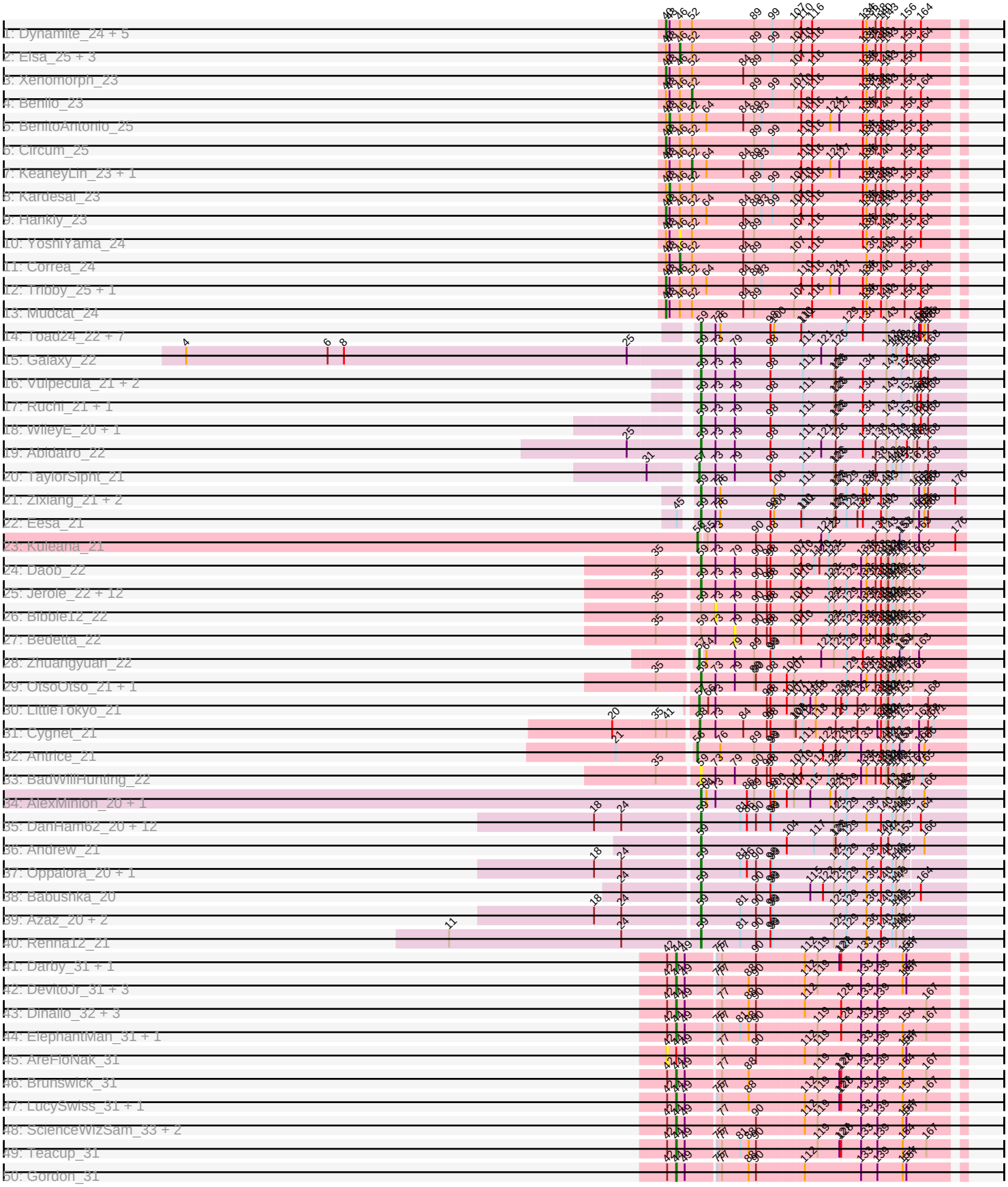
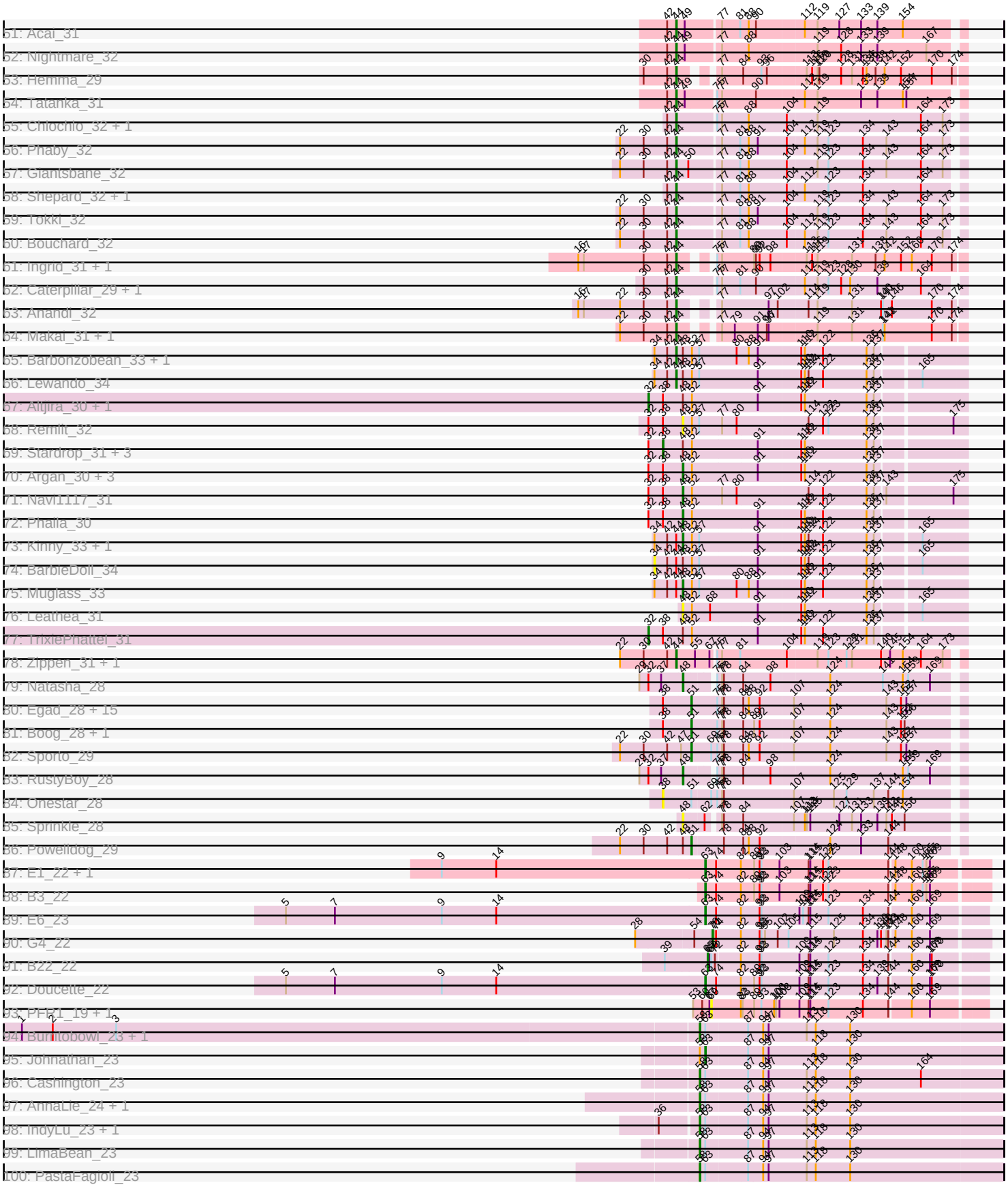
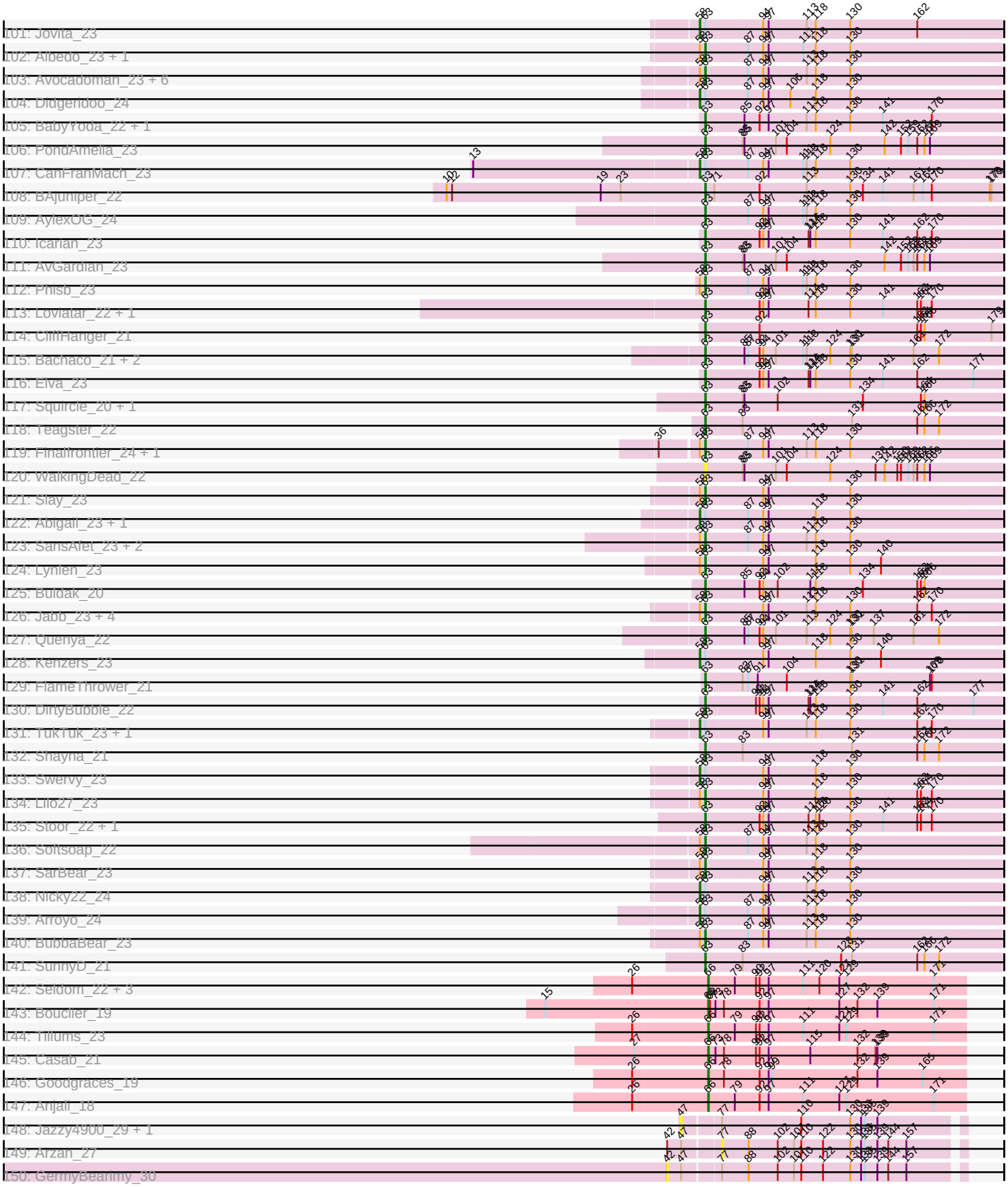
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1: Dynamite_24 + 5
2: Elsa_25 + 3
3: Xenomorph_23
4: Benilo_23
5: BenitoAntonio_25
6: Circum_25
7: KeaneyLin_23 + 1
8: Kardesai_23
9: Hankly_23
10: YoshiYama_24
11: Correa_24
12: Tribby_25 + 1
13: Mudcat_24
14: Toad24_22 + 7
15: Galaxy_22
16: Vulpecula_21 + 2
17: Ruchi_21 + 1
18: WileyE_20 + 1
19: Abidatro_22
20: TaylorSipht_21
21: Zixiang_21 + 2
22: Eesa_21
23: Kuleana_21
24: Daob_22
25: Jerole_22 + 12
26: Bibble12_22
27: Bedetta_22
28: Zhuangyuan_22
29: OtsoOtso_21 + 1
30: LittleTokyo_21
31: Cygnet_21
32: Antrice_21
33: BadWillHunting_22
34: AlexMinion_20 + 1
35: DanHam62_20 + 12
36: Andrew_21
37: Oppalora_20 + 1
38: Babushka_20
39: Azaz_20 + 2
40: Renna12_21
41: Darby_31 + 1
42: DevitoJr_31 + 3
43: Dinallo_32 + 3
44: ElephantMan_31 + 1
45: AreFloNak_31
46: Brunswick_31
47: LucySwiss_31 + 1
48: ScienceWizSam_33 + 2
49: Teacup_31
50: Gordon_31

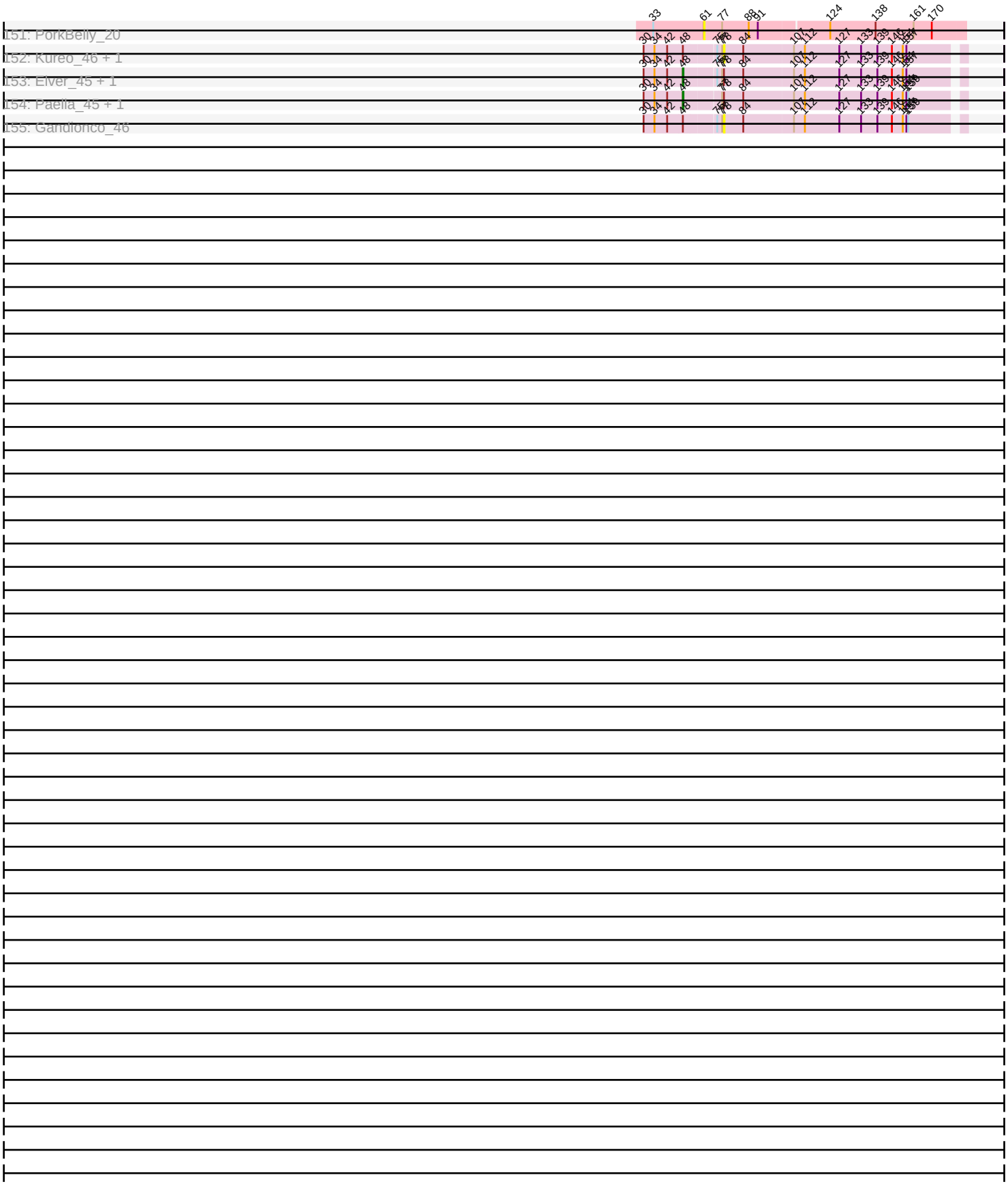
Pham 347188


51: Acai_31
52: Nightmare_32
53: Hemma_29
54: Tatanka_31
55: Chiochio_32 + 1
56: Phaby_32
57: Giantsbane_32
58: Shepard_32 + 1
59: Tokki_32
60: Bouchard_32
61: Ingrid_31 + 1
62: Caterpillar_29 + 1
63: Anandi_32
64: Makai_31 + 1
65: Barbonzobean_33 + 1
66: Lewando_34
67: Aljira_30 + 1
68: Remiit_32
69: Stardrop_31 + 3
70: Argan_30 + 3
71: Navi1117_31
72: Phalla_30
73: Kinny_33 + 1
74: BarbieDoll_34
75: Muglass_33
76: Leathea_31
77: TrixiePhattel_31
78: Zippen_31 + 1
79: Natasha_28
80: Egad_28 + 15
81: Boog_28 + 1
82: Sporto_29
83: RustyBoy_28
84: Onestar_28
85: Sprinkle_28
86: Powelldog_29
87: E1_22 + 1
88: B3_22
89: E6_23
90: G4_22
91: B22_22
92: Doucette_22
93: PFR1_19 + 1
94: Burritobowl_23 + 1
95: Jonnathan_23
96: Cashington_23
97: AnnaLie_24 + 1
98: IndyLu_23 + 1
99: LimaBean_23
100: PastaFagioli_23

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I01: Jovita_23
I02: Albedo_23 + 1
I03: Avocadoman_23 + 6
I04: Didgeridoo_24
I05: BabyYoda_22 + 1
I06: PondAmelia_23
I07: CanFranMach_23
I08: BAjuniper_22
I09: AylexOG_24
I10: Icarian_23
I11: AvGardian_23
I12: Phisb_23
I13: Loviatar_22 + 1
I14: CliffHanger_21
I15: Bachaco_21 + 2
I16: Elva_23
I17: Squircle_20 + 1
I18: Teagster_22
I19: FinalFrontier_24 + 1
I20: WalkingDead_22
I21: Slay_23
I22: Abigail_23 + 1
I23: SansAfet_23 + 2
I24: Lynlen_23
I25: Buldak_20
I26: Jabb_23 + 4
I27: Quenya_22
I28: Kenzers_23
I29: FlameThrower_21
I30: DirtyBubble_22
I31: TukTuk_23 + 1
I32: Shayna_21
I33: Swervy_23
I34: Lilo27_23
I35: Stoor_22 + 1
I36: Softsoap_22
I37: SarBear_23
I38: Nicky22_24
I39: Arroyo_24
I40: BubbaBear_23
I41: SunnyD_21
I42: Seldom_22 + 3
I43: Boucher_19
I44: Tillums_23
I45: Casab_21
I46: Goodgraces_19
I47: Anjali_18
I48: Jazzy4900_29 + 1
I49: Arzan_27
I50: GemmyBeanmy_30

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151: PorkBelly_20
152: Kureo_46 + 1
153: Elver_45 + 1
154: Paella_45 + 1
155: Gandionco_46

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 347188 Report

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

Pham number 347188 has 283 members, 43 are drafts.

Phages represented in each track:
• Track 1 : Dynamite_24, Mooshroom_24, Bowling_25, Heisenberger_24, NapoleonB_24, JEGGS_24
• Track 2 : Elsa_25, Arcadia_25, Nason_25, Stardom_23
• Track 3 : Xenomorph_23
• Track 4 : Benllo_23
• Track 5 : BenitoAntonio_25
• Track 6 : Circum_25
• Track 7 : KeaneyLin_23, GoCrazy_23
• Track 8 : Kardesai_23
• Track 9 : Hankly_23
• Track 10 : YoshiYama_24
• Track 11 : Correa_24
• Track 12 : Tribby_25, Cheesy_25
• Track 13 : Mudcat_24
• Track 14 : Toad24_22, Amanises_22, KendraB23_22, Shen_22, Westrich_22, Orcanus_21, Gravel_22, Pelletreau_22
• Track 15 : Galaxy_22
• Track 16 : Vulpecula_21, Jamun_21, Brynnie_21
• Track 17 : Ruchi_21, Basilisk_21
• Track 18 : WileyE_20, Chickaboom_20
• Track 19 : Abidatro_22
• Track 20 : TaylorSipht_21
• Track 21 : Zixiang_21, Niblet_21, Chicken_21
• Track 22 : Eesa_21
• Track 23 : Kuleana_21
• Track 24 : Daob_22
• Track 25 : Jerole_22, Amelia_22, HannahPhantana_22, Cote_22, Kepler_21, Colusalem_21, Lunar_22, Damocles_22, PhirstandPhine_22, GramZayde_21, Melons_22, Coral_21, Pineda_22
• Track 26 : Bibble12_22
• Track 27 : Bedetta_22
• Track 28 : Zhuangyuan_22
• Track 29 : OtsoOtso_21, Polka_21
• Track 30 : LittleTokyo_21
• Track 31 : Cygnet_21
• Track 32 : Antrice_21
• Track 33 : BadWillHunting_22

• Track 34 : AlexMinion_20, StuartMinion_20
• Track 35 : DanHam62_20, AdoptaAdorbs_20, Atlantica_20, Laphuphu24k_19, Camara_20, Fingolfin_20, Juno112_20, Glotell_20, KHumphrey_20, PhluffyCoco_20, Amphitrite_20, HamCheese_20, RedFox_20
• Track 36 : Andrew_21
• Track 37 : Oppalora_20, AmiCi24_20
• Track 38 : Babushka_20
• Track 39 : Azaz_20, Rattail_20, Leona_20
• Track 40 : Renna12_21
• Track 41 : Darby_31, Synepsis_30
• Track 42 : DevitoJr_31, CastorTray_33, Issa_31, Trustiboi_32
• Track 43 : Dinallo_32, CapnMurica_31, MiniBagel_31, Tenno_32
• Track 44 : ElephantMan_31, Niktson_31
• Track 45 : AreFloNak_31
• Track 46 : Brunswick_31
• Track 47 : LucySwiss_31, Westerlin_32
• Track 48 : ScienceWizSam_33, Breylor17_32, Nivinsha_31
• Track 49 : Teacup_31
• Track 50 : Gordon_31
• Track 51 : Acai_31
• Track 52 : Nightmare_32
• Track 53 : Hemma_29
• Track 54 : Tatanka_31
• Track 55 : Chlochlo_32, Tipton_32
• Track 56 : Phaby_32
• Track 57 : Giantsbane_32
• Track 58 : Shepard_32, LilHuddy_32
• Track 59 : Tokki_32
• Track 60 : Bouchard_32
• Track 61 : Ingrid_31, Loretta_31
• Track 62 : Caterpillar_29, MediumFry_29
• Track 63 : Anandi_32
• Track 64 : Makai_31, Truckee_30
• Track 65 : Barbonzobean_33, Biscute_32
• Track 66 : Lewando_34
• Track 67 : Altjira_30, Zeina_31
• Track 68 : Remlit_32
• Track 69 : Stardrop_31, KevinMinion_31, Mardi_32, Tenney120_31
• Track 70 : Argan_30, PoeMe_32, GantcherGoblin_30, Uzumaki_31
• Track 71 : Navi1117_31
• Track 72 : Phaila_30
• Track 73 : Kinny_33, Renaldo_36
• Track 74 : BarbieDoll_34
• Track 75 : Muglass_33
• Track 76 : Leathea_31
• Track 77 : TrixiePhattel_31
• Track 78 : Zippen_31, Inked_33
• Track 79 : Natasha_28
• Track 80 : Egad_28, Spain_27, StarLord_28, BronxBay_28, Salk_28, Raunak_28, Shiba_28, Jeremy4pt0_28, ProfFrink_28, Stayer_28, DoctorPepper_28, Linda_28, Michelle_28, MrAaronian_28, Sloopyjoe_28, Djungelskog_28
• Track 81 : Boog_28, HerbBucket_27
• Track 82 : Sporto_29

• Track 83 : RustyBoy_28
• Track 84 : Onestar_28
• Track 85 : Sprinkle_28
• Track 86 : Powelldog_29
• Track 87 : E1_22, Anatole_22
• Track 88 : B3_22
• Track 89 : E6_23
• Track 90 : G4_22
• Track 91 : B22_22
• Track 92 : Doucette_22
• Track 93 : PFR1_19, PFR2_21
• Track 94 : Burritobowl_23, DickRichards_23
• Track 95 : Johnathan_23
• Track 96 : Cashington_23
• Track 97 : AnnaLie_24, PhigPhack_24
• Track 98 : IndyLu_23, Kate33_23
• Track 99 : LimaBean_23
• Track 100 : PastaFagioli_23
• Track 101 : Jovita_23
• Track 102 : Albedo_23, SirBeanington_23
• Track 103 : Avocadoman_23, Bengal_23, CroZenni_23, Albright_23, Doobus_23, Milomuff_24, Solea_25
• Track 104 : Didgeridoo_24
• Track 105 : BabyYoda_22, Stromboli_22
• Track 106 : PondAmelia_23
• Track 107 : CanFranMach_23
• Track 108 : BAjuniper_22
• Track 109 : AylexOG_24
• Track 110 : Icarian_23
• Track 111 : AvGardian_23
• Track 112 : Phisb_23
• Track 113 : Loviatar_22, Akino08_21
• Track 114 : CliffHanger_21
• Track 115 : Bachaco_21, Katzastrophic_21, Celaena_21
• Track 116 : Elva_23
• Track 117 : Squircle_20, Olliecat_20
• Track 118 : Teagster_22
• Track 119 : Finalfrontier_24, Grist_23
• Track 120 : WalkingDead_22
• Track 121 : Slay_23
• Track 122 : Abigail_23, Lahqtemish_23
• Track 123 : SansAfet_23, BelmontSKP_24, BabyDaisy_24
• Track 124 : Lynlen_23
• Track 125 : Buldak_20
• Track 126 : Jabb_23, MsUbiquitous_23, Eula_23, Pecas_23, QMacho_24
• Track 127 : Quenya_22
• Track 128 : Kenzers_23
• Track 129 : FlameThrower_21
• Track 130 : DirtyBubble_22
• Track 131 : TukTuk_23, CupcakePrincess_23
• Track 132 : Shayna_21
• Track 133 : Swervy_23
• Track 134 : Lilo27_23

• Track 135 : Stoor_22, SanaSana_23
• Track 136 : Softsoap_22
• Track 137 : SarBear_23
• Track 138 : Nicky22_24
• Track 139 : Arroyo_24
• Track 140 : BubbaBear_23
• Track 141 : SunnyD_21
• Track 142 : Seldom_22, Mendel_20, Dunamis_21, Swim_23
• Track 143 : Bouclier_19
• Track 144 : Tillums_23
• Track 145 : Casab_21
• Track 146 : Goodgraces_19
• Track 147 : Anjali_18
• Track 148 : Jazzy4900_29, Sunny4976_28
• Track 149 : Arzan_27
• Track 150 : GermyBearimy_30
• Track 151 : PorkBelly_20
• Track 152 : Kureo_46, Marianna39_46
• Track 153 : Elver_45, JeNeSaisPas_44
• Track 154 : Paella_45, Qui_45
• Track 155 : Gandionco_46

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

The start number called the most often in the published annotations is 63, it was called in 54 of the 240 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akino08_21, Albedo_23, Albright_23, Anatole_22, AvGardian_23, Avocadoman_23, AylexOG_24, B3_22, BAjuniper_22, BabyDaisy_24, BabyYoda_22, Bachaco_21, BelmontSKP_24, Bengal_23, BubbaBear_23, Buldak_20, Celaena_21, CliffHanger_21, CroZenni_23, DirtyBubble_22, Doobus_23, Doucette_22, E1_22, E6_23, Elva_23, Eula_23, Finalfrontier_24, FlameThrower_21, Grist_23, Icarian_23, Jabb_23, Johnathan_23, Katzastrophic_21, Lilo27_23, Loviatar_22, Lynlen_23, Milomuff_24, MsUbiquitous_23, Olliecat_20, Pecas_23, Phisb_23, PondAmelia_23, QMacho_24, Quenya_22, SanaSana_23, SansAfet_23, SarBear_23, Shayna_21, SirBeanington_23, Slay_23, Softsoap_22, Solea_25, Squircle_20, Stoor_22, Stromboli_22, SunnyD_21, Teagster_22, WalkingDead_22,

Genes that have the "Most Annotated" start but do not call it:
• Abigail_23, AnnaLie_24, Arroyo_24, Burritobowl_23, CanFranMach_23, Cashington_23, CupcakePrincess_23, DickRichards_23, Didgeridoo_24, IndyLu_23, Jovita_23, Kate33_23, Kenzers_23, Lahqtemish_23, LimaBean_23, Nicky22_24, PastaFagioli_23, PhigPhack_24, Swervy_23, TukTuk_23,

Genes that do not have the "Most Annotated" start:
• Abidatro_22, Acai_31, AdoptaAdorbs_20, AlexMinion_20, Altjira_30, Amanises_22, Amelia_22, AmiCi24_20, Amphitrite_20, Anandi_32, Andrew_21, Anjali_18, Antrice_21, Arcadia_25, AreFloNak_31, Argan_30, Arzan_27, Atlantica_20, Azaz_20, B22_22, Babushka_20, BadWillHunting_22, BarbieDoll_34, Barbonzobean_33,

Basilisk_21, Bedetta_22, BenitoAntonio_25, Benllo_23, Bibble12_22, Biscute_32, Boog_28, Bouchard_32, Bouclier_19, Bowling_25, Breylor17_32, BronxBay_28, Brunswick_31, Brynnie_21, Camara_20, CapnMurica_31, Casab_21, CastorTray_33, Caterpillar_29, Cheesy_25, Chickaboom_20, Chicken_21, Chlochlo_32, Circum_25, Colusalem_21, Coral_21, Correa_24, Cote_22, Cygnet_21, Damocles_22, DanHam62_20, Daob_22, Darby_31, DevitoJr_31, Dinallo_32, Djungelskog_28, DoctorPepper_28, Dunamis_21, Dynamite_24, Eesa_21, Egad_28, ElephantMan_31, Elsa_25, Elver_45, Fingolfin_20, G4_22, Galaxy_22, Gandionco_46, GantcherGoblin_30, GermyBearimy_30, Giantsbane_32, Glotell_20, GoCrazy_23, Goodgraces_19, Gordon_31, GramZayde_21, Gravel_22, HamCheese_20, Hankly_23, HannahPhantana_22, Heisenberger_24, Hemma_29, HerbBucket_27, Ingrid_31, Inked_33, Issa_31, JEGGS_24, Jamun_21, Jazzy4900_29, JeNeSaisPas_44, Jeremy4pt0_28, Jerole_22, Juno112_20, KHumphrey_20, Kardesai_23, KeaneyLin_23, KendraB23_22, Kepler_21, KevinMinion_31, Kinny_33, Kuleana_21, Kureo_46, Laphuphu24k_19, Leathea_31, Leona_20, Lewando_34, LilHuddy_32, Linda_28, LittleTokyo_21, Loretta_31, LucySwiss_31, Lunar_22, Makai_31, Mardi_32, Marianna39_46, MediumFry_29, Melons_22, Mendel_20, Michelle_28, MiniBagel_31, Mooshroom_24, MrAaronian_28, Mudcat_24, Muglass_33, NapoleonB_24, Nason_25, Natasha_28, Navi1117_31, Niblet_21, Nightmare_32, Niktson_31, Nivinsha_31, Onestar_28, Oppalora_20, Orcanus_21, OtsoOtso_21, PFR1_19, PFR2_21, Paella_45, Pelletreau_22, Phaby_32, Phaila_30, PhirstandPhine_22, PhluffyCoco_20, Pineda_22, PoeMe_32, Polka_21, PorkBelly_20, Powelldog_29, ProfFrink_28, Qui_45, Rattail_20, Raunak_28, RedFox_20, Remlit_32, Renaldo_36, Renna12_21, Ruchi_21, RustyBoy_28, Salk_28, ScienceWizSam_33, Seldom_22, Shen_22, Shepard_32, Shiba_28, Sloopyjoe_28, Spain_27, Sporto_29, Sprinkle_28, StarLord_28, Stardom_23, Stardrop_31, Stayer_28, StuartMinion_20, Sunny4976_28, Swim_23, Synepsis_30, Tatanka_31, TaylorSipht_21, Teacup_31, Tenney120_31, Tenno_32, Tillums_23, Tipton_32, Toad24_22, Tokki_32, Tribby_25, TrixiePhattel_31, Truckee_30, Trustiboi_32, Uzumaki_31, Vulpecula_21, Westerlin_32, Westrich_22, WileyE_20, Xenomorph_23, YoshiYama_24, Zeina_31, Zhuangyuan_22, Zippen_31, Zixiang_21,

Summary by start number:

Start 32:
• Found in 16 of 283 (5.7%) of genes in pham
• Manual Annotations of this start: 2 of 240
• Called 18.8% of time when present
• Phage (with cluster) where this start called: Altjira_30 (AU6), TrixiePhattel_31 (AU6), Zeina_31 (AU6),

Start 34:
• Found in 14 of 283 (4.9%) of genes in pham
• No Manual Annotations of this start.
• Called 7.1% of time when present
• Phage (with cluster) where this start called: BarbieDoll_34 (AU6),

Start 38:
• Found in 33 of 283 (11.7%) of genes in pham
• Manual Annotations of this start: 3 of 240
• Called 15.2% of time when present
• Phage (with cluster) where this start called: KevinMinion_31 (AU6), Mardi_32 (AU6), Onestar_28 (AW), Stardrop_31 (AU6), Tenney120_31 (AU6),

Start 40:
• Found in 23 of 283 (8.1%) of genes in pham
• Manual Annotations of this start: 12 of 240
• Called 52.2% of time when present
• Phage (with cluster) where this start called: Bowling_25 (AM), Cheesy_25 (AM), Circum_25 (AM), Dynamite_24 (AM), Hankly_23 (AM), Heisenberger_24 (AM), JEGGS_24 (AM), Mooshroom_24 (AM), Mudcat_24 (AM), NapoleonB_24 (AM), Tribby_25 (AM), Xenomorph_23 (AM),

Start 42:
• Found in 60 of 283 (21.2%) of genes in pham
• No Manual Annotations of this start.
• Called 3.3% of time when present
• Phage (with cluster) where this start called: AreFloNak_31 (AU1), GermyBearimy_30 (FI),

Start 43:
• Found in 23 of 283 (8.1%) of genes in pham
• Manual Annotations of this start: 2 of 240
• Called 8.7% of time when present
• Phage (with cluster) where this start called: BenitoAntonio_25 (AM), Kardesai_23 (AM),

Start 44:
• Found in 49 of 283 (17.3%) of genes in pham
• Manual Annotations of this start: 41 of 240
• Called 89.8% of time when present
• Phage (with cluster) where this start called: Acai_31 (AU1), Anandi_32 (AU4), Barbonzobean_33 (AU6), Biscute_32 (AU6), Bouchard_32 (AU2), Breylor17_32 (AU1), Brunswick_31 (AU1), CapnMurica_31 (AU1), CastorTray_33 (AU1), Caterpillar_29 (AU4), Chlochlo_32 (AU2), Darby_31 (AU1), DevitoJr_31 (AU1), Dinallo_32 (AU1), ElephantMan_31 (AU1), Giantsbane_32 (AU2), Gordon_31 (AU1), Hemma_29 (AU1), Ingrid_31 (AU3), Inked_33 (AU7), Issa_31 (AU1), Lewando_34 (AU6), LilHuddy_32 (AU2), Loretta_31 (AU3), LucySwiss_31 (AU1), Makai_31 (AU5), MediumFry_29 (AU4), MiniBagel_31 (AU1), Nightmare_32 (AU1), Niktson_31 (AU1), Nivinsha_31 (AU1), Phaby_32 (AU2), ScienceWizSam_33 (AU1), Shepard_32 (AU2), Synepsis_30 (AU1), Tatanka_31 (AU1), Teacup_31 (AU1), Tenno_32 (AU1), Tipton_32 (AU2), Tokki_32 (AU2), Truckee_30 (AU5), Trustiboi_32 (AU1), Westerlin_32 (AU1), Zippen_31 (AU7),

Start 46:
• Found in 23 of 283 (8.1%) of genes in pham
• Manual Annotations of this start: 4 of 240
• Called 26.1% of time when present
• Phage (with cluster) where this start called: Arcadia_25 (AM), Correa_24 (AM), Elsa_25 (AM), Nason_25 (AM), Stardom_23 (AM), YoshiYama_24 (AM),

Start 47:
• Found in 5 of 283 (1.8%) of genes in pham
• No Manual Annotations of this start.
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Jazzy4900_29 (FI), Sunny4976_28 (FI),

Start 48:
• Found in 33 of 283 (11.7%) of genes in pham
• Manual Annotations of this start: 14 of 240
• Called 54.5% of time when present
• Phage (with cluster) where this start called: Argan_30 (AU6), Elver_45 (FK), GantcherGoblin_30 (AU6), JeNeSaisPas_44 (FK), Kinny_33 (AU6), Leathea_31 (AU6), Muglass_33 (AU6), Natasha_28 (AW), Navi1117_31 (AU6), Paella_45 (FK), Phaila_30 (AU6), PoeMe_32 (AU6), Qui_45 (FK), Remlit_32 (AU6), Renaldo_36 (AU6), RustyBoy_28 (AW), Sprinkle_28 (AW), Uzumaki_31 (AU6),

Start 51:
• Found in 21 of 283 (7.4%) of genes in pham
• Manual Annotations of this start: 18 of 240
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Boog_28 (AW), BronxBay_28 (AW), Djungelskog_28 (AW), DoctorPepper_28 (AW), Egad_28 (AW), HerbBucket_27 (AW), Jeremy4pt0_28 (AW), Linda_28 (AW), Michelle_28 (AW), MrAaronian_28 (AW), Powelldog_29 (AW), ProfFrink_28 (AW), Raunak_28 (AW), Salk_28 (AW), Shiba_28 (AW), Sloopyjoe_28 (AW), Spain_27 (AW), Sporto_29 (AW), StarLord_28 (AW), Stayer_28 (AW),

Start 52:
• Found in 45 of 283 (15.9%) of genes in pham
• Manual Annotations of this start: 3 of 240
• Called 6.7% of time when present
• Phage (with cluster) where this start called: Benllo_23 (AM), GoCrazy_23 (AM), KeaneyLin_23 (AM),

Start 56:
• Found in 2 of 283 (0.7%) of genes in pham
• Manual Annotations of this start: 2 of 240
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antrice_21 (AS2), Kuleana_21 (AS2),

Start 57:
• Found in 11 of 283 (3.9%) of genes in pham
• Manual Annotations of this start: 3 of 240
• Called 27.3% of time when present
• Phage (with cluster) where this start called: LittleTokyo_21 (AS2), TaylorSipht_21 (AS1), Zhuangyuan_22 (AS2),

Start 58:
• Found in 48 of 283 (17.0%) of genes in pham
• Manual Annotations of this start: 21 of 240
• Called 43.8% of time when present
• Phage (with cluster) where this start called: Abigail_23 (EB), AnnaLie_24 (EB), Arroyo_24 (EB), Burritobowl_23 (EB), CanFranMach_23 (EB), Cashington_23 (EB), CupcakePrincess_23 (EB), Cygnet_21 (AS2), DickRichards_23 (EB), Didgeridoo_24 (EB), IndyLu_23 (EB), Jovita_23 (EB), Kate33_23 (EB), Kenzers_23 (EB), Lahqtemish_23 (EB), LimaBean_23 (EB), Nicky22_24 (EB), PastaFagioli_23 (EB), PhigPhack_24 (EB), Swervy_23 (EB), TukTuk_23 (EB),

Start 59:
• Found in 63 of 283 (22.3%) of genes in pham
• Manual Annotations of this start: 50 of 240
• Called 96.8% of time when present
• Phage (with cluster) where this start called: Abidatro_22 (AS1), AdoptaAdorbs_20 (AS3), AlexMinion_20 (AS3), Amanises_22 (AS1), Amelia_22 (AS2), AmiCi24_20 (AS3), Amphitrite_20 (AS3), Andrew_21 (AS3), Atlantica_20 (AS3), Azaz_20 (AS3), Babushka_20 (AS3), BadWillHunting_22 (AS2), Basilisk_21 (AS1), Brynnie_21 (AS1), Camara_20 (AS3), Chickaboom_20 (AS1), Chicken_21 (AS1), Colusalem_21 (AS2), Coral_21 (AS2), Cote_22 (AS2), Damocles_22 (AS2), DanHam62_20 (AS3), Daob_22 (AS2), Eesa_21 (AS1), Fingolfin_20 (AS3), Galaxy_22 (AS1), Glotell_20 (AS3), GramZayde_21 (AS2), Gravel_22 (AS1), HamCheese_20 (AS3), HannahPhantana_22 (AS2), Jamun_21 (AS1), Jerole_22 (AS2), Juno112_20 (AS3), KHumphrey_20 (AS3), KendraB23_22 (AS1), Kepler_21 (AS2), Laphuphu24k_19 (AS3), Leona_20 (AS3), Lunar_22 (AS2), Melons_22 (AS2), Niblet_21 (AS1), Oppalora_20 (AS3), Orcanus_21 (AS1), OtsoOtso_21 (AS2), Pelletreau_22 (AS1), PhirstandPhine_22 (AS2), PhluffyCoco_20 (AS3), Pineda_22 (AS2), Polka_21 (AS2), Rattail_20 (AS3), RedFox_20 (AS3), Renna12_21 (AS3), Ruchi_21 (AS1), Shen_22 (AS1), StuartMinion_20 (AS3), Toad24_22 (AS1), Vulpecula_21 (AS1), Westrich_22 (AS1), WileyE_20 (AS1), Zixiang_21 (AS1),

Start 61:
• Found in 1 of 283 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PorkBelly_20 (FJ),

Start 63:
• Found in 78 of 283 (27.6%) of genes in pham
• Manual Annotations of this start: 54 of 240
• Called 74.4% of time when present
• Phage (with cluster) where this start called: Akino08_21 (EB), Albedo_23 (EB), Albright_23 (EB), Anatole_22 (BV), AvGardian_23 (EB), Avocadoman_23 (EB), AylexOG_24 (EB), B3_22 (BV), BAjuniper_22 (EB), BabyDaisy_24 (EB), BabyYoda_22 (EB), Bachaco_21 (EB), BelmontSKP_24 (EB), Bengal_23 (EB), BubbaBear_23 (EB), Buldak_20 (EB), Celaena_21 (EB), CliffHanger_21 (EB), CroZenni_23 (EB), DirtyBubble_22 (EB), Doobus_23 (EB), Doucette_22 (BW), E1_22 (BV), E6_23 (BW), Elva_23 (EB), Eula_23 (EB), Finalfrontier_24 (EB), FlameThrower_21 (EB), Grist_23 (EB), Icarian_23 (EB), Jabb_23 (EB), Johnathan_23 (EB), Katzastrophic_21 (EB), Lilo27_23 (EB), Loviatar_22 (EB), Lynlen_23 (EB), Milomuff_24 (EB), MsUbiquitous_23 (EB), Olliecat_20 (EB), Pecas_23 (EB), Phisb_23 (EB), PondAmelia_23 (EB), QMacho_24 (EB), Quenya_22 (EB), SanaSana_23 (EB), SansAfet_23 (EB), SarBear_23 (EB), Shayna_21 (EB), SirBeanington_23 (EB), Slay_23 (EB), Softsoap_22 (EB), Solea_25 (EB), Squircle_20 (EB), Stoor_22 (EB), Stromboli_22 (EB), SunnyD_21 (EB), Teagster_22 (EB), WalkingDead_22 (EB),

Start 65:
• Found in 2 of 283 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 240
• Called 50.0% of time when present
• Phage (with cluster) where this start called: B22_22 (BW),

Start 66:
• Found in 10 of 283 (3.5%) of genes in pham
• Manual Annotations of this start: 9 of 240
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Anjali_18 (FD), Bouclier_19 (FD), Casab_21 (FD), Dunamis_21 (FD), Goodgraces_19 (FD), Mendel_20 (FD), Seldom_22 (FD), Swim_23 (FD), Tillums_23 (FD),

Start 69:
• Found in 5 of 283 (1.8%) of genes in pham
• No Manual Annotations of this start.
• Called 40.0% of time when present
• Phage (with cluster) where this start called: PFR1_19 (BX), PFR2_21 (BX),

Start 70:
• Found in 1 of 283 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 240
• Called 100.0% of time when present
• Phage (with cluster) where this start called: G4_22 (BW),

Start 73:
• Found in 48 of 283 (17.0%) of genes in pham
• No Manual Annotations of this start.
• Called 2.1% of time when present
• Phage (with cluster) where this start called: Bibble12_22 (AS2),

Start 77:
• Found in 79 of 283 (27.9%) of genes in pham
• No Manual Annotations of this start.
• Called 1.3% of time when present
• Phage (with cluster) where this start called: Arzan_27 (FI),

Start 78:
• Found in 34 of 283 (12.0%) of genes in pham
• No Manual Annotations of this start.
• Called 8.8% of time when present
• Phage (with cluster) where this start called: Gandionco_46 (FK), Kureo_46 (FK), Marianna39_46 (FK),

Start 79:
• Found in 38 of 283 (13.4%) of genes in pham
• No Manual Annotations of this start.
• Called 2.6% of time when present
• Phage (with cluster) where this start called: Bedetta_22 (AS2),

Summary by clusters:

There are 20 clusters represented in this pham: BW, AS3, AS1, FI, AU7, AS2, AM, BV, EB, AU1, AU3, AU2, FD, AU4, AW, AU6, AU5, FJ, FK, BX,

Info for manual annotations of cluster AM:
•Start number 40 was manually annotated 12 times for cluster AM.
•Start number 43 was manually annotated 2 times for cluster AM.

•Start number 46 was manually annotated 4 times for cluster AM.
•Start number 52 was manually annotated 3 times for cluster AM.

Info for manual annotations of cluster AS1:
•Start number 57 was manually annotated 1 time for cluster AS1.
•Start number 59 was manually annotated 17 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 56 was manually annotated 2 times for cluster AS2.
•Start number 57 was manually annotated 2 times for cluster AS2.
•Start number 58 was manually annotated 1 time for cluster AS2.
•Start number 59 was manually annotated 14 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 59 was manually annotated 19 times for cluster AS3.

Info for manual annotations of cluster AU1:
•Start number 44 was manually annotated 21 times for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 44 was manually annotated 8 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 44 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:
•Start number 44 was manually annotated 3 times for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 44 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:
•Start number 32 was manually annotated 2 times for cluster AU6.
•Start number 38 was manually annotated 3 times for cluster AU6.
•Start number 44 was manually annotated 3 times for cluster AU6.
•Start number 48 was manually annotated 8 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 44 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:
•Start number 48 was manually annotated 2 times for cluster AW.
•Start number 51 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster BV:
•Start number 63 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:
•Start number 63 was manually annotated 2 times for cluster BW.
•Start number 65 was manually annotated 1 time for cluster BW.
•Start number 70 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster EB:
•Start number 58 was manually annotated 20 times for cluster EB.
•Start number 63 was manually annotated 49 times for cluster EB.

Info for manual annotations of cluster FD:
•Start number 66 was manually annotated 9 times for cluster FD.

Info for manual annotations of cluster FK:
•Start number 48 was manually annotated 4 times for cluster FK.

Gene Information:

Gene: Abidatro_22 Start: 17270, Stop: 17692, Start Num: 59
Candidate Starts for Abidatro_22:
(25, 17150), (Start: 59 @17270 has 50 MA's), (73, 17294), (79, 17324), (98, 17381), (111, 17432), (121, 17459), (126, 17483), (134, 17528), (138, 17549), (143, 17567), (149, 17582), (158, 17600), (161, 17606), (162, 17612), (168, 17630),

Gene: Abigail_23 Start: 18912, Stop: 19403, Start Num: 58
Candidate Starts for Abigail_23:
(Start: 58 @18912 has 21 MA's), (Start: 63 @18921 has 54 MA's), (87, 18987), (94, 19011), (97, 19020), (118, 19098), (130, 19155),

Gene: Acai_31 Start: 27716, Stop: 28159, Start Num: 44
Candidate Starts for Acai_31:
(42, 27701), (Start: 44 @27716 has 41 MA's), (49, 27728), (77, 27779), (81, 27809), (88, 27821), (90, 27833), (112, 27908), (119, 27929), (127, 27965), (133, 28001), (139, 28028), (154, 28070),

Gene: AdoptaAdorbs_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for AdoptaAdorbs_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Akino08_21 Start: 19409, Stop: 19891, Start Num: 63
Candidate Starts for Akino08_21:
(Start: 63 @19409 has 54 MA's), (92, 19493), (94, 19499), (97, 19508), (114, 19574), (118, 19586), (130, 19643), (141, 19697), (162, 19754), (164, 19760), (170, 19778),

Gene: Albedo_23 Start: 18798, Stop: 19280, Start Num: 63
Candidate Starts for Albedo_23:
(Start: 58 @18789 has 21 MA's), (Start: 63 @18798 has 54 MA's), (87, 18864), (94, 18888), (97, 18897), (111, 18954), (118, 18975), (130, 19032),

Gene: Albright_23 Start: 18679, Stop: 19161, Start Num: 63
Candidate Starts for Albright_23:
(Start: 58 @18670 has 21 MA's), (Start: 63 @18679 has 54 MA's), (87, 18745), (94, 18769), (97, 18778), (113, 18841), (118, 18856), (130, 18913),

Gene: AlexMinion_20 Start: 15817, Stop: 16239, Start Num: 59
Candidate Starts for AlexMinion_20:
(Start: 59 @15817 has 50 MA's), (64, 15826), (73, 15841), (86, 15889), (89, 15901), (98, 15928), (100, 15934), (104, 15952), (107, 15964), (115, 15991), (124, 16021), (126, 16030), (129, 16048), (143, 16114), (149, 16129), (153, 16138), (155, 16141), (166, 16171),

Gene: Altjira_30 Start: 26927, Stop: 27430, Start Num: 32
Candidate Starts for Altjira_30:
(Start: 32 @26927 has 2 MA's), (Start: 38 @26951 has 3 MA's), (Start: 48 @26984 has 14 MA's), (Start: 52 @26999 has 3 MA's), (91, 27104), (110, 27173), (112, 27179), (136, 27281), (137, 27293),

Gene: Amanises_22 Start: 17352, Stop: 17774, Start Num: 59
Candidate Starts for Amanises_22:
(Start: 59 @17352 has 50 MA's), (73, 17376), (76, 17382), (98, 17463), (100, 17469), (110, 17511), (111, 17514), (129, 17583), (134, 17610), (143, 17649), (161, 17688), (163, 17697), (164, 17700), (166, 17706), (168, 17712),

Gene: Amelia_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Amelia_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: AmiCi24_20 Start: 15770, Stop: 16192, Start Num: 59
Candidate Starts for AmiCi24_20:
(18, 15605), (24, 15650), (Start: 59 @15770 has 50 MA's), (81, 15833), (86, 15842), (90, 15857), (98, 15881), (99, 15884), (125, 15980), (129, 16001), (136, 16034), (140, 16058), (147, 16076), (149, 16082), (155, 16094),

Gene: Amphitrite_20 Start: 15770, Stop: 16192, Start Num: 59
Candidate Starts for Amphitrite_20:
(18, 15605), (24, 15650), (Start: 59 @15770 has 50 MA's), (81, 15833), (86, 15842), (90, 15857), (98, 15881), (99, 15884), (125, 15980), (129, 16001), (136, 16034), (140, 16058), (147, 16076), (149, 16082), (155, 16094), (164, 16118),

Gene: Anandi_32 Start: 28281, Stop: 28712, Start Num: 44
Candidate Starts for Anandi_32:
(16, 28119), (17, 28128), (22, 28188), (30, 28227), (42, 28266), (Start: 44 @28281 has 41 MA's), (77, 28320), (97, 28395), (102, 28410), (114, 28455), (119, 28470), (131, 28527), (140, 28575), (141, 28578), (146, 28593), (170, 28659), (174, 28692),

Gene: Anatole_22 Start: 18350, Stop: 18799, Start Num: 63
Candidate Starts for Anatole_22:
(9, 17915), (14, 18005), (Start: 63 @18350 has 54 MA's), (74, 18368), (82, 18407), (89, 18428), (92, 18437), (93, 18440), (103, 18470), (114, 18518), (115, 18521), (122, 18539), (123, 18548), (144, 18647), (148, 18653), (160, 18680), (165, 18698), (167, 18704), (169, 18710),

Gene: Andrew_21 Start: 16213, Stop: 16635, Start Num: 59
Candidate Starts for Andrew_21:
(Start: 59 @16213 has 50 MA's), (104, 16348), (117, 16393), (125, 16423), (126, 16426), (129, 16444), (140, 16501), (144, 16513), (153, 16534), (166, 16567),

Gene: Anjali_18 Start: 14913, Stop: 15332, Start Num: 66
Candidate Starts for Anjali_18:
(26, 14790), (Start: 66 @14913 has 9 MA's), (79, 14955), (92, 14994), (97, 15009), (111, 15066), (127, 15123), (129, 15135), (171, 15279),

Gene: AnnaLie_24 Start: 19099, Stop: 19590, Start Num: 58
Candidate Starts for AnnaLie_24:
(Start: 58 @19099 has 21 MA's), (Start: 63 @19108 has 54 MA's), (87, 19174), (94, 19198), (97, 19207), (113, 19270), (118, 19285), (130, 19342),

Gene: Antrice_21 Start: 16736, Stop: 17161, Start Num: 56
Candidate Starts for Antrice_21:
(21, 16616), (Start: 56 @16736 has 2 MA's), (76, 16772), (89, 16826), (98, 16853), (99, 16856), (111, 16901), (122, 16931), (126, 16952), (129, 16970), (133, 16994), (140, 17027), (143, 17036), (147, 17045), (151, 17057), (153, 17060), (163, 17084), (166, 17093),

Gene: Arcadia_25 Start: 24095, Stop: 24541, Start Num: 46
Candidate Starts for Arcadia_25:
(Start: 40 @24074 has 12 MA's), (Start: 43 @24080 has 2 MA's), (Start: 46 @24095 has 4 MA's), (Start: 52 @24113 has 3 MA's), (89, 24212), (99, 24242), (107, 24275), (110, 24284), (116, 24302), (134, 24386), (136, 24392), (138, 24407), (140, 24416), (143, 24425), (156, 24455), (164, 24482),

Gene: AreFloNak_31 Start: 27662, Stop: 28120, Start Num: 42
Candidate Starts for AreFloNak_31:
(42, 27662), (Start: 44 @27677 has 41 MA's), (49, 27689), (77, 27740), (90, 27794), (112, 27869), (119, 27890), (133, 27962), (139, 27989), (154, 28031), (157, 28037),

Gene: Argan_30 Start: 26251, Stop: 26697, Start Num: 48
Candidate Starts for Argan_30:
(Start: 32 @26194 has 2 MA's), (Start: 38 @26218 has 3 MA's), (Start: 48 @26251 has 14 MA's), (Start: 52 @26266 has 3 MA's), (91, 26371), (110, 26440), (112, 26446), (136, 26548), (137, 26560),

Gene: Arroyo_24 Start: 19299, Stop: 19790, Start Num: 58
Candidate Starts for Arroyo_24:
(Start: 58 @19299 has 21 MA's), (Start: 63 @19308 has 54 MA's), (87, 19374), (94, 19398), (97, 19407), (113, 19470), (118, 19485), (130, 19542),

Gene: Arzan_27 Start: 25038, Stop: 25418, Start Num: 77
Candidate Starts for Arzan_27:
(42, 24963), (47, 24984), (77, 25038), (88, 25080), (102, 25128), (107, 25152), (110, 25161), (122, 25197), (130, 25242), (133, 25260), (135, 25266), (139, 25287), (144, 25305), (157, 25335),

Gene: Atlantica_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for Atlantica_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: AvGardian_23 Start: 19023, Stop: 19508, Start Num: 63
Candidate Starts for AvGardian_23:
(Start: 63 @19023 has 54 MA's), (83, 19080), (85, 19083), (101, 19134), (104, 19152), (142, 19314), (152, 19341), (159, 19353), (161, 19362), (162, 19368), (166, 19380), (169, 19389),

Gene: Avocadoman_23 Start: 18863, Stop: 19345, Start Num: 63
Candidate Starts for Avocadoman_23:
(Start: 58 @18854 has 21 MA's), (Start: 63 @18863 has 54 MA's), (87, 18929), (94, 18953), (97, 18962), (113, 19025), (118, 19040), (130, 19097),

Gene: AylexOG_24 Start: 19135, Stop: 19617, Start Num: 63
Candidate Starts for AylexOG_24:
(Start: 63 @19135 has 54 MA's), (87, 19201), (94, 19225), (97, 19234), (111, 19291), (113, 19297), (118, 19312), (130, 19369),

Gene: Azaz_20 Start: 15832, Stop: 16254, Start Num: 59
Candidate Starts for Azaz_20:
(18, 15667), (24, 15712), (Start: 59 @15832 has 50 MA's), (81, 15895), (90, 15919), (98, 15943), (99, 15946), (125, 16042), (129, 16063), (136, 16096), (140, 16120), (147, 16138), (149, 16144), (155, 16156),

Gene: B22_22 Start: 17579, Stop: 18019, Start Num: 65
Candidate Starts for B22_22:
(39, 17510), (Start: 65 @17579 has 1 MA's), (67, 17582), (69, 17585), (72, 17591), (82, 17630), (92, 17660), (93, 17663), (109, 17726), (114, 17741), (115, 17744), (123, 17771), (134, 17828), (144, 17870), (160, 17903), (169, 17933), (170, 17936),

Gene: B3_22 Start: 18353, Stop: 18802, Start Num: 63
Candidate Starts for B3_22:
(Start: 63 @18353 has 54 MA's), (74, 18371), (82, 18410), (89, 18431), (92, 18440), (93, 18443), (103, 18473), (114, 18521), (115, 18524), (122, 18542), (123, 18551), (144, 18650), (148, 18656), (160, 18683), (165, 18701), (167, 18707), (169, 18713),

Gene: BAjuniper_22 Start: 19495, Stop: 19983, Start Num: 63
Candidate Starts for BAjuniper_22:
(10, 19072), (12, 19081), (19, 19327), (23, 19360), (Start: 63 @19495 has 54 MA's), (71, 19510), (92, 19579), (113, 19657), (130, 19729), (134, 19750), (141, 19783), (161, 19834), (165, 19849), (170, 19864), (178, 19960), (179, 19963),

Gene: Babushka_20 Start: 15831, Stop: 16253, Start Num: 59
Candidate Starts for Babushka_20:
(24, 15711), (Start: 59 @15831 has 50 MA's), (90, 15918), (98, 15942), (99, 15945), (115, 16005), (122, 16023), (125, 16041), (129, 16062), (136, 16095), (140, 16119), (147, 16137), (149, 16143), (164, 16179),

Gene: BabyDaisy_24 Start: 18924, Stop: 19406, Start Num: 63
Candidate Starts for BabyDaisy_24:
(Start: 58 @18915 has 21 MA's), (Start: 63 @18924 has 54 MA's), (87, 18990), (94, 19014), (97, 19023), (113, 19086), (118, 19101), (130, 19158),

Gene: BabyYoda_22 Start: 19492, Stop: 19974, Start Num: 63
Candidate Starts for BabyYoda_22:
(Start: 63 @19492 has 54 MA's), (85, 19552), (92, 19576), (97, 19591), (113, 19654), (118, 19669), (130, 19726), (141, 19780), (170, 19861),

Gene: Bachaco_21 Start: 19551, Stop: 20033, Start Num: 63
Candidate Starts for Bachaco_21:

(Start: 63 @19551 has 54 MA's), (85, 19611), (87, 19617), (92, 19635), (94, 19641), (101, 19662), (111, 19707), (113, 19713), (124, 19752), (130, 19785), (131, 19788), (161, 19890), (172, 19932),

Gene: BadWillHunting_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for BadWillHunting_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (117, 16384), (123, 16405), (125, 16414), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540), (165, 16555),

Gene: BarbieDoll_34 Start: 28185, Stop: 28676, Start Num: 34
Candidate Starts for BarbieDoll_34:
(34, 28185), (42, 28206), (Start: 44 @28221 has 41 MA's), (Start: 48 @28230 has 14 MA's), (Start: 52 @28245 has 3 MA's), (Start: 57 @28257 has 3 MA's), (91, 28350), (110, 28419), (112, 28425), (114, 28431), (122, 28455), (136, 28527), (137, 28539), (165, 28605),

Gene: Barbonzobean_33 Start: 27816, Stop: 28271, Start Num: 44
Candidate Starts for Barbonzobean_33:
(34, 27780), (42, 27801), (Start: 44 @27816 has 41 MA's), (Start: 48 @27825 has 14 MA's), (Start: 52 @27840 has 3 MA's), (Start: 57 @27852 has 3 MA's), (80, 27912), (88, 27930), (91, 27945), (110, 28014), (112, 28020), (122, 28050), (136, 28122), (137, 28134),

Gene: Basilisk_21 Start: 17479, Stop: 17901, Start Num: 59
Candidate Starts for Basilisk_21:
(Start: 59 @17479 has 50 MA's), (73, 17503), (79, 17533), (98, 17590), (111, 17641), (125, 17689), (126, 17692), (134, 17737), (143, 17776), (153, 17800), (161, 17815), (162, 17821), (164, 17827), (168, 17839),

Gene: Bedetta_22 Start: 16258, Stop: 16626, Start Num: 79
Candidate Starts for Bedetta_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: BelmontSKP_24 Start: 19108, Stop: 19590, Start Num: 63
Candidate Starts for BelmontSKP_24:
(Start: 58 @19099 has 21 MA's), (Start: 63 @19108 has 54 MA's), (87, 19174), (94, 19198), (97, 19207), (113, 19270), (118, 19285), (130, 19342),

Gene: Bengal_23 Start: 18696, Stop: 19178, Start Num: 63
Candidate Starts for Bengal_23:
(Start: 58 @18687 has 21 MA's), (Start: 63 @18696 has 54 MA's), (87, 18762), (94, 18786), (97, 18795), (113, 18858), (118, 18873), (130, 18930),

Gene: BenitoAntonio_25 Start: 23696, Stop: 24157, Start Num: 43
Candidate Starts for BenitoAntonio_25:
(Start: 40 @23690 has 12 MA's), (Start: 43 @23696 has 2 MA's), (Start: 46 @23711 has 4 MA's), (Start: 52 @23729 has 3 MA's), (64, 23753), (84, 23810), (89, 23828), (93, 23840), (110, 23900), (116, 23918), (124, 23948), (127, 23963), (134, 24002), (136, 24008), (140, 24032), (156, 24071), (164, 24098),

Gene: Benllo_23 Start: 24013, Stop: 24441, Start Num: 52

Candidate Starts for Benllo_23:
(Start: 40 @23974 has 12 MA's), (Start: 43 @23980 has 2 MA's), (Start: 46 @23995 has 4 MA's), (Start: 52 @24013 has 3 MA's), (89, 24112), (99, 24142), (107, 24175), (110, 24184), (116, 24202), (134, 24286), (136, 24292), (138, 24307), (140, 24316), (143, 24325), (156, 24355), (164, 24382),

Gene: Bibble12_22 Start: 16231, Stop: 16629, Start Num: 73
Candidate Starts for Bibble12_22:
(35, 16141), (Start: 59 @16207 has 50 MA's), (73, 16231), (79, 16261), (90, 16294), (96, 16312), (98, 16318), (107, 16354), (110, 16366), (123, 16408), (125, 16417), (129, 16438), (133, 16462), (136, 16471), (138, 16486), (140, 16495), (143, 16504), (144, 16507), (147, 16513), (149, 16519), (155, 16531), (161, 16543),

Gene: Biscute_32 Start: 27867, Stop: 28322, Start Num: 44
Candidate Starts for Biscute_32:
(34, 27831), (42, 27852), (Start: 44 @27867 has 41 MA's), (Start: 48 @27876 has 14 MA's), (Start: 52 @27891 has 3 MA's), (Start: 57 @27903 has 3 MA's), (80, 27963), (88, 27981), (91, 27996), (110, 28065), (112, 28071), (122, 28101), (136, 28173), (137, 28185),

Gene: Boog_28 Start: 24847, Stop: 25275, Start Num: 51
Candidate Starts for Boog_28:
(Start: 38 @24805 has 3 MA's), (Start: 51 @24847 has 18 MA's), (75, 24889), (77, 24895), (78, 24898), (84, 24928), (89, 24946), (92, 24955), (107, 25009), (124, 25066), (143, 25159), (152, 25183), (156, 25189),

Gene: Bouchard_32 Start: 27859, Stop: 28302, Start Num: 44
Candidate Starts for Bouchard_32:
(22, 27766), (30, 27805), (42, 27844), (Start: 44 @27859 has 41 MA's), (77, 27922), (81, 27952), (88, 27964), (104, 28024), (112, 28051), (119, 28072), (123, 28090), (134, 28147), (143, 28186), (164, 28243), (173, 28279),

Gene: Bouclier_19 Start: 15162, Stop: 15575, Start Num: 66
Candidate Starts for Bouclier_19:
(15, 14898), (Start: 66 @15162 has 9 MA's), (68, 15165), (73, 15174), (78, 15186), (92, 15240), (97, 15255), (127, 15366), (132, 15396), (139, 15429), (171, 15522),

Gene: Bowling_25 Start: 23788, Stop: 24255, Start Num: 40
Candidate Starts for Bowling_25:
(Start: 40 @23788 has 12 MA's), (Start: 43 @23794 has 2 MA's), (Start: 46 @23809 has 4 MA's), (Start: 52 @23827 has 3 MA's), (89, 23926), (99, 23956), (107, 23989), (110, 23998), (116, 24016), (134, 24100), (136, 24106), (138, 24121), (140, 24130), (143, 24139), (156, 24169), (164, 24196),

Gene: Breylor17_32 Start: 28283, Stop: 28726, Start Num: 44
Candidate Starts for Breylor17_32:
(42, 28268), (Start: 44 @28283 has 41 MA's), (49, 28295), (77, 28346), (90, 28400), (112, 28475), (119, 28496), (133, 28568), (139, 28595), (154, 28637), (157, 28643),

Gene: BronxBay_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for BronxBay_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: Brunswick_31 Start: 27749, Stop: 28192, Start Num: 44

Candidate Starts for Brunswick_31:
(42, 27734), (Start: 44 @27749 has 41 MA's), (49, 27761), (77, 27812), (88, 27854), (119, 27962), (127, 27998), (128, 28001), (133, 28034), (139, 28061), (154, 28103), (167, 28142),

Gene: Brynnie_21 Start: 17291, Stop: 17713, Start Num: 59
Candidate Starts for Brynnie_21:
(Start: 59 @17291 has 50 MA's), (73, 17315), (79, 17345), (98, 17402), (111, 17453), (125, 17501), (126, 17504), (134, 17549), (143, 17588), (153, 17612), (161, 17627), (164, 17639), (168, 17651),

Gene: BubbaBear_23 Start: 18798, Stop: 19280, Start Num: 63
Candidate Starts for BubbaBear_23:
(Start: 58 @18789 has 21 MA's), (Start: 63 @18798 has 54 MA's), (87, 18864), (94, 18888), (97, 18897), (113, 18960), (118, 18975), (130, 19032),

Gene: Buldak_20 Start: 17465, Stop: 17950, Start Num: 63
Candidate Starts for Buldak_20:
(Start: 63 @17465 has 54 MA's), (85, 17525), (92, 17549), (94, 17555), (102, 17579), (115, 17633), (118, 17642), (134, 17720), (162, 17810), (164, 17816), (166, 17822),

Gene: Burritobowl_23 Start: 18855, Stop: 19346, Start Num: 58
Candidate Starts for Burritobowl_23:
(1, 17745), (2, 17796), (3, 17901), (Start: 58 @18855 has 21 MA's), (Start: 63 @18864 has 54 MA's), (87, 18930), (94, 18954), (97, 18963), (113, 19026), (118, 19041), (130, 19098),

Gene: Camara_20 Start: 15773, Stop: 16195, Start Num: 59
Candidate Starts for Camara_20:
(18, 15608), (24, 15653), (Start: 59 @15773 has 50 MA's), (81, 15836), (86, 15845), (90, 15860), (98, 15884), (99, 15887), (125, 15983), (129, 16004), (136, 16037), (140, 16061), (147, 16079), (149, 16085), (155, 16097), (164, 16121),

Gene: CanFranMach_23 Start: 18789, Stop: 19280, Start Num: 58
Candidate Starts for CanFranMach_23:
(13, 18423), (Start: 58 @18789 has 21 MA's), (Start: 63 @18798 has 54 MA's), (87, 18864), (94, 18888), (97, 18897), (111, 18954), (113, 18960), (118, 18975), (130, 19032),

Gene: CapnMurica_31 Start: 28835, Stop: 29278, Start Num: 44
Candidate Starts for CapnMurica_31:
(42, 28820), (Start: 44 @28835 has 41 MA's), (49, 28847), (77, 28898), (88, 28940), (90, 28952), (112, 29027), (128, 29087), (133, 29120), (139, 29147), (167, 29228),

Gene: Casab_21 Start: 15585, Stop: 15995, Start Num: 66
Candidate Starts for Casab_21:
(27, 15465), (Start: 66 @15585 has 9 MA's), (73, 15594), (78, 15606), (90, 15654), (92, 15660), (97, 15675), (115, 15741), (132, 15816), (138, 15846), (139, 15849),

Gene: Cashington_23 Start: 18704, Stop: 19195, Start Num: 58
Candidate Starts for Cashington_23:
(Start: 58 @18704 has 21 MA's), (Start: 63 @18713 has 54 MA's), (87, 18779), (94, 18803), (97, 18812), (113, 18875), (118, 18890), (130, 18947), (164, 19064),

Gene: CastorTray_33 Start: 28141, Stop: 28584, Start Num: 44
Candidate Starts for CastorTray_33:

(42, 28126), (Start: 44 @28141 has 41 MA's), (49, 28153), (75, 28198), (77, 28204), (88, 28246), (90, 28258), (112, 28333), (119, 28354), (133, 28426), (139, 28453), (154, 28495), (157, 28501),

Gene: Caterpillar_29 Start: 26915, Stop: 27358, Start Num: 44
Candidate Starts for Caterpillar_29:
(30, 26861), (42, 26900), (Start: 44 @26915 has 41 MA's), (75, 26972), (77, 26978), (81, 27008), (90, 27032), (112, 27107), (119, 27128), (123, 27146), (128, 27167), (130, 27182), (139, 27227), (164, 27299),

Gene: Celaena_21 Start: 19499, Stop: 19981, Start Num: 63
Candidate Starts for Celaena_21:
(Start: 63 @19499 has 54 MA's), (85, 19559), (87, 19565), (92, 19583), (94, 19589), (101, 19610), (111, 19655), (113, 19661), (124, 19700), (130, 19733), (131, 19736), (161, 19838), (172, 19880),

Gene: Cheesy_25 Start: 23789, Stop: 24256, Start Num: 40
Candidate Starts for Cheesy_25:
(Start: 40 @23789 has 12 MA's), (Start: 43 @23795 has 2 MA's), (Start: 46 @23810 has 4 MA's), (Start: 52 @23828 has 3 MA's), (64, 23852), (84, 23909), (89, 23927), (93, 23939), (110, 23999), (116, 24017), (124, 24047), (127, 24062), (134, 24101), (136, 24107), (140, 24131), (156, 24170), (164, 24197),

Gene: Chickaboom_20 Start: 16217, Stop: 16639, Start Num: 59
Candidate Starts for Chickaboom_20:
(Start: 59 @16217 has 50 MA's), (73, 16241), (79, 16271), (98, 16328), (111, 16379), (125, 16427), (126, 16430), (134, 16475), (143, 16514), (153, 16538), (161, 16553), (164, 16565), (168, 16577),

Gene: Chicken_21 Start: 17230, Stop: 17652, Start Num: 59
Candidate Starts for Chicken_21:
(Start: 59 @17230 has 50 MA's), (73, 17254), (76, 17260), (100, 17347), (111, 17392), (125, 17440), (126, 17443), (129, 17461), (134, 17488), (136, 17494), (140, 17518), (143, 17527), (161, 17566), (163, 17575), (166, 17584), (168, 17590), (176, 17635),

Gene: Chlochlo_32 Start: 27895, Stop: 28338, Start Num: 44
Candidate Starts for Chlochlo_32:
(42, 27880), (Start: 44 @27895 has 41 MA's), (75, 27952), (77, 27958), (88, 28000), (104, 28060), (119, 28108), (164, 28279), (173, 28315),

Gene: Circum_25 Start: 23796, Stop: 24263, Start Num: 40
Candidate Starts for Circum_25:
(Start: 40 @23796 has 12 MA's), (Start: 43 @23802 has 2 MA's), (Start: 46 @23817 has 4 MA's), (Start: 52 @23835 has 3 MA's), (89, 23934), (99, 23964), (110, 24006), (116, 24024), (134, 24108), (136, 24114), (138, 24129), (140, 24138), (143, 24147), (156, 24177), (164, 24204),

Gene: CliffHanger_21 Start: 17065, Stop: 17550, Start Num: 63
Candidate Starts for CliffHanger_21:
(Start: 63 @17065 has 54 MA's), (92, 17149), (162, 17410), (164, 17416), (166, 17422), (179, 17533),

Gene: Colusalem_21 Start: 16043, Stop: 16465, Start Num: 59
Candidate Starts for Colusalem_21:
(35, 15977), (Start: 59 @16043 has 50 MA's), (73, 16067), (79, 16097), (90, 16130), (96, 16148), (98, 16154), (107, 16190), (110, 16202), (123, 16244), (125, 16253), (129, 16274), (133, 16298), (136, 16307), (138, 16322), (140, 16331), (143, 16340), (144, 16343), (147, 16349), (149, 16355), (155, 16367), (161, 16379),

Gene: Coral_21 Start: 16043, Stop: 16465, Start Num: 59
Candidate Starts for Coral_21:
(35, 15977), (Start: 59 @16043 has 50 MA's), (73, 16067), (79, 16097), (90, 16130), (96, 16148), (98, 16154), (107, 16190), (110, 16202), (123, 16244), (125, 16253), (129, 16274), (133, 16298), (136, 16307), (138, 16322), (140, 16331), (143, 16340), (144, 16343), (147, 16349), (149, 16355), (155, 16367), (161, 16379),

Gene: Correa_24 Start: 23325, Stop: 23771, Start Num: 46
Candidate Starts for Correa_24:
(Start: 40 @23304 has 12 MA's), (Start: 43 @23310 has 2 MA's), (Start: 46 @23325 has 4 MA's), (Start: 52 @23343 has 3 MA's), (84, 23424), (89, 23442), (107, 23505), (116, 23532), (136, 23622), (140, 23646), (143, 23655), (156, 23685),

Gene: Cote_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Cote_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: CroZenni_23 Start: 18702, Stop: 19184, Start Num: 63
Candidate Starts for CroZenni_23:
(Start: 58 @18693 has 21 MA's), (Start: 63 @18702 has 54 MA's), (87, 18768), (94, 18792), (97, 18801), (113, 18864), (118, 18879), (130, 18936),

Gene: CupcakePrincess_23 Start: 18813, Stop: 19304, Start Num: 58
Candidate Starts for CupcakePrincess_23:
(Start: 58 @18813 has 21 MA's), (Start: 63 @18822 has 54 MA's), (94, 18912), (97, 18921), (113, 18984), (118, 18999), (130, 19056), (162, 19167), (170, 19191),

Gene: Cygnet_21 Start: 16846, Stop: 17268, Start Num: 58
Candidate Starts for Cygnet_21:
(20, 16714), (35, 16783), (41, 16801), (Start: 58 @16846 has 21 MA's), (73, 16870), (84, 16912), (96, 16951), (98, 16957), (107, 16993), (108, 16996), (111, 17008), (118, 17029), (126, 17059), (132, 17095), (139, 17128), (140, 17134), (143, 17143), (144, 17146), (147, 17152), (153, 17167), (163, 17191), (168, 17206), (171, 17215),

Gene: Damocles_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Damocles_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: DanHam62_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for DanHam62_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Daob_22 Start: 16207, Stop: 16629, Start Num: 59
Candidate Starts for Daob_22:

(35, 16141), (Start: 59 @16207 has 50 MA's), (73, 16231), (79, 16261), (90, 16294), (96, 16312), (98, 16318), (107, 16354), (110, 16366), (117, 16387), (120, 16393), (123, 16408), (125, 16417), (133, 16462), (136, 16471), (138, 16486), (140, 16495), (143, 16504), (144, 16507), (147, 16513), (149, 16519), (155, 16531), (161, 16543), (165, 16558),

Gene: Darby_31 Start: 27587, Stop: 28030, Start Num: 44
Candidate Starts for Darby_31:
(42, 27572), (Start: 44 @27587 has 41 MA's), (49, 27599), (75, 27644), (77, 27650), (90, 27704), (112, 27779), (119, 27800), (127, 27836), (128, 27839), (133, 27872), (139, 27899), (154, 27941), (157, 27947),

Gene: DevitoJr_31 Start: 27758, Stop: 28201, Start Num: 44
Candidate Starts for DevitoJr_31:
(42, 27743), (Start: 44 @27758 has 41 MA's), (49, 27770), (75, 27815), (77, 27821), (88, 27863), (90, 27875), (112, 27950), (119, 27971), (133, 28043), (139, 28070), (154, 28112), (157, 28118),

Gene: DickRichards_23 Start: 19185, Stop: 19676, Start Num: 58
Candidate Starts for DickRichards_23:
(1, 18075), (2, 18126), (3, 18231), (Start: 58 @19185 has 21 MA's), (Start: 63 @19194 has 54 MA's), (87, 19260), (94, 19284), (97, 19293), (113, 19356), (118, 19371), (130, 19428),

Gene: Didgeridoo_24 Start: 18917, Stop: 19408, Start Num: 58
Candidate Starts for Didgeridoo_24:
(Start: 58 @18917 has 21 MA's), (Start: 63 @18926 has 54 MA's), (87, 18992), (94, 19016), (97, 19025), (106, 19061), (118, 19103), (130, 19160),

Gene: Dinallo_32 Start: 28823, Stop: 29266, Start Num: 44
Candidate Starts for Dinallo_32:
(42, 28808), (Start: 44 @28823 has 41 MA's), (49, 28835), (77, 28886), (88, 28928), (90, 28940), (112, 29015), (128, 29075), (133, 29108), (139, 29135), (167, 29216),

Gene: DirtyBubble_22 Start: 19450, Stop: 19932, Start Num: 63
Candidate Starts for DirtyBubble_22:
(Start: 63 @19450 has 54 MA's), (90, 19528), (92, 19534), (94, 19540), (97, 19549), (114, 19615), (115, 19618), (118, 19627), (130, 19684), (141, 19738), (162, 19795), (177, 19885),

Gene: Djungelskog_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Djungelskog_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: DoctorPepper_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for DoctorPepper_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: Doobus_23 Start: 19030, Stop: 19512, Start Num: 63
Candidate Starts for Doobus_23:
(Start: 58 @19021 has 21 MA's), (Start: 63 @19030 has 54 MA's), (87, 19096), (94, 19120), (97, 19129), (113, 19192), (118, 19207), (130, 19264),

Gene: Doucette_22 Start: 18526, Stop: 18972, Start Num: 63
Candidate Starts for Doucette_22:
(5, 17833), (7, 17914), (9, 18091), (14, 18181), (Start: 63 @18526 has 54 MA's), (74, 18544), (82, 18583), (89, 18604), (92, 18613), (93, 18616), (109, 18679), (114, 18694), (115, 18697), (123, 18724), (134, 18781), (139, 18805), (144, 18823), (160, 18856), (169, 18886), (170, 18889),

Gene: Dunamis_21 Start: 15070, Stop: 15489, Start Num: 66
Candidate Starts for Dunamis_21:
(26, 14947), (Start: 66 @15070 has 9 MA's), (79, 15112), (90, 15145), (92, 15151), (97, 15166), (111, 15223), (120, 15247), (127, 15280), (129, 15292), (171, 15436),

Gene: Dynamite_24 Start: 23597, Stop: 24064, Start Num: 40
Candidate Starts for Dynamite_24:
(Start: 40 @23597 has 12 MA's), (Start: 43 @23603 has 2 MA's), (Start: 46 @23618 has 4 MA's), (Start: 52 @23636 has 3 MA's), (89, 23735), (99, 23765), (107, 23798), (110, 23807), (116, 23825), (134, 23909), (136, 23915), (138, 23930), (140, 23939), (143, 23948), (156, 23978), (164, 24005),

Gene: E1_22 Start: 18350, Stop: 18799, Start Num: 63
Candidate Starts for E1_22:
(9, 17915), (14, 18005), (Start: 63 @18350 has 54 MA's), (74, 18368), (82, 18407), (89, 18428), (92, 18437), (93, 18440), (103, 18470), (114, 18518), (115, 18521), (122, 18539), (123, 18548), (144, 18647), (148, 18653), (160, 18680), (165, 18698), (167, 18704), (169, 18710),

Gene: E6_23 Start: 18532, Stop: 18978, Start Num: 63
Candidate Starts for E6_23:
(5, 17839), (7, 17920), (9, 18097), (14, 18187), (Start: 63 @18532 has 54 MA's), (74, 18550), (82, 18589), (92, 18619), (93, 18622), (109, 18685), (111, 18691), (114, 18700), (115, 18703), (123, 18730), (134, 18787), (144, 18829), (160, 18862), (169, 18892),

Gene: Eesa_21 Start: 17444, Stop: 17866, Start Num: 59
Candidate Starts for Eesa_21:
(45, 17426), (Start: 59 @17444 has 50 MA's), (73, 17468), (76, 17474), (98, 17555), (100, 17561), (110, 17603), (111, 17606), (125, 17654), (126, 17657), (129, 17675), (132, 17693), (134, 17702), (140, 17732), (143, 17741), (161, 17780), (163, 17789), (166, 17798), (168, 17804),

Gene: Egad_28 Start: 24847, Stop: 25275, Start Num: 51
Candidate Starts for Egad_28:
(Start: 38 @24805 has 3 MA's), (Start: 51 @24847 has 18 MA's), (75, 24889), (77, 24895), (78, 24898), (84, 24928), (88, 24937), (92, 24955), (107, 25009), (124, 25066), (143, 25159), (152, 25183), (157, 25192),

Gene: ElephantMan_31 Start: 28289, Stop: 28732, Start Num: 44
Candidate Starts for ElephantMan_31:
(42, 28274), (Start: 44 @28289 has 41 MA's), (49, 28301), (75, 28346), (77, 28352), (81, 28382), (88, 28394), (90, 28406), (119, 28502), (128, 28541), (133, 28574), (139, 28601), (154, 28643), (167, 28682),

Gene: Elsa_25 Start: 24095, Stop: 24541, Start Num: 46
Candidate Starts for Elsa_25:
(Start: 40 @24074 has 12 MA's), (Start: 43 @24080 has 2 MA's), (Start: 46 @24095 has 4 MA's), (Start: 52 @24113 has 3 MA's), (89, 24212), (99, 24242), (107, 24275), (110, 24284), (116, 24302), (134, 24386), (136, 24392), (138, 24407), (140, 24416), (143, 24425), (156, 24455), (164, 24482),

Gene: Elva_23 Start: 19414, Stop: 19896, Start Num: 63
Candidate Starts for Elva_23:
(Start: 63 @19414 has 54 MA's), (92, 19498), (94, 19504), (97, 19513), (114, 19579), (115, 19582), (118, 19591), (130, 19648), (141, 19702), (162, 19759), (177, 19849),

Gene: Elver_45 Start: 36454, Stop: 36888, Start Num: 48
Candidate Starts for Elver_45:
(30, 36391), (34, 36409), (42, 36430), (Start: 48 @36454 has 14 MA's), (75, 36502), (77, 36508), (78, 36511), (84, 36541), (107, 36622), (112, 36637), (127, 36694), (133, 36730), (139, 36757), (146, 36781), (154, 36799), (157, 36805),

Gene: Eula_23 Start: 18783, Stop: 19265, Start Num: 63
Candidate Starts for Eula_23:
(Start: 58 @18774 has 21 MA's), (Start: 63 @18783 has 54 MA's), (94, 18873), (97, 18882), (113, 18945), (118, 18960), (130, 19017), (162, 19128), (170, 19152),

Gene: Finalfrontier_24 Start: 19290, Stop: 19772, Start Num: 63
Candidate Starts for Finalfrontier_24:
(36, 19221), (Start: 58 @19281 has 21 MA's), (Start: 63 @19290 has 54 MA's), (87, 19356), (94, 19380), (97, 19389), (113, 19452), (118, 19467), (130, 19524),

Gene: Fingolfin_20 Start: 15773, Stop: 16195, Start Num: 59
Candidate Starts for Fingolfin_20:
(18, 15608), (24, 15653), (Start: 59 @15773 has 50 MA's), (81, 15836), (86, 15845), (90, 15860), (98, 15884), (99, 15887), (125, 15983), (129, 16004), (136, 16037), (140, 16061), (147, 16079), (149, 16085), (155, 16097), (164, 16121),

Gene: FlameThrower_21 Start: 19016, Stop: 19501, Start Num: 63
Candidate Starts for FlameThrower_21:
(Start: 63 @19016 has 54 MA's), (83, 19073), (87, 19082), (91, 19097), (104, 19145), (130, 19250), (131, 19253), (169, 19382), (170, 19385),

Gene: G4_22 Start: 17744, Stop: 18184, Start Num: 70
Candidate Starts for G4_22:
(28, 17621), (54, 17714), (Start: 70 @17744 has 1 MA's), (71, 17747), (74, 17750), (82, 17789), (92, 17819), (93, 17822), (95, 17828), (102, 17849), (105, 17867), (115, 17903), (125, 17939), (134, 17987), (139, 18011), (140, 18017), (143, 18026), (144, 18029), (148, 18035), (160, 18062), (169, 18092),

Gene: Galaxy_22 Start: 17275, Stop: 17697, Start Num: 59
Candidate Starts for Galaxy_22:
(4, 16426), (6, 16660), (8, 16687), (25, 17155), (Start: 59 @17275 has 50 MA's), (73, 17299), (79, 17329), (98, 17386), (111, 17437), (121, 17464), (126, 17488), (143, 17572), (147, 17581), (149, 17587), (153, 17596), (158, 17605), (161, 17611), (168, 17635),

Gene: Gandionco_46 Start: 37033, Stop: 37410, Start Num: 78
Candidate Starts for Gandionco_46:
(30, 36913), (34, 36931), (42, 36952), (Start: 48 @36976 has 14 MA's), (75, 37024), (77, 37030), (78, 37033), (84, 37063), (107, 37144), (112, 37159), (127, 37216), (133, 37252), (139, 37279), (146, 37303), (154, 37321), (157, 37327), (159, 37330),

Gene: GantcherGoblin_30 Start: 26290, Stop: 26736, Start Num: 48
Candidate Starts for GantcherGoblin_30:

(Start: 32 @26233 has 2 MA's), (Start: 38 @26257 has 3 MA's), (Start: 48 @26290 has 14 MA's), (Start: 52 @26305 has 3 MA's), (91, 26410), (110, 26479), (112, 26485), (136, 26587), (137, 26599),

Gene: GermyBearimy_30 Start: 25394, Stop: 25849, Start Num: 42
Candidate Starts for GermyBearimy_30:
(42, 25394), (47, 25415), (77, 25469), (88, 25511), (102, 25559), (107, 25583), (110, 25592), (122, 25628), (130, 25673), (133, 25691), (135, 25697), (139, 25718), (144, 25736), (157, 25766),

Gene: Giantsbane_32 Start: 26755, Stop: 27198, Start Num: 44
Candidate Starts for Giantsbane_32:
(22, 26662), (30, 26701), (42, 26740), (Start: 44 @26755 has 41 MA's), (50, 26773), (77, 26818), (81, 26848), (88, 26860), (104, 26920), (119, 26968), (123, 26986), (134, 27043), (143, 27082), (164, 27139), (173, 27175),

Gene: Glotell_20 Start: 15770, Stop: 16192, Start Num: 59
Candidate Starts for Glotell_20:
(18, 15605), (24, 15650), (Start: 59 @15770 has 50 MA's), (81, 15833), (86, 15842), (90, 15857), (98, 15881), (99, 15884), (125, 15980), (129, 16001), (136, 16034), (140, 16058), (147, 16076), (149, 16082), (155, 16094), (164, 16118),

Gene: GoCrazy_23 Start: 23636, Stop: 24064, Start Num: 52
Candidate Starts for GoCrazy_23:
(Start: 40 @23597 has 12 MA's), (Start: 43 @23603 has 2 MA's), (Start: 46 @23618 has 4 MA's), (Start: 52 @23636 has 3 MA's), (64, 23660), (84, 23717), (89, 23735), (93, 23747), (110, 23807), (116, 23825), (124, 23855), (127, 23870), (134, 23909), (136, 23915), (140, 23939), (156, 23978), (164, 24005),

Gene: Goodgraces_19 Start: 15130, Stop: 15546, Start Num: 66
Candidate Starts for Goodgraces_19:
(26, 15007), (Start: 66 @15130 has 9 MA's), (78, 15154), (92, 15208), (97, 15223), (99, 15229), (132, 15367), (139, 15400), (165, 15475),

Gene: Gordon_31 Start: 28863, Stop: 29306, Start Num: 44
Candidate Starts for Gordon_31:
(42, 28848), (Start: 44 @28863 has 41 MA's), (49, 28875), (75, 28920), (77, 28926), (88, 28968), (90, 28980), (112, 29055), (133, 29148), (139, 29175), (154, 29217), (157, 29223),

Gene: GramZayde_21 Start: 16043, Stop: 16465, Start Num: 59
Candidate Starts for GramZayde_21:
(35, 15977), (Start: 59 @16043 has 50 MA's), (73, 16067), (79, 16097), (90, 16130), (96, 16148), (98, 16154), (107, 16190), (110, 16202), (123, 16244), (125, 16253), (129, 16274), (133, 16298), (136, 16307), (138, 16322), (140, 16331), (143, 16340), (144, 16343), (147, 16349), (149, 16355), (155, 16367), (161, 16379),

Gene: Gravel_22 Start: 17350, Stop: 17772, Start Num: 59
Candidate Starts for Gravel_22:
(Start: 59 @17350 has 50 MA's), (73, 17374), (76, 17380), (98, 17461), (100, 17467), (110, 17509), (111, 17512), (129, 17581), (134, 17608), (143, 17647), (161, 17686), (163, 17695), (164, 17698), (166, 17704), (168, 17710),

Gene: Grist_23 Start: 18748, Stop: 19230, Start Num: 63
Candidate Starts for Grist_23:

(36, 18679), (Start: 58 @18739 has 21 MA's), (Start: 63 @18748 has 54 MA's), (87, 18814), (94, 18838), (97, 18847), (113, 18910), (118, 18925), (130, 18982),

Gene: HamCheese_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for HamCheese_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Hankly_23 Start: 22819, Stop: 23286, Start Num: 40
Candidate Starts for Hankly_23:
(Start: 40 @22819 has 12 MA's), (Start: 43 @22825 has 2 MA's), (Start: 46 @22840 has 4 MA's), (Start: 52 @22858 has 3 MA's), (64, 22882), (84, 22939), (89, 22957), (93, 22969), (99, 22987), (107, 23020), (110, 23029), (116, 23047), (134, 23131), (136, 23137), (138, 23152), (140, 23161), (143, 23170), (156, 23200), (164, 23227),

Gene: HannahPhantana_22 Start: 16207, Stop: 16629, Start Num: 59
Candidate Starts for HannahPhantana_22:
(35, 16141), (Start: 59 @16207 has 50 MA's), (73, 16231), (79, 16261), (90, 16294), (96, 16312), (98, 16318), (107, 16354), (110, 16366), (123, 16408), (125, 16417), (129, 16438), (133, 16462), (136, 16471), (138, 16486), (140, 16495), (143, 16504), (144, 16507), (147, 16513), (149, 16519), (155, 16531), (161, 16543),

Gene: Heisenberger_24 Start: 23467, Stop: 23934, Start Num: 40
Candidate Starts for Heisenberger_24:
(Start: 40 @23467 has 12 MA's), (Start: 43 @23473 has 2 MA's), (Start: 46 @23488 has 4 MA's), (Start: 52 @23506 has 3 MA's), (89, 23605), (99, 23635), (107, 23668), (110, 23677), (116, 23695), (134, 23779), (136, 23785), (138, 23800), (140, 23809), (143, 23818), (156, 23848), (164, 23875),

Gene: Hemma_29 Start: 24206, Stop: 24637, Start Num: 44
Candidate Starts for Hemma_29:
(30, 24152), (42, 24191), (Start: 44 @24206 has 41 MA's), (77, 24245), (84, 24278), (93, 24308), (96, 24317), (113, 24377), (116, 24386), (119, 24395), (120, 24398), (128, 24434), (131, 24452), (134, 24470), (136, 24476), (138, 24491), (142, 24506), (152, 24533), (170, 24584), (174, 24617),

Gene: HerbBucket_27 Start: 24847, Stop: 25275, Start Num: 51
Candidate Starts for HerbBucket_27:
(Start: 38 @24805 has 3 MA's), (Start: 51 @24847 has 18 MA's), (75, 24889), (77, 24895), (78, 24898), (84, 24928), (89, 24946), (92, 24955), (107, 25009), (124, 25066), (143, 25159), (152, 25183), (156, 25189),

Gene: Icarian_23 Start: 19329, Stop: 19811, Start Num: 63
Candidate Starts for Icarian_23:
(Start: 63 @19329 has 54 MA's), (92, 19413), (94, 19419), (97, 19428), (114, 19494), (115, 19497), (118, 19506), (130, 19563), (141, 19617), (162, 19674), (170, 19698),

Gene: IndyLu_23 Start: 18736, Stop: 19227, Start Num: 58
Candidate Starts for IndyLu_23:
(36, 18676), (Start: 58 @18736 has 21 MA's), (Start: 63 @18745 has 54 MA's), (87, 18811), (94, 18835), (97, 18844), (113, 18907), (118, 18922), (130, 18979),

Gene: Ingrid_31 Start: 27486, Stop: 27917, Start Num: 44
Candidate Starts for Ingrid_31:

(16, 27324), (17, 27333), (30, 27432), (42, 27471), (Start: 44 @27486 has 41 MA's), (75, 27519), (77, 27525), (89, 27576), (90, 27579), (92, 27585), (98, 27603), (113, 27657), (116, 27666), (119, 27675), (131, 27732), (138, 27771), (142, 27786), (152, 27813), (160, 27831), (170, 27864), (174, 27897),

Gene: Inked_33 Start: 28494, Stop: 28937, Start Num: 44
Candidate Starts for Inked_33:
(22, 28401), (30, 28440), (42, 28479), (Start: 44 @28494 has 41 MA's), (55, 28521), (67, 28545), (75, 28551), (77, 28557), (81, 28587), (104, 28659), (119, 28707), (123, 28725), (129, 28755), (131, 28764), (140, 28812), (145, 28827), (154, 28848), (164, 28878), (173, 28914),

Gene: Issa_31 Start: 27567, Stop: 28010, Start Num: 44
Candidate Starts for Issa_31:
(42, 27552), (Start: 44 @27567 has 41 MA's), (49, 27579), (75, 27624), (77, 27630), (88, 27672), (90, 27684), (112, 27759), (119, 27780), (133, 27852), (139, 27879), (154, 27921), (157, 27927),

Gene: JEGGS_24 Start: 23521, Stop: 23988, Start Num: 40
Candidate Starts for JEGGS_24:
(Start: 40 @23521 has 12 MA's), (Start: 43 @23527 has 2 MA's), (Start: 46 @23542 has 4 MA's), (Start: 52 @23560 has 3 MA's), (89, 23659), (99, 23689), (107, 23722), (110, 23731), (116, 23749), (134, 23833), (136, 23839), (138, 23854), (140, 23863), (143, 23872), (156, 23902), (164, 23929),

Gene: Jabb_23 Start: 18822, Stop: 19304, Start Num: 63
Candidate Starts for Jabb_23:
(Start: 58 @18813 has 21 MA's), (Start: 63 @18822 has 54 MA's), (94, 18912), (97, 18921), (113, 18984), (118, 18999), (130, 19056), (162, 19167), (170, 19191),

Gene: Jamun_21 Start: 16885, Stop: 17307, Start Num: 59
Candidate Starts for Jamun_21:
(Start: 59 @16885 has 50 MA's), (73, 16909), (79, 16939), (98, 16996), (111, 17047), (125, 17095), (126, 17098), (134, 17143), (143, 17182), (153, 17206), (161, 17221), (164, 17233), (168, 17245),

Gene: Jazzy4900_29 Start: 26238, Stop: 26672, Start Num: 47
Candidate Starts for Jazzy4900_29:
(47, 26238), (77, 26292), (110, 26415), (130, 26496), (133, 26514), (135, 26520), (139, 26541),

Gene: JeNeSaisPas_44 Start: 36989, Stop: 37423, Start Num: 48
Candidate Starts for JeNeSaisPas_44:
(30, 36926), (34, 36944), (42, 36965), (Start: 48 @36989 has 14 MA's), (75, 37037), (77, 37043), (78, 37046), (84, 37076), (107, 37157), (112, 37172), (127, 37229), (133, 37265), (139, 37292), (146, 37316), (154, 37334), (157, 37340),

Gene: Jeremy4pt0_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Jeremy4pt0_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: Jerole_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Jerole_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: Johnathan_23 Start: 18803, Stop: 19285, Start Num: 63
Candidate Starts for Johnathan_23:
(Start: 58 @18794 has 21 MA's), (Start: 63 @18803 has 54 MA's), (87, 18869), (94, 18893), (97, 18902), (118, 18980), (130, 19037),

Gene: Jovita_23 Start: 18878, Stop: 19369, Start Num: 58
Candidate Starts for Jovita_23:
(Start: 58 @18878 has 21 MA's), (Start: 63 @18887 has 54 MA's), (94, 18977), (97, 18986), (113, 19049), (118, 19064), (130, 19121), (162, 19232),

Gene: Juno112_20 Start: 15773, Stop: 16195, Start Num: 59
Candidate Starts for Juno112_20:
(18, 15608), (24, 15653), (Start: 59 @15773 has 50 MA's), (81, 15836), (86, 15845), (90, 15860), (98, 15884), (99, 15887), (125, 15983), (129, 16004), (136, 16037), (140, 16061), (147, 16079), (149, 16085), (155, 16097), (164, 16121),

Gene: KHumphrey_20 Start: 15770, Stop: 16192, Start Num: 59
Candidate Starts for KHumphrey_20:
(18, 15605), (24, 15650), (Start: 59 @15770 has 50 MA's), (81, 15833), (86, 15842), (90, 15857), (98, 15881), (99, 15884), (125, 15980), (129, 16001), (136, 16034), (140, 16058), (147, 16076), (149, 16082), (155, 16094), (164, 16118),

Gene: Kardesai_23 Start: 23206, Stop: 23667, Start Num: 43
Candidate Starts for Kardesai_23:
(Start: 40 @23200 has 12 MA's), (Start: 43 @23206 has 2 MA's), (Start: 46 @23221 has 4 MA's), (Start: 52 @23239 has 3 MA's), (89, 23338), (99, 23368), (107, 23401), (110, 23410), (116, 23428), (134, 23512), (136, 23518), (138, 23533), (140, 23542), (143, 23551), (156, 23581), (164, 23608),

Gene: Kate33_23 Start: 18738, Stop: 19229, Start Num: 58
Candidate Starts for Kate33_23:
(36, 18678), (Start: 58 @18738 has 21 MA's), (Start: 63 @18747 has 54 MA's), (87, 18813), (94, 18837), (97, 18846), (113, 18909), (118, 18924), (130, 18981),

Gene: Katzastrophic_21 Start: 19157, Stop: 19639, Start Num: 63
Candidate Starts for Katzastrophic_21:
(Start: 63 @19157 has 54 MA's), (85, 19217), (87, 19223), (92, 19241), (94, 19247), (101, 19268), (111, 19313), (113, 19319), (124, 19358), (130, 19391), (131, 19394), (161, 19496), (172, 19538),

Gene: KeaneyLin_23 Start: 23636, Stop: 24064, Start Num: 52
Candidate Starts for KeaneyLin_23:
(Start: 40 @23597 has 12 MA's), (Start: 43 @23603 has 2 MA's), (Start: 46 @23618 has 4 MA's), (Start: 52 @23636 has 3 MA's), (64, 23660), (84, 23717), (89, 23735), (93, 23747), (110, 23807), (116, 23825), (124, 23855), (127, 23870), (134, 23909), (136, 23915), (140, 23939), (156, 23978), (164, 24005),

Gene: KendraB23_22 Start: 17351, Stop: 17773, Start Num: 59
Candidate Starts for KendraB23_22:
(Start: 59 @17351 has 50 MA's), (73, 17375), (76, 17381), (98, 17462), (100, 17468), (110, 17510), (111, 17513), (129, 17582), (134, 17609), (143, 17648), (161, 17687), (163, 17696), (164, 17699), (166, 17705), (168, 17711),

Gene: Kenzers_23 Start: 18764, Stop: 19255, Start Num: 58

Candidate Starts for Kenzers_23:
(Start: 58 @18764 has 21 MA's), (Start: 63 @18773 has 54 MA's), (94, 18863), (97, 18872), (118, 18950), (130, 19007), (140, 19058),

Gene: Kepler_21 Start: 16042, Stop: 16464, Start Num: 59
Candidate Starts for Kepler_21:
(35, 15976), (Start: 59 @16042 has 50 MA's), (73, 16066), (79, 16096), (90, 16129), (96, 16147), (98, 16153), (107, 16189), (110, 16201), (123, 16243), (125, 16252), (129, 16273), (133, 16297), (136, 16306), (138, 16321), (140, 16330), (143, 16339), (144, 16342), (147, 16348), (149, 16354), (155, 16366), (161, 16378),

Gene: KevinMinion_31 Start: 27351, Stop: 27830, Start Num: 38
Candidate Starts for KevinMinion_31:
(Start: 32 @27327 has 2 MA's), (Start: 38 @27351 has 3 MA's), (Start: 48 @27384 has 14 MA's), (Start: 52 @27399 has 3 MA's), (91, 27504), (110, 27573), (112, 27579), (136, 27681), (137, 27693),

Gene: Kinny_33 Start: 28143, Stop: 28589, Start Num: 48
Candidate Starts for Kinny_33:
(34, 28098), (42, 28119), (Start: 44 @28134 has 41 MA's), (Start: 48 @28143 has 14 MA's), (Start: 52 @28158 has 3 MA's), (Start: 57 @28170 has 3 MA's), (91, 28263), (110, 28332), (112, 28338), (114, 28344), (122, 28368), (136, 28440), (137, 28452), (165, 28518),

Gene: Kuleana_21 Start: 16151, Stop: 16570, Start Num: 56
Candidate Starts for Kuleana_21:
(Start: 56 @16151 has 2 MA's), (Start: 65 @16163 has 1 MA's), (73, 16175), (90, 16238), (98, 16262), (121, 16337), (123, 16349), (138, 16427), (143, 16445), (151, 16466), (153, 16469), (163, 16493), (176, 16553),

Gene: Kureo_46 Start: 35856, Stop: 36233, Start Num: 78
Candidate Starts for Kureo_46:
(30, 35736), (34, 35754), (42, 35775), (Start: 48 @35799 has 14 MA's), (75, 35847), (77, 35853), (78, 35856), (84, 35886), (107, 35967), (112, 35982), (127, 36039), (133, 36075), (139, 36102), (146, 36126), (154, 36144), (157, 36150),

Gene: Lahqtemish_23 Start: 18787, Stop: 19278, Start Num: 58
Candidate Starts for Lahqtemish_23:
(Start: 58 @18787 has 21 MA's), (Start: 63 @18796 has 54 MA's), (87, 18862), (94, 18886), (97, 18895), (118, 18973), (130, 19030),

Gene: Laphuphu24k_19 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for Laphuphu24k_19:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Leathea_31 Start: 26183, Stop: 26632, Start Num: 48
Candidate Starts for Leathea_31:
(Start: 48 @26183 has 14 MA's), (Start: 52 @26198 has 3 MA's), (68, 26228), (91, 26303), (110, 26372), (112, 26378), (136, 26480), (137, 26492), (165, 26558),

Gene: Leona_20 Start: 15832, Stop: 16254, Start Num: 59
Candidate Starts for Leona_20:

(18, 15667), (24, 15712), (Start: 59 @15832 has 50 MA's), (81, 15895), (90, 15919), (98, 15943), (99, 15946), (125, 16042), (129, 16063), (136, 16096), (140, 16120), (147, 16138), (149, 16144), (155, 16156),

Gene: Lewando_34 Start: 28203, Stop: 28658, Start Num: 44
Candidate Starts for Lewando_34:
(34, 28167), (42, 28188), (Start: 44 @28203 has 41 MA's), (Start: 48 @28212 has 14 MA's), (Start: 52 @28227 has 3 MA's), (Start: 57 @28239 has 3 MA's), (91, 28332), (110, 28401), (112, 28407), (114, 28413), (122, 28437), (136, 28509), (137, 28521), (165, 28587),

Gene: LilHuddy_32 Start: 27938, Stop: 28381, Start Num: 44
Candidate Starts for LilHuddy_32:
(42, 27923), (Start: 44 @27938 has 41 MA's), (77, 28001), (81, 28031), (88, 28043), (104, 28103), (112, 28130), (123, 28169), (134, 28226), (164, 28322),

Gene: Lilo27_23 Start: 18759, Stop: 19241, Start Num: 63
Candidate Starts for Lilo27_23:
(Start: 58 @18750 has 21 MA's), (Start: 63 @18759 has 54 MA's), (94, 18849), (97, 18858), (118, 18936), (130, 18993), (162, 19104), (164, 19110), (170, 19128),

Gene: LimaBean_23 Start: 18790, Stop: 19281, Start Num: 58
Candidate Starts for LimaBean_23:
(Start: 58 @18790 has 21 MA's), (Start: 63 @18799 has 54 MA's), (87, 18865), (94, 18889), (97, 18898), (113, 18961), (118, 18976), (130, 19033),

Gene: Linda_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Linda_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: LittleTokyo_21 Start: 16106, Stop: 16528, Start Num: 57
Candidate Starts for LittleTokyo_21:
(Start: 57 @16106 has 3 MA's), (Start: 66 @16118 has 9 MA's), (73, 16130), (96, 16211), (98, 16217), (104, 16241), (107, 16253), (111, 16268), (115, 16280), (118, 16289), (126, 16319), (128, 16328), (129, 16337), (132, 16355), (138, 16385), (140, 16394), (143, 16403), (144, 16406), (147, 16412), (153, 16427), (168, 16466),

Gene: Loretta_31 Start: 27486, Stop: 27917, Start Num: 44
Candidate Starts for Loretta_31:
(16, 27324), (17, 27333), (30, 27432), (42, 27471), (Start: 44 @27486 has 41 MA's), (75, 27519), (77, 27525), (89, 27576), (90, 27579), (92, 27585), (98, 27603), (113, 27657), (116, 27666), (119, 27675), (131, 27732), (138, 27771), (142, 27786), (152, 27813), (160, 27831), (170, 27864), (174, 27897),

Gene: Loviatar_22 Start: 19424, Stop: 19906, Start Num: 63
Candidate Starts for Loviatar_22:
(Start: 63 @19424 has 54 MA's), (92, 19508), (94, 19514), (97, 19523), (114, 19589), (118, 19601), (130, 19658), (141, 19712), (162, 19769), (164, 19775), (170, 19793),

Gene: LucySwiss_31 Start: 27592, Stop: 28035, Start Num: 44
Candidate Starts for LucySwiss_31:
(42, 27577), (Start: 44 @27592 has 41 MA's), (49, 27604), (75, 27649), (77, 27655), (88, 27697), (112, 27784), (119, 27805), (127, 27841), (128, 27844), (133, 27877), (139, 27904), (154, 27946), (167,

27985),

Gene: Lunar_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Lunar_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: Lynlen_23 Start: 18773, Stop: 19255, Start Num: 63
Candidate Starts for Lynlen_23:
(Start: 58 @18764 has 21 MA's), (Start: 63 @18773 has 54 MA's), (94, 18863), (97, 18872), (118, 18950), (130, 19007), (140, 19058),

Gene: Makai_31 Start: 27724, Stop: 28155, Start Num: 44
Candidate Starts for Makai_31:
(22, 27631), (30, 27670), (42, 27709), (Start: 44 @27724 has 41 MA's), (77, 27763), (79, 27784), (91, 27820), (96, 27835), (97, 27838), (119, 27913), (131, 27970), (141, 28021), (142, 28024), (170, 28102), (174, 28135),

Gene: Mardi_32 Start: 26785, Stop: 27264, Start Num: 38
Candidate Starts for Mardi_32:
(Start: 32 @26761 has 2 MA's), (Start: 38 @26785 has 3 MA's), (Start: 48 @26818 has 14 MA's), (Start: 52 @26833 has 3 MA's), (91, 26938), (110, 27007), (112, 27013), (136, 27115), (137, 27127),

Gene: Marianna39_46 Start: 37033, Stop: 37410, Start Num: 78
Candidate Starts for Marianna39_46:
(30, 36913), (34, 36931), (42, 36952), (Start: 48 @36976 has 14 MA's), (75, 37024), (77, 37030), (78, 37033), (84, 37063), (107, 37144), (112, 37159), (127, 37216), (133, 37252), (139, 37279), (146, 37303), (154, 37321), (157, 37327),

Gene: MediumFry_29 Start: 26917, Stop: 27360, Start Num: 44
Candidate Starts for MediumFry_29:
(30, 26863), (42, 26902), (Start: 44 @26917 has 41 MA's), (75, 26974), (77, 26980), (81, 27010), (90, 27034), (112, 27109), (119, 27130), (123, 27148), (128, 27169), (130, 27184), (139, 27229), (164, 27301),

Gene: Melons_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Melons_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: Mendel_20 Start: 14828, Stop: 15247, Start Num: 66
Candidate Starts for Mendel_20:
(26, 14705), (Start: 66 @14828 has 9 MA's), (79, 14870), (90, 14903), (92, 14909), (97, 14924), (111, 14981), (120, 15005), (127, 15038), (129, 15050), (171, 15194),

Gene: Michelle_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Michelle_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157,

25191),

Gene: Milomuff_24 Start: 19163, Stop: 19645, Start Num: 63
Candidate Starts for Milomuff_24:
(Start: 58 @19154 has 21 MA's), (Start: 63 @19163 has 54 MA's), (87, 19229), (94, 19253), (97, 19262), (113, 19325), (118, 19340), (130, 19397),

Gene: MiniBagel_31 Start: 28814, Stop: 29257, Start Num: 44
Candidate Starts for MiniBagel_31:
(42, 28799), (Start: 44 @28814 has 41 MA's), (49, 28826), (77, 28877), (88, 28919), (90, 28931), (112, 29006), (128, 29066), (133, 29099), (139, 29126), (167, 29207),

Gene: Mooshroom_24 Start: 23200, Stop: 23667, Start Num: 40
Candidate Starts for Mooshroom_24:
(Start: 40 @23200 has 12 MA's), (Start: 43 @23206 has 2 MA's), (Start: 46 @23221 has 4 MA's), (Start: 52 @23239 has 3 MA's), (89, 23338), (99, 23368), (107, 23401), (110, 23410), (116, 23428), (134, 23512), (136, 23518), (138, 23533), (140, 23542), (143, 23551), (156, 23581), (164, 23608),

Gene: MrAaronian_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for MrAaronian_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: MsUbiquitous_23 Start: 18822, Stop: 19304, Start Num: 63
Candidate Starts for MsUbiquitous_23:
(Start: 58 @18813 has 21 MA's), (Start: 63 @18822 has 54 MA's), (94, 18912), (97, 18921), (113, 18984), (118, 18999), (130, 19056), (162, 19167), (170, 19191),

Gene: Mudcat_24 Start: 25498, Stop: 25965, Start Num: 40
Candidate Starts for Mudcat_24:
(Start: 40 @25498 has 12 MA's), (Start: 43 @25504 has 2 MA's), (Start: 46 @25519 has 4 MA's), (Start: 52 @25537 has 3 MA's), (84, 25618), (89, 25636), (107, 25699), (116, 25726), (134, 25810), (136, 25816), (140, 25840), (143, 25849), (156, 25879), (164, 25906),

Gene: Muglass_33 Start: 27780, Stop: 28226, Start Num: 48
Candidate Starts for Muglass_33:
(34, 27735), (42, 27756), (Start: 44 @27771 has 41 MA's), (Start: 48 @27780 has 14 MA's), (Start: 52 @27795 has 3 MA's), (Start: 57 @27807 has 3 MA's), (80, 27867), (88, 27885), (91, 27900), (110, 27969), (112, 27975), (122, 28005), (136, 28077), (137, 28089),

Gene: NapoleonB_24 Start: 23597, Stop: 24064, Start Num: 40
Candidate Starts for NapoleonB_24:
(Start: 40 @23597 has 12 MA's), (Start: 43 @23603 has 2 MA's), (Start: 46 @23618 has 4 MA's), (Start: 52 @23636 has 3 MA's), (89, 23735), (99, 23765), (107, 23798), (110, 23807), (116, 23825), (134, 23909), (136, 23915), (138, 23930), (140, 23939), (143, 23948), (156, 23978), (164, 24005),

Gene: Nason_25 Start: 24095, Stop: 24541, Start Num: 46
Candidate Starts for Nason_25:
(Start: 40 @24074 has 12 MA's), (Start: 43 @24080 has 2 MA's), (Start: 46 @24095 has 4 MA's), (Start: 52 @24113 has 3 MA's), (89, 24212), (99, 24242), (107, 24275), (110, 24284), (116, 24302), (134, 24386), (136, 24392), (138, 24407), (140, 24416), (143, 24425), (156, 24455), (164, 24482),

Gene: Natasha_28 Start: 24254, Stop: 24679, Start Num: 48
Candidate Starts for Natasha_28:
(29, 24188), (Start: 32 @24203 has 2 MA's), (37, 24224), (Start: 48 @24254 has 14 MA's), (75, 24293), (77, 24299), (78, 24302), (84, 24332), (98, 24377), (124, 24470), (141, 24557), (154, 24590), (159, 24599), (169, 24635),

Gene: Navi1117_31 Start: 26457, Stop: 26903, Start Num: 48
Candidate Starts for Navi1117_31:
(Start: 32 @26400 has 2 MA's), (Start: 38 @26424 has 3 MA's), (Start: 48 @26457 has 14 MA's), (Start: 52 @26472 has 3 MA's), (77, 26520), (80, 26544), (114, 26658), (122, 26682), (136, 26754), (137, 26766), (143, 26781), (175, 26883),

Gene: Niblet_21 Start: 17230, Stop: 17652, Start Num: 59
Candidate Starts for Niblet_21:
(Start: 59 @17230 has 50 MA's), (73, 17254), (76, 17260), (100, 17347), (111, 17392), (125, 17440), (126, 17443), (129, 17461), (134, 17488), (136, 17494), (140, 17518), (143, 17527), (161, 17566), (163, 17575), (166, 17584), (168, 17590), (176, 17635),

Gene: Nicky22_24 Start: 19224, Stop: 19715, Start Num: 58
Candidate Starts for Nicky22_24:
(Start: 58 @19224 has 21 MA's), (Start: 63 @19233 has 54 MA's), (94, 19323), (97, 19332), (113, 19395), (118, 19410), (130, 19467),

Gene: Nightmare_32 Start: 28127, Stop: 28570, Start Num: 44
Candidate Starts for Nightmare_32:
(42, 28112), (Start: 44 @28127 has 41 MA's), (49, 28139), (77, 28190), (88, 28232), (119, 28340), (128, 28379), (133, 28412), (139, 28439), (167, 28520),

Gene: Niktson_31 Start: 28289, Stop: 28732, Start Num: 44
Candidate Starts for Niktson_31:
(42, 28274), (Start: 44 @28289 has 41 MA's), (49, 28301), (75, 28346), (77, 28352), (81, 28382), (88, 28394), (90, 28406), (119, 28502), (128, 28541), (133, 28574), (139, 28601), (154, 28643), (167, 28682),

Gene: Nivinsha_31 Start: 27677, Stop: 28120, Start Num: 44
Candidate Starts for Nivinsha_31:
(42, 27662), (Start: 44 @27677 has 41 MA's), (49, 27689), (77, 27740), (90, 27794), (112, 27869), (119, 27890), (133, 27962), (139, 27989), (154, 28031), (157, 28037),

Gene: Olliecat_20 Start: 17428, Stop: 17916, Start Num: 63
Candidate Starts for Olliecat_20:
(Start: 63 @17428 has 54 MA's), (83, 17485), (85, 17488), (102, 17542), (134, 17683), (164, 17779), (166, 17785),

Gene: Onestar_28 Start: 24587, Stop: 25054, Start Num: 38
Candidate Starts for Onestar_28:
(Start: 38 @24587 has 3 MA's), (Start: 51 @24629 has 18 MA's), (69, 24659), (75, 24668), (77, 24674), (78, 24677), (107, 24788), (125, 24851), (129, 24872), (137, 24917), (144, 24941), (154, 24965),

Gene: Oppalora_20 Start: 15770, Stop: 16192, Start Num: 59
Candidate Starts for Oppalora_20:
(18, 15605), (24, 15650), (Start: 59 @15770 has 50 MA's), (81, 15833), (86, 15842), (90, 15857), (98, 15881), (99, 15884), (125, 15980), (129, 16001), (136, 16034), (140, 16058), (147, 16076), (149,

16082), (155, 16094),

Gene: Orcanus_21 Start: 17144, Stop: 17566, Start Num: 59
Candidate Starts for Orcanus_21:
(Start: 59 @17144 has 50 MA's), (73, 17168), (76, 17174), (98, 17255), (100, 17261), (110, 17303), (111, 17306), (129, 17375), (134, 17402), (143, 17441), (161, 17480), (163, 17489), (164, 17492), (166, 17498), (168, 17504),

Gene: OtsoOtso_21 Start: 16046, Stop: 16468, Start Num: 59
Candidate Starts for OtsoOtso_21:
(35, 15980), (Start: 59 @16046 has 50 MA's), (73, 16070), (79, 16100), (89, 16130), (90, 16133), (98, 16157), (104, 16181), (107, 16193), (129, 16277), (133, 16301), (136, 16310), (138, 16325), (140, 16334), (143, 16343), (144, 16346), (147, 16352), (149, 16358), (155, 16370), (161, 16382),

Gene: PFR1_19 Start: 16983, Stop: 17417, Start Num: 69
Candidate Starts for PFR1_19:
(53, 16953), (60, 16968), (67, 16980), (69, 16983), (82, 17028), (83, 17031), (89, 17049), (93, 17061), (100, 17082), (101, 17085), (103, 17091), (109, 17124), (114, 17139), (115, 17142), (123, 17169), (134, 17226), (144, 17268), (160, 17301), (169, 17331),

Gene: PFR2_21 Start: 18552, Stop: 18986, Start Num: 69
Candidate Starts for PFR2_21:
(53, 18522), (60, 18537), (67, 18549), (69, 18552), (82, 18597), (83, 18600), (89, 18618), (93, 18630), (100, 18651), (101, 18654), (103, 18660), (109, 18693), (114, 18708), (115, 18711), (123, 18738), (134, 18795), (144, 18837), (160, 18870), (169, 18900),

Gene: Paella_45 Start: 36456, Stop: 36890, Start Num: 48
Candidate Starts for Paella_45:
(30, 36393), (34, 36411), (42, 36432), (Start: 48 @36456 has 14 MA's), (77, 36510), (78, 36513), (84, 36543), (107, 36624), (112, 36639), (127, 36696), (133, 36732), (139, 36759), (146, 36783), (154, 36801), (157, 36807), (159, 36810),

Gene: PastaFagioli_23 Start: 18778, Stop: 19269, Start Num: 58
Candidate Starts for PastaFagioli_23:
(Start: 58 @18778 has 21 MA's), (Start: 63 @18787 has 54 MA's), (87, 18853), (94, 18877), (97, 18886), (113, 18949), (118, 18964), (130, 19021),

Gene: Pecas_23 Start: 18783, Stop: 19265, Start Num: 63
Candidate Starts for Pecas_23:
(Start: 58 @18774 has 21 MA's), (Start: 63 @18783 has 54 MA's), (94, 18873), (97, 18882), (113, 18945), (118, 18960), (130, 19017), (162, 19128), (170, 19152),

Gene: Pelletreau_22 Start: 17350, Stop: 17772, Start Num: 59
Candidate Starts for Pelletreau_22:
(Start: 59 @17350 has 50 MA's), (73, 17374), (76, 17380), (98, 17461), (100, 17467), (110, 17509), (111, 17512), (129, 17581), (134, 17608), (143, 17647), (161, 17686), (163, 17695), (164, 17698), (166, 17704), (168, 17710),

Gene: Phaby_32 Start: 27870, Stop: 28313, Start Num: 44
Candidate Starts for Phaby_32:
(22, 27777), (30, 27816), (42, 27855), (Start: 44 @27870 has 41 MA's), (77, 27933), (81, 27963), (88, 27975), (91, 27990), (104, 28035), (112, 28062), (119, 28083), (123, 28101), (134, 28158), (143, 28197), (164, 28254), (173, 28290),

Gene: Phaila_30 Start: 25868, Stop: 26314, Start Num: 48
Candidate Starts for Phaila_30:
(Start: 32 @25811 has 2 MA's), (Start: 38 @25835 has 3 MA's), (Start: 48 @25868 has 14 MA's), (Start: 52 @25883 has 3 MA's), (91, 25988), (110, 26057), (112, 26063), (122, 26093), (136, 26165), (137, 26177),

Gene: PhigPhack_24 Start: 18767, Stop: 19258, Start Num: 58
Candidate Starts for PhigPhack_24:
(Start: 58 @18767 has 21 MA's), (Start: 63 @18776 has 54 MA's), (87, 18842), (94, 18866), (97, 18875), (113, 18938), (118, 18953), (130, 19010),

Gene: PhirstandPhine_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for PhirstandPhine_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: Phisb_23 Start: 18799, Stop: 19281, Start Num: 63
Candidate Starts for Phisb_23:
(Start: 58 @18790 has 21 MA's), (Start: 63 @18799 has 54 MA's), (87, 18865), (94, 18889), (97, 18898), (111, 18955), (113, 18961), (118, 18976), (130, 19033),

Gene: PhluffyCoco_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for PhluffyCoco_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Pineda_22 Start: 16204, Stop: 16626, Start Num: 59
Candidate Starts for Pineda_22:
(35, 16138), (Start: 59 @16204 has 50 MA's), (73, 16228), (79, 16258), (90, 16291), (96, 16309), (98, 16315), (107, 16351), (110, 16363), (123, 16405), (125, 16414), (129, 16435), (133, 16459), (136, 16468), (138, 16483), (140, 16492), (143, 16501), (144, 16504), (147, 16510), (149, 16516), (155, 16528), (161, 16540),

Gene: PoeMe_32 Start: 27146, Stop: 27592, Start Num: 48
Candidate Starts for PoeMe_32:
(Start: 32 @27089 has 2 MA's), (Start: 38 @27113 has 3 MA's), (Start: 48 @27146 has 14 MA's), (Start: 52 @27161 has 3 MA's), (91, 27266), (110, 27335), (112, 27341), (136, 27443), (137, 27455),

Gene: Polka_21 Start: 16046, Stop: 16468, Start Num: 59
Candidate Starts for Polka_21:
(35, 15980), (Start: 59 @16046 has 50 MA's), (73, 16070), (79, 16100), (89, 16130), (90, 16133), (98, 16157), (104, 16181), (107, 16193), (129, 16277), (133, 16301), (136, 16310), (138, 16325), (140, 16334), (143, 16343), (144, 16346), (147, 16352), (149, 16358), (155, 16370), (161, 16382),

Gene: PondAmelia_23 Start: 19473, Stop: 19958, Start Num: 63
Candidate Starts for PondAmelia_23:
(Start: 63 @19473 has 54 MA's), (83, 19530), (85, 19533), (101, 19584), (104, 19602), (124, 19674), (142, 19764), (152, 19791), (159, 19803), (162, 19818), (166, 19830), (169, 19839),

Gene: PorkBelly_20 Start: 19379, Stop: 19798, Start Num: 61
Candidate Starts for PorkBelly_20:
(33, 19295), (61, 19379), (77, 19409), (88, 19451), (91, 19466), (124, 19577), (138, 19652), (161, 19715), (170, 19745),

Gene: Powelldog_29 Start: 24544, Stop: 24969, Start Num: 51
Candidate Starts for Powelldog_29:
(22, 24430), (30, 24469), (42, 24508), (Start: 48 @24532 has 14 MA's), (Start: 51 @24544 has 18 MA's), (78, 24592), (84, 24622), (88, 24631), (92, 24649), (124, 24760), (133, 24811), (144, 24856),

Gene: ProfFrink_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for ProfFrink_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: QMacho_24 Start: 19266, Stop: 19748, Start Num: 63
Candidate Starts for QMacho_24:
(Start: 58 @19257 has 21 MA's), (Start: 63 @19266 has 54 MA's), (94, 19356), (97, 19365), (113, 19428), (118, 19443), (130, 19500), (162, 19611), (170, 19635),

Gene: Quenya_22 Start: 19022, Stop: 19504, Start Num: 63
Candidate Starts for Quenya_22:
(Start: 63 @19022 has 54 MA's), (85, 19082), (87, 19088), (92, 19106), (94, 19112), (101, 19133), (113, 19184), (124, 19223), (130, 19256), (131, 19259), (137, 19295), (161, 19361), (172, 19403),

Gene: Qui_45 Start: 36456, Stop: 36890, Start Num: 48
Candidate Starts for Qui_45:
(30, 36393), (34, 36411), (42, 36432), (Start: 48 @36456 has 14 MA's), (77, 36510), (78, 36513), (84, 36543), (107, 36624), (112, 36639), (127, 36696), (133, 36732), (139, 36759), (146, 36783), (154, 36801), (157, 36807), (159, 36810),

Gene: Rattail_20 Start: 15832, Stop: 16254, Start Num: 59
Candidate Starts for Rattail_20:
(18, 15667), (24, 15712), (Start: 59 @15832 has 50 MA's), (81, 15895), (90, 15919), (98, 15943), (99, 15946), (125, 16042), (129, 16063), (136, 16096), (140, 16120), (147, 16138), (149, 16144), (155, 16156),

Gene: Raunak_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Raunak_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: RedFox_20 Start: 15772, Stop: 16194, Start Num: 59
Candidate Starts for RedFox_20:
(18, 15607), (24, 15652), (Start: 59 @15772 has 50 MA's), (81, 15835), (86, 15844), (90, 15859), (98, 15883), (99, 15886), (125, 15982), (129, 16003), (136, 16036), (140, 16060), (147, 16078), (149, 16084), (155, 16096), (164, 16120),

Gene: Remlit_32 Start: 25752, Stop: 26198, Start Num: 48
Candidate Starts for Remlit_32:

(Start: 32 @25695 has 2 MA's), (Start: 38 @25719 has 3 MA's), (Start: 48 @25752 has 14 MA's), (Start: 52 @25767 has 3 MA's), (Start: 57 @25779 has 3 MA's), (77, 25815), (80, 25839), (114, 25953), (122, 25977), (123, 25986), (136, 26049), (137, 26061), (175, 26178),

Gene: Renaldo_36 Start: 28221, Stop: 28667, Start Num: 48
Candidate Starts for Renaldo_36:
(34, 28176), (42, 28197), (Start: 44 @28212 has 41 MA's), (Start: 48 @28221 has 14 MA's), (Start: 52 @28236 has 3 MA's), (Start: 57 @28248 has 3 MA's), (91, 28341), (110, 28410), (112, 28416), (114, 28422), (122, 28446), (136, 28518), (137, 28530), (165, 28596),

Gene: Renna12_21 Start: 16122, Stop: 16544, Start Num: 59
Candidate Starts for Renna12_21:
(11, 15717), (24, 16002), (Start: 59 @16122 has 50 MA's), (81, 16185), (90, 16209), (98, 16233), (99, 16236), (125, 16332), (129, 16353), (136, 16386), (140, 16410), (147, 16428), (149, 16434), (155, 16446),

Gene: Ruchi_21 Start: 17425, Stop: 17847, Start Num: 59
Candidate Starts for Ruchi_21:
(Start: 59 @17425 has 50 MA's), (73, 17449), (79, 17479), (98, 17536), (111, 17587), (125, 17635), (126, 17638), (134, 17683), (143, 17722), (153, 17746), (161, 17761), (162, 17767), (164, 17773), (168, 17785),

Gene: RustyBoy_28 Start: 24236, Stop: 24661, Start Num: 48
Candidate Starts for RustyBoy_28:
(29, 24170), (Start: 32 @24185 has 2 MA's), (37, 24206), (Start: 48 @24236 has 14 MA's), (75, 24275), (77, 24281), (78, 24284), (84, 24314), (98, 24359), (124, 24452), (154, 24572), (159, 24581), (169, 24617),

Gene: Salk_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Salk_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: SanaSana_23 Start: 19363, Stop: 19845, Start Num: 63
Candidate Starts for SanaSana_23:
(Start: 63 @19363 has 54 MA's), (92, 19447), (94, 19453), (97, 19462), (114, 19528), (118, 19540), (120, 19546), (130, 19597), (141, 19651), (162, 19708), (164, 19714), (170, 19732),

Gene: SansAfet_23 Start: 18710, Stop: 19192, Start Num: 63
Candidate Starts for SansAfet_23:
(Start: 58 @18701 has 21 MA's), (Start: 63 @18710 has 54 MA's), (87, 18776), (94, 18800), (97, 18809), (113, 18872), (118, 18887), (130, 18944),

Gene: SarBear_23 Start: 18764, Stop: 19246, Start Num: 63
Candidate Starts for SarBear_23:
(Start: 58 @18755 has 21 MA's), (Start: 63 @18764 has 54 MA's), (94, 18854), (97, 18863), (118, 18941), (130, 18998),

Gene: ScienceWizSam_33 Start: 28078, Stop: 28521, Start Num: 44
Candidate Starts for ScienceWizSam_33:
(42, 28063), (Start: 44 @28078 has 41 MA's), (49, 28090), (77, 28141), (90, 28195), (112, 28270), (119, 28291), (133, 28363), (139, 28390), (154, 28432), (157, 28438),

Gene: Seldom_22 Start: 15454, Stop: 15873, Start Num: 66
Candidate Starts for Seldom_22:
(26, 15331), (Start: 66 @15454 has 9 MA's), (79, 15496), (90, 15529), (92, 15535), (97, 15550), (111, 15607), (120, 15631), (127, 15664), (129, 15676), (171, 15820),

Gene: Shayna_21 Start: 18113, Stop: 18598, Start Num: 63
Candidate Starts for Shayna_21:
(Start: 63 @18113 has 54 MA's), (83, 18170), (131, 18350), (162, 18458), (166, 18470), (172, 18494),

Gene: Shen_22 Start: 17351, Stop: 17773, Start Num: 59
Candidate Starts for Shen_22:
(Start: 59 @17351 has 50 MA's), (73, 17375), (76, 17381), (98, 17462), (100, 17468), (110, 17510), (111, 17513), (129, 17582), (134, 17609), (143, 17648), (161, 17687), (163, 17696), (164, 17699), (166, 17705), (168, 17711),

Gene: Shepard_32 Start: 27935, Stop: 28378, Start Num: 44
Candidate Starts for Shepard_32:
(42, 27920), (Start: 44 @27935 has 41 MA's), (77, 27998), (81, 28028), (88, 28040), (104, 28100), (112, 28127), (123, 28166), (134, 28223), (164, 28319),

Gene: Shiba_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Shiba_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: SirBeanington_23 Start: 18806, Stop: 19288, Start Num: 63
Candidate Starts for SirBeanington_23:
(Start: 58 @18797 has 21 MA's), (Start: 63 @18806 has 54 MA's), (87, 18872), (94, 18896), (97, 18905), (111, 18962), (118, 18983), (130, 19040),

Gene: Slay_23 Start: 19306, Stop: 19788, Start Num: 63
Candidate Starts for Slay_23:
(Start: 58 @19297 has 21 MA's), (Start: 63 @19306 has 54 MA's), (94, 19396), (97, 19405), (130, 19540),

Gene: Sloopyjoe_28 Start: 24847, Stop: 25275, Start Num: 51
Candidate Starts for Sloopyjoe_28:
(Start: 38 @24805 has 3 MA's), (Start: 51 @24847 has 18 MA's), (75, 24889), (77, 24895), (78, 24898), (84, 24928), (88, 24937), (92, 24955), (107, 25009), (124, 25066), (143, 25159), (152, 25183), (157, 25192),

Gene: Softsoap_22 Start: 18534, Stop: 19016, Start Num: 63
Candidate Starts for Softsoap_22:
(Start: 58 @18525 has 21 MA's), (Start: 63 @18534 has 54 MA's), (87, 18600), (94, 18624), (97, 18633), (113, 18696), (118, 18711), (130, 18768),

Gene: Solea_25 Start: 19163, Stop: 19645, Start Num: 63
Candidate Starts for Solea_25:
(Start: 58 @19154 has 21 MA's), (Start: 63 @19163 has 54 MA's), (87, 19229), (94, 19253), (97, 19262), (113, 19325), (118, 19340), (130, 19397),

Gene: Spain_27 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Spain_27:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: Sporto_29 Start: 26058, Stop: 26486, Start Num: 51
Candidate Starts for Sporto_29:
(22, 25944), (30, 25983), (42, 26022), (47, 26043), (Start: 51 @26058 has 18 MA's), (69, 26091), (75, 26100), (77, 26106), (78, 26109), (84, 26139), (88, 26148), (92, 26166), (107, 26220), (124, 26277), (143, 26370), (152, 26394), (157, 26403),

Gene: Sprinkle_28 Start: 24960, Stop: 25385, Start Num: 48
Candidate Starts for Sprinkle_28:
(Start: 48 @24960 has 14 MA's), (62, 24990), (77, 25005), (78, 25008), (84, 25038), (107, 25119), (112, 25134), (113, 25137), (115, 25143), (127, 25191), (131, 25212), (133, 25227), (139, 25254), (143, 25269), (146, 25278), (156, 25299),

Gene: Squircle_20 Start: 17427, Stop: 17915, Start Num: 63
Candidate Starts for Squircle_20:
(Start: 63 @17427 has 54 MA's), (83, 17484), (85, 17487), (102, 17541), (134, 17682), (164, 17778), (166, 17784),

Gene: StarLord_28 Start: 24847, Stop: 25275, Start Num: 51
Candidate Starts for StarLord_28:
(Start: 38 @24805 has 3 MA's), (Start: 51 @24847 has 18 MA's), (75, 24889), (77, 24895), (78, 24898), (84, 24928), (88, 24937), (92, 24955), (107, 25009), (124, 25066), (143, 25159), (152, 25183), (157, 25192),

Gene: Stardom_23 Start: 23077, Stop: 23523, Start Num: 46
Candidate Starts for Stardom_23:
(Start: 40 @23056 has 12 MA's), (Start: 43 @23062 has 2 MA's), (Start: 46 @23077 has 4 MA's), (Start: 52 @23095 has 3 MA's), (89, 23194), (99, 23224), (107, 23257), (110, 23266), (116, 23284), (134, 23368), (136, 23374), (138, 23389), (140, 23398), (143, 23407), (156, 23437), (164, 23464),

Gene: Stardrop_31 Start: 26809, Stop: 27288, Start Num: 38
Candidate Starts for Stardrop_31:
(Start: 32 @26785 has 2 MA's), (Start: 38 @26809 has 3 MA's), (Start: 48 @26842 has 14 MA's), (Start: 52 @26857 has 3 MA's), (91, 26962), (110, 27031), (112, 27037), (136, 27139), (137, 27151),

Gene: Stayer_28 Start: 24846, Stop: 25274, Start Num: 51
Candidate Starts for Stayer_28:
(Start: 38 @24804 has 3 MA's), (Start: 51 @24846 has 18 MA's), (75, 24888), (77, 24894), (78, 24897), (84, 24927), (88, 24936), (92, 24954), (107, 25008), (124, 25065), (143, 25158), (152, 25182), (157, 25191),

Gene: Stoor_22 Start: 19360, Stop: 19842, Start Num: 63
Candidate Starts for Stoor_22:
(Start: 63 @19360 has 54 MA's), (92, 19444), (94, 19450), (97, 19459), (114, 19525), (118, 19537), (120, 19543), (130, 19594), (141, 19648), (162, 19705), (164, 19711), (170, 19729),

Gene: Stromboli_22 Start: 19490, Stop: 19972, Start Num: 63
Candidate Starts for Stromboli_22:

(Start: 63 @19490 has 54 MA's), (85, 19550), (92, 19574), (97, 19589), (113, 19652), (118, 19667), (130, 19724), (141, 19778), (170, 19859),

Gene: StuartMinion_20 Start: 15817, Stop: 16239, Start Num: 59
Candidate Starts for StuartMinion_20:
(Start: 59 @15817 has 50 MA's), (64, 15826), (73, 15841), (86, 15889), (89, 15901), (98, 15928), (100, 15934), (104, 15952), (107, 15964), (115, 15991), (124, 16021), (126, 16030), (129, 16048), (143, 16114), (149, 16129), (153, 16138), (155, 16141), (166, 16171),

Gene: Sunny4976_28 Start: 26238, Stop: 26672, Start Num: 47
Candidate Starts for Sunny4976_28:
(47, 26238), (77, 26292), (110, 26415), (130, 26496), (133, 26514), (135, 26520), (139, 26541),

Gene: SunnyD_21 Start: 18117, Stop: 18602, Start Num: 63
Candidate Starts for SunnyD_21:
(Start: 63 @18117 has 54 MA's), (83, 18174), (128, 18336), (131, 18354), (162, 18462), (166, 18474), (172, 18498),

Gene: Swervy_23 Start: 18755, Stop: 19246, Start Num: 58
Candidate Starts for Swervy_23:
(Start: 58 @18755 has 21 MA's), (Start: 63 @18764 has 54 MA's), (94, 18854), (97, 18863), (118, 18941), (130, 18998),

Gene: Swim_23 Start: 15327, Stop: 15746, Start Num: 66
Candidate Starts for Swim_23:
(26, 15204), (Start: 66 @15327 has 9 MA's), (79, 15369), (90, 15402), (92, 15408), (97, 15423), (111, 15480), (120, 15504), (127, 15537), (129, 15549), (171, 15693),

Gene: Synepsis_30 Start: 27741, Stop: 28184, Start Num: 44
Candidate Starts for Synepsis_30:
(42, 27726), (Start: 44 @27741 has 41 MA's), (49, 27753), (75, 27798), (77, 27804), (90, 27858), (112, 27933), (119, 27954), (127, 27990), (128, 27993), (133, 28026), (139, 28053), (154, 28095), (157, 28101),

Gene: Tatanka_31 Start: 28225, Stop: 28668, Start Num: 44
Candidate Starts for Tatanka_31:
(42, 28210), (Start: 44 @28225 has 41 MA's), (49, 28237), (75, 28282), (77, 28288), (90, 28342), (112, 28417), (119, 28438), (133, 28510), (139, 28537), (154, 28579), (157, 28585),

Gene: TaylorSipht_21 Start: 16161, Stop: 16583, Start Num: 57
Candidate Starts for TaylorSipht_21:
(31, 16098), (Start: 57 @16161 has 3 MA's), (73, 16185), (79, 16215), (98, 16272), (111, 16323), (125, 16371), (126, 16374), (138, 16440), (143, 16458), (147, 16467), (149, 16473), (153, 16482), (161, 16497), (168, 16521),

Gene: Teacup_31 Start: 27597, Stop: 28040, Start Num: 44
Candidate Starts for Teacup_31:
(42, 27582), (Start: 44 @27597 has 41 MA's), (49, 27609), (75, 27654), (77, 27660), (81, 27690), (88, 27702), (90, 27714), (119, 27810), (127, 27846), (128, 27849), (133, 27882), (139, 27909), (154, 27951), (167, 27990),

Gene: Teagster_22 Start: 19074, Stop: 19559, Start Num: 63
Candidate Starts for Teagster_22:

(Start: 63 @19074 has 54 MA's), (83, 19131), (131, 19311), (162, 19419), (166, 19431), (172, 19455),

Gene: Tenney120_31 Start: 26546, Stop: 27025, Start Num: 38
Candidate Starts for Tenney120_31:
(Start: 32 @26522 has 2 MA's), (Start: 38 @26546 has 3 MA's), (Start: 48 @26579 has 14 MA's), (Start: 52 @26594 has 3 MA's), (91, 26699), (110, 26768), (112, 26774), (136, 26876), (137, 26888),

Gene: Tenno_32 Start: 28823, Stop: 29266, Start Num: 44
Candidate Starts for Tenno_32:
(42, 28808), (Start: 44 @28823 has 41 MA's), (49, 28835), (77, 28886), (88, 28928), (90, 28940), (112, 29015), (128, 29075), (133, 29108), (139, 29135), (167, 29216),

Gene: Tillums_23 Start: 15460, Stop: 15879, Start Num: 66
Candidate Starts for Tillums_23:
(26, 15337), (Start: 66 @15460 has 9 MA's), (79, 15502), (90, 15535), (92, 15541), (97, 15556), (111, 15613), (127, 15670), (129, 15682), (171, 15826),

Gene: Tipton_32 Start: 27931, Stop: 28374, Start Num: 44
Candidate Starts for Tipton_32:
(42, 27916), (Start: 44 @27931 has 41 MA's), (75, 27988), (77, 27994), (88, 28036), (104, 28096), (119, 28144), (164, 28315), (173, 28351),

Gene: Toad24_22 Start: 17351, Stop: 17773, Start Num: 59
Candidate Starts for Toad24_22:
(Start: 59 @17351 has 50 MA's), (73, 17375), (76, 17381), (98, 17462), (100, 17468), (110, 17510), (111, 17513), (129, 17582), (134, 17609), (143, 17648), (161, 17687), (163, 17696), (164, 17699), (166, 17705), (168, 17711),

Gene: Tokki_32 Start: 27886, Stop: 28329, Start Num: 44
Candidate Starts for Tokki_32:
(22, 27793), (30, 27832), (42, 27871), (Start: 44 @27886 has 41 MA's), (77, 27949), (81, 27979), (88, 27991), (91, 28006), (104, 28051), (119, 28099), (123, 28117), (134, 28174), (143, 28213), (164, 28270), (173, 28306),

Gene: Tribby_25 Start: 23789, Stop: 24256, Start Num: 40
Candidate Starts for Tribby_25:
(Start: 40 @23789 has 12 MA's), (Start: 43 @23795 has 2 MA's), (Start: 46 @23810 has 4 MA's), (Start: 52 @23828 has 3 MA's), (64, 23852), (84, 23909), (89, 23927), (93, 23939), (110, 23999), (116, 24017), (124, 24047), (127, 24062), (134, 24101), (136, 24107), (140, 24131), (156, 24170), (164, 24197),

Gene: TrixiePhattel_31 Start: 26358, Stop: 26861, Start Num: 32
Candidate Starts for TrixiePhattel_31:
(Start: 32 @26358 has 2 MA's), (Start: 38 @26382 has 3 MA's), (Start: 48 @26415 has 14 MA's), (Start: 52 @26430 has 3 MA's), (91, 26535), (110, 26604), (112, 26610), (122, 26640), (136, 26712), (137, 26724),

Gene: Truckee_30 Start: 27769, Stop: 28200, Start Num: 44
Candidate Starts for Truckee_30:
(22, 27676), (30, 27715), (42, 27754), (Start: 44 @27769 has 41 MA's), (77, 27808), (79, 27829), (91, 27865), (96, 27880), (97, 27883), (119, 27958), (131, 28015), (141, 28066), (142, 28069), (170, 28147), (174, 28180),

Gene: Trustiboi_32 Start: 28294, Stop: 28737, Start Num: 44
Candidate Starts for Trustiboi_32:
(42, 28279), (Start: 44 @28294 has 41 MA's), (49, 28306), (75, 28351), (77, 28357), (88, 28399), (90, 28411), (112, 28486), (119, 28507), (133, 28579), (139, 28606), (154, 28648), (157, 28654),

Gene: TukTuk_23 Start: 18813, Stop: 19304, Start Num: 58
Candidate Starts for TukTuk_23:
(Start: 58 @18813 has 21 MA's), (Start: 63 @18822 has 54 MA's), (94, 18912), (97, 18921), (113, 18984), (118, 18999), (130, 19056), (162, 19167), (170, 19191),

Gene: Uzumaki_31 Start: 27109, Stop: 27555, Start Num: 48
Candidate Starts for Uzumaki_31:
(Start: 32 @27052 has 2 MA's), (Start: 38 @27076 has 3 MA's), (Start: 48 @27109 has 14 MA's), (Start: 52 @27124 has 3 MA's), (91, 27229), (110, 27298), (112, 27304), (136, 27406), (137, 27418),

Gene: Vulpecula_21 Start: 16883, Stop: 17305, Start Num: 59
Candidate Starts for Vulpecula_21:
(Start: 59 @16883 has 50 MA's), (73, 16907), (79, 16937), (98, 16994), (111, 17045), (125, 17093), (126, 17096), (134, 17141), (143, 17180), (153, 17204), (161, 17219), (164, 17231), (168, 17243),

Gene: WalkingDead_22 Start: 19488, Stop: 19973, Start Num: 63
Candidate Starts for WalkingDead_22:
(Start: 63 @19488 has 54 MA's), (83, 19545), (85, 19548), (101, 19599), (104, 19617), (124, 19689), (138, 19764), (142, 19779), (150, 19800), (152, 19806), (159, 19818), (161, 19827), (162, 19833), (166, 19845), (169, 19854),

Gene: Westerlin_32 Start: 29406, Stop: 29849, Start Num: 44
Candidate Starts for Westerlin_32:
(42, 29391), (Start: 44 @29406 has 41 MA's), (49, 29418), (75, 29463), (77, 29469), (88, 29511), (112, 29598), (119, 29619), (127, 29655), (128, 29658), (133, 29691), (139, 29718), (154, 29760), (167, 29799),

Gene: Westrich_22 Start: 17340, Stop: 17762, Start Num: 59
Candidate Starts for Westrich_22:
(Start: 59 @17340 has 50 MA's), (73, 17364), (76, 17370), (98, 17451), (100, 17457), (110, 17499), (111, 17502), (129, 17571), (134, 17598), (143, 17637), (161, 17676), (163, 17685), (164, 17688), (166, 17694), (168, 17700),

Gene: WileyE_20 Start: 16217, Stop: 16639, Start Num: 59
Candidate Starts for WileyE_20:
(Start: 59 @16217 has 50 MA's), (73, 16241), (79, 16271), (98, 16328), (111, 16379), (125, 16427), (126, 16430), (134, 16475), (143, 16514), (153, 16538), (161, 16553), (164, 16565), (168, 16577),

Gene: Xenomorph_23 Start: 23807, Stop: 24274, Start Num: 40
Candidate Starts for Xenomorph_23:
(Start: 40 @23807 has 12 MA's), (Start: 43 @23813 has 2 MA's), (Start: 46 @23828 has 4 MA's), (Start: 52 @23846 has 3 MA's), (84, 23927), (89, 23945), (107, 24008), (116, 24035), (134, 24119), (136, 24125), (140, 24149), (143, 24158), (156, 24188),

Gene: YoshiYama_24 Start: 23859, Stop: 24305, Start Num: 46
Candidate Starts for YoshiYama_24:
(Start: 40 @23838 has 12 MA's), (Start: 43 @23844 has 2 MA's), (Start: 46 @23859 has 4 MA's), (Start: 52 @23877 has 3 MA's), (84, 23958), (89, 23976), (107, 24039), (116, 24066), (134, 24150),

(136, 24156), (140, 24180), (143, 24189), (156, 24219), (164, 24246),

Gene: Zeina_31 Start: 26433, Stop: 26936, Start Num: 32
Candidate Starts for Zeina_31:
(Start: 32 @26433 has 2 MA's), (Start: 38 @26457 has 3 MA's), (Start: 48 @26490 has 14 MA's), (Start: 52 @26505 has 3 MA's), (91, 26610), (110, 26679), (112, 26685), (136, 26787), (137, 26799),

Gene: Zhuangyuan_22 Start: 16586, Stop: 17002, Start Num: 57
Candidate Starts for Zhuangyuan_22:
(Start: 57 @16586 has 3 MA's), (64, 16592), (79, 16637), (89, 16667), (98, 16694), (99, 16697), (121, 16769), (125, 16790), (129, 16811), (134, 16838), (140, 16868), (143, 16877), (151, 16898), (153, 16901), (163, 16925),

Gene: Zippen_31 Start: 28073, Stop: 28516, Start Num: 44
Candidate Starts for Zippen_31:
(22, 27980), (30, 28019), (42, 28058), (Start: 44 @28073 has 41 MA's), (55, 28100), (67, 28124), (75, 28130), (77, 28136), (81, 28166), (104, 28238), (119, 28286), (123, 28304), (129, 28334), (131, 28343), (140, 28391), (145, 28406), (154, 28427), (164, 28457), (173, 28493),

Gene: Zixiang_21 Start: 17231, Stop: 17653, Start Num: 59
Candidate Starts for Zixiang_21:
(Start: 59 @17231 has 50 MA's), (73, 17255), (76, 17261), (100, 17348), (111, 17393), (125, 17441), (126, 17444), (129, 17462), (134, 17489), (136, 17495), (140, 17519), (143, 17528), (161, 17567), (163, 17576), (166, 17585), (168, 17591), (176, 17636),