track 121 : Albedo_14, Doobus_14, Phisb_14, BubbaBear_14
• Track 122 : BabyDaisy_15, Kate33_14, Didgeridoo_15, IndyLu_14, Lahqtemish_14, PastaFagioli_14
• Track 123 : Akino08_14
• Track 124 : Franklin22_13
• Track 125 : Stromboli_14
• Track 126 : Nicky22_15
• Track 127 : Gack_13
• Track 128 : Sharkboy_14
• Track 129 : Quenya_15
• Track 130 : Icarian_15
• Track 131 : CliffHanger_15
• Track 132 : Squircle_14, Olliecat_14

• Track 133 : Kieran_14, Rona_14, ChiliPepper_14, Dismas_14
• Track 134 : Albright_14, Softsoap_14
• Track 135 : Celaena_14
• Track 136 : Buldak_14
• Track 137 : Teagster_13, Shayna_13, SunnyD_13
• Track 138 : Elva_15
• Track 139 : SarBear_14
• Track 140 : Eden_13
• Track 141 : AvGardian_14
• Track 142 : Loviatar_14
• Track 143 : CanFranMach_14
• Track 144 : Lilo27_14
• Track 145 : Gibbzilla_15
• Track 146 : TripleC_19
• Track 147 : AnnabelLee_16
• Track 148 : Roberts_16, Gerri43_16, ChipsNGuac_16
• Track 149 : LastNadiia_19, Audell_19
• Track 150 : TMaxx_16
• Track 151 : Agamotto_18
• Track 152 : Mireles_16
• Track 153 : Makima_17
• Track 154 : Stellammi_12
• Track 155 : Spartoi_13
• Track 156 : Kromp_16
• Track 157 : LilSpotty_14
• Track 158 : DS6A_18

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

The start number called the most often in the published annotations is 42, it was called in 137 of the 317 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abigail_14, Agamotto_18, Akino08_14, Albedo_14, Albright_14, AlexMinion_14, Amanises_16, AmiCi24_14, Amphitrite_14, Andrew_14, AnnaLie_15, AnnabelLee_16, Armstrong_12, Arroyo_15, Asapag_16, Atlantica_14, Audell_19, AvGardian_14, Avocadoman_14, AylexOG_15, Azaz_14, BAjuniper_14, BENtherdunthat_16, Babushka_14, BabyDaisy_15, BabyYoda_14, Bachaco_14, BelmontSKP_15, Bengal_14, Bernstein_12, Brahms_12, BubbaBear_14, Buldak_14, Burritobowl_14, CanFranMach_14, Cashington_14, Celaena_14, Chicken_15, ChiliPepper_14, ChipsNGuac_16, Clayda5_13, Coltrane_12, CroZenni_14, CupcakePrincess_14, DanHam62_14, DickRichards_14, Didgeridoo_15, DirtyBubble_14, Dismas_14, Doobus_14, Eden_13, Eesa_15, Elva_15, Eula_14, Finalfrontier_15, Fingolfin_14, FlameThrower_14, Franklin22_13, Fribs8_16, Gack_13, Gerri43_16, Getalong_16, Glotell_14, HamCheese_13, Holliday_15, Horus_16, Icarian_15, IndyLu_14, Jabb_14, Johnathan_14, Jovita_14, Juno112_14, KHumphrey_14, Kate33_14, Katzastrophic_14, Kenna_15, Kenzers_14, Kieran_14, Lahqtemish_14, Laphuphu24k_13, LastNadiia_19, Leona_14, Leroy_16, Lilo27_14, LimaBean_14, LittleTokyo_15, Loviatar_14, Lutum_16, Lynlen_14, Makima_17, Milomuff_15, Mireles_16, MsUbiquitous_14, Niblet_15, Nicky22_15, Olliecat_14,

Orcanus_15, PastaFagioli_14, Pecas_14, Periwinkle_16, PhigPhack_14, Phisb_14, Phistory_16, PhluffyCoco_14, PondAmelia_15, QMacho_15, Quenya_15, RedFox_14, Renna12_15, Roberts_16, Rollins_12, Rona_14, SanaSana_15, SansAfet_14, SarBear_14, Sharkboy_14, Shayna_13, Shen_16, Skylord_13, Slay_14, Softsoap_14, Squiddly_18, Squircle_14, Stoor_14, Stromboli_14, StuartMinion_14, SunnyD_13, Swervy_14, TMaxx_16, TaylorSipht_15, Teagster_13, Toad24_16, TripleC_19, TukTuk_14, Vitas_13, Zhuangyuan_16, Zixiang_15,

Genes that have the "Most Annotated" start but do not call it:
• CliffHanger_15,

Genes that do not have the "Most Annotated" start:
• Abidatro_15, Agatha_15, AikoCarson_14, Albanese_17, Aledel_12, Amelia_16, Amok_14, AndPeggy_14, Antrice_15, AppleCider_17, AustinPowers_13, Axym_15, Azira_17, Basilisk_15, Beethoven_17, Bennie_13, BigChungus_14, BigMack_12, BillDoor_17, Biskit_16, Blondies_16, Bodacious_12, BrotherBLo_17, Brynnie_15, Bubble_15, Burnsey_15, Button_16, Buttrmlkdreams_15, CallieOMalley_17, Canowicakte_17, Carpal_17, CherryonLim_16, ChewChew_13, Chickaboom_14, Cholula_17, Chridison_13, Christian_13, Cleo_15, Colusalem_15, Coral_15, Cote_16, Cozz_15, CristinaYang_13, Cygnet_15, DS6A_18, Daiboju_12, Daob_16, Dino_17, DrRobert_13, Dre3_15, DreamTeam_13, Elinal_16, Emalyn_14, EstebanJulior_13, Eunoia_13, Feastonyeet_14, Galaxy_15, GiKK_18, Gibbous_15, Gibbzilla_15, Gisselle_13, Glenn_17, GoldHunter_15, GreenHearts_17, Greenhouse_17, HannahPhantana_16, HeadNerd_12, Herb_13, Hexbug_17, HippoPololi_17, Horseradish_16, Huckleberry_13, HunterDalle_13, Huntingdon_17, Immaculata_17, Jamun_15, Jamzy_18, Jerole_16, Joann_17, Jumboset_17, Kalizoi_17, KayGee_15, Kepler_15, KingBob_13, Kittykat_13, Korra_16, Kromp_16, Kuleana_15, Lakshmi_17, Lasagna_13, Lauer_14, Lennox_13, LilSpotty_14, LilStuart_13, Litotes_17, Lucy_13, Lunar_15, MAnor_15, MScarn_17, MaVan_17, Makoto_13, MamaPearl_13, Margaret_18, Maria1952_13, Mayweather_16, MeganNoll_16, Melons_16, Misaeng_17, Moki_13, MrGloopy_17, MunkgeeRoachy_15, Nancia_13, Nibbles_17, Nina_16, Nodigi_17, Nubia_16, OMalley_13, Orla_17, OtsoOtso_15, OurGirlNessie_13, Oxynfrius_17, PartyCup_17, PhirstandPhine_16, Pineda_16, PinkFriday_13, PitaDog_13, Polka_15, Pons_15, PotPie_15, Potatoes_17, Preamble_13, Pterodactyl_13, Pumancara_13, Quasar_14, RAP15_17, RSchmailzl_16, RanchParmCat_18, RcigaStruga_17, RedBaron_17, Riovina_13, Riverdale_17, Rozby_17, Ruchi_15, Savage2526_17, Scuttle_17, Sergei_13, SheckWes_14, SketchMex_14, Socotra_16, Spartoi_13, SteamedHams_17, Stellammi_12, SummitAcademy_14, Supakev_13, Suppi_17, Survivors_17, SweatNTears_17, Tarnish_15, TattModd_17, Temper16_13, Tolls_17, Troje_15, Typhonomachy_15, Urla_12, Vallejo_17, Vine_16, Vulpecula_15, Vulture_13, Wawa_17, Wayne_16, WileyE_14, Wolfwood_17, WonderBoy_13, Yakult_16, Yarn_14, Yucky_15, Yummy_16, Zareef_17, Zorro_17,

Summary by start number:

Start 8:
• Found in 6 of 317 (1.9%) of genes in pham
• Manual Annotations of this start: 4 of 317
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Herb_13 (AK), KingBob_13 (AK), Sergei_13 (AK), Temper16_13 (AK),

Start 10:
• Found in 22 of 317 (6.9%) of genes in pham
• Manual Annotations of this start: 2 of 317
• Called 9.1% of time when present
• Phage (with cluster) where this start called: AppleCider_17 (AK), Bodacious_12 (AK),

Start 11:
• Found in 41 of 317 (12.9%) of genes in pham
• Manual Annotations of this start: 13 of 317
• Called 31.7% of time when present
• Phage (with cluster) where this start called: BrotherBLo_17 (AK), Dino_17 (AK), Glenn_17 (AK), Immaculata_17 (AK), Jumboset_17 (AK), Kalizoi_17 (AK), Maria1952_13 (AK), MeganNoll_16 (AK), MrGloopy_17 (AK), Rozby_17 (AK), Savage2526_17 (AK), TattModd_17 (AK), Zorro_17 (AK),

Start 12:
• Found in 81 of 317 (25.6%) of genes in pham
• Manual Annotations of this start: 62 of 317
• Called 76.5% of time when present
• Phage (with cluster) where this start called: Albanese_17 (AK), Aledel_12 (AK), AustinPowers_13 (AK), Beethoven_17 (AK), Bennie_13 (AK), BigMack_12 (AK), CallieOMalley_17 (AK), Canowicakte_17 (AK), Carpal_17 (AK), ChewChew_13 (AK), Cholula_17 (AK), Chridison_13 (AK), Christian_13 (AK), CristinaYang_13 (AK), Daiboju_12 (AK), DrRobert_13 (AK), DreamTeam_13 (AK), EstebanJulior_13 (AK), Eunoia_13 (AK), Gisselle_13 (AK), GreenHearts_17 (AK), Greenhouse_17 (AK), HeadNerd_12 (AK), Huckleberry_13 (AK), HunterDalle_13 (AK), Huntingdon_17 (AK), Kittykat_13 (AK), Korra_16 (AK), Lakshmi_17 (AK), Lasagna_13 (AK), Lennox_13 (AK), LilStuart_13 (AK), Litotes_17 (AK), Lucy_13 (AK), Makoto_13 (AK), MamaPearl_13 (AK), Moki_13 (AK), Nancia_13 (AK), Nubia_16 (AK), OMalley_13 (AK), OurGirlNessie_13 (AK), Oxynfrius_17 (AK), PartyCup_17 (AK), PinkFriday_13 (AK), PitaDog_13 (AK), Potatoes_17 (AK), Preamble_13 (AK), Pterodactyl_13 (AK), Pumancara_13 (AK), RAP15_17 (AK), RcigaStruga_17 (AK), Riovina_13 (AK), Riverdale_17 (AK), Scuttle_17 (AK), Supakev_13 (AK), Suppi_17 (AK), Urla_12 (AK), Vallejo_17 (AK), Vulture_13 (AK), Wawa_17 (AK), Wayne_16 (AK), WonderBoy_13 (AK),

Start 13:
• Found in 2 of 317 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Joann_17 (AK), Misaeng_17 (AK),

Start 23:
• Found in 1 of 317 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kromp_16 (singleton),

Start 26:
• Found in 7 of 317 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 14.3% of time when present

• Phage (with cluster) where this start called: Troje_15 (CT),

Start 27:
• Found in 1 of 317 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Margaret_18 (CT),

Start 30:
• Found in 1 of 317 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DS6A_18 (singleton),

Start 33:
• Found in 1 of 317 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Spartoi_13 (singleton),

Start 39:
• Found in 1 of 317 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kuleana_15 (AS2),

Start 40:
• Found in 45 of 317 (14.2%) of genes in pham
• Manual Annotations of this start: 44 of 317
• Called 97.8% of time when present
• Phage (with cluster) where this start called: Agatha_15 (CT), AikoCarson_14 (CT), Amok_14 (CT), AndPeggy_14 (CT), Axym_15 (CT), BigChungus_14 (CT), BillDoor_17 (CT), Biskit_16 (CT), Blondies_16 (CT), Bubble_15 (CT), Burnsey_15 (CT), Buttrmlkdreams_15 (CT), CherryonLim_16 (CT), Cozz_15 (CT), Elinal_16 (CT), Emalyn_14 (CT), Feastonyeet_14 (CT), GoldHunter_15 (CT), Horseradish_16 (CT), KayGee_15 (CT), Lauer_14 (CT), MAnor_15 (CT), MScarn_17 (CT), Mayweather_16 (CT), MunkgeeRoachy_15 (CT), Nina_16 (CT), Pons_15 (CT), PotPie_15 (CT), Quasar_14 (CT), RSchmailzl_16 (CT), RedBaron_17 (CT), SheckWes_14 (CT), SketchMex_14 (CT), Socotra_16 (CT), SteamedHams_17 (CT), SummitAcademy_14 (CT), SweatNTears_17 (CT), Tarnish_15 (CT), Tolls_17 (CT), Typhonomachy_15 (CT), Vine_16 (CT), Yarn_14 (CT), Yucky_15 (CT), Yummy_16 (CT),

Start 41:
• Found in 27 of 317 (8.5%) of genes in pham
• Manual Annotations of this start: 26 of 317
• Called 96.3% of time when present
• Phage (with cluster) where this start called: Amelia_16 (AS2), Azira_17 (CT), Cleo_15 (CT), Colusalem_15 (AS2), Coral_15 (AS2), Cote_16 (AS2), Cygnet_15 (AS2), Daob_16 (AS2), Dre3_15 (CT), Gibbous_15 (CT), HannahPhantana_16 (AS2), HippoPololi_17 (CT), Jerole_16 (AS2), Kepler_15 (AS2), LilSpotty_14 (singleton), Lunar_15 (AS2), MaVan_17 (CT), Melons_16 (AS2), Nibbles_17 (CT), OtsoOtso_15 (AS2), PhirstandPhine_16 (AS2), Pineda_16 (AS2), Polka_15 (AS2), Survivors_17 (CT), Wolfwood_17 (CT), Zareef_17 (CT),

Start 42:
• Found in 138 of 317 (43.5%) of genes in pham
• Manual Annotations of this start: 137 of 317
• Called 99.3% of time when present
• Phage (with cluster) where this start called: Abigail_14 (EB), Agamotto_18 (FR), Akino08_14 (EB), Albedo_14 (EB), Albright_14 (EB), AlexMinion_14 (AS3), Amanises_16 (AS1), AmiCi24_14 (AS3), Amphitrite_14 (AS3), Andrew_14 (AS3), AnnaLie_15 (EB), AnnabelLee_16 (FR), Armstrong_12 (EB), Arroyo_15 (EB), Asapag_16 (DN1), Atlantica_14 (AS3), Audell_19 (FR), AvGardian_14 (EB), Avocadoman_14 (EB), AylexOG_15 (EB), Azaz_14 (AS3), BAjuniper_14 (EB), BENtherdunthat_16 (DN1), Babushka_14 (AS3), BabyDaisy_15 (EB), BabyYoda_14 (EB), Bachaco_14 (EB), BelmontSKP_15 (EB), Bengal_14 (EB), Bernstein_12 (EB), Brahms_12 (EB), BubbaBear_14 (EB), Buldak_14 (EB), Burritobowl_14 (EB), CanFranMach_14 (EB), Cashington_14 (EB), Celaena_14 (EB), Chicken_15 (AS1), ChiliPepper_14 (EB), ChipsNGuac_16 (FR), Clayda5_13 (EB), Coltrane_12 (EB), CroZenni_14 (EB), CupcakePrincess_14 (EB), DanHam62_14 (AS3), DickRichards_14 (EB), Didgeridoo_15 (EB), DirtyBubble_14 (EB), Dismas_14 (EB), Doobus_14 (EB), Eden_13 (EB), Eesa_15 (AS1), Elva_15 (EB), Eula_14 (EB), Finalfrontier_15 (EB), Fingolfin_14 (AS3), FlameThrower_14 (EB), Franklin22_13 (EB), Fribs8_16 (CT), Gack_13 (EB), Gerri43_16 (FR), Getalong_16 (DN1), Glotell_14 (AS3), HamCheese_13 (AS3), Holliday_15 (DN1), Horus_16 (DN1), Icarian_15 (EB), IndyLu_14 (EB), Jabb_14 (EB), Johnathan_14 (EB), Jovita_14 (EB), Juno112_14 (AS3), KHumphrey_14 (AS3), Kate33_14 (EB), Katzastrophic_14 (EB), Kenna_15 (DN1), Kenzers_14 (EB), Kieran_14 (EB), Lahqtemish_14 (EB), Laphuphu24k_13 (AS3), LastNadiia_19 (FR), Leona_14 (AS3), Leroy_16 (DN1), Lilo27_14 (EB), LimaBean_14 (EB), LittleTokyo_15 (AS2), Loviatar_14 (EB), Lutum_16 (DN1), Lynlen_14 (EB), Makima_17 (FR), Milomuff_15 (EB), Mireles_16 (FR), MsUbiquitous_14 (EB), Niblet_15 (AS1), Nicky22_15 (EB), Olliecat_14 (EB), Orcanus_15 (AS1), PastaFagioli_14 (EB), Pecas_14 (EB), Periwinkle_16 (DN1), PhigPhack_14 (EB), Phisb_14 (EB), Phistory_16 (DN1), PhluffyCoco_14 (AS3), PondAmelia_15 (EB), QMacho_15 (EB), Quenya_15 (EB), RedFox_14 (AS3), Renna12_15 (AS3), Roberts_16 (FR), Rollins_12 (EB), Rona_14 (EB), SanaSana_15 (EB), SansAfet_14 (EB), SarBear_14 (EB), Sharkboy_14 (EB), Shayna_13 (EB), Shen_16 (AS1), Skylord_13 (EB), Slay_14 (EB), Softsoap_14 (EB), Squiddly_18 (DN2), Squircle_14 (EB), Stoor_14 (EB), Stromboli_14 (EB), StuartMinion_14 (AS3), SunnyD_13 (EB), Swervy_14 (EB), TMaxx_16 (FR), TaylorSipht_15 (AS1), Teagster_13 (EB), Toad24_16 (AS1), TripleC_19 (FR), TukTuk_14 (EB), Vitas_13 (EB), Zhuangyuan_16 (AS2), Zixiang_15 (AS1),

Start 43:
• Found in 11 of 317 (3.5%) of genes in pham
• Manual Annotations of this start: 11 of 317
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abidatro_15 (AS1), Antrice_15 (AS2), Basilisk_15 (AS1), Brynnie_15 (AS1), Chickaboom_14 (AS1), Galaxy_15 (AS1), Gibbzilla_15 (FB), Jamun_15 (AS1), Ruchi_15 (AS1), Vulpecula_15 (AS1), WileyE_14 (AS1),

Start 44:
• Found in 2 of 317 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 50.0% of time when present

• Phage (with cluster) where this start called: RanchParmCat_18 (CT),

Start 45:
• Found in 38 of 317 (12.0%) of genes in pham
• Manual Annotations of this start: 8 of 317
• Called 21.1% of time when present
• Phage (with cluster) where this start called: Button_16 (CT), CliffHanger_15 (EB), GiKK_18 (CT), Hexbug_17 (CT), Jamzy_18 (CT), Nodigi_17 (CT), Orla_17 (CT), Yakult_16 (CT),

Start 51:
• Found in 3 of 317 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 317
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Stellammi_12 (UNK),

Summary by clusters:

There are 12 clusters represented in this pham: AS3, AS2, FR, AK, AS1, EB, FB, DN1, DN2, singleton, UNK, CT,

Info for manual annotations of cluster AK:
•Start number 8 was manually annotated 4 times for cluster AK.
•Start number 10 was manually annotated 2 times for cluster AK.
•Start number 11 was manually annotated 13 times for cluster AK.
•Start number 12 was manually annotated 62 times for cluster AK.
•Start number 13 was manually annotated 2 times for cluster AK.

Info for manual annotations of cluster AS1:
•Start number 42 was manually annotated 9 times for cluster AS1.
•Start number 43 was manually annotated 9 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 39 was manually annotated 1 time for cluster AS2.
•Start number 41 was manually annotated 15 times for cluster AS2.
•Start number 42 was manually annotated 2 times for cluster AS2.
•Start number 43 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 42 was manually annotated 19 times for cluster AS3.

Info for manual annotations of cluster CT:
•Start number 26 was manually annotated 1 time for cluster CT.
•Start number 27 was manually annotated 1 time for cluster CT.
•Start number 40 was manually annotated 44 times for cluster CT.
•Start number 41 was manually annotated 10 times for cluster CT.
•Start number 42 was manually annotated 1 time for cluster CT.
•Start number 44 was manually annotated 1 time for cluster CT.
•Start number 45 was manually annotated 7 times for cluster CT.

Info for manual annotations of cluster DN1:
•Start number 42 was manually annotated 10 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 42 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster EB:
•Start number 42 was manually annotated 84 times for cluster EB.
•Start number 45 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster FB:
•Start number 43 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FR:
•Start number 42 was manually annotated 11 times for cluster FR.

Info for manual annotations of cluster UNK:
•Start number 51 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Abidatro_15 Start: 9744, Stop: 10471, Start Num: 43
Candidate Starts for Abidatro_15:
(Start: 43 @9744 has 11 MA's), (61, 9840), (68, 9873), (85, 9948), (103, 10035), (106, 10065),

Gene: Abigail_14 Start: 9362, Stop: 10053, Start Num: 42
Candidate Starts for Abigail_14:
(Start: 42 @9362 has 137 MA's), (64, 9473), (86, 9536), (100, 9593), (102, 9602), (106, 9635), (145, 9827),

Gene: Agamotto_18 Start: 11890, Stop: 12611, Start Num: 42
Candidate Starts for Agamotto_18:
(Start: 42 @11890 has 137 MA's), (69, 12016), (84, 12085), (89, 12109), (99, 12163), (119, 12280), (122, 12298), (128, 12325), (157, 12439), (189, 12592),

Gene: Agatha_15 Start: 8885, Stop: 9639, Start Num: 40
Candidate Starts for Agatha_15:
(Start: 40 @8885 has 44 MA's), (56, 8969), (92, 9083), (93, 9089), (94, 9092), (99, 9116), (102, 9128), (131, 9299), (154, 9389), (156, 9395), (174, 9509), (179, 9524), (193, 9605), (197, 9629),

Gene: AikoCarson_14 Start: 8613, Stop: 9367, Start Num: 40
Candidate Starts for AikoCarson_14:
(Start: 40 @8613 has 44 MA's), (56, 8685), (94, 8808), (99, 8832), (102, 8844), (105, 8871), (131, 9015), (134, 9024), (140, 9051), (167, 9210), (179, 9252), (197, 9357),

Gene: Akino08_14 Start: 9518, Stop: 10209, Start Num: 42
Candidate Starts for Akino08_14:
(Start: 42 @9518 has 137 MA's), (94, 9722), (102, 9758), (106, 9791),

Gene: Albanese_17 Start: 11894, Stop: 12654, Start Num: 12
Candidate Starts for Albanese_17:
(2, 11618), (Start: 12 @11894 has 62 MA's), (74, 12131), (77, 12146), (97, 12218), (159, 12512), (160, 12515), (175, 12602), (182, 12623), (185, 12632), (189, 12644),

Gene: Albedo_14 Start: 9208, Stop: 9899, Start Num: 42
Candidate Starts for Albedo_14:
(Start: 42 @9208 has 137 MA's), (64, 9319), (86, 9382), (100, 9439), (102, 9448), (106, 9481), (120, 9574), (136, 9640),

Gene: Albright_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for Albright_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (138, 9684), (145, 9708),

Gene: Aledel_12 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for Aledel_12:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (157, 9577), (164, 9619), (166, 9649),

Gene: AlexMinion_14 Start: 9092, Stop: 9816, Start Num: 42
Candidate Starts for AlexMinion_14:
(Start: 42 @9092 has 137 MA's), (55, 9152), (93, 9341), (102, 9380), (106, 9413), (150, 9617),

Gene: Amanises_16 Start: 9656, Stop: 10377, Start Num: 42
Candidate Starts for Amanises_16:
(Start: 42 @9656 has 137 MA's), (47, 9668), (64, 9767), (101, 9941), (103, 9947), (106, 9977), (110, 9995), (121, 10064), (123, 10070), (146, 10163), (184, 10346),

Gene: Amelia_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Amelia_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: AmiCi24_14 Start: 9058, Stop: 9782, Start Num: 42
Candidate Starts for AmiCi24_14:
(22, 9016), (Start: 42 @9058 has 137 MA's), (60, 9151), (64, 9169), (70, 9196), (94, 9310), (103, 9349), (106, 9379), (146, 9565),

Gene: Amok_14 Start: 8613, Stop: 9367, Start Num: 40
Candidate Starts for Amok_14:
(Start: 40 @8613 has 44 MA's), (56, 8685), (94, 8808), (99, 8832), (102, 8844), (105, 8871), (131, 9015), (134, 9024), (140, 9051), (167, 9210), (179, 9252), (197, 9357),

Gene: Amphitrite_14 Start: 9058, Stop: 9782, Start Num: 42
Candidate Starts for Amphitrite_14:
(16, 8974), (Start: 42 @9058 has 137 MA's), (60, 9151), (64, 9169), (70, 9196), (94, 9310), (103, 9349), (106, 9379), (146, 9565), (153, 9604),

Gene: AndPeggy_14 Start: 8901, Stop: 9655, Start Num: 40
Candidate Starts for AndPeggy_14:
(Start: 40 @8901 has 44 MA's), (56, 8973), (58, 8979), (94, 9096), (99, 9120), (102, 9132), (105, 9159), (131, 9303), (134, 9312), (146, 9357), (167, 9498), (179, 9540), (197, 9645),

Gene: Andrew_14 Start: 9438, Stop: 10162, Start Num: 42
Candidate Starts for Andrew_14:
(Start: 42 @9438 has 137 MA's), (55, 9498), (84, 9639), (94, 9690), (96, 9699), (106, 9759), (121, 9846), (131, 9891), (152, 9981), (174, 10098), (184, 10128), (185, 10131),

Gene: AnnaLie_15 Start: 9652, Stop: 10343, Start Num: 42
Candidate Starts for AnnaLie_15:
(Start: 42 @9652 has 137 MA's), (64, 9763), (86, 9826), (100, 9883), (102, 9892), (106, 9925), (145, 10117),

Gene: AnnabelLee_16 Start: 8830, Stop: 9566, Start Num: 42
Candidate Starts for AnnabelLee_16:
(Start: 42 @8830 has 137 MA's), (56, 8914), (77, 9007), (78, 9010), (84, 9037), (99, 9115), (114, 9199), (116, 9211), (122, 9250), (128, 9280), (165, 9463), (187, 9541), (189, 9547),

Gene: Antrice_15 Start: 9399, Stop: 10123, Start Num: 43
Candidate Starts for Antrice_15:
(Start: 43 @9399 has 11 MA's), (68, 9528), (89, 9624), (93, 9648), (106, 9720), (109, 9732), (116, 9771), (117, 9777), (155, 9954), (185, 10092), (191, 10116),

Gene: AppleCider_17 Start: 11828, Stop: 12606, Start Num: 10
Candidate Starts for AppleCider_17:
(Start: 10 @11828 has 2 MA's), (Start: 12 @11840 has 62 MA's), (34, 11939), (38, 11951), (77, 12095), (97, 12167), (116, 12272), (139, 12383), (160, 12464), (162, 12482),

Gene: Armstrong_12 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Armstrong_12:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: Arroyo_15 Start: 9713, Stop: 10404, Start Num: 42
Candidate Starts for Arroyo_15:
(Start: 42 @9713 has 137 MA's), (64, 9824), (86, 9887), (100, 9944), (102, 9953), (106, 9986), (131, 10127), (138, 10154), (145, 10178),

Gene: Asapag_16 Start: 8335, Stop: 9014, Start Num: 42
Candidate Starts for Asapag_16:
(31, 8314), (Start: 42 @8335 has 137 MA's), (90, 8500), (100, 8554), (101, 8560), (102, 8563), (105, 8590), (122, 8689), (128, 8716), (146, 8791), (154, 8827), (163, 8872), (169, 8926), (177, 8956), (183, 8974), (188, 8992),

Gene: Atlantica_14 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for Atlantica_14:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (146, 9567), (185, 9753),

Gene: Audell_19 Start: 12164, Stop: 12891, Start Num: 42
Candidate Starts for Audell_19:
(19, 12092), (Start: 42 @12164 has 137 MA's), (69, 12296), (84, 12365), (99, 12443), (114, 12527), (122, 12578), (128, 12605), (132, 12623), (148, 12677), (157, 12719), (181, 12845), (187, 12866),

Gene: AustinPowers_13 Start: 8975, Stop: 9732, Start Num: 12
Candidate Starts for AustinPowers_13:
(Start: 11 @8966 has 13 MA's), (Start: 12 @8975 has 62 MA's), (34, 9068), (61, 9182), (74, 9209), (77, 9224), (97, 9296), (120, 9434), (134, 9488), (156, 9575), (164, 9620), (166, 9650), (182, 9701),

Gene: AvGardian_14 Start: 9267, Stop: 9958, Start Num: 42
Candidate Starts for AvGardian_14:

(Start: 42 @9267 has 137 MA's), (63, 9372), (94, 9471), (100, 9498), (102, 9507), (106, 9540),

Gene: Avocadoman_14 Start: 9305, Stop: 9996, Start Num: 42
Candidate Starts for Avocadoman_14:
(Start: 42 @9305 has 137 MA's), (64, 9416), (86, 9479), (100, 9536), (102, 9545), (106, 9578), (145, 9770),

Gene: Axym_15 Start: 8885, Stop: 9639, Start Num: 40
Candidate Starts for Axym_15:
(Start: 40 @8885 has 44 MA's), (56, 8969), (92, 9083), (93, 9089), (94, 9092), (99, 9116), (102, 9128), (131, 9299), (154, 9389), (156, 9395), (174, 9509), (179, 9524), (193, 9605), (197, 9629),

Gene: AylexOG_15 Start: 9588, Stop: 10279, Start Num: 42
Candidate Starts for AylexOG_15:
(Start: 42 @9588 has 137 MA's), (64, 9699), (86, 9762), (100, 9819), (102, 9828), (106, 9861), (136, 10020), (149, 10071),

Gene: Azaz_14 Start: 9111, Stop: 9835, Start Num: 42
Candidate Starts for Azaz_14:
(16, 9027), (Start: 42 @9111 has 137 MA's), (60, 9204), (64, 9222), (70, 9249), (94, 9363), (103, 9402), (106, 9432), (146, 9618),

Gene: Azira_17 Start: 9884, Stop: 10629, Start Num: 41
Candidate Starts for Azira_17:
(37, 9875), (Start: 41 @9884 has 26 MA's), (49, 9914), (54, 9944), (94, 10079), (99, 10103), (102, 10115), (109, 10160), (126, 10253), (136, 10301), (137, 10307), (163, 10418), (166, 10463), (179, 10508), (196, 10598), (198, 10619),

Gene: BAjuniper_14 Start: 8933, Stop: 9645, Start Num: 42
Candidate Starts for BAjuniper_14:
(Start: 42 @8933 has 137 MA's), (102, 9173), (106, 9206),

Gene: BENtherdunthat_16 Start: 8335, Stop: 9014, Start Num: 42
Candidate Starts for BENtherdunthat_16:
(31, 8314), (Start: 42 @8335 has 137 MA's), (90, 8500), (100, 8554), (101, 8560), (102, 8563), (105, 8590), (122, 8689), (128, 8716), (146, 8791), (154, 8827), (163, 8872), (169, 8926), (177, 8956), (183, 8974), (188, 8992),

Gene: Babushka_14 Start: 9108, Stop: 9832, Start Num: 42
Candidate Starts for Babushka_14:
(16, 9024), (Start: 42 @9108 has 137 MA's), (60, 9201), (64, 9219), (70, 9246), (94, 9360), (103, 9399), (106, 9429),

Gene: BabyDaisy_15 Start: 9464, Stop: 10155, Start Num: 42
Candidate Starts for BabyDaisy_15:
(Start: 42 @9464 has 137 MA's), (Start: 45 @9467 has 8 MA's), (63, 9569), (94, 9668), (100, 9695), (106, 9737), (123, 9839),

Gene: BabyYoda_14 Start: 9464, Stop: 10155, Start Num: 42
Candidate Starts for BabyYoda_14:
(Start: 42 @9464 has 137 MA's), (80, 9614), (94, 9668), (102, 9704), (161, 10004),

Gene: Bachaco_14 Start: 9138, Stop: 9847, Start Num: 42

Candidate Starts for Bachaco_14:
(Start: 42 @9138 has 137 MA's), (100, 9369), (102, 9378), (106, 9411), (120, 9504), (124, 9516), (160, 9660),

Gene: Basilisk_15 Start: 10064, Stop: 10794, Start Num: 43
Candidate Starts for Basilisk_15:
(Start: 43 @10064 has 11 MA's), (61, 10160), (68, 10193), (85, 10268), (103, 10355), (106, 10385), (114, 10430), (119, 10463), (130, 10520),

Gene: Beethoven_17 Start: 11795, Stop: 12561, Start Num: 12
Candidate Starts for Beethoven_17:
(7, 11723), (Start: 11 @11786 has 13 MA's), (Start: 12 @11795 has 62 MA's), (Start: 45 @11915 has 8 MA's), (76, 12041), (77, 12050), (97, 12122), (116, 12227), (128, 12293), (160, 12419), (162, 12437), (164, 12449),

Gene: BelmontSKP_15 Start: 9652, Stop: 10343, Start Num: 42
Candidate Starts for BelmontSKP_15:
(Start: 42 @9652 has 137 MA's), (64, 9763), (86, 9826), (100, 9883), (102, 9892), (106, 9925), (145, 10117),

Gene: Bengal_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for Bengal_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (145, 9708),

Gene: Bennie_13 Start: 8948, Stop: 9714, Start Num: 12
Candidate Starts for Bennie_13:
(Start: 12 @8948 has 62 MA's), (77, 9203), (93, 9254), (97, 9275), (99, 9284), (116, 9380), (160, 9572), (162, 9590), (164, 9602),

Gene: Bernstein_12 Start: 8845, Stop: 9554, Start Num: 42
Candidate Starts for Bernstein_12:
(Start: 42 @8845 has 137 MA's), (64, 8953), (102, 9085), (106, 9118), (161, 9385),

Gene: BigChungus_14 Start: 8662, Stop: 9410, Start Num: 40
Candidate Starts for BigChungus_14:
(Start: 40 @8662 has 44 MA's), (56, 8734), (87, 8830), (94, 8857), (99, 8881), (102, 8893), (106, 8926), (123, 9025), (145, 9115), (170, 9256), (174, 9274), (199, 9403),

Gene: BigMack_12 Start: 8944, Stop: 9710, Start Num: 12
Candidate Starts for BigMack_12:
(Start: 10 @8932 has 2 MA's), (Start: 12 @8944 has 62 MA's), (Start: 45 @9064 has 8 MA's), (77, 9199), (97, 9271), (116, 9376), (160, 9568), (162, 9586), (164, 9598),

Gene: BillDoor_17 Start: 8866, Stop: 9620, Start Num: 40
Candidate Starts for BillDoor_17:
(Start: 40 @8866 has 44 MA's), (56, 8938), (58, 8944), (94, 9061), (99, 9085), (102, 9097), (105, 9124), (131, 9268), (134, 9277), (146, 9322), (166, 9460), (167, 9463), (174, 9490), (179, 9505), (197, 9610),

Gene: Biskit_16 Start: 8872, Stop: 9626, Start Num: 40
Candidate Starts for Biskit_16:
(Start: 26 @8830 has 1 MA's), (Start: 40 @8872 has 44 MA's), (94, 9067), (99, 9091), (102, 9103), (105, 9130), (131, 9274), (134, 9283), (197, 9616),

Gene: Blondies_16 Start: 8858, Stop: 9612, Start Num: 40
Candidate Starts for Blondies_16:
(Start: 26 @8816 has 1 MA's), (Start: 40 @8858 has 44 MA's), (94, 9053), (99, 9077), (102, 9089), (105, 9116), (131, 9260), (134, 9269), (197, 9602),

Gene: Bodacious_12 Start: 8930, Stop: 9711, Start Num: 10
Candidate Starts for Bodacious_12:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Brahms_12 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Brahms_12:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: BrotherBLo_17 Start: 11792, Stop: 12567, Start Num: 11
Candidate Starts for BrotherBLo_17:
(1, 11306), (2, 11519), (Start: 11 @11792 has 13 MA's), (Start: 12 @11801 has 62 MA's), (Start: 45 @11921 has 8 MA's), (76, 12047), (77, 12056), (97, 12128), (116, 12233), (128, 12299), (160, 12425), (162, 12443), (164, 12455),

Gene: Brynnie_15 Start: 9876, Stop: 10606, Start Num: 43
Candidate Starts for Brynnie_15:
(Start: 43 @9876 has 11 MA's), (61, 9972), (68, 10005), (85, 10080), (103, 10167), (106, 10197), (114, 10242), (119, 10275), (130, 10332),

Gene: BubbaBear_14 Start: 9208, Stop: 9899, Start Num: 42
Candidate Starts for BubbaBear_14:
(Start: 42 @9208 has 137 MA's), (64, 9319), (86, 9382), (100, 9439), (102, 9448), (106, 9481), (120, 9574), (136, 9640),

Gene: Bubble_15 Start: 8885, Stop: 9639, Start Num: 40
Candidate Starts for Bubble_15:
(Start: 40 @8885 has 44 MA's), (56, 8969), (94, 9092), (99, 9116), (102, 9128), (131, 9299), (154, 9389), (156, 9395), (174, 9509), (179, 9524), (193, 9605), (197, 9629),

Gene: Buldak_14 Start: 9315, Stop: 10006, Start Num: 42
Candidate Starts for Buldak_14:
(Start: 42 @9315 has 137 MA's), (90, 9507), (102, 9567), (106, 9600), (115, 9651),

Gene: Burnsey_15 Start: 8886, Stop: 9640, Start Num: 40
Candidate Starts for Burnsey_15:
(Start: 40 @8886 has 44 MA's), (56, 8970), (71, 9006), (94, 9093), (99, 9117), (102, 9129), (131, 9300), (154, 9390), (156, 9396), (174, 9510), (179, 9525), (193, 9606), (197, 9630),

Gene: Burritobowl_14 Start: 9270, Stop: 9961, Start Num: 42
Candidate Starts for Burritobowl_14:
(Start: 42 @9270 has 137 MA's), (64, 9381), (86, 9444), (100, 9501), (102, 9510), (106, 9543), (136, 9702), (145, 9735),

Gene: Button_16 Start: 8897, Stop: 9627, Start Num: 45
Candidate Starts for Button_16:

(28, 8864), (Start: 45 @8897 has 8 MA's), (50, 8927), (71, 9002), (94, 9089), (99, 9113), (102, 9125), (106, 9158), (113, 9194), (116, 9212), (123, 9254), (167, 9470), (186, 9536), (197, 9617),

Gene: Buttrmlkdreams_15 Start: 8857, Stop: 9611, Start Num: 40
Candidate Starts for Buttrmlkdreams_15:
(Start: 26 @8815 has 1 MA's), (Start: 40 @8857 has 44 MA's), (94, 9052), (99, 9076), (102, 9088), (105, 9115), (131, 9259), (134, 9268), (197, 9601),

Gene: CallieOMalley_17 Start: 11840, Stop: 12606, Start Num: 12
Candidate Starts for CallieOMalley_17:
(Start: 10 @11828 has 2 MA's), (Start: 12 @11840 has 62 MA's), (34, 11939), (77, 12095), (97, 12167), (116, 12272), (139, 12383), (162, 12482),

Gene: CanFranMach_14 Start: 9260, Stop: 9951, Start Num: 42
Candidate Starts for CanFranMach_14:
(Start: 42 @9260 has 137 MA's), (63, 9365), (94, 9464), (100, 9491), (102, 9500), (106, 9533), (112, 9569), (120, 9626), (176, 9878),

Gene: Canowicakte_17 Start: 11875, Stop: 12641, Start Num: 12
Candidate Starts for Canowicakte_17:
(Start: 10 @11863 has 2 MA's), (Start: 12 @11875 has 62 MA's), (34, 11974), (38, 11986), (77, 12130), (97, 12202), (116, 12307), (139, 12418), (160, 12499), (162, 12517),

Gene: Carpal_17 Start: 11802, Stop: 12568, Start Num: 12
Candidate Starts for Carpal_17:
(7, 11730), (Start: 11 @11793 has 13 MA's), (Start: 12 @11802 has 62 MA's), (Start: 45 @11922 has 8 MA's), (76, 12048), (77, 12057), (97, 12129), (116, 12234), (128, 12300), (160, 12426), (162, 12444), (164, 12456),

Gene: Cashington_14 Start: 9260, Stop: 9951, Start Num: 42
Candidate Starts for Cashington_14:
(Start: 42 @9260 has 137 MA's), (64, 9371), (86, 9434), (100, 9491), (102, 9500), (106, 9533), (145, 9725),

Gene: Celaena_14 Start: 9074, Stop: 9783, Start Num: 42
Candidate Starts for Celaena_14:
(Start: 42 @9074 has 137 MA's), (100, 9305), (102, 9314), (106, 9347), (120, 9440), (124, 9452), (160, 9596), (161, 9611),

Gene: CherryonLim_16 Start: 9392, Stop: 10140, Start Num: 40
Candidate Starts for CherryonLim_16:
(Start: 40 @9392 has 44 MA's), (56, 9464), (94, 9587), (99, 9611), (102, 9623), (112, 9689), (123, 9755), (141, 9833), (146, 9848), (174, 10004), (199, 10133),

Gene: ChewChew_13 Start: 8941, Stop: 9710, Start Num: 12
Candidate Starts for ChewChew_13:
(Start: 10 @8929 has 2 MA's), (Start: 12 @8941 has 62 MA's), (50, 9094), (77, 9199), (97, 9271), (116, 9376), (157, 9556), (160, 9568), (162, 9586), (164, 9598),

Gene: Chickaboom_14 Start: 9421, Stop: 10145, Start Num: 43
Candidate Starts for Chickaboom_14:
(Start: 43 @9421 has 11 MA's), (68, 9550), (85, 9625), (103, 9712), (106, 9742),

Gene: Chicken_15 Start: 9448, Stop: 10169, Start Num: 42
Candidate Starts for Chicken_15:
(17, 9370), (29, 9427), (32, 9433), (Start: 42 @9448 has 137 MA's), (47, 9460), (66, 9568), (73, 9604), (95, 9709), (101, 9736), (103, 9742), (106, 9772), (118, 9838), (121, 9859), (146, 9958), (160, 10024), (184, 10141),

Gene: ChiliPepper_14 Start: 9439, Stop: 10115, Start Num: 42
Candidate Starts for ChiliPepper_14:
(Start: 42 @9439 has 137 MA's), (100, 9670), (102, 9679), (106, 9712),

Gene: ChipsNGuac_16 Start: 8830, Stop: 9566, Start Num: 42
Candidate Starts for ChipsNGuac_16:
(Start: 42 @8830 has 137 MA's), (56, 8914), (77, 9007), (78, 9010), (84, 9037), (99, 9115), (114, 9199), (116, 9211), (122, 9250), (128, 9280), (187, 9541), (189, 9547),

Gene: Cholula_17 Start: 11847, Stop: 12613, Start Num: 12
Candidate Starts for Cholula_17:
(Start: 11 @11838 has 13 MA's), (Start: 12 @11847 has 62 MA's), (76, 12093), (77, 12102), (97, 12174), (116, 12279), (128, 12345), (160, 12471), (162, 12489), (164, 12501),

Gene: Chridison_13 Start: 8975, Stop: 9732, Start Num: 12
Candidate Starts for Chridison_13:
(Start: 11 @8966 has 13 MA's), (Start: 12 @8975 has 62 MA's), (34, 9068), (61, 9182), (74, 9209), (77, 9224), (97, 9296), (120, 9434), (134, 9488), (156, 9575), (157, 9578), (164, 9620), (166, 9650),

Gene: Christian_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for Christian_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (Start: 45 @9065 has 8 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Clayda5_13 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Clayda5_13:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: Cleo_15 Start: 9174, Stop: 9919, Start Num: 41
Candidate Starts for Cleo_15:
(37, 9165), (Start: 41 @9174 has 26 MA's), (56, 9246), (94, 9369), (99, 9393), (102, 9405), (105, 9432), (126, 9543), (137, 9597), (166, 9753), (174, 9783), (179, 9798), (196, 9888), (198, 9909),

Gene: CliffHanger_15 Start: 8971, Stop: 9659, Start Num: 45
Candidate Starts for CliffHanger_15:
(Start: 42 @8968 has 137 MA's), (Start: 45 @8971 has 8 MA's), (63, 9073), (75, 9097), (102, 9217), (106, 9250), (162, 9523),

Gene: Coltrane_12 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Coltrane_12:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: Colusalem_15 Start: 9483, Stop: 10201, Start Num: 41
Candidate Starts for Colusalem_15:
(Start: 41 @9483 has 26 MA's), (61, 9579), (68, 9612), (106, 9804), (116, 9855), (131, 9936), (156, 10041),

Gene: Coral_15 Start: 9483, Stop: 10201, Start Num: 41
Candidate Starts for Coral_15:
(Start: 41 @9483 has 26 MA's), (61, 9579), (68, 9612), (106, 9804), (116, 9855), (131, 9936), (156, 10041),

Gene: Cote_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Cote_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: Cozz_15 Start: 8886, Stop: 9640, Start Num: 40
Candidate Starts for Cozz_15:
(Start: 40 @8886 has 44 MA's), (56, 8970), (92, 9084), (93, 9090), (94, 9093), (99, 9117), (102, 9129), (131, 9300), (154, 9390), (174, 9510), (179, 9525), (193, 9606), (197, 9630),

Gene: CristinaYang_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for CristinaYang_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: CroZenni_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for CroZenni_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (145, 9708),

Gene: CupcakePrincess_14 Start: 9283, Stop: 9974, Start Num: 42
Candidate Starts for CupcakePrincess_14:
(Start: 42 @9283 has 137 MA's), (64, 9394), (86, 9457), (100, 9514), (102, 9523), (106, 9556), (121, 9652), (136, 9715),

Gene: Cygnet_15 Start: 9436, Stop: 10160, Start Num: 41
Candidate Starts for Cygnet_15:
(Start: 41 @9436 has 26 MA's), (47, 9448), (68, 9565), (76, 9598), (89, 9661), (96, 9697), (106, 9757), (114, 9796), (117, 9814), (121, 9844), (174, 10096), (184, 10126), (191, 10153),

Gene: DS6A_18 Start: 11578, Stop: 12356, Start Num: 30
Candidate Starts for DS6A_18:
(Start: 30 @11578 has 1 MA's), (Start: 41 @11602 has 26 MA's), (48, 11623), (50, 11635), (Start: 51 @11641 has 1 MA's), (62, 11704), (63, 11707), (64, 11713), (81, 11755), (104, 11848), (125, 11971), (131, 12004), (168, 12190),

Gene: Daiboju_12 Start: 8974, Stop: 9737, Start Num: 12
Candidate Starts for Daiboju_12:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: DanHam62_14 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for DanHam62_14:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (140, 9549), (146, 9567),

Gene: Daob_16 Start: 9647, Stop: 10365, Start Num: 41

Candidate Starts for Daob_16:
(Start: 41 @9647 has 26 MA's), (61, 9743), (68, 9776), (106, 9968), (116, 10019), (131, 10100), (156, 10205),

Gene: DickRichards_14 Start: 9737, Stop: 10428, Start Num: 42
Candidate Starts for DickRichards_14:
(Start: 42 @9737 has 137 MA's), (64, 9848), (86, 9911), (100, 9968), (102, 9977), (106, 10010), (145, 10202),

Gene: Didgeridoo_15 Start: 9466, Stop: 10157, Start Num: 42
Candidate Starts for Didgeridoo_15:
(Start: 42 @9466 has 137 MA's), (Start: 45 @9469 has 8 MA's), (63, 9571), (94, 9670), (100, 9697), (106, 9739), (123, 9841),

Gene: Dino_17 Start: 11791, Stop: 12566, Start Num: 11
Candidate Starts for Dino_17:
(1, 11305), (2, 11518), (Start: 11 @11791 has 13 MA's), (Start: 12 @11800 has 62 MA's), (Start: 45 @11920 has 8 MA's), (76, 12046), (77, 12055), (97, 12127), (116, 12232), (128, 12298), (160, 12424), (162, 12442), (164, 12454),

Gene: DirtyBubble_14 Start: 9472, Stop: 10163, Start Num: 42
Candidate Starts for DirtyBubble_14:
(Start: 42 @9472 has 137 MA's), (80, 9622), (94, 9676), (102, 9712), (161, 10012),

Gene: Dismas_14 Start: 9439, Stop: 10115, Start Num: 42
Candidate Starts for Dismas_14:
(Start: 42 @9439 has 137 MA's), (100, 9670), (102, 9679), (106, 9712),

Gene: Doobus_14 Start: 9474, Stop: 10165, Start Num: 42
Candidate Starts for Doobus_14:
(Start: 42 @9474 has 137 MA's), (64, 9585), (86, 9648), (100, 9705), (102, 9714), (106, 9747), (120, 9840), (136, 9906),

Gene: DrRobert_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for DrRobert_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (Start: 45 @9065 has 8 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Dre3_15 Start: 9121, Stop: 9866, Start Num: 41
Candidate Starts for Dre3_15:
(37, 9112), (Start: 41 @9121 has 26 MA's), (56, 9193), (94, 9316), (99, 9340), (102, 9352), (105, 9379), (109, 9397), (126, 9490), (137, 9544), (166, 9700), (174, 9730), (179, 9745), (196, 9835), (198, 9856),

Gene: DreamTeam_13 Start: 9012, Stop: 9778, Start Num: 12
Candidate Starts for DreamTeam_13:
(Start: 12 @9012 has 62 MA's), (38, 9123), (77, 9267), (97, 9339), (116, 9444), (128, 9510), (139, 9555), (144, 9573), (162, 9654), (164, 9666), (166, 9696),

Gene: Eden_13 Start: 8899, Stop: 9614, Start Num: 42
Candidate Starts for Eden_13:
(Start: 42 @8899 has 137 MA's), (63, 9001), (64, 9007), (102, 9139), (106, 9172), (121, 9268),

Gene: Eesa_15 Start: 9662, Stop: 10383, Start Num: 42

Candidate Starts for Eesa_15:
(17, 9584), (32, 9647), (Start: 42 @9662 has 137 MA's), (47, 9674), (64, 9776), (66, 9782), (95, 9923), (101, 9950), (103, 9956), (106, 9986), (121, 10073), (123, 10079), (146, 10172), (160, 10238), (184, 10355),

Gene: Elinal_16 Start: 8643, Stop: 9391, Start Num: 40
Candidate Starts for Elinal_16:
(Start: 40 @8643 has 44 MA's), (56, 8715), (94, 8838), (99, 8862), (102, 8874), (113, 8943), (123, 9006), (145, 9096), (170, 9237), (174, 9255), (199, 9384),

Gene: Elva_15 Start: 9524, Stop: 10215, Start Num: 42
Candidate Starts for Elva_15:
(Start: 42 @9524 has 137 MA's), (80, 9674), (94, 9728), (102, 9764), (136, 9956), (142, 9980),

Gene: Emalyn_14 Start: 8612, Stop: 9366, Start Num: 40
Candidate Starts for Emalyn_14:
(Start: 40 @8612 has 44 MA's), (56, 8684), (94, 8807), (99, 8831), (102, 8843), (105, 8870), (131, 9014), (134, 9023), (140, 9050), (167, 9209), (179, 9251), (197, 9356),

Gene: EstebanJulior_13 Start: 8981, Stop: 9747, Start Num: 12
Candidate Starts for EstebanJulior_13:
(Start: 12 @8981 has 62 MA's), (77, 9236), (97, 9308), (99, 9317), (116, 9413), (143, 9539), (155, 9587), (162, 9623), (164, 9635), (184, 9722),

Gene: Eula_14 Start: 9244, Stop: 9935, Start Num: 42
Candidate Starts for Eula_14:
(Start: 42 @9244 has 137 MA's), (64, 9355), (86, 9418), (100, 9475), (102, 9484), (106, 9517), (136, 9676), (176, 9862),

Gene: Eunoia_13 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for Eunoia_13:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (157, 9577), (164, 9619), (166, 9649),

Gene: Feastonyeet_14 Start: 8662, Stop: 9410, Start Num: 40
Candidate Starts for Feastonyeet_14:
(Start: 40 @8662 has 44 MA's), (56, 8734), (87, 8830), (94, 8857), (99, 8881), (102, 8893), (106, 8926), (123, 9025), (145, 9115), (170, 9256), (174, 9274), (199, 9403),

Gene: Finalfrontier_15 Start: 9756, Stop: 10447, Start Num: 42
Candidate Starts for Finalfrontier_15:
(Start: 42 @9756 has 137 MA's), (64, 9867), (86, 9930), (100, 9987), (102, 9996), (106, 10029), (136, 10188),

Gene: Fingolfin_14 Start: 9061, Stop: 9785, Start Num: 42
Candidate Starts for Fingolfin_14:
(16, 8977), (Start: 42 @9061 has 137 MA's), (60, 9154), (64, 9172), (70, 9199), (94, 9313), (103, 9352), (106, 9382), (146, 9568), (185, 9754),

Gene: FlameThrower_14 Start: 8962, Stop: 9671, Start Num: 42
Candidate Starts for FlameThrower_14:
(Start: 42 @8962 has 137 MA's), (100, 9193), (102, 9202), (106, 9235), (120, 9328), (124, 9340), (160, 9484),

Gene: Franklin22_13 Start: 8878, Stop: 9596, Start Num: 42
Candidate Starts for Franklin22_13:
(Start: 42 @8878 has 137 MA's), (64, 8986), (80, 9025), (102, 9118), (106, 9151), (142, 9334),

Gene: Fribs8_16 Start: 9689, Stop: 10434, Start Num: 42
Candidate Starts for Fribs8_16:
(14, 9578), (15, 9581), (Start: 42 @9689 has 137 MA's), (56, 9761), (87, 9857), (94, 9884), (99, 9908), (102, 9920), (105, 9947), (126, 10058), (133, 10094), (137, 10112), (166, 10268), (174, 10298), (179, 10313), (198, 10424),

Gene: Gack_13 Start: 8940, Stop: 9655, Start Num: 42
Candidate Starts for Gack_13:
(Start: 42 @8940 has 137 MA's), (64, 9048), (80, 9087), (82, 9096), (102, 9180), (105, 9207), (106, 9213), (121, 9309), (142, 9396), (154, 9444), (155, 9447), (161, 9480),

Gene: Galaxy_15 Start: 9750, Stop: 10477, Start Num: 43
Candidate Starts for Galaxy_15:
(Start: 43 @9750 has 11 MA's), (61, 9846), (68, 9879), (85, 9954), (103, 10041), (106, 10071),

Gene: Gerri43_16 Start: 8830, Stop: 9566, Start Num: 42
Candidate Starts for Gerri43_16:
(Start: 42 @8830 has 137 MA's), (56, 8914), (77, 9007), (78, 9010), (84, 9037), (99, 9115), (114, 9199), (116, 9211), (122, 9250), (128, 9280), (187, 9541), (189, 9547),

Gene: Getalong_16 Start: 8315, Stop: 8997, Start Num: 42
Candidate Starts for Getalong_16:
(Start: 42 @8315 has 137 MA's), (90, 8480), (100, 8534), (101, 8540), (102, 8543), (105, 8570), (122, 8672), (127, 8690), (128, 8699), (146, 8774), (154, 8810), (166, 8900), (167, 8903), (169, 8909), (177, 8939), (178, 8942), (183, 8957), (188, 8975),

Gene: GiKK_18 Start: 9200, Stop: 9930, Start Num: 45
Candidate Starts for GiKK_18:
(28, 9167), (Start: 45 @9200 has 8 MA's), (50, 9230), (71, 9305), (94, 9392), (99, 9416), (102, 9428), (106, 9461), (113, 9497), (116, 9515), (123, 9557), (167, 9773), (186, 9839), (197, 9920),

Gene: Gibbous_15 Start: 9121, Stop: 9866, Start Num: 41
Candidate Starts for Gibbous_15:
(37, 9112), (Start: 41 @9121 has 26 MA's), (56, 9193), (94, 9316), (99, 9340), (102, 9352), (105, 9379), (109, 9397), (126, 9490), (137, 9544), (166, 9700), (174, 9730), (179, 9745), (196, 9835), (198, 9856),

Gene: Gibbzilla_15 Start: 8885, Stop: 9543, Start Num: 43
Candidate Starts for Gibbzilla_15:
(Start: 43 @8885 has 11 MA's), (58, 8972), (80, 9032), (93, 9074), (108, 9152), (114, 9191),

Gene: Gisselle_13 Start: 9012, Stop: 9778, Start Num: 12
Candidate Starts for Gisselle_13:
(Start: 12 @9012 has 62 MA's), (38, 9123), (77, 9267), (97, 9339), (116, 9444), (128, 9510), (139, 9555), (144, 9573), (162, 9654), (164, 9666), (166, 9696),

Gene: Glenn_17 Start: 11843, Stop: 12618, Start Num: 11
Candidate Starts for Glenn_17:

(2, 11570), (Start: 11 @11843 has 13 MA's), (Start: 12 @11852 has 62 MA's), (Start: 45 @11972 has 8 MA's), (76, 12098), (77, 12107), (97, 12179), (116, 12284), (128, 12350), (160, 12476), (162, 12494), (164, 12506),

Gene: Glotell_14 Start: 9058, Stop: 9782, Start Num: 42
Candidate Starts for Glotell_14:
(22, 9016), (Start: 42 @9058 has 137 MA's), (60, 9151), (64, 9169), (70, 9196), (94, 9310), (103, 9349), (106, 9379), (146, 9565),

Gene: GoldHunter_15 Start: 8886, Stop: 9640, Start Num: 40
Candidate Starts for GoldHunter_15:
(Start: 40 @8886 has 44 MA's), (56, 8970), (92, 9084), (93, 9090), (94, 9093), (99, 9117), (102, 9129), (131, 9300), (154, 9390), (156, 9396), (174, 9510), (179, 9525), (193, 9606), (197, 9630),

Gene: GreenHearts_17 Start: 11941, Stop: 12701, Start Num: 12
Candidate Starts for GreenHearts_17:
(2, 11665), (Start: 12 @11941 has 62 MA's), (74, 12178), (77, 12193), (97, 12265), (160, 12562), (175, 12649), (182, 12670), (185, 12679), (189, 12691),

Gene: Greenhouse_17 Start: 11865, Stop: 12625, Start Num: 12
Candidate Starts for Greenhouse_17:
(2, 11589), (Start: 12 @11865 has 62 MA's), (74, 12102), (77, 12117), (97, 12189), (160, 12486), (166, 12546), (175, 12573), (182, 12594), (185, 12603), (189, 12615),

Gene: HamCheese_13 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for HamCheese_13:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (146, 9567), (153, 9606),

Gene: HannahPhantana_16 Start: 9647, Stop: 10365, Start Num: 41
Candidate Starts for HannahPhantana_16:
(Start: 41 @9647 has 26 MA's), (61, 9743), (68, 9776), (106, 9968), (116, 10019), (131, 10100), (156, 10205),

Gene: HeadNerd_12 Start: 8948, Stop: 9714, Start Num: 12
Candidate Starts for HeadNerd_12:
(Start: 12 @8948 has 62 MA's), (77, 9203), (93, 9254), (97, 9275), (99, 9284), (116, 9380), (160, 9572), (162, 9590), (164, 9602),

Gene: Herb_13 Start: 8899, Stop: 9737, Start Num: 8
Candidate Starts for Herb_13:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: Hexbug_17 Start: 9883, Stop: 10613, Start Num: 45
Candidate Starts for Hexbug_17:
(Start: 45 @9883 has 8 MA's), (53, 9937), (54, 9940), (102, 10111), (106, 10144), (116, 10198), (123, 10240), (166, 10453), (186, 10522), (197, 10603),

Gene: HippoPololi_17 Start: 9778, Stop: 10523, Start Num: 41
Candidate Starts for HippoPololi_17:

(37, 9769), (Start: 41 @9778 has 26 MA's), (56, 9850), (87, 9946), (94, 9973), (99, 9997), (102, 10009), (105, 10036), (137, 10201), (163, 10312), (166, 10357), (174, 10387), (179, 10402), (196, 10492), (198, 10513),

Gene: Holliday_15 Start: 8319, Stop: 8998, Start Num: 42
Candidate Starts for Holliday_15:
(24, 8271), (Start: 42 @8319 has 137 MA's), (90, 8484), (100, 8538), (101, 8544), (102, 8547), (105, 8574), (122, 8673), (128, 8700), (136, 8733), (146, 8775), (154, 8811), (167, 8904), (169, 8910), (178, 8943), (183, 8958),

Gene: Horseradish_16 Start: 8771, Stop: 9525, Start Num: 40
Candidate Starts for Horseradish_16:
(Start: 40 @8771 has 44 MA's), (94, 8966), (99, 8990), (102, 9002), (105, 9029), (131, 9173), (134, 9182), (137, 9197), (197, 9515),

Gene: Horus_16 Start: 8335, Stop: 9014, Start Num: 42
Candidate Starts for Horus_16:
(31, 8314), (Start: 42 @8335 has 137 MA's), (90, 8500), (100, 8554), (101, 8560), (102, 8563), (105, 8590), (122, 8689), (128, 8716), (146, 8791), (154, 8827), (163, 8872), (169, 8926), (177, 8956), (183, 8974), (188, 8992),

Gene: Huckleberry_13 Start: 8948, Stop: 9714, Start Num: 12
Candidate Starts for Huckleberry_13:
(Start: 12 @8948 has 62 MA's), (77, 9203), (93, 9254), (97, 9275), (99, 9284), (116, 9380), (160, 9572), (162, 9590), (164, 9602),

Gene: HunterDalle_13 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for HunterDalle_13:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (164, 9619), (166, 9649), (182, 9700),

Gene: Huntingdon_17 Start: 11851, Stop: 12611, Start Num: 12
Candidate Starts for Huntingdon_17:
(Start: 12 @11851 has 62 MA's), (34, 11947), (74, 12088), (77, 12103), (79, 12109), (97, 12175), (107, 12229), (175, 12559), (182, 12580), (185, 12589), (189, 12601),

Gene: Icarian_15 Start: 9446, Stop: 10137, Start Num: 42
Candidate Starts for Icarian_15:
(Start: 42 @9446 has 137 MA's), (94, 9650), (100, 9677), (102, 9686), (106, 9719),

Gene: Immaculata_17 Start: 11837, Stop: 12612, Start Num: 11
Candidate Starts for Immaculata_17:
(2, 11564), (Start: 11 @11837 has 13 MA's), (Start: 12 @11846 has 62 MA's), (Start: 45 @11966 has 8 MA's), (76, 12092), (77, 12101), (97, 12173), (116, 12278), (128, 12344), (160, 12470), (162, 12488), (164, 12500),

Gene: IndyLu_14 Start: 9288, Stop: 9979, Start Num: 42
Candidate Starts for IndyLu_14:
(Start: 42 @9288 has 137 MA's), (Start: 45 @9291 has 8 MA's), (63, 9393), (94, 9492), (100, 9519), (106, 9561), (123, 9663),

Gene: Jabb_14 Start: 9283, Stop: 9974, Start Num: 42
Candidate Starts for Jabb_14:

(Start: 42 @9283 has 137 MA's), (64, 9394), (86, 9457), (100, 9514), (102, 9523), (106, 9556), (121, 9652), (136, 9715),

Gene: Jamun_15 Start: 10088, Stop: 10812, Start Num: 43
Candidate Starts for Jamun_15:
(Start: 43 @10088 has 11 MA's), (61, 10184), (68, 10217), (85, 10292), (103, 10379), (106, 10409), (131, 10541),

Gene: Jamzy_18 Start: 9210, Stop: 9940, Start Num: 45
Candidate Starts for Jamzy_18:
(28, 9177), (Start: 45 @9210 has 8 MA's), (50, 9240), (71, 9315), (94, 9402), (99, 9426), (102, 9438), (106, 9471), (113, 9507), (116, 9525), (123, 9567), (167, 9783), (197, 9930),

Gene: Jerole_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Jerole_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: Joann_17 Start: 11845, Stop: 12605, Start Num: 13
Candidate Starts for Joann_17:
(Start: 13 @11845 has 2 MA's), (74, 12082), (77, 12097), (97, 12169), (159, 12463), (160, 12466), (175, 12553), (182, 12574), (185, 12583), (189, 12595),

Gene: Johnathan_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for Johnathan_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (145, 9708),

Gene: Jovita_14 Start: 9345, Stop: 10036, Start Num: 42
Candidate Starts for Jovita_14:
(Start: 42 @9345 has 137 MA's), (64, 9456), (86, 9519), (100, 9576), (102, 9585), (106, 9618), (136, 9777), (176, 9963),

Gene: Jumboset_17 Start: 11786, Stop: 12561, Start Num: 11
Candidate Starts for Jumboset_17:
(2, 11513), (Start: 11 @11786 has 13 MA's), (Start: 12 @11795 has 62 MA's), (76, 12041), (77, 12050), (97, 12122), (116, 12227), (128, 12293), (160, 12419), (162, 12437), (164, 12449),

Gene: Juno112_14 Start: 9061, Stop: 9785, Start Num: 42
Candidate Starts for Juno112_14:
(16, 8977), (Start: 42 @9061 has 137 MA's), (60, 9154), (64, 9172), (70, 9199), (94, 9313), (103, 9352), (106, 9382), (146, 9568), (185, 9754),

Gene: KHumphrey_14 Start: 9058, Stop: 9782, Start Num: 42
Candidate Starts for KHumphrey_14:
(22, 9016), (Start: 42 @9058 has 137 MA's), (60, 9151), (64, 9169), (70, 9196), (94, 9310), (103, 9349), (106, 9379), (146, 9565),

Gene: Kalizoi_17 Start: 11785, Stop: 12560, Start Num: 11
Candidate Starts for Kalizoi_17:
(2, 11512), (Start: 11 @11785 has 13 MA's), (Start: 12 @11794 has 62 MA's), (Start: 45 @11914 has 8 MA's), (76, 12040), (77, 12049), (97, 12121), (116, 12226), (128, 12292), (160, 12418), (162, 12436), (164, 12448),

Gene: Kate33_14 Start: 9287, Stop: 9978, Start Num: 42
Candidate Starts for Kate33_14:
(Start: 42 @9287 has 137 MA's), (Start: 45 @9290 has 8 MA's), (63, 9392), (94, 9491), (100, 9518), (106, 9560), (123, 9662),

Gene: Katzastrophic_14 Start: 9137, Stop: 9846, Start Num: 42
Candidate Starts for Katzastrophic_14:
(Start: 42 @9137 has 137 MA's), (100, 9368), (102, 9377), (106, 9410), (120, 9503), (124, 9515), (160, 9659),

Gene: KayGee_15 Start: 8643, Stop: 9391, Start Num: 40
Candidate Starts for KayGee_15:
(Start: 40 @8643 has 44 MA's), (56, 8715), (94, 8838), (99, 8862), (102, 8874), (113, 8943), (123, 9006), (145, 9096), (170, 9237), (174, 9255), (199, 9384),

Gene: Kenna_15 Start: 8335, Stop: 9014, Start Num: 42
Candidate Starts for Kenna_15:
(31, 8314), (Start: 42 @8335 has 137 MA's), (90, 8500), (100, 8554), (101, 8560), (102, 8563), (105, 8590), (122, 8689), (128, 8716), (146, 8791), (154, 8827), (163, 8872), (169, 8926), (177, 8956), (183, 8974), (188, 8992),

Gene: Kenzers_14 Start: 9260, Stop: 9951, Start Num: 42
Candidate Starts for Kenzers_14:
(Start: 42 @9260 has 137 MA's), (64, 9371), (86, 9434), (100, 9491), (102, 9500), (106, 9533), (145, 9725),

Gene: Kepler_15 Start: 9482, Stop: 10200, Start Num: 41
Candidate Starts for Kepler_15:
(Start: 41 @9482 has 26 MA's), (61, 9578), (68, 9611), (106, 9803), (116, 9854), (131, 9935), (156, 10040),

Gene: Kieran_14 Start: 9442, Stop: 10118, Start Num: 42
Candidate Starts for Kieran_14:
(Start: 42 @9442 has 137 MA's), (100, 9673), (102, 9682), (106, 9715),

Gene: KingBob_13 Start: 8899, Stop: 9737, Start Num: 8
Candidate Starts for KingBob_13:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: Kittykat_13 Start: 8984, Stop: 9750, Start Num: 12
Candidate Starts for Kittykat_13:
(Start: 10 @8972 has 2 MA's), (Start: 12 @8984 has 62 MA's), (35, 9086), (38, 9095), (77, 9239), (93, 9290), (97, 9311), (116, 9416), (128, 9482), (139, 9527), (144, 9545), (160, 9608), (162, 9626), (163, 9629), (164, 9638), (166, 9668),

Gene: Korra_16 Start: 11800, Stop: 12566, Start Num: 12
Candidate Starts for Korra_16:
(1, 11305), (2, 11518), (Start: 11 @11791 has 13 MA's), (Start: 12 @11800 has 62 MA's), (Start: 45 @11920 has 8 MA's), (76, 12046), (77, 12055), (97, 12127), (116, 12232), (128, 12298), (160, 12424), (162, 12442), (164, 12454),

Gene: Kromp_16 Start: 10416, Stop: 11236, Start Num: 23
Candidate Starts for Kromp_16:
(Start: 23 @10416 has 1 MA's), (46, 10476), (66, 10590), (70, 10611), (116, 10836), (159, 11040), (192, 11211),

Gene: Kuleana_15 Start: 9441, Stop: 10159, Start Num: 39
Candidate Starts for Kuleana_15:
(Start: 39 @9441 has 1 MA's), (63, 9546), (68, 9570), (102, 9729), (106, 9762), (114, 9801), (117, 9819), (131, 9894), (174, 10101),

Gene: Lahqtemish_14 Start: 9360, Stop: 10051, Start Num: 42
Candidate Starts for Lahqtemish_14:
(Start: 42 @9360 has 137 MA's), (Start: 45 @9363 has 8 MA's), (63, 9465), (94, 9564), (100, 9591), (106, 9633), (123, 9735),

Gene: Lakshmi_17 Start: 11870, Stop: 12630, Start Num: 12
Candidate Starts for Lakshmi_17:
(2, 11594), (Start: 12 @11870 has 62 MA's), (74, 12107), (77, 12122), (97, 12194), (159, 12488), (160, 12491), (175, 12578), (182, 12599), (185, 12608), (189, 12620),

Gene: Laphuphu24k_13 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for Laphuphu24k_13:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (146, 9567), (153, 9606),

Gene: Lasagna_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for Lasagna_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: LastNadiia_19 Start: 11116, Stop: 11843, Start Num: 42
Candidate Starts for LastNadiia_19:
(19, 11044), (Start: 42 @11116 has 137 MA's), (69, 11248), (84, 11317), (99, 11395), (114, 11479), (122, 11530), (128, 11557), (132, 11575), (148, 11629), (157, 11671), (181, 11797), (187, 11818),

Gene: Lauer_14 Start: 8692, Stop: 9440, Start Num: 40
Candidate Starts for Lauer_14:
(Start: 40 @8692 has 44 MA's), (56, 8764), (94, 8887), (99, 8911), (102, 8923), (106, 8956), (113, 8992), (123, 9055), (145, 9145), (170, 9286), (174, 9304), (199, 9433),

Gene: Lennox_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for Lennox_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Leona_14 Start: 9111, Stop: 9835, Start Num: 42
Candidate Starts for Leona_14:
(16, 9027), (Start: 42 @9111 has 137 MA's), (60, 9204), (64, 9222), (70, 9249), (94, 9363), (103, 9402), (106, 9432), (146, 9618),

Gene: Leroy_16 Start: 8336, Stop: 9015, Start Num: 42
Candidate Starts for Leroy_16:

(31, 8315), (Start: 42 @8336 has 137 MA's), (90, 8501), (100, 8555), (101, 8561), (102, 8564), (105, 8591), (122, 8690), (128, 8717), (146, 8792), (154, 8828), (163, 8873), (169, 8927), (177, 8957), (183, 8975), (188, 8993),

Gene: LilSpotty_14 Start: 8433, Stop: 9124, Start Num: 41
Candidate Starts for LilSpotty_14:
(Start: 41 @8433 has 26 MA's), (57, 8502), (59, 8508), (81, 8559), (93, 8604), (100, 8634), (104, 8652), (175, 9021),

Gene: LilStuart_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for LilStuart_13:
(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Lilo27_14 Start: 9220, Stop: 9911, Start Num: 42
Candidate Starts for Lilo27_14:
(Start: 42 @9220 has 137 MA's), (64, 9331), (86, 9394), (94, 9424), (100, 9451), (102, 9460), (106, 9493), (136, 9652), (149, 9703),

Gene: LimaBean_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for LimaBean_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (145, 9708),

Gene: Litotes_17 Start: 11825, Stop: 12591, Start Num: 12
Candidate Starts for Litotes_17:
(Start: 10 @11813 has 2 MA's), (Start: 12 @11825 has 62 MA's), (34, 11924), (38, 11936), (77, 12080), (97, 12152), (116, 12257), (139, 12368), (160, 12449), (162, 12467),

Gene: LittleTokyo_15 Start: 9395, Stop: 10119, Start Num: 42
Candidate Starts for LittleTokyo_15:
(Start: 42 @9395 has 137 MA's), (47, 9407), (68, 9524), (72, 9545), (94, 9647), (96, 9656), (106, 9716), (116, 9767), (117, 9773), (121, 9803), (184, 10085), (191, 10112),

Gene: Loviatar_14 Start: 9533, Stop: 10224, Start Num: 42
Candidate Starts for Loviatar_14:
(Start: 42 @9533 has 137 MA's), (94, 9737), (102, 9773), (106, 9806), (161, 10073),

Gene: Lucy_13 Start: 8934, Stop: 9703, Start Num: 12
Candidate Starts for Lucy_13:
(Start: 10 @8922 has 2 MA's), (Start: 12 @8934 has 62 MA's), (Start: 45 @9057 has 8 MA's), (50, 9087), (77, 9192), (97, 9264), (116, 9369), (157, 9549), (160, 9561), (162, 9579), (164, 9591),

Gene: Lunar_15 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Lunar_15:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: Lutum_16 Start: 8335, Stop: 9014, Start Num: 42
Candidate Starts for Lutum_16:
(31, 8314), (Start: 42 @8335 has 137 MA's), (90, 8500), (100, 8554), (101, 8560), (102, 8563), (105, 8590), (122, 8689), (128, 8716), (146, 8791), (154, 8827), (163, 8872), (169, 8926), (177, 8956), (183, 8974), (188, 8992),

Gene: Lynlen_14 Start: 9260, Stop: 9951, Start Num: 42
Candidate Starts for Lynlen_14:
(Start: 42 @9260 has 137 MA's), (64, 9371), (86, 9434), (100, 9491), (102, 9500), (106, 9533), (145, 9725),

Gene: MAnor_15 Start: 8635, Stop: 9383, Start Num: 40
Candidate Starts for MAnor_15:
(Start: 40 @8635 has 44 MA's), (56, 8707), (94, 8830), (99, 8854), (102, 8866), (113, 8935), (123, 8998), (141, 9076), (146, 9091), (163, 9172), (174, 9247), (179, 9262), (195, 9349), (199, 9376),

Gene: MScarn_17 Start: 8857, Stop: 9611, Start Num: 40
Candidate Starts for MScarn_17:
(Start: 26 @8815 has 1 MA's), (Start: 40 @8857 has 44 MA's), (94, 9052), (99, 9076), (102, 9088), (105, 9115), (131, 9259), (134, 9268), (197, 9601),

Gene: MaVan_17 Start: 9884, Stop: 10629, Start Num: 41
Candidate Starts for MaVan_17:
(37, 9875), (Start: 41 @9884 has 26 MA's), (49, 9914), (54, 9944), (94, 10079), (99, 10103), (102, 10115), (109, 10160), (126, 10253), (136, 10301), (137, 10307), (163, 10418), (166, 10463), (179, 10508), (196, 10598), (198, 10619),

Gene: Makima_17 Start: 10199, Stop: 10926, Start Num: 42
Candidate Starts for Makima_17:
(20, 10130), (21, 10133), (36, 10187), (Start: 42 @10199 has 137 MA's), (69, 10331), (84, 10400), (99, 10478), (114, 10562), (122, 10613), (128, 10640), (132, 10658), (141, 10694), (148, 10712), (163, 10790), (181, 10880), (187, 10901),

Gene: Makoto_13 Start: 8943, Stop: 9712, Start Num: 12
Candidate Starts for Makoto_13:
(Start: 10 @8931 has 2 MA's), (Start: 12 @8943 has 62 MA's), (Start: 45 @9066 has 8 MA's), (50, 9096), (77, 9201), (97, 9273), (116, 9378), (157, 9558), (160, 9570), (162, 9588), (164, 9600),

Gene: MamaPearl_13 Start: 8981, Stop: 9747, Start Num: 12
Candidate Starts for MamaPearl_13:
(Start: 12 @8981 has 62 MA's), (77, 9236), (97, 9308), (99, 9317), (116, 9413), (143, 9539), (155, 9587), (162, 9623), (164, 9635), (184, 9722),

Gene: Margaret_18 Start: 9558, Stop: 10321, Start Num: 27
Candidate Starts for Margaret_18:
(3, 9264), (5, 9306), (6, 9381), (9, 9432), (Start: 27 @9558 has 1 MA's), (37, 9582), (Start: 44 @9591 has 1 MA's), (50, 9621), (54, 9648), (83, 9744), (94, 9783), (101, 9816), (102, 9819), (106, 9852), (116, 9906), (123, 9948), (167, 10164), (186, 10230), (197, 10311),

Gene: Maria1952_13 Start: 8965, Stop: 9737, Start Num: 11
Candidate Starts for Maria1952_13:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: Mayweather_16 Start: 9265, Stop: 10013, Start Num: 40
Candidate Starts for Mayweather_16:

(Start: 40 @9265 has 44 MA's), (56, 9337), (94, 9460), (99, 9484), (102, 9496), (113, 9565), (123, 9628), (141, 9706), (146, 9721), (163, 9802), (174, 9877), (199, 10006),

Gene: MeganNoll_16 Start: 11843, Stop: 12618, Start Num: 11
Candidate Starts for MeganNoll_16:
(2, 11570), (Start: 11 @11843 has 13 MA's), (Start: 12 @11852 has 62 MA's), (Start: 45 @11972 has 8 MA's), (76, 12098), (77, 12107), (97, 12179), (116, 12284), (128, 12350), (160, 12476), (162, 12494), (164, 12506),

Gene: Melons_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Melons_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: Milomuff_15 Start: 9629, Stop: 10320, Start Num: 42
Candidate Starts for Milomuff_15:
(Start: 42 @9629 has 137 MA's), (64, 9740), (86, 9803), (100, 9860), (102, 9869), (106, 9902), (136, 10061), (145, 10094),

Gene: Mireles_16 Start: 8602, Stop: 9329, Start Num: 42
Candidate Starts for Mireles_16:
(36, 8590), (Start: 42 @8602 has 137 MA's), (67, 8722), (69, 8734), (84, 8803), (88, 8818), (98, 8875), (99, 8881), (114, 8965), (122, 9016), (128, 9043), (145, 9109), (157, 9157), (165, 9226), (189, 9310),

Gene: Misaeng_17 Start: 11918, Stop: 12678, Start Num: 13
Candidate Starts for Misaeng_17:
(Start: 13 @11918 has 2 MA's), (34, 12014), (74, 12155), (77, 12170), (97, 12242), (107, 12296), (175, 12626), (182, 12647), (185, 12656), (189, 12668),

Gene: Moki_13 Start: 8948, Stop: 9714, Start Num: 12
Candidate Starts for Moki_13:
(Start: 12 @8948 has 62 MA's), (77, 9203), (93, 9254), (97, 9275), (99, 9284), (116, 9380), (160, 9572), (162, 9590), (164, 9602),

Gene: MrGloopy_17 Start: 11777, Stop: 12552, Start Num: 11
Candidate Starts for MrGloopy_17:
(Start: 11 @11777 has 13 MA's), (Start: 12 @11786 has 62 MA's), (Start: 45 @11906 has 8 MA's), (76, 12032), (77, 12041), (97, 12113), (116, 12218), (128, 12284), (160, 12410), (162, 12428), (164, 12440),

Gene: MsUbiquitous_14 Start: 9283, Stop: 9974, Start Num: 42
Candidate Starts for MsUbiquitous_14:
(Start: 42 @9283 has 137 MA's), (64, 9394), (86, 9457), (100, 9514), (102, 9523), (106, 9556), (121, 9652), (136, 9715),

Gene: MunkgeeRoachy_15 Start: 8933, Stop: 9687, Start Num: 40
Candidate Starts for MunkgeeRoachy_15:
(Start: 40 @8933 has 44 MA's), (56, 9017), (93, 9137), (94, 9140), (99, 9164), (102, 9176), (131, 9347), (154, 9437), (174, 9557), (179, 9572), (193, 9653), (197, 9677),

Gene: Nancia_13 Start: 8942, Stop: 9711, Start Num: 12
Candidate Starts for Nancia_13:

(Start: 10 @8930 has 2 MA's), (Start: 12 @8942 has 62 MA's), (50, 9095), (77, 9200), (97, 9272), (116, 9377), (157, 9557), (160, 9569), (162, 9587), (164, 9599),

Gene: Nibbles_17 Start: 9884, Stop: 10629, Start Num: 41
Candidate Starts for Nibbles_17:
(37, 9875), (Start: 41 @9884 has 26 MA's), (49, 9914), (Start: 51 @9923 has 1 MA's), (54, 9944), (94, 10079), (99, 10103), (102, 10115), (109, 10160), (126, 10253), (136, 10301), (137, 10307), (163, 10418), (166, 10463), (179, 10508), (196, 10598), (198, 10619),

Gene: Niblet_15 Start: 9448, Stop: 10169, Start Num: 42
Candidate Starts for Niblet_15:
(17, 9370), (29, 9427), (32, 9433), (Start: 42 @9448 has 137 MA's), (47, 9460), (66, 9568), (73, 9604), (95, 9709), (101, 9736), (103, 9742), (106, 9772), (118, 9838), (121, 9859), (146, 9958), (160, 10024), (184, 10141),

Gene: Nicky22_15 Start: 9691, Stop: 10382, Start Num: 42
Candidate Starts for Nicky22_15:
(Start: 42 @9691 has 137 MA's), (64, 9802), (86, 9865), (94, 9895), (100, 9922), (102, 9931), (106, 9964), (136, 10123), (149, 10174), (176, 10309),

Gene: Nina_16 Start: 9918, Stop: 10672, Start Num: 40
Candidate Starts for Nina_16:
(Start: 40 @9918 has 44 MA's), (56, 10002), (93, 10122), (94, 10125), (99, 10149), (102, 10161), (131, 10332), (135, 10347), (154, 10422), (174, 10542), (179, 10557), (193, 10638), (197, 10662),

Gene: Nodigi_17 Start: 9874, Stop: 10604, Start Num: 45
Candidate Starts for Nodigi_17:
(Start: 45 @9874 has 8 MA's), (50, 9904), (94, 10066), (102, 10102), (106, 10135), (116, 10189), (123, 10231), (166, 10444), (186, 10513), (197, 10594),

Gene: Nubia_16 Start: 11830, Stop: 12590, Start Num: 12
Candidate Starts for Nubia_16:
(2, 11554), (Start: 12 @11830 has 62 MA's), (74, 12067), (77, 12082), (97, 12154), (160, 12451), (175, 12538), (182, 12559), (185, 12568), (189, 12580),

Gene: OMalley_13 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for OMalley_13:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (157, 9577), (164, 9619), (166, 9649),

Gene: Olliecat_14 Start: 9271, Stop: 9962, Start Num: 42
Candidate Starts for Olliecat_14:
(Start: 42 @9271 has 137 MA's), (90, 9463), (102, 9523), (106, 9556), (115, 9607), (182, 9919), (185, 9928),

Gene: Orcanus_15 Start: 9449, Stop: 10170, Start Num: 42
Candidate Starts for Orcanus_15:
(Start: 42 @9449 has 137 MA's), (47, 9461), (64, 9560), (101, 9734), (103, 9740), (106, 9770), (110, 9788), (121, 9857), (123, 9863), (146, 9956), (184, 10139),

Gene: Orla_17 Start: 9878, Stop: 10608, Start Num: 45
Candidate Starts for Orla_17:

(Start: 45 @9878 has 8 MA's), (50, 9908), (94, 10070), (102, 10106), (106, 10139), (116, 10193), (123, 10235), (166, 10448), (186, 10517), (197, 10598),

Gene: OtsoOtso_15 Start: 9483, Stop: 10201, Start Num: 41
Candidate Starts for OtsoOtso_15:
(Start: 41 @9483 has 26 MA's), (61, 9579), (68, 9612), (106, 9804), (116, 9855), (131, 9936), (156, 10041),

Gene: OurGirlNessie_13 Start: 8934, Stop: 9703, Start Num: 12
Candidate Starts for OurGirlNessie_13:
(Start: 10 @8922 has 2 MA's), (Start: 12 @8934 has 62 MA's), (Start: 45 @9057 has 8 MA's), (50, 9087), (77, 9192), (97, 9264), (116, 9369), (157, 9549), (160, 9561), (162, 9579), (164, 9591),

Gene: Oxynfrius_17 Start: 11843, Stop: 12603, Start Num: 12
Candidate Starts for Oxynfrius_17:
(2, 11567), (Start: 12 @11843 has 62 MA's), (74, 12080), (77, 12095), (97, 12167), (159, 12461), (160, 12464), (175, 12551), (182, 12572), (185, 12581), (189, 12593),

Gene: PartyCup_17 Start: 11872, Stop: 12638, Start Num: 12
Candidate Starts for PartyCup_17:
(Start: 10 @11860 has 2 MA's), (Start: 12 @11872 has 62 MA's), (34, 11971), (38, 11983), (77, 12127), (97, 12199), (116, 12304), (139, 12415), (162, 12514),

Gene: PastaFagioli_14 Start: 9348, Stop: 10039, Start Num: 42
Candidate Starts for PastaFagioli_14:
(Start: 42 @9348 has 137 MA's), (Start: 45 @9351 has 8 MA's), (63, 9453), (94, 9552), (100, 9579), (106, 9621), (123, 9723),

Gene: Pecas_14 Start: 9244, Stop: 9935, Start Num: 42
Candidate Starts for Pecas_14:
(Start: 42 @9244 has 137 MA's), (64, 9355), (86, 9418), (100, 9475), (102, 9484), (106, 9517), (136, 9676), (176, 9862),

Gene: Periwinkle_16 Start: 8315, Stop: 8994, Start Num: 42
Candidate Starts for Periwinkle_16:
(Start: 42 @8315 has 137 MA's), (90, 8480), (100, 8534), (101, 8540), (102, 8543), (105, 8570), (122, 8669), (128, 8696), (146, 8771), (154, 8807), (163, 8852), (169, 8906), (177, 8936), (183, 8954), (188, 8972),

Gene: PhigPhack_14 Start: 9272, Stop: 9963, Start Num: 42
Candidate Starts for PhigPhack_14:
(Start: 42 @9272 has 137 MA's), (64, 9383), (86, 9446), (100, 9503), (102, 9512), (106, 9545), (145, 9737),

Gene: PhirstandPhine_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for PhirstandPhine_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: Phisb_14 Start: 9208, Stop: 9899, Start Num: 42
Candidate Starts for Phisb_14:
(Start: 42 @9208 has 137 MA's), (64, 9319), (86, 9382), (100, 9439), (102, 9448), (106, 9481), (120, 9574), (136, 9640),

Gene: Phistory_16 Start: 8304, Stop: 8983, Start Num: 42
Candidate Starts for Phistory_16:
(Start: 42 @8304 has 137 MA's), (90, 8469), (100, 8523), (101, 8529), (102, 8532), (105, 8559), (122, 8658), (128, 8685), (146, 8760), (154, 8796), (163, 8841), (167, 8889), (169, 8895), (177, 8925), (178, 8928), (183, 8943),

Gene: PhluffyCoco_14 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for PhluffyCoco_14:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (146, 9567), (153, 9606),

Gene: Pineda_16 Start: 9644, Stop: 10362, Start Num: 41
Candidate Starts for Pineda_16:
(Start: 41 @9644 has 26 MA's), (61, 9740), (68, 9773), (106, 9965), (116, 10016), (131, 10097), (156, 10202),

Gene: PinkFriday_13 Start: 8971, Stop: 9743, Start Num: 12
Candidate Starts for PinkFriday_13:
(Start: 11 @8962 has 13 MA's), (Start: 12 @8971 has 62 MA's), (25, 9049), (61, 9193), (77, 9235), (97, 9307), (116, 9412), (127, 9466), (144, 9538), (156, 9586), (162, 9619), (164, 9631), (182, 9712), (184, 9718),

Gene: PitaDog_13 Start: 8933, Stop: 9702, Start Num: 12
Candidate Starts for PitaDog_13:
(Start: 10 @8921 has 2 MA's), (Start: 12 @8933 has 62 MA's), (Start: 45 @9056 has 8 MA's), (50, 9086), (77, 9191), (97, 9263), (116, 9368), (157, 9548), (160, 9560), (162, 9578), (164, 9590),

Gene: Polka_15 Start: 9483, Stop: 10201, Start Num: 41
Candidate Starts for Polka_15:
(Start: 41 @9483 has 26 MA's), (61, 9579), (68, 9612), (106, 9804), (116, 9855), (131, 9936), (156, 10041),

Gene: PondAmelia_15 Start: 9462, Stop: 10153, Start Num: 42
Candidate Starts for PondAmelia_15:
(Start: 42 @9462 has 137 MA's), (80, 9612), (94, 9666), (102, 9702), (161, 10002),

Gene: Pons_15 Start: 8643, Stop: 9391, Start Num: 40
Candidate Starts for Pons_15:
(Start: 40 @8643 has 44 MA's), (56, 8715), (94, 8838), (99, 8862), (102, 8874), (113, 8943), (123, 9006), (141, 9084), (146, 9099), (163, 9180), (174, 9255), (199, 9384),

Gene: PotPie_15 Start: 9496, Stop: 10244, Start Num: 40
Candidate Starts for PotPie_15:
(Start: 40 @9496 has 44 MA's), (56, 9568), (94, 9691), (99, 9715), (102, 9727), (106, 9760), (123, 9859), (145, 9949), (170, 10090), (174, 10108), (199, 10237),

Gene: Potatoes_17 Start: 11847, Stop: 12613, Start Num: 12
Candidate Starts for Potatoes_17:
(Start: 11 @11838 has 13 MA's), (Start: 12 @11847 has 62 MA's), (76, 12093), (77, 12102), (97, 12174), (116, 12279), (128, 12345), (160, 12471), (162, 12489), (164, 12501),

Gene: Preamble_13 Start: 8946, Stop: 9715, Start Num: 12

Candidate Starts for Preamble_13:
(Start: 12 @8946 has 62 MA's), (38, 9060), (47, 9078), (77, 9204), (97, 9276), (116, 9381), (128, 9447), (139, 9492), (144, 9510), (160, 9573), (162, 9591), (164, 9603), (166, 9633),

Gene: Pterodactyl_13 Start: 8935, Stop: 9704, Start Num: 12
Candidate Starts for Pterodactyl_13:
(Start: 11 @8923 has 13 MA's), (Start: 12 @8935 has 62 MA's), (Start: 45 @9058 has 8 MA's), (50, 9088), (77, 9193), (97, 9265), (116, 9370), (157, 9550), (160, 9562), (162, 9580), (164, 9592),

Gene: Pumancara_13 Start: 8970, Stop: 9742, Start Num: 12
Candidate Starts for Pumancara_13:
(Start: 11 @8961 has 13 MA's), (Start: 12 @8970 has 62 MA's), (25, 9048), (61, 9192), (77, 9234), (97, 9306), (116, 9411), (127, 9465), (144, 9537), (156, 9585), (162, 9618), (164, 9630), (182, 9711), (184, 9717),

Gene: QMacho_15 Start: 9727, Stop: 10418, Start Num: 42
Candidate Starts for QMacho_15:
(Start: 42 @9727 has 137 MA's), (64, 9838), (86, 9901), (100, 9958), (102, 9967), (106, 10000), (136, 10159), (176, 10345),

Gene: Quasar_14 Start: 9494, Stop: 10248, Start Num: 40
Candidate Starts for Quasar_14:
(Start: 40 @9494 has 44 MA's), (56, 9578), (94, 9701), (99, 9725), (102, 9737), (131, 9908), (154, 9998), (156, 10004), (174, 10118), (179, 10133), (193, 10214), (197, 10238),

Gene: Quenya_15 Start: 9138, Stop: 9844, Start Num: 42
Candidate Starts for Quenya_15:
(Start: 42 @9138 has 137 MA's), (100, 9369), (102, 9378), (106, 9411), (161, 9675),

Gene: RAP15_17 Start: 11852, Stop: 12618, Start Num: 12
Candidate Starts for RAP15_17:
(2, 11570), (Start: 11 @11843 has 13 MA's), (Start: 12 @11852 has 62 MA's), (Start: 45 @11972 has 8 MA's), (76, 12098), (77, 12107), (97, 12179), (116, 12284), (128, 12350), (160, 12476), (162, 12494), (164, 12506),

Gene: RSchmailzl_16 Start: 9029, Stop: 9783, Start Num: 40
Candidate Starts for RSchmailzl_16:
(Start: 40 @9029 has 44 MA's), (56, 9113), (92, 9227), (93, 9233), (94, 9236), (99, 9260), (102, 9272), (131, 9443), (135, 9458), (154, 9533), (163, 9578), (174, 9653), (179, 9668), (193, 9749), (197, 9773),

Gene: RanchParmCat_18 Start: 9591, Stop: 10321, Start Num: 44
Candidate Starts for RanchParmCat_18:
(37, 9582), (Start: 44 @9591 has 1 MA's), (50, 9621), (54, 9648), (83, 9744), (94, 9783), (101, 9816), (102, 9819), (106, 9852), (116, 9906), (123, 9948), (167, 10164), (186, 10230), (197, 10311),

Gene: RcigaStruga_17 Start: 11851, Stop: 12611, Start Num: 12
Candidate Starts for RcigaStruga_17:
(Start: 12 @11851 has 62 MA's), (34, 11947), (74, 12088), (77, 12103), (79, 12109), (97, 12175), (107, 12229), (175, 12559), (182, 12580), (185, 12589), (189, 12601),

Gene: RedBaron_17 Start: 8929, Stop: 9683, Start Num: 40
Candidate Starts for RedBaron_17:

(Start: 40 @8929 has 44 MA's), (56, 9013), (58, 9019), (92, 9127), (93, 9133), (94, 9136), (99, 9160), (102, 9172), (131, 9343), (154, 9433), (174, 9553), (179, 9568), (193, 9649), (197, 9673),

Gene: RedFox_14 Start: 9060, Stop: 9784, Start Num: 42
Candidate Starts for RedFox_14:
(16, 8976), (Start: 42 @9060 has 137 MA's), (60, 9153), (64, 9171), (70, 9198), (94, 9312), (103, 9351), (106, 9381), (140, 9549), (146, 9567),

Gene: Renna12_15 Start: 9269, Stop: 9993, Start Num: 42
Candidate Starts for Renna12_15:
(Start: 42 @9269 has 137 MA's), (60, 9362), (64, 9380), (70, 9407), (94, 9521), (103, 9560), (106, 9590),

Gene: Riovina_13 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for Riovina_13:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (157, 9577), (164, 9619), (166, 9649),

Gene: Riverdale_17 Start: 11782, Stop: 12548, Start Num: 12
Candidate Starts for Riverdale_17:
(4, 11599), (Start: 11 @11773 has 13 MA's), (Start: 12 @11782 has 62 MA's), (76, 12028), (77, 12037), (97, 12109), (116, 12214), (128, 12280), (160, 12406), (162, 12424), (164, 12436),

Gene: Roberts_16 Start: 8830, Stop: 9566, Start Num: 42
Candidate Starts for Roberts_16:
(Start: 42 @8830 has 137 MA's), (56, 8914), (77, 9007), (78, 9010), (84, 9037), (99, 9115), (114, 9199), (116, 9211), (122, 9250), (128, 9280), (187, 9541), (189, 9547),

Gene: Rollins_12 Start: 8845, Stop: 9554, Start Num: 42
Candidate Starts for Rollins_12:
(Start: 42 @8845 has 137 MA's), (64, 8953), (102, 9085), (106, 9118), (161, 9385),

Gene: Rona_14 Start: 9439, Stop: 10115, Start Num: 42
Candidate Starts for Rona_14:
(Start: 42 @9439 has 137 MA's), (100, 9670), (102, 9679), (106, 9712),

Gene: Rozby_17 Start: 11774, Stop: 12549, Start Num: 11
Candidate Starts for Rozby_17:
(2, 11501), (Start: 11 @11774 has 13 MA's), (Start: 12 @11783 has 62 MA's), (Start: 45 @11903 has 8 MA's), (76, 12029), (77, 12038), (97, 12110), (116, 12215), (128, 12281), (160, 12407), (162, 12425), (164, 12437),

Gene: Ruchi_15 Start: 10010, Stop: 10740, Start Num: 43
Candidate Starts for Ruchi_15:
(Start: 43 @10010 has 11 MA's), (61, 10106), (68, 10139), (85, 10214), (103, 10301), (106, 10331), (114, 10376), (119, 10409), (130, 10466),

Gene: SanaSana_15 Start: 9463, Stop: 10154, Start Num: 42
Candidate Starts for SanaSana_15:
(Start: 42 @9463 has 137 MA's), (80, 9613), (94, 9667), (102, 9703), (161, 10003),

Gene: SansAfet_14 Start: 9254, Stop: 9945, Start Num: 42
Candidate Starts for SansAfet_14:

(Start: 42 @9254 has 137 MA's), (64, 9365), (86, 9428), (100, 9485), (102, 9494), (106, 9527), (145, 9719),

Gene: SarBear_14 Start: 9220, Stop: 9911, Start Num: 42
Candidate Starts for SarBear_14:
(Start: 42 @9220 has 137 MA's), (64, 9331), (86, 9394), (100, 9451), (102, 9460), (106, 9493), (136, 9652), (149, 9703), (158, 9739),

Gene: Savage2526_17 Start: 11837, Stop: 12612, Start Num: 11
Candidate Starts for Savage2526_17:
(2, 11564), (Start: 11 @11837 has 13 MA's), (Start: 12 @11846 has 62 MA's), (Start: 45 @11966 has 8 MA's), (76, 12092), (77, 12101), (97, 12173), (116, 12278), (128, 12344), (160, 12470), (162, 12488), (164, 12500),

Gene: Scuttle_17 Start: 11851, Stop: 12617, Start Num: 12
Candidate Starts for Scuttle_17:
(4, 11668), (Start: 11 @11842 has 13 MA's), (Start: 12 @11851 has 62 MA's), (76, 12097), (77, 12106), (97, 12178), (116, 12283), (128, 12349), (160, 12475), (162, 12493), (164, 12505),

Gene: Sergei_13 Start: 8899, Stop: 9737, Start Num: 8
Candidate Starts for Sergei_13:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: Sharkboy_14 Start: 9438, Stop: 10114, Start Num: 42
Candidate Starts for Sharkboy_14:
(Start: 42 @9438 has 137 MA's), (100, 9669), (102, 9678), (106, 9711), (145, 9903),

Gene: Shayna_13 Start: 8829, Stop: 9529, Start Num: 42
Candidate Starts for Shayna_13:
(Start: 42 @8829 has 137 MA's), (75, 8958), (102, 9081), (115, 9165), (142, 9297),

Gene: SheckWes_14 Start: 8631, Stop: 9379, Start Num: 40
Candidate Starts for SheckWes_14:
(Start: 40 @8631 has 44 MA's), (56, 8703), (94, 8826), (99, 8850), (102, 8862), (113, 8931), (123, 8994), (145, 9084), (163, 9168), (174, 9243), (199, 9372),

Gene: Shen_16 Start: 9656, Stop: 10377, Start Num: 42
Candidate Starts for Shen_16:
(Start: 42 @9656 has 137 MA's), (47, 9668), (64, 9767), (101, 9941), (103, 9947), (106, 9977), (110, 9995), (121, 10064), (123, 10070), (146, 10163), (184, 10346),

Gene: SketchMex_14 Start: 8872, Stop: 9626, Start Num: 40
Candidate Starts for SketchMex_14:
(Start: 26 @8830 has 1 MA's), (Start: 40 @8872 has 44 MA's), (94, 9067), (99, 9091), (102, 9103), (105, 9130), (131, 9274), (134, 9283), (197, 9616),

Gene: Skylord_13 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Skylord_13:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: Slay_14 Start: 9696, Stop: 10387, Start Num: 42

Candidate Starts for Slay_14:
(Start: 42 @9696 has 137 MA's), (64, 9807), (86, 9870), (100, 9927), (102, 9936), (106, 9969), (136, 10128), (149, 10179),

Gene: Socotra_16 Start: 8885, Stop: 9639, Start Num: 40
Candidate Starts for Socotra_16:
(Start: 40 @8885 has 44 MA's), (56, 8969), (71, 9005), (94, 9092), (99, 9116), (102, 9128), (131, 9299), (154, 9389), (156, 9395), (174, 9509), (179, 9524), (193, 9605), (197, 9629),

Gene: Softsoap_14 Start: 9243, Stop: 9934, Start Num: 42
Candidate Starts for Softsoap_14:
(Start: 42 @9243 has 137 MA's), (64, 9354), (86, 9417), (100, 9474), (102, 9483), (106, 9516), (138, 9684), (145, 9708),

Gene: Spartoi_13 Start: 7665, Stop: 8437, Start Num: 33
Candidate Starts for Spartoi_13:
(Start: 33 @7665 has 1 MA's), (52, 7737), (65, 7806), (79, 7848), (83, 7866), (91, 7899), (97, 7929), (111, 8010), (119, 8079), (121, 8097), (134, 8154), (147, 8202), (156, 8241), (158, 8250), (169, 8334), (175, 8355), (191, 8412),

Gene: Squiddly_18 Start: 9737, Stop: 10419, Start Num: 42
Candidate Starts for Squiddly_18:
(Start: 42 @9737 has 137 MA's), (90, 9902), (100, 9956), (101, 9962), (102, 9965), (105, 9992), (122, 10094), (128, 10121), (146, 10196), (151, 10214), (156, 10238), (167, 10325), (169, 10331), (178, 10364), (183, 10379),

Gene: Squircle_14 Start: 9270, Stop: 9961, Start Num: 42
Candidate Starts for Squircle_14:
(Start: 42 @9270 has 137 MA's), (90, 9462), (102, 9522), (106, 9555), (115, 9606), (182, 9918), (185, 9927),

Gene: SteamedHams_17 Start: 8902, Stop: 9656, Start Num: 40
Candidate Starts for SteamedHams_17:
(Start: 40 @8902 has 44 MA's), (56, 8974), (58, 8980), (94, 9097), (99, 9121), (102, 9133), (105, 9160), (131, 9304), (134, 9313), (146, 9358), (167, 9499), (179, 9541), (197, 9646),

Gene: Stellammi_12 Start: 7669, Stop: 8342, Start Num: 51
Candidate Starts for Stellammi_12:
(Start: 51 @7669 has 1 MA's), (58, 7717), (71, 7747), (72, 7750), (81, 7783), (83, 7792), (88, 7807), (96, 7840), (101, 7864), (131, 8032), (140, 8068), (155, 8125), (163, 8167), (171, 8227), (173, 8233), (187, 8278), (190, 8293), (194, 8332),

Gene: Stoor_14 Start: 9460, Stop: 10151, Start Num: 42
Candidate Starts for Stoor_14:
(Start: 42 @9460 has 137 MA's), (80, 9610), (94, 9664), (102, 9700), (161, 10000),

Gene: Stromboli_14 Start: 9463, Stop: 10154, Start Num: 42
Candidate Starts for Stromboli_14:
(Start: 42 @9463 has 137 MA's), (80, 9613), (94, 9667), (102, 9703), (153, 9961), (161, 10003),

Gene: StuartMinion_14 Start: 9092, Stop: 9816, Start Num: 42
Candidate Starts for StuartMinion_14:
(Start: 42 @9092 has 137 MA's), (55, 9152), (93, 9341), (102, 9380), (106, 9413), (150, 9617),

Gene: SummitAcademy_14 Start: 8711, Stop: 9459, Start Num: 40
Candidate Starts for SummitAcademy_14:
(Start: 40 @8711 has 44 MA's), (56, 8783), (94, 8906), (99, 8930), (102, 8942), (106, 8975), (123, 9074), (170, 9305), (174, 9323), (199, 9452),

Gene: SunnyD_13 Start: 8829, Stop: 9529, Start Num: 42
Candidate Starts for SunnyD_13:
(Start: 42 @8829 has 137 MA's), (75, 8958), (102, 9081), (115, 9165), (142, 9297),

Gene: Supakev_13 Start: 8976, Stop: 9733, Start Num: 12
Candidate Starts for Supakev_13:
(Start: 11 @8967 has 13 MA's), (Start: 12 @8976 has 62 MA's), (34, 9069), (61, 9183), (74, 9210), (77, 9225), (97, 9297), (120, 9435), (134, 9489), (156, 9576), (164, 9621), (166, 9651),

Gene: Suppi_17 Start: 11875, Stop: 12641, Start Num: 12
Candidate Starts for Suppi_17:
(Start: 10 @11863 has 2 MA's), (Start: 12 @11875 has 62 MA's), (34, 11974), (38, 11986), (77, 12130), (97, 12202), (116, 12307), (139, 12418), (160, 12499), (162, 12517),

Gene: Survivors_17 Start: 9739, Stop: 10484, Start Num: 41
Candidate Starts for Survivors_17:
(37, 9730), (Start: 41 @9739 has 26 MA's), (54, 9799), (85, 9898), (94, 9934), (99, 9958), (102, 9970), (109, 10015), (126, 10108), (136, 10156), (137, 10162), (163, 10273), (166, 10318), (179, 10363), (196, 10453), (198, 10474),

Gene: SweatNTears_17 Start: 9383, Stop: 10137, Start Num: 40
Candidate Starts for SweatNTears_17:
(Start: 26 @9341 has 1 MA's), (Start: 40 @9383 has 44 MA's), (94, 9578), (99, 9602), (102, 9614), (105, 9641), (131, 9785), (134, 9794), (137, 9809), (197, 10127),

Gene: Swervy_14 Start: 9220, Stop: 9911, Start Num: 42
Candidate Starts for Swervy_14:
(Start: 42 @9220 has 137 MA's), (64, 9331), (86, 9394), (100, 9451), (102, 9460), (106, 9493), (136, 9652), (149, 9703),

Gene: TMaxx_16 Start: 8696, Stop: 9420, Start Num: 42
Candidate Starts for TMaxx_16:
(36, 8684), (Start: 42 @8696 has 137 MA's), (77, 8864), (84, 8894), (87, 8906), (99, 8972), (114, 9056), (119, 9089), (122, 9107), (128, 9134), (129, 9143), (132, 9152), (141, 9188), (150, 9221), (153, 9233), (156, 9245), (157, 9248), (180, 9371), (189, 9401),

Gene: Tarnish_15 Start: 9010, Stop: 9758, Start Num: 40
Candidate Starts for Tarnish_15:
(Start: 40 @9010 has 44 MA's), (56, 9082), (94, 9205), (99, 9229), (102, 9241), (113, 9310), (123, 9373), (170, 9604), (174, 9622), (199, 9751),

Gene: TattModd_17 Start: 11836, Stop: 12611, Start Num: 11
Candidate Starts for TattModd_17:
(4, 11662), (Start: 11 @11836 has 13 MA's), (Start: 12 @11845 has 62 MA's), (76, 12091), (77, 12100), (97, 12172), (116, 12277), (128, 12343), (160, 12469), (162, 12487), (164, 12499),

Gene: TaylorSipht_15 Start: 9540, Stop: 10261, Start Num: 42

Candidate Starts for TaylorSipht_15:
(29, 9516), (32, 9522), (Start: 42 @9540 has 137 MA's), (47, 9552), (66, 9660), (94, 9795), (106, 9864),

Gene: Teagster_13 Start: 8829, Stop: 9529, Start Num: 42
Candidate Starts for Teagster_13:
(Start: 42 @8829 has 137 MA's), (75, 8958), (102, 9081), (115, 9165), (142, 9297),

Gene: Temper16_13 Start: 8899, Stop: 9737, Start Num: 8
Candidate Starts for Temper16_13:
(Start: 8 @8899 has 4 MA's), (Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9073), (61, 9187), (77, 9229), (97, 9301), (116, 9406), (127, 9460), (144, 9532), (156, 9580), (162, 9613), (164, 9625), (182, 9706), (184, 9712),

Gene: Toad24_16 Start: 9656, Stop: 10377, Start Num: 42
Candidate Starts for Toad24_16:
(Start: 42 @9656 has 137 MA's), (47, 9668), (64, 9767), (101, 9941), (103, 9947), (106, 9977), (110, 9995), (121, 10064), (123, 10070), (146, 10163), (184, 10346),

Gene: Tolls_17 Start: 8905, Stop: 9659, Start Num: 40
Candidate Starts for Tolls_17:
(Start: 40 @8905 has 44 MA's), (56, 8977), (58, 8983), (94, 9100), (99, 9124), (102, 9136), (105, 9163), (131, 9307), (134, 9316), (146, 9361), (167, 9502), (179, 9544), (197, 9649),

Gene: TripleC_19 Start: 12205, Stop: 12926, Start Num: 42
Candidate Starts for TripleC_19:
(Start: 42 @12205 has 137 MA's), (69, 12331), (84, 12400), (99, 12478), (116, 12574), (122, 12613), (128, 12640), (129, 12649), (143, 12700), (150, 12727), (153, 12739), (189, 12907),

Gene: Troje_15 Start: 8815, Stop: 9611, Start Num: 26
Candidate Starts for Troje_15:
(Start: 26 @8815 has 1 MA's), (Start: 40 @8857 has 44 MA's), (94, 9052), (99, 9076), (102, 9088), (105, 9115), (131, 9259), (134, 9268), (197, 9601),

Gene: TukTuk_14 Start: 9280, Stop: 9971, Start Num: 42
Candidate Starts for TukTuk_14:
(Start: 42 @9280 has 137 MA's), (64, 9391), (86, 9454), (100, 9511), (102, 9520), (106, 9553), (121, 9649), (136, 9712),

Gene: Typhonomachy_15 Start: 8885, Stop: 9639, Start Num: 40
Candidate Starts for Typhonomachy_15:
(Start: 40 @8885 has 44 MA's), (56, 8969), (93, 9089), (94, 9092), (99, 9116), (102, 9128), (131, 9299), (154, 9389), (156, 9395), (174, 9509), (179, 9524), (193, 9605), (197, 9629),

Gene: Urla_12 Start: 8980, Stop: 9749, Start Num: 12
Candidate Starts for Urla_12:
(Start: 11 @8971 has 13 MA's), (Start: 12 @8980 has 62 MA's), (18, 9022), (74, 9223), (77, 9238), (97, 9310), (99, 9319), (116, 9415), (155, 9589), (162, 9625), (164, 9637),

Gene: Vallejo_17 Start: 11784, Stop: 12550, Start Num: 12
Candidate Starts for Vallejo_17:
(2, 11502), (Start: 11 @11775 has 13 MA's), (Start: 12 @11784 has 62 MA's), (Start: 45 @11904 has 8 MA's), (76, 12030), (77, 12039), (97, 12111), (116, 12216), (128, 12282), (160, 12408), (162, 12426), (164, 12438),

Gene: Vine_16 Start: 9640, Stop: 10388, Start Num: 40
Candidate Starts for Vine_16:
(Start: 40 @9640 has 44 MA's), (56, 9712), (94, 9835), (99, 9859), (102, 9871), (113, 9940), (123, 10003), (145, 10093), (170, 10234), (174, 10252), (199, 10381),

Gene: Vitas_13 Start: 8785, Stop: 9494, Start Num: 42
Candidate Starts for Vitas_13:
(Start: 42 @8785 has 137 MA's), (64, 8893), (102, 9025), (106, 9058), (161, 9325),

Gene: Vulpecula_15 Start: 10086, Stop: 10810, Start Num: 43
Candidate Starts for Vulpecula_15:
(Start: 43 @10086 has 11 MA's), (61, 10182), (68, 10215), (85, 10290), (103, 10377), (131, 10539),

Gene: Vulture_13 Start: 8974, Stop: 9731, Start Num: 12
Candidate Starts for Vulture_13:
(Start: 11 @8965 has 13 MA's), (Start: 12 @8974 has 62 MA's), (34, 9067), (61, 9181), (74, 9208), (77, 9223), (97, 9295), (120, 9433), (134, 9487), (156, 9574), (164, 9619), (166, 9649), (182, 9700),

Gene: Wawa_17 Start: 11821, Stop: 12587, Start Num: 12
Candidate Starts for Wawa_17:
(1, 11326), (2, 11539), (Start: 11 @11812 has 13 MA's), (Start: 12 @11821 has 62 MA's), (Start: 45 @11941 has 8 MA's), (76, 12067), (77, 12076), (97, 12148), (116, 12253), (128, 12319), (160, 12445), (162, 12463), (164, 12475),

Gene: Wayne_16 Start: 11921, Stop: 12687, Start Num: 12
Candidate Starts for Wayne_16:
(Start: 10 @11909 has 2 MA's), (Start: 12 @11921 has 62 MA's), (34, 12020), (38, 12032), (77, 12176), (97, 12248), (116, 12353), (139, 12464), (160, 12545), (162, 12563),

Gene: WileyE_14 Start: 9421, Stop: 10145, Start Num: 43
Candidate Starts for WileyE_14:
(Start: 43 @9421 has 11 MA's), (68, 9550), (85, 9625), (103, 9712), (106, 9742),

Gene: Wolfwood_17 Start: 9883, Stop: 10628, Start Num: 41
Candidate Starts for Wolfwood_17:
(37, 9874), (Start: 41 @9883 has 26 MA's), (49, 9913), (54, 9943), (94, 10078), (99, 10102), (102, 10114), (109, 10159), (126, 10252), (136, 10300), (137, 10306), (163, 10417), (166, 10462), (179, 10507), (196, 10597), (198, 10618),

Gene: WonderBoy_13 Start: 8935, Stop: 9704, Start Num: 12
Candidate Starts for WonderBoy_13:
(Start: 12 @8935 has 62 MA's), (50, 9088), (77, 9193), (97, 9265), (116, 9370), (157, 9550), (160, 9562), (162, 9580), (164, 9592),

Gene: Yakult_16 Start: 8776, Stop: 9506, Start Num: 45
Candidate Starts for Yakult_16:
(Start: 45 @8776 has 8 MA's), (49, 8803), (54, 8833), (56, 8845), (102, 9004), (106, 9037), (117, 9097), (124, 9136), (163, 9301), (166, 9346), (172, 9367), (174, 9376), (197, 9496),

Gene: Yarn_14 Start: 8895, Stop: 9649, Start Num: 40
Candidate Starts for Yarn_14:

(Start: 40 @8895 has 44 MA's), (56, 8967), (58, 8973), (94, 9090), (99, 9114), (102, 9126), (105, 9153), (131, 9297), (134, 9306), (146, 9351), (167, 9492), (179, 9534), (197, 9639),

Gene: Yucky_15 Start: 9500, Stop: 10248, Start Num: 40
Candidate Starts for Yucky_15:
(Start: 40 @9500 has 44 MA's), (56, 9572), (94, 9695), (99, 9719), (102, 9731), (113, 9800), (123, 9863), (145, 9953), (170, 10094), (174, 10112), (199, 10241),

Gene: Yummy_16 Start: 8771, Stop: 9525, Start Num: 40
Candidate Starts for Yummy_16:
(Start: 40 @8771 has 44 MA's), (94, 8966), (99, 8990), (102, 9002), (105, 9029), (131, 9173), (134, 9182), (137, 9197), (197, 9515),

Gene: Zareef_17 Start: 9885, Stop: 10630, Start Num: 41
Candidate Starts for Zareef_17:
(37, 9876), (Start: 41 @9885 has 26 MA's), (49, 9915), (54, 9945), (94, 10080), (99, 10104), (102, 10116), (109, 10161), (126, 10254), (136, 10302), (137, 10308), (163, 10419), (166, 10464), (179, 10509), (196, 10599), (198, 10620),

Gene: Zhuangyuan_16 Start: 9822, Stop: 10546, Start Num: 42
Candidate Starts for Zhuangyuan_16:
(Start: 42 @9822 has 137 MA's), (68, 9951), (89, 10047), (94, 10074), (96, 10083), (106, 10143), (114, 10182), (116, 10194), (117, 10200), (121, 10230), (128, 10260), (155, 10377), (164, 10425), (185, 10515), (191, 10539),

Gene: Zixiang_15 Start: 9448, Stop: 10169, Start Num: 42
Candidate Starts for Zixiang_15:
(17, 9370), (29, 9427), (32, 9433), (Start: 42 @9448 has 137 MA's), (47, 9460), (66, 9568), (73, 9604), (95, 9709), (101, 9736), (103, 9742), (106, 9772), (118, 9838), (121, 9859), (146, 9958), (160, 10024), (184, 10141),

Gene: Zorro_17 Start: 11791, Stop: 12566, Start Num: 11
Candidate Starts for Zorro_17:
(1, 11305), (2, 11518), (Start: 11 @11791 has 13 MA's), (Start: 12 @11800 has 62 MA's), (Start: 45 @11920 has 8 MA's), (76, 12046), (77, 12055), (97, 12127), (116, 12232), (128, 12298), (160, 12424), (162, 12442), (164, 12454),