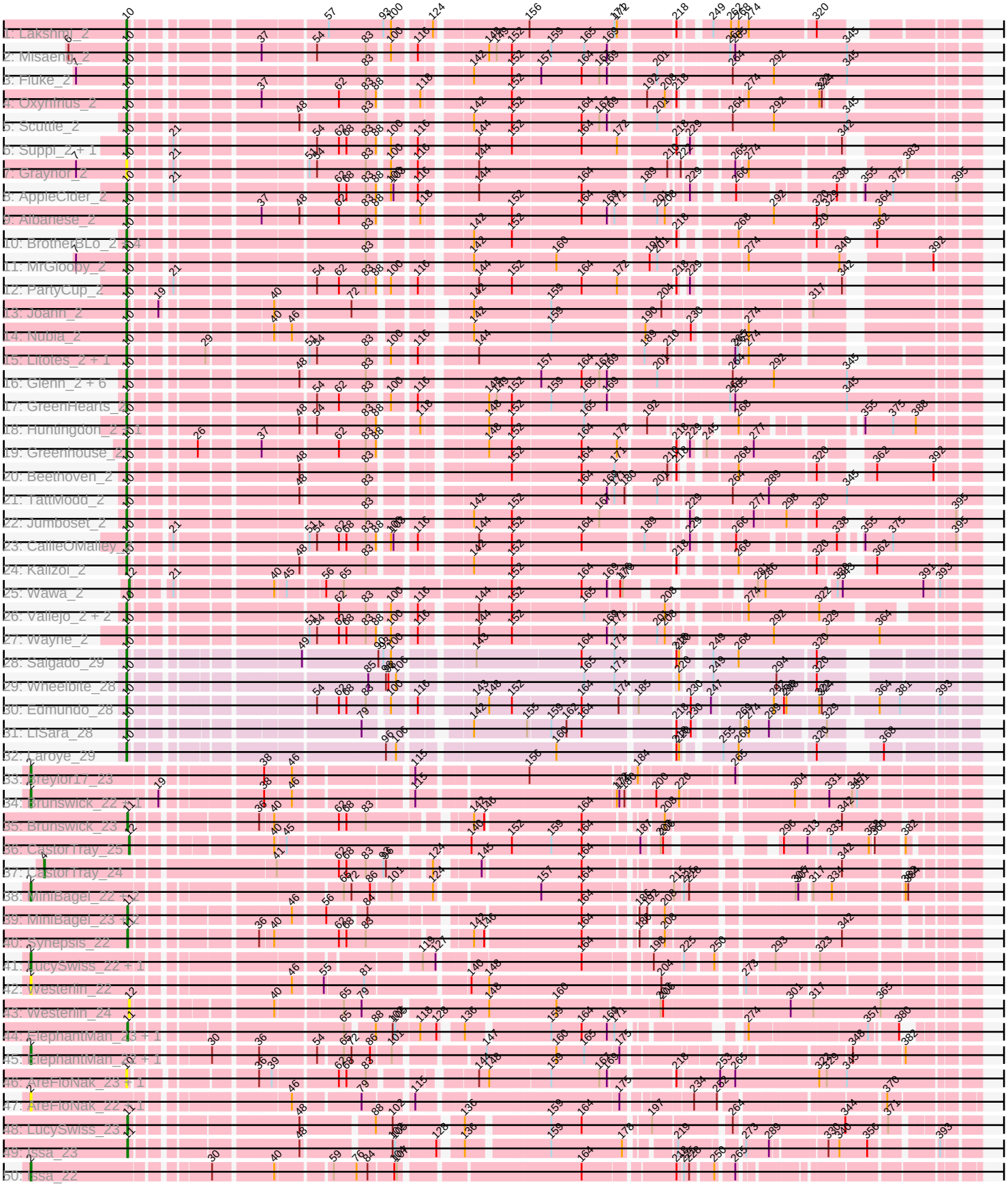
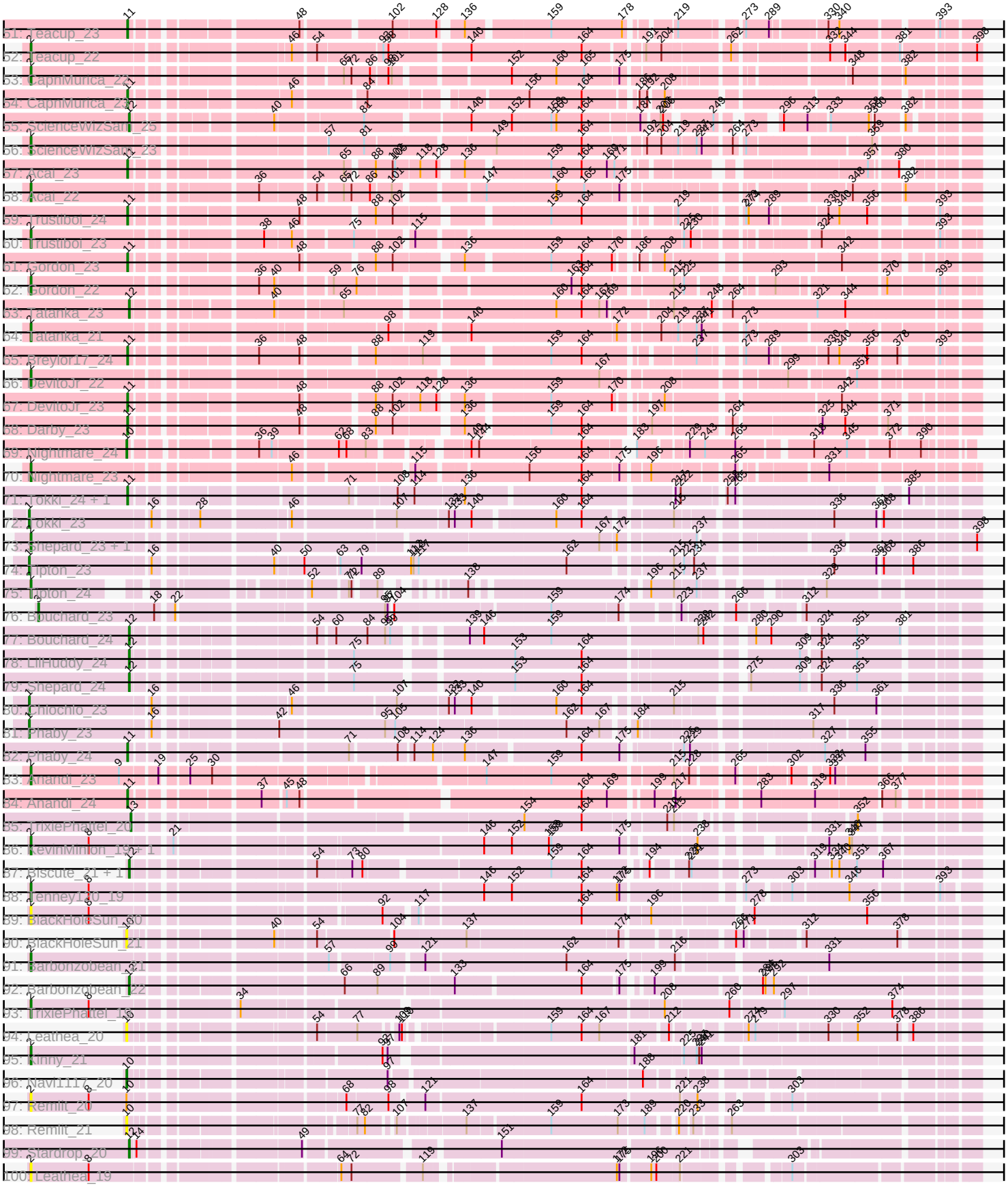
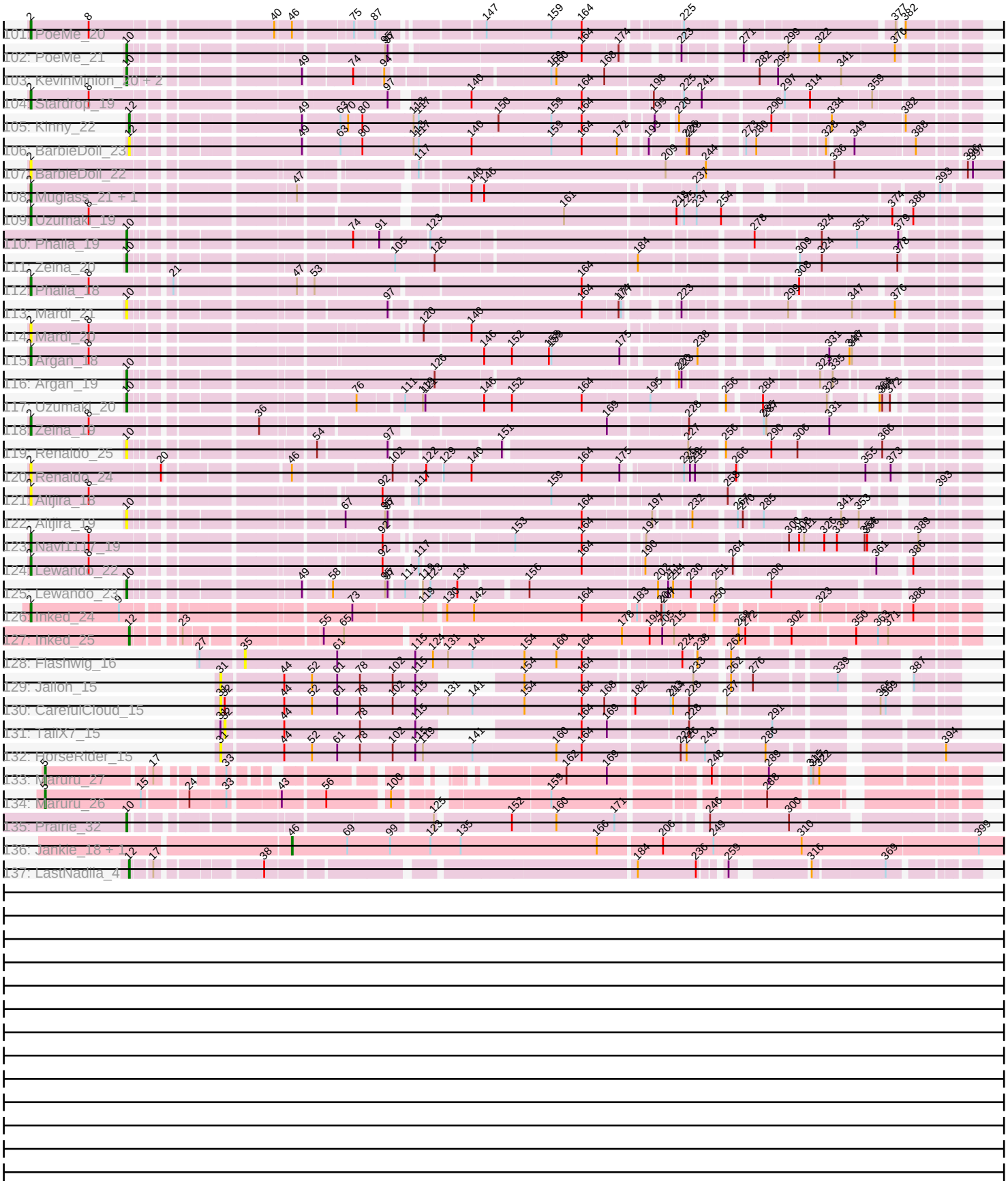
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101: PoeMe_20
102: PoeMe_21
103: KevinMinion_20 + 2
104: Stardrop_19
105: Kinny_22
106: BarbieDoll_23
107: BarbieDoll_22
108: Muglass_21 + 1
109: Ozumaki_19
110: Phaila_19
111: Zeina_20
112: Phaila_18
113: Mardi_21
114: Mardi_20
115: Argan_18
116: Argan_19
117: Ozumaki_20
118: Zeina_19
119: Renaldo_25
120: Renaldo_24
121: Altjira_18
122: Altjira_19
123: Navi1107_19
124: Lewando_22
125: Lewando_23
126: Inked_24
127: Inked_25
128: Flashwig_16
129: Jallon_15
130: CarefulCloud_15
131: TallX7_15
132: HorseRider_15
133: Maruru_27
134: Maruru_26
135: Prairie_32
136: Jankie_18 + 1
137: LastNadila_4

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 347311 Report

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

Pham number 347311 has 170 members, 29 are drafts.

Phages represented in each track:
- Track 1 : Lakshmi_2
- Track 2 : Misaeng_2
- Track 3 : Fluke_2
- Track 4 : Oxynfrius_2
- Track 5 : Scuttle_2
- Track 6 : Suppi_2, Canowicakte_2
- Track 7 : Graynor_2
- Track 8 : AppleCider_2
- Track 9 : Albanese_2
- Track 10 : BrotherBLo_2, Carpal_2, Dino_2, Zorro_2, Korra_2
- Track 11 : MrGloopy_2
- Track 12 : PartyCup_2
- Track 13 : Joann_2
- Track 14 : Nubia_2
- Track 15 : Litotes_2, MrBoss_2
- Track 16 : Glenn_2, Cholula_2, Potatoes_2, RAP15_2, MeganNoll_2, Immaculata_2, Savage2526_2
- Track 17 : GreenHearts_2
- Track 18 : Huntingdon_2, RcigaStruga_2
- Track 19 : Greenhouse_2
- Track 20 : Beethoven_2
- Track 21 : TattModd_2
- Track 22 : Jumboset_2
- Track 23 : CallieOMalley_2
- Track 24 : Kalizoi_2
- Track 25 : Wawa_2
- Track 26 : Vallejo_2, Rozby_2, Riverdale_2
- Track 27 : Wayne_2
- Track 28 : Salgado_29
- Track 29 : Wheelbite_28
- Track 30 : Edmundo_28
- Track 31 : LiSara_28
- Track 32 : Laroye_29
- Track 33 : Breylor17_23
- Track 34 : Brunswick_22, Synepsis_21
- Track 35 : Brunswick_23
- Track 36 : CastorTray_25

- Track 37 : CastorTray_24
- Track 38 : MiniBagel_22, Dinallo_23, Tenno_23
- Track 39 : MiniBagel_23, Dinallo_24, Tenno_24
- Track 40 : Synepsis_22
- Track 41 : LucySwiss_22, Darby_22
- Track 42 : Westerlin_22
- Track 43 : Westerlin_24
- Track 44 : ElephantMan_23, Niktson_23
- Track 45 : ElephantMan_22, Niktson_22
- Track 46 : AreFloNak_23, Nivinsha_23
- Track 47 : AreFloNak_22, Nivinsha_22
- Track 48 : LucySwiss_23
- Track 49 : Issa_23
- Track 50 : Issa_22
- Track 51 : Teacup_23
- Track 52 : Teacup_22
- Track 53 : CapnMurica_22
- Track 54 : CapnMurica_23
- Track 55 : ScienceWizSam_25
- Track 56 : ScienceWizSam_23
- Track 57 : Acai_23
- Track 58 : Acai_22
- Track 59 : Trustiboi_24
- Track 60 : Trustiboi_23
- Track 61 : Gordon_23
- Track 62 : Gordon_22
- Track 63 : Tatanka_23
- Track 64 : Tatanka_21
- Track 65 : Breylor17_24
- Track 66 : DevitoJr_22
- Track 67 : DevitoJr_23
- Track 68 : Darby_23
- Track 69 : Nightmare_24
- Track 70 : Nightmare_23
- Track 71 : Tokki_24, Chlochlo_24
- Track 72 : Tokki_23
- Track 73 : Shepard_23, LilHuddy_23
- Track 74 : Tipton_23
- Track 75 : Tipton_24
- Track 76 : Bouchard_23
- Track 77 : Bouchard_24
- Track 78 : LilHuddy_24
- Track 79 : Shepard_24
- Track 80 : Chlochlo_23
- Track 81 : Phaby_23
- Track 82 : Phaby_24
- Track 83 : Anandi_23
- Track 84 : Anandi_24
- Track 85 : TrixiePhattel_20
- Track 86 : KevinMinion_19, GantcherGoblin_18
- Track 87 : Biscute_21, Muglass_22
- Track 88 : Tenney120_19
- Track 89 : BlackHoleSun_20

- Track 90 : BlackHoleSun_21
- Track 91 : Barbonzobean_21
- Track 92 : Barbonzobean_22
- Track 93 : TrixiePhattel_19
- Track 94 : Leathea_20
- Track 95 : Kinny_21
- Track 96 : Navi1117_20
- Track 97 : Remlit_20
- Track 98 : Remlit_21
- Track 99 : Stardrop_20
- Track 100 : Leathea_19
- Track 101 : PoeMe_20
- Track 102 : PoeMe_21
- Track 103 : KevinMinion_20, Tenney120_20, GantcherGoblin_19
- Track 104 : Stardrop_19
- Track 105 : Kinny_22
- Track 106 : BarbieDoll_23
- Track 107 : BarbieDoll_22
- Track 108 : Muglass_21, Biscute_20
- Track 109 : Uzumaki_19
- Track 110 : Phaila_19
- Track 111 : Zeina_20
- Track 112 : Phaila_18
- Track 113 : Mardi_21
- Track 114 : Mardi_20
- Track 115 : Argan_18
- Track 116 : Argan_19
- Track 117 : Uzumaki_20
- Track 118 : Zeina_19
- Track 119 : Renaldo_25
- Track 120 : Renaldo_24
- Track 121 : Altjira_18
- Track 122 : Altjira_19
- Track 123 : Navi1117_19
- Track 124 : Lewando_22
- Track 125 : Lewando_23
- Track 126 : Inked_24
- Track 127 : Inked_25
- Track 128 : Flashwig_16
- Track 129 : Jalloh_15
- Track 130 : CarefulCloud_15
- Track 131 : TailX7_15
- Track 132 : HorseRider_15
- Track 133 : Maruru_27
- Track 134 : Maruru_26
- Track 135 : Prairie_32
- Track 136 : Jankie_18, GrimEater_18
- Track 137 : LastNadiia_4

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

The start number called the most often in the published annotations is 10, it was called in 56 of the 141 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_2, Altjira_19, AppleCider_2, AreFloNak_23, Argan_19, Beethoven_2, BlackHoleSun_21, BrotherBLo_2, CallieOMalley_2, Canowicakte_2, Carpal_2, Cholula_2, Dino_2, Edmundo_28, Fluke_2, GantcherGoblin_19, Glenn_2, Graynor_2, GreenHearts_2, Greenhouse_2, Huntingdon_2, Immaculata_2, Joann_2, Jumboset_2, Kalizoi_2, KevinMinion_20, Korra_2, Lakshmi_2, Laroye_29, Leathea_20, Lewando_23, LiSara_28, Litotes_2, Mardi_21, MeganNoll_2, Misaeng_2, MrBoss_2, MrGloopy_2, Navi1117_20, Nightmare_24, Nivinsha_23, Nubia_2, Oxynfrius_2, PartyCup_2, Phaila_19, PoeMe_21, Potatoes_2, Prairie_32, RAP15_2, RcigaStruga_2, Remlit_21, Renaldo_25, Riverdale_2, Rozby_2, Salgado_29, Savage2526_2, Scuttle_2, Suppi_2, TattModd_2, Tenney120_20, Uzumaki_20, Vallejo_2, Wayne_2, Wheelbite_28, Zeina_20, Zorro_2,

Genes that have the "Most Annotated" start but do not call it:
• Remlit_20,

Genes that do not have the "Most Annotated" start:
• Acai_22, Acai_23, Altjira_18, Anandi_23, Anandi_24, AreFloNak_22, Argan_18, BarbieDoll_22, BarbieDoll_23, Barbonzobean_21, Barbonzobean_22, Biscute_20, Biscute_21, BlackHoleSun_20, Bouchard_23, Bouchard_24, Breylor17_23, Breylor17_24, Brunswick_22, Brunswick_23, CapnMurica_22, CapnMurica_23, CarefulCloud_15, CastorTray_24, CastorTray_25, Chlochlo_23, Chlochlo_24, Darby_22, Darby_23, DevitoJr_22, DevitoJr_23, Dinallo_23, Dinallo_24, ElephantMan_22, ElephantMan_23, Flashwig_16, GantcherGoblin_18, Gordon_22, Gordon_23, GrimEater_18, HorseRider_15, Inked_24, Inked_25, Issa_22, Issa_23, Jalloh_15, Jankie_18, KevinMinion_19, Kinny_21, Kinny_22, LastNadiia_4, Leathea_19, Lewando_22, LilHuddy_23, LilHuddy_24, LucySwiss_22, LucySwiss_23, Mardi_20, Maruru_26, Maruru_27, MiniBagel_22, MiniBagel_23, Muglass_21, Muglass_22, Navi1117_19, Nightmare_23, Niktson_22, Niktson_23, Nivinsha_22, Phaby_23, Phaby_24, Phaila_18, PoeMe_20, Renaldo_24, ScienceWizSam_23, ScienceWizSam_25, Shepard_23, Shepard_24, Stardrop_19, Stardrop_20, Synepsis_21, Synepsis_22, TailX7_15, Tatanka_21, Tatanka_23, Teacup_22, Teacup_23, Tenney120_19, Tenno_23, Tenno_24, Tipton_23, Tipton_24, Tokki_23, Tokki_24, TrixiePhattel_19, TrixiePhattel_20, Trustiboi_23, Trustiboi_24, Uzumaki_19, Wawa_2, Westerlin_22, Westerlin_24, Zeina_19,

Summary by start number:

Start 1:
• Found in 4 of 170 (2.4%) of genes in pham
• Manual Annotations of this start: 4 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chlochlo_23 (AU2), Phaby_23 (AU2), Tipton_23 (AU2), Tokki_23 (AU2),

Start 2:
• Found in 51 of 170 (30.0%) of genes in pham
• Manual Annotations of this start: 40 of 141
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Acai_22 (AU1), Altjira_18 (AU6), Anandi_23 (AU4), AreFloNak_22 (AU1), Argan_18 (AU6), BarbieDoll_22 (AU6), Barbonzobean_21 (AU6), Biscute_20 (AU6), BlackHoleSun_20 (AU6), Breylor17_23 (AU1), Brunswick_22 (AU1), CapnMurica_22 (AU1), Darby_22 (AU1), DevitoJr_22 (AU1), Dinallo_23 (AU1), ElephantMan_22 (AU1), GantcherGoblin_18 (AU6), Gordon_22 (AU1), Inked_24 (AU7), Issa_22 (AU1), KevinMinion_19 (AU6), Kinny_21 (AU6), Leathea_19 (AU6), Lewando_22 (AU6), LilHuddy_23 (AU2), LucySwiss_22 (AU1), Mardi_20 (AU6), MiniBagel_22 (AU1), Muglass_21 (AU6), Navi1117_19 (AU6), Nightmare_23 (AU1), Niktson_22 (AU1), Nivinsha_22 (AU1), Phaila_18 (AU6), PoeMe_20 (AU6), Remlit_20 (AU6), Renaldo_24 (AU6), ScienceWizSam_23 (AU1), Shepard_23 (AU2), Stardrop_19 (AU6), Synepsis_21 (AU1), Tatanka_21 (AU1), Teacup_22 (AU1), Tenney120_19 (AU6), Tenno_23 (AU1), Tipton_24 (AU2), TrixiePhattel_19 (AU6), Trustiboi_23 (AU1), Uzumaki_19 (AU6), Westerlin_22 (AU1), Zeina_19 (AU6),

Start 3:
• Found in 1 of 170 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bouchard_23 (AU2),

Start 4:
• Found in 1 of 170 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CastorTray_24 (AU1),

Start 5:
• Found in 2 of 170 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Maruru_26 (FG), Maruru_27 (FG),

Start 10:
• Found in 67 of 170 (39.4%) of genes in pham
• Manual Annotations of this start: 56 of 141
• Called 98.5% of time when present
• Phage (with cluster) where this start called: Albanese_2 (AK), Altjira_19 (AU6), AppleCider_2 (AK), AreFloNak_23 (AU1), Argan_19 (AU6), Beethoven_2 (AK), BlackHoleSun_21 (AU6), BrotherBLo_2 (AK), CallieOMalley_2 (AK), Canowicakte_2 (AK), Carpal_2 (AK), Cholula_2 (AK), Dino_2 (AK), Edmundo_28 (AL), Fluke_2 (AK), GantcherGoblin_19 (AU6), Glenn_2 (AK), Graynor_2 (AK), GreenHearts_2 (AK), Greenhouse_2 (AK), Huntingdon_2 (AK), Immaculata_2 (AK), Joann_2 (AK), Jumboset_2 (AK), Kalizoi_2 (AK), KevinMinion_20 (AU6), Korra_2 (AK), Lakshmi_2 (AK), Laroye_29 (AL), Leathea_20 (AU6), Lewando_23 (AU6), LiSara_28 (AL), Litotes_2 (AK), Mardi_21 (AU6), MeganNoll_2 (AK), Misaeng_2 (AK), MrBoss_2 (AK), MrGloopy_2 (AK), Navi1117_20 (AU6), Nightmare_24 (AU1), Nivinsha_23 (AU1), Nubia_2 (AK), Oxynfrius_2 (AK), PartyCup_2 (AK), Phaila_19 (AU6), PoeMe_21 (AU6), Potatoes_2 (AK), Prairie_32 (FH), RAP15_2 (AK), RcigaStruga_2 (AK), Remlit_21 (AU6), Renaldo_25 (AU6), Riverdale_2 (AK), Rozby_2 (AK), Salgado_29 (AL), Savage2526_2 (AK), Scuttle_2 (AK), Suppi_2 (AK), TattModd_2 (AK), Tenney120_20 (AU6), Uzumaki_20 (AU6), Vallejo_2 (AK), Wayne_2 (AK), Wheelbite_28 (AL), Zeina_20 (AU6), Zorro_2 (AK),

Start 11:
• Found in 21 of 170 (12.4%) of genes in pham
• Manual Annotations of this start: 20 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acai_23 (AU1), Anandi_24 (AU4), Breylor17_24 (AU1), Brunswick_23 (AU1), CapnMurica_23 (AU1), Chlochlo_24 (AU2), Darby_23 (AU1), DevitoJr_23 (AU1), Dinallo_24 (AU1), ElephantMan_23 (AU1), Gordon_23 (AU1), Issa_23 (AU1), LucySwiss_23 (AU1), MiniBagel_23 (AU1), Niktson_23 (AU1), Phaby_24 (AU2), Synepsis_22 (AU1), Teacup_23 (AU1), Tenno_24 (AU1), Tokki_24 (AU2), Trustiboi_24 (AU1),

Start 12:
• Found in 16 of 170 (9.4%) of genes in pham
• Manual Annotations of this start: 14 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarbieDoll_23 (AU6), Barbonzobean_22 (AU6), Biscute_21 (AU6), Bouchard_24 (AU2), CastorTray_25 (AU1), Inked_25 (AU7), Kinny_22 (AU6), LastNadiia_4 (FR), LilHuddy_24 (AU2), Muglass_22 (AU6), ScienceWizSam_25 (AU1), Shepard_24 (AU2), Stardrop_20 (AU6), Tatanka_23 (AU1), Wawa_2 (AK), Westerlin_24 (AU1),

Start 13:
• Found in 1 of 170 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 141
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TrixiePhattel_20 (AU6),

Start 31:
• Found in 4 of 170 (2.4%) of genes in pham
• No Manual Annotations of this start.
• Called 75.0% of time when present
• Phage (with cluster) where this start called: CarefulCloud_15 (ER), HorseRider_15 (ER), Jalloh_15 (ER),

Start 32:
• Found in 2 of 170 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: TailX7_15 (ER),

Start 35:
• Found in 1 of 170 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Flashwig_16 (ER),

Start 46:
• Found in 20 of 170 (11.8%) of genes in pham
• Manual Annotations of this start: 2 of 141
• Called 10.0% of time when present
• Phage (with cluster) where this start called: GrimEater_18 (FP), Jankie_18 (FP),

Summary by clusters:

There are 12 clusters represented in this pham: FP, FR, AK, FG, AL, AU1, AU2, AU4, AU7, AU6, FH, ER,

Info for manual annotations of cluster AK:
•Start number 10 was manually annotated 39 times for cluster AK.
•Start number 12 was manually annotated 1 time for cluster AK.

Info for manual annotations of cluster AL:
•Start number 10 was manually annotated 5 times for cluster AL.

Info for manual annotations of cluster AU1:
•Start number 2 was manually annotated 19 times for cluster AU1.
•Start number 4 was manually annotated 1 time for cluster AU1.
•Start number 10 was manually annotated 1 time for cluster AU1.
•Start number 11 was manually annotated 16 times for cluster AU1.
•Start number 12 was manually annotated 3 times for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 1 was manually annotated 4 times for cluster AU2.
•Start number 2 was manually annotated 3 times for cluster AU2.
•Start number 3 was manually annotated 1 time for cluster AU2.
•Start number 11 was manually annotated 3 times for cluster AU2.
•Start number 12 was manually annotated 3 times for cluster AU2.

Info for manual annotations of cluster AU4:
•Start number 2 was manually annotated 1 time for cluster AU4.
•Start number 11 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU6:
•Start number 2 was manually annotated 16 times for cluster AU6.
•Start number 10 was manually annotated 10 times for cluster AU6.
•Start number 12 was manually annotated 5 times for cluster AU6.
•Start number 13 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 2 was manually annotated 1 time for cluster AU7.
•Start number 12 was manually annotated 1 time for cluster AU7.

Info for manual annotations of cluster FG:
•Start number 5 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FH:
•Start number 10 was manually annotated 1 time for cluster FH.

Info for manual annotations of cluster FP:
•Start number 46 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster FR:
•Start number 12 was manually annotated 1 time for cluster FR.

Gene Information:

Gene: Acai_23 Start: 18769, Stop: 19566, Start Num: 11
Candidate Starts for Acai_23:
(Start: 11 @18769 has 20 MA's), (65, 18976), (88, 19003), (102, 19021), (105, 19024), (118, 19051), (128, 19069), (136, 19087), (159, 19174), (164, 19210), (169, 19240), (171, 19249), (357, 19480), (380, 19507),

Gene: Acai_22 Start: 17813, Stop: 18757, Start Num: 2
Candidate Starts for Acai_22:
(Start: 2 @17813 has 40 MA's), (36, 18044), (54, 18104), (65, 18128), (72, 18137), (86, 18158), (101, 18179), (147, 18266), (160, 18344), (165, 18377), (175, 18416), (348, 18632), (382, 18683),

Gene: Albanese_2 Start: 1709, Stop: 2587, Start Num: 10
Candidate Starts for Albanese_2:
(Start: 10 @1709 has 56 MA's), (37, 1829), (48, 1871), (62, 1910), (83, 1940), (88, 1952), (118, 1988), (152, 2078), (164, 2156), (169, 2186), (171, 2192), (201, 2234), (208, 2243), (292, 2357), (320, 2408), (329, 2420), (364, 2483),

Gene: Altjira_18 Start: 15262, Stop: 16206, Start Num: 2
Candidate Starts for Altjira_18:
(Start: 2 @15262 has 40 MA's), (8, 15331), (92, 15619), (117, 15652), (159, 15793), (258, 15979), (393, 16168),

Gene: Altjira_19 Start: 16222, Stop: 17067, Start Num: 10
Candidate Starts for Altjira_19:
(Start: 10 @16222 has 56 MA's), (67, 16420), (95, 16465), (97, 16468), (164, 16672), (197, 16747), (232, 16780), (267, 16825), (270, 16831), (285, 16849), (341, 16930), (353, 16951),

Gene: Anandi_23 Start: 18319, Stop: 19266, Start Num: 2
Candidate Starts for Anandi_23:
(Start: 2 @18319 has 40 MA's), (9, 18424), (19, 18460), (25, 18481), (30, 18505), (147, 18775), (159, 18847), (215, 18979), (228, 18994), (265, 19036), (302, 19084), (332, 19117), (337, 19123),

Gene: Anandi_24 Start: 19277, Stop: 20116, Start Num: 11
Candidate Starts for Anandi_24:
(Start: 11 @19277 has 20 MA's), (37, 19394), (45, 19418), (48, 19433), (164, 19730), (169, 19760), (199, 19802), (217, 19823), (283, 19904), (319, 19964), (366, 20033), (377, 20048),

Gene: AppleCider_2 Start: 1706, Stop: 2524, Start Num: 10
Candidate Starts for AppleCider_2:
(Start: 10 @1706 has 56 MA's), (21, 1742), (62, 1907), (68, 1916), (83, 1937), (88, 1949), (100, 1958), (103, 1961), (116, 1982), (144, 2036), (164, 2153), (189, 2219), (229, 2258), (266, 2294), (338, 2387), (355, 2405), (375, 2435), (395, 2501),

Gene: AreFloNak_23 Start: 18649, Stop: 19527, Start Num: 10
Candidate Starts for AreFloNak_23:
(Start: 10 @18649 has 56 MA's), (36, 18763), (39, 18778), (62, 18847), (68, 18856), (83, 18877), (144, 18976), (148, 18988), (159, 19057), (167, 19114), (169, 19123), (218, 19189), (253, 19234), (265, 19252), (322, 19351), (329, 19360), (345, 19384),

Gene: AreFloNak_22 Start: 17690, Stop: 18637, Start Num: 2
Candidate Starts for AreFloNak_22:
(Start: 2 @17690 has 40 MA's), (Start: 46 @17957 has 2 MA's), (79, 18026), (115, 18074), (175, 18290), (234, 18359), (252, 18386), (370, 18548),

Gene: Argan_18 Start: 14524, Stop: 15495, Start Num: 2
Candidate Starts for Argan_18:
(Start: 2 @14524 has 40 MA's), (8, 14593), (146, 15001), (152, 15034), (158, 15073), (159, 15076), (175, 15157), (238, 15229), (331, 15337), (346, 15361), (347, 15364),

Gene: Argan_19 Start: 15507, Stop: 16340, Start Num: 10
Candidate Starts for Argan_19:
(Start: 10 @15507 has 56 MA's), (126, 15807), (220, 16059), (223, 16062), (323, 16188), (335, 16200),

Gene: BarbieDoll_23 Start: 17463, Stop: 18320, Start Num: 12
Candidate Starts for BarbieDoll_23:
(Start: 12 @17463 has 14 MA's), (49, 17628), (63, 17664), (80, 17688), (113, 17748), (117, 17754), (140, 17814), (159, 17904), (164, 17940), (172, 17979), (193, 18003), (226, 18036), (228, 18039), (273, 18090), (280, 18102), (328, 18171), (349, 18198), (388, 18258),

Gene: BarbieDoll_22 Start: 16372, Stop: 17451, Start Num: 2
Candidate Starts for BarbieDoll_22:
(Start: 2 @16372 has 40 MA's), (117, 16762), (209, 17038), (244, 17086), (336, 17236), (396, 17380), (397, 17386),

Gene: Barbonzobean_21 Start: 16047, Stop: 17045, Start Num: 2
Candidate Starts for Barbonzobean_21:
(Start: 2 @16047 has 40 MA's), (57, 16356), (99, 16416), (121, 16449), (162, 16605), (216, 16725), (331, 16881),

Gene: Barbonzobean_22 Start: 17057, Stop: 17917, Start Num: 12
Candidate Starts for Barbonzobean_22:
(Start: 12 @17057 has 14 MA's), (66, 17261), (89, 17300), (133, 17381), (164, 17513), (175, 17552), (199, 17576), (284, 17684), (286, 17687), (292, 17696),

Gene: Beethoven_2 Start: 1700, Stop: 2530, Start Num: 10
Candidate Starts for Beethoven_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (152, 2069), (164, 2147), (171, 2186), (210, 2243), (218, 2249), (268, 2297), (320, 2381), (362, 2423), (392, 2489),

Gene: Biscute_21 Start: 17123, Stop: 17968, Start Num: 12
Candidate Starts for Biscute_21:
(Start: 12 @17123 has 14 MA's), (54, 17297), (73, 17330), (80, 17342), (159, 17540), (164, 17576), (194, 17639), (228, 17672), (231, 17675), (319, 17798), (334, 17813), (340, 17822), (351, 17843), (367, 17873),

Gene: Biscute_20 Start: 16164, Stop: 17111, Start Num: 2
Candidate Starts for Biscute_20:
(Start: 2 @16164 has 40 MA's), (47, 16440), (140, 16608), (146, 16623), (237, 16851), (393, 17073),

Gene: BlackHoleSun_20 Start: 14234, Stop: 15223, Start Num: 2
Candidate Starts for BlackHoleSun_20:

(Start: 2 @14234 has 40 MA's), (8, 14303), (92, 14591), (117, 14624), (164, 14801), (196, 14876), (278, 14975), (356, 15104),

Gene: BlackHoleSun_21 Start: 15235, Stop: 16074, Start Num: 10
Candidate Starts for BlackHoleSun_21:
(Start: 10 @15235 has 56 MA's), (40, 15367), (54, 15406), (104, 15484), (137, 15562), (174, 15730), (266, 15832), (271, 15841), (312, 15895), (378, 16000),

Gene: Bouchard_23 Start: 17892, Stop: 18848, Start Num: 3
Candidate Starts for Bouchard_23:
(Start: 3 @17892 has 1 MA's), (18, 18027), (22, 18042), (95, 18258), (97, 18261), (104, 18264), (159, 18429), (174, 18504), (223, 18558), (266, 18606), (312, 18669),

Gene: Bouchard_24 Start: 18859, Stop: 19707, Start Num: 12
Candidate Starts for Bouchard_24:
(Start: 12 @18859 has 14 MA's), (54, 19030), (60, 19045), (84, 19081), (95, 19102), (99, 19108), (139, 19171), (146, 19186), (159, 19261), (239, 19426), (242, 19432), (280, 19474), (290, 19492), (324, 19543), (351, 19585), (381, 19636),

Gene: Breylor17_23 Start: 18359, Stop: 19300, Start Num: 2
Candidate Starts for Breylor17_23:
(Start: 2 @18359 has 40 MA's), (38, 18596), (Start: 46 @18626 has 2 MA's), (115, 18743), (156, 18857), (184, 18968), (265, 19061),

Gene: Breylor17_24 Start: 19312, Stop: 20133, Start Num: 11
Candidate Starts for Breylor17_24:
(Start: 11 @19312 has 20 MA's), (36, 19426), (48, 19474), (88, 19546), (119, 19597), (159, 19717), (164, 19753), (237, 19864), (273, 19900), (289, 19927), (330, 19984), (340, 19996), (356, 20029), (378, 20059), (393, 20095),

Gene: BrotherBLo_2 Start: 1706, Stop: 2536, Start Num: 10
Candidate Starts for BrotherBLo_2:
(Start: 10 @1706 has 56 MA's), (83, 1937), (142, 2030), (152, 2075), (218, 2255), (268, 2303), (320, 2387), (362, 2429),

Gene: Brunswick_22 Start: 17810, Stop: 18757, Start Num: 2
Candidate Starts for Brunswick_22:
(Start: 2 @17810 has 40 MA's), (19, 17951), (38, 18047), (Start: 46 @18077 has 2 MA's), (115, 18194), (172, 18407), (175, 18410), (180, 18416), (200, 18443), (220, 18467), (304, 18572), (331, 18605), (347, 18632), (351, 18638),

Gene: Brunswick_23 Start: 18769, Stop: 19596, Start Num: 11
Candidate Starts for Brunswick_23:
(Start: 11 @18769 has 20 MA's), (36, 18883), (40, 18898), (62, 18967), (68, 18976), (83, 18997), (142, 19096), (146, 19108), (164, 19213), (208, 19288), (342, 19468),

Gene: CallieOMalley_2 Start: 1706, Stop: 2524, Start Num: 10
Candidate Starts for CallieOMalley_2:
(Start: 10 @1706 has 56 MA's), (21, 1742), (51, 1874), (54, 1883), (62, 1907), (68, 1916), (83, 1937), (88, 1949), (100, 1958), (103, 1961), (116, 1982), (144, 2036), (152, 2075), (164, 2153), (189, 2219), (229, 2258), (266, 2294), (338, 2387), (355, 2405), (375, 2435), (395, 2501),

Gene: Canowicakte_2 Start: 1727, Stop: 2557, Start Num: 10

Candidate Starts for Canowicakte_2:
(Start: 10 @1727 has 56 MA's), (21, 1763), (54, 1904), (62, 1928), (68, 1937), (83, 1958), (88, 1970), (100, 1979), (116, 2003), (144, 2057), (152, 2096), (164, 2174), (172, 2216), (218, 2276), (229, 2282), (342, 2432),

Gene: CapnMurica_22 Start: 18903, Stop: 19847, Start Num: 2
Candidate Starts for CapnMurica_22:
(Start: 2 @18903 has 40 MA's), (65, 19218), (72, 19227), (86, 19248), (98, 19266), (101, 19269), (152, 19386), (160, 19434), (165, 19467), (175, 19506), (348, 19722), (382, 19773),

Gene: CapnMurica_23 Start: 19859, Stop: 20683, Start Num: 11
Candidate Starts for CapnMurica_23:
(Start: 11 @19859 has 20 MA's), (Start: 46 @20009 has 2 MA's), (84, 20084), (156, 20240), (164, 20300), (186, 20351), (192, 20360), (208, 20375),

Gene: CarefulCloud_15 Start: 10465, Stop: 11241, Start Num: 31
Candidate Starts for CarefulCloud_15:
(31, 10465), (32, 10468), (44, 10531), (52, 10564), (61, 10594), (78, 10621), (102, 10660), (115, 10687), (131, 10726), (141, 10753), (154, 10813), (164, 10879), (168, 10906), (182, 10936), (213, 10978), (214, 10981), (228, 10999), (257, 11029), (365, 11173), (369, 11179),

Gene: Carpal_2 Start: 1706, Stop: 2536, Start Num: 10
Candidate Starts for Carpal_2:
(Start: 10 @1706 has 56 MA's), (83, 1937), (142, 2030), (152, 2075), (218, 2255), (268, 2303), (320, 2387), (362, 2429),

Gene: CastorTray_25 Start: 19162, Stop: 19992, Start Num: 12
Candidate Starts for CastorTray_25:
(Start: 12 @19162 has 14 MA's), (40, 19294), (45, 19306), (140, 19501), (152, 19549), (159, 19591), (164, 19627), (187, 19690), (203, 19708), (206, 19711), (296, 19801), (313, 19828), (333, 19849), (358, 19894), (360, 19897), (382, 19927),

Gene: CastorTray_24 Start: 18206, Stop: 19150, Start Num: 4
Candidate Starts for CastorTray_24:
(Start: 4 @18206 has 1 MA's), (41, 18455), (62, 18521), (68, 18530), (83, 18551), (93, 18572), (96, 18575), (124, 18620), (145, 18659), (164, 18767), (342, 19022),

Gene: Chlochlo_23 Start: 17927, Stop: 18889, Start Num: 1
Candidate Starts for Chlochlo_23:
(Start: 1 @17927 has 4 MA's), (16, 18062), (Start: 46 @18188 has 2 MA's), (107, 18299), (132, 18356), (133, 18362), (140, 18380), (160, 18467), (164, 18497), (215, 18584), (336, 18743), (361, 18791),

Gene: Chlochlo_24 Start: 18901, Stop: 19737, Start Num: 11
Candidate Starts for Chlochlo_24:
(Start: 11 @18901 has 20 MA's), (71, 19108), (108, 19156), (114, 19174), (136, 19228), (164, 19351), (217, 19450), (222, 19456), (258, 19498), (265, 19507), (385, 19672),

Gene: Cholula_2 Start: 1700, Stop: 2581, Start Num: 10
Candidate Starts for Cholula_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (157, 2099), (164, 2147), (167, 2168), (169, 2177), (201, 2225), (264, 2303), (292, 2351), (345, 2438),

Gene: Darby_22 Start: 17672, Stop: 18595, Start Num: 2

Candidate Starts for Darby_22:
(Start: 2 @17672 has 40 MA's), (119, 18059), (127, 18074), (164, 18221), (198, 18293), (225, 18323), (250, 18353), (293, 18401), (323, 18440),

Gene: Darby_23 Start: 18607, Stop: 19437, Start Num: 11
Candidate Starts for Darby_23:
(Start: 11 @18607 has 20 MA's), (48, 18769), (88, 18841), (102, 18859), (136, 18925), (159, 19012), (164, 19048), (197, 19117), (264, 19195), (325, 19285), (344, 19312), (371, 19357),

Gene: DevitoJr_22 Start: 17815, Stop: 18768, Start Num: 2
Candidate Starts for DevitoJr_22:
(Start: 2 @17815 has 40 MA's), (167, 18412), (299, 18592), (351, 18655),

Gene: DevitoJr_23 Start: 18780, Stop: 19604, Start Num: 11
Candidate Starts for DevitoJr_23:
(Start: 11 @18780 has 20 MA's), (48, 18942), (88, 19014), (102, 19032), (118, 19062), (128, 19080), (136, 19098), (159, 19185), (170, 19257), (208, 19296), (342, 19476),

Gene: Dinallo_23 Start: 18897, Stop: 19835, Start Num: 2
Candidate Starts for Dinallo_23:
(Start: 2 @18897 has 40 MA's), (65, 19212), (72, 19221), (86, 19242), (101, 19263), (124, 19302), (157, 19410), (164, 19458), (215, 19548), (225, 19557), (228, 19563), (305, 19662), (307, 19665), (317, 19677), (334, 19695), (382, 19761), (384, 19764),

Gene: Dinallo_24 Start: 19847, Stop: 20671, Start Num: 11
Candidate Starts for Dinallo_24:
(Start: 11 @19847 has 20 MA's), (Start: 46 @19997 has 2 MA's), (56, 20030), (84, 20072), (164, 20288), (186, 20339), (192, 20348), (208, 20363),

Gene: Dino_2 Start: 1706, Stop: 2536, Start Num: 10
Candidate Starts for Dino_2:
(Start: 10 @1706 has 56 MA's), (83, 1937), (142, 2030), (152, 2075), (218, 2255), (268, 2303), (320, 2387), (362, 2429),

Gene: Edmundo_28 Start: 22116, Stop: 22982, Start Num: 10
Candidate Starts for Edmundo_28:
(Start: 10 @22116 has 56 MA's), (54, 22290), (62, 22314), (68, 22323), (83, 22344), (100, 22365), (116, 22389), (143, 22440), (148, 22455), (152, 22482), (164, 22560), (174, 22602), (185, 22617), (230, 22671), (247, 22695), (292, 22764), (296, 22776), (298, 22779), (322, 22815), (324, 22818), (364, 22878), (381, 22902), (393, 22944),

Gene: ElephantMan_23 Start: 19339, Stop: 20136, Start Num: 11
Candidate Starts for ElephantMan_23:
(Start: 11 @19339 has 20 MA's), (65, 19546), (88, 19573), (102, 19591), (105, 19594), (118, 19621), (128, 19639), (136, 19657), (159, 19744), (164, 19780), (169, 19810), (171, 19819), (274, 19921), (357, 20050), (380, 20077),

Gene: ElephantMan_22 Start: 18383, Stop: 19327, Start Num: 2
Candidate Starts for ElephantMan_22:
(Start: 2 @18383 has 40 MA's), (30, 18569), (36, 18614), (54, 18674), (65, 18698), (72, 18707), (86, 18728), (101, 18749), (147, 18836), (160, 18914), (165, 18947), (175, 18986), (348, 19202), (382, 19253),

Gene: Flashwig_16 Start: 11132, Stop: 11866, Start Num: 35
Candidate Starts for Flashwig_16:
(27, 11087), (35, 11132), (61, 11237), (115, 11327), (124, 11348), (131, 11366), (141, 11393), (154, 11453), (160, 11489), (164, 11519), (224, 11621), (238, 11633), (262, 11663),

Gene: Fluke_2 Start: 1696, Stop: 2577, Start Num: 10
Candidate Starts for Fluke_2:
(7, 1636), (Start: 10 @1696 has 56 MA's), (83, 1927), (142, 2020), (152, 2065), (157, 2095), (164, 2143), (167, 2164), (169, 2173), (201, 2221), (264, 2299), (292, 2347), (345, 2434),

Gene: GantcherGoblin_18 Start: 14524, Stop: 15495, Start Num: 2
Candidate Starts for GantcherGoblin_18:
(Start: 2 @14524 has 40 MA's), (8, 14593), (21, 14677), (146, 15001), (152, 15034), (158, 15073), (159, 15076), (175, 15157), (238, 15229), (331, 15337), (346, 15361), (347, 15364),

Gene: GantcherGoblin_19 Start: 15507, Stop: 16379, Start Num: 10
Candidate Starts for GantcherGoblin_19:
(Start: 10 @15507 has 56 MA's), (49, 15669), (74, 15717), (94, 15747), (159, 15912), (160, 15918), (168, 15975), (282, 16146), (295, 16167), (341, 16239),

Gene: Glenn_2 Start: 1706, Stop: 2587, Start Num: 10
Candidate Starts for Glenn_2:
(Start: 10 @1706 has 56 MA's), (48, 1868), (83, 1937), (157, 2105), (164, 2153), (167, 2174), (169, 2183), (201, 2231), (264, 2309), (292, 2357), (345, 2444),

Gene: Gordon_23 Start: 19887, Stop: 20711, Start Num: 11
Candidate Starts for Gordon_23:
(Start: 11 @19887 has 20 MA's), (48, 20049), (88, 20121), (102, 20139), (136, 20205), (159, 20292), (164, 20328), (170, 20364), (186, 20379), (208, 20403), (342, 20583),

Gene: Gordon_22 Start: 18940, Stop: 19875, Start Num: 2
Candidate Starts for Gordon_22:
(Start: 2 @18940 has 40 MA's), (36, 19171), (40, 19189), (59, 19243), (76, 19270), (163, 19489), (164, 19501), (215, 19594), (225, 19603), (293, 19681), (370, 19786), (393, 19840),

Gene: Graynor_2 Start: 1724, Stop: 2548, Start Num: 10
Candidate Starts for Graynor_2:
(7, 1664), (Start: 10 @1724 has 56 MA's), (21, 1760), (51, 1892), (54, 1901), (83, 1955), (100, 1976), (116, 2000), (144, 2054), (210, 2264), (222, 2273), (265, 2318), (274, 2330), (383, 2477),

Gene: GreenHearts_2 Start: 1706, Stop: 2587, Start Num: 10
Candidate Starts for GreenHearts_2:
(Start: 10 @1706 has 56 MA's), (54, 1883), (62, 1907), (83, 1937), (100, 1958), (116, 1982), (148, 2048), (149, 2057), (152, 2075), (159, 2117), (165, 2156), (169, 2183), (261, 2306), (265, 2312), (345, 2444),

Gene: Greenhouse_2 Start: 1726, Stop: 2556, Start Num: 10
Candidate Starts for Greenhouse_2:
(Start: 10 @1726 has 56 MA's), (26, 1786), (37, 1846), (62, 1927), (83, 1957), (88, 1969), (148, 2068), (152, 2095), (164, 2173), (172, 2215), (218, 2275), (229, 2281), (245, 2290), (277, 2338),

Gene: GrimEater_18 Start: 16559, Stop: 17395, Start Num: 46
Candidate Starts for GrimEater_18:

(Start: 46 @16559 has 2 MA's), (69, 16625), (99, 16676), (123, 16724), (135, 16760), (166, 16922), (206, 16994), (249, 17054), (310, 17156), (399, 17363),

Gene: HorseRider_15 Start: 10464, Stop: 11309, Start Num: 31
Candidate Starts for HorseRider_15:
(31, 10464), (44, 10530), (52, 10563), (61, 10593), (78, 10620), (102, 10659), (115, 10686), (119, 10695), (141, 10752), (160, 10848), (164, 10878), (222, 10986), (226, 10992), (243, 11013), (286, 11076), (394, 11244),

Gene: Huntingdon_2 Start: 1717, Stop: 2535, Start Num: 10
Candidate Starts for Huntingdon_2:
(Start: 10 @1717 has 56 MA's), (48, 1879), (54, 1894), (83, 1948), (88, 1960), (118, 1996), (148, 2059), (152, 2086), (165, 2167), (192, 2233), (268, 2308), (355, 2416), (375, 2446), (388, 2473),

Gene: Immaculata_2 Start: 1700, Stop: 2581, Start Num: 10
Candidate Starts for Immaculata_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (157, 2099), (164, 2147), (167, 2168), (169, 2177), (201, 2225), (264, 2303), (292, 2351), (345, 2438),

Gene: Inked_24 Start: 18496, Stop: 19452, Start Num: 2
Candidate Starts for Inked_24:
(Start: 2 @18496 has 40 MA's), (9, 18601), (73, 18823), (119, 18901), (130, 18922), (142, 18952), (164, 19075), (183, 19132), (204, 19156), (207, 19159), (250, 19204), (323, 19300), (386, 19387),

Gene: Inked_25 Start: 19463, Stop: 20353, Start Num: 12
Candidate Starts for Inked_25:
(Start: 12 @19463 has 14 MA's), (23, 19505), (55, 19643), (65, 19667), (178, 19976), (194, 20009), (205, 20024), (215, 20036), (268, 20099), (272, 20105), (302, 20153), (350, 20222), (363, 20246), (371, 20258),

Gene: Issa_23 Start: 18593, Stop: 19414, Start Num: 11
Candidate Starts for Issa_23:
(Start: 11 @18593 has 20 MA's), (48, 18755), (102, 18845), (105, 18848), (128, 18893), (136, 18911), (159, 18998), (178, 19082), (219, 19124), (273, 19181), (289, 19208), (330, 19265), (340, 19277), (356, 19310), (393, 19376),

Gene: Issa_22 Start: 17646, Stop: 18581, Start Num: 2
Candidate Starts for Issa_22:
(Start: 2 @17646 has 40 MA's), (30, 17832), (40, 17895), (59, 17949), (76, 17976), (84, 17988), (104, 18015), (107, 18018), (164, 18207), (218, 18303), (225, 18309), (228, 18315), (250, 18339), (265, 18357),

Gene: Jalloh_15 Start: 10472, Stop: 11173, Start Num: 31
Candidate Starts for Jalloh_15:
(31, 10472), (44, 10538), (52, 10571), (61, 10601), (78, 10628), (102, 10667), (115, 10694), (154, 10754), (164, 10820), (233, 10937), (262, 10970), (276, 10991), (339, 11075), (387, 11129),

Gene: Jankie_18 Start: 16558, Stop: 17394, Start Num: 46
Candidate Starts for Jankie_18:
(Start: 46 @16558 has 2 MA's), (69, 16624), (99, 16675), (123, 16723), (135, 16759), (166, 16921), (206, 16993), (249, 17053), (310, 17155), (399, 17362),

Gene: Joann_2 Start: 1712, Stop: 2527, Start Num: 10

Candidate Starts for Joann_2:
(Start: 10 @1712 has 56 MA's), (19, 1739), (40, 1844), (72, 1925), (142, 2027), (159, 2114), (204, 2234), (317, 2369),

Gene: Jumboset_2 Start: 1700, Stop: 2530, Start Num: 10
Candidate Starts for Jumboset_2:
(Start: 10 @1700 has 56 MA's), (83, 1931), (142, 2024), (152, 2069), (167, 2168), (229, 2255), (277, 2309), (298, 2345), (320, 2375), (395, 2507),

Gene: Kalizoi_2 Start: 1700, Stop: 2530, Start Num: 10
Candidate Starts for Kalizoi_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (142, 2024), (152, 2069), (218, 2249), (268, 2297), (320, 2381), (362, 2423),

Gene: KevinMinion_19 Start: 15618, Stop: 16589, Start Num: 2
Candidate Starts for KevinMinion_19:
(Start: 2 @15618 has 40 MA's), (8, 15687), (21, 15771), (146, 16095), (152, 16128), (158, 16167), (159, 16170), (175, 16251), (238, 16323), (331, 16431), (346, 16455), (347, 16458),

Gene: KevinMinion_20 Start: 16601, Stop: 17473, Start Num: 10
Candidate Starts for KevinMinion_20:
(Start: 10 @16601 has 56 MA's), (49, 16763), (74, 16811), (94, 16841), (159, 17006), (160, 17012), (168, 17069), (282, 17240), (295, 17261), (341, 17333),

Gene: Kinny_21 Start: 16348, Stop: 17340, Start Num: 2
Candidate Starts for Kinny_21:
(Start: 2 @16348 has 40 MA's), (92, 16711), (97, 16717), (181, 16975), (225, 17023), (237, 17038), (240, 17041), (241, 17044),

Gene: Kinny_22 Start: 17352, Stop: 18233, Start Num: 12
Candidate Starts for Kinny_22:
(Start: 12 @17352 has 14 MA's), (49, 17517), (63, 17553), (70, 17562), (80, 17577), (113, 17637), (117, 17643), (150, 17733), (159, 17793), (164, 17829), (199, 17904), (220, 17925), (290, 18021), (334, 18078), (382, 18159),

Gene: Korra_2 Start: 1706, Stop: 2536, Start Num: 10
Candidate Starts for Korra_2:
(Start: 10 @1706 has 56 MA's), (83, 1937), (142, 2030), (152, 2075), (218, 2255), (268, 2303), (320, 2387), (362, 2429),

Gene: Lakshmi_2 Start: 1712, Stop: 2563, Start Num: 10
Candidate Starts for Lakshmi_2:
(Start: 10 @1712 has 56 MA's), (57, 1901), (93, 1964), (100, 1973), (124, 2012), (156, 2114), (171, 2213), (172, 2216), (218, 2276), (249, 2303), (262, 2324), (268, 2333), (274, 2345), (320, 2420),

Gene: Laroye_29 Start: 21839, Stop: 22678, Start Num: 10
Candidate Starts for Laroye_29:
(Start: 10 @21839 has 56 MA's), (96, 22091), (106, 22103), (160, 22268), (218, 22394), (220, 22397), (255, 22433), (268, 22451), (320, 22538), (368, 22586),

Gene: LastNadiia_4 Start: 2351, Stop: 3184, Start Num: 12
Candidate Starts for LastNadiia_4:

(Start: 12 @2351 has 14 MA's), (17, 2372), (38, 2471), (184, 2858), (236, 2927), (259, 2948), (316, 3020), (369, 3098),

Gene: Leathea_20 Start: 15559, Stop: 16368, Start Num: 10
Candidate Starts for Leathea_20:
(Start: 10 @15559 has 56 MA's), (54, 15730), (77, 15772), (109, 15808), (110, 15811), (159, 15952), (164, 15988), (167, 16009), (212, 16078), (274, 16141), (279, 16147), (330, 16219), (352, 16249), (378, 16294), (386, 16303),

Gene: Leathea_19 Start: 14595, Stop: 15545, Start Num: 2
Candidate Starts for Leathea_19:
(Start: 2 @14595 has 40 MA's), (8, 14664), (64, 14913), (72, 14925), (119, 15000), (172, 15198), (175, 15201), (196, 15231), (200, 15237), (221, 15261), (303, 15357),

Gene: Lewando_22 Start: 16467, Stop: 17426, Start Num: 2
Candidate Starts for Lewando_22:
(Start: 2 @16467 has 40 MA's), (8, 16536), (92, 16824), (117, 16857), (164, 17034), (190, 17097), (264, 17187), (361, 17331), (386, 17361),

Gene: Lewando_23 Start: 17438, Stop: 18301, Start Num: 10
Candidate Starts for Lewando_23:
(Start: 10 @17438 has 56 MA's), (49, 17597), (58, 17621), (95, 17681), (97, 17684), (111, 17699), (119, 17714), (123, 17723), (134, 17750), (156, 17816), (202, 17963), (211, 17975), (214, 17981), (230, 18002), (251, 18032), (290, 18089),

Gene: LiSara_28 Start: 21859, Stop: 22668, Start Num: 10
Candidate Starts for LiSara_28:
(Start: 10 @21859 has 56 MA's), (79, 22081), (142, 22171), (155, 22234), (159, 22258), (162, 22276), (164, 22294), (218, 22390), (230, 22402), (269, 22444), (274, 22450), (289, 22474), (329, 22528),

Gene: LilHuddy_23 Start: 17957, Stop: 18919, Start Num: 2
Candidate Starts for LilHuddy_23:
(Start: 2 @17957 has 40 MA's), (167, 18554), (172, 18572), (237, 18650), (398, 18914),

Gene: LilHuddy_24 Start: 18931, Stop: 19785, Start Num: 12
Candidate Starts for LilHuddy_24:
(Start: 12 @18931 has 14 MA's), (75, 19141), (153, 19303), (164, 19378), (309, 19603), (324, 19621), (351, 19663),

Gene: Litotes_2 Start: 1688, Stop: 2512, Start Num: 10
Candidate Starts for Litotes_2:
(Start: 10 @1688 has 56 MA's), (29, 1757), (51, 1856), (54, 1865), (83, 1919), (100, 1940), (116, 1964), (144, 2018), (189, 2201), (210, 2228), (265, 2282), (267, 2285), (274, 2294),

Gene: LucySwiss_22 Start: 17674, Stop: 18597, Start Num: 2
Candidate Starts for LucySwiss_22:
(Start: 2 @17674 has 40 MA's), (119, 18061), (127, 18076), (164, 18223), (198, 18295), (225, 18325), (250, 18355), (293, 18403), (323, 18442),

Gene: LucySwiss_23 Start: 18609, Stop: 19439, Start Num: 11
Candidate Starts for LucySwiss_23:
(Start: 11 @18609 has 20 MA's), (48, 18771), (88, 18843), (102, 18861), (136, 18927), (159, 19014), (164, 19050), (197, 19119), (264, 19197), (344, 19314), (371, 19359),

Gene: Mardi_21 Start: 16080, Stop: 16907, Start Num: 10
Candidate Starts for Mardi_21:
(Start: 10 @16080 has 56 MA's), (97, 16326), (164, 16530), (174, 16569), (177, 16572), (223, 16617), (299, 16716), (347, 16782), (376, 16830),

Gene: Mardi_20 Start: 15112, Stop: 16068, Start Num: 2
Candidate Starts for Mardi_20:
(Start: 2 @15112 has 40 MA's), (8, 15181), (120, 15508), (140, 15556),

Gene: Maruru_27 Start: 26708, Stop: 27541, Start Num: 5
Candidate Starts for Maruru_27:
(Start: 5 @26708 has 2 MA's), (17, 26825), (33, 26876), (162, 27140), (169, 27188), (248, 27287), (289, 27344), (315, 27386), (317, 27389), (322, 27395),

Gene: Maruru_26 Start: 25762, Stop: 26697, Start Num: 5
Candidate Starts for Maruru_26:
(Start: 5 @25762 has 2 MA's), (15, 25876), (24, 25924), (33, 25963), (43, 26014), (56, 26059), (100, 26125), (159, 26278), (288, 26500),

Gene: MeganNoll_2 Start: 1706, Stop: 2587, Start Num: 10
Candidate Starts for MeganNoll_2:
(Start: 10 @1706 has 56 MA's), (48, 1868), (83, 1937), (157, 2105), (164, 2153), (167, 2174), (169, 2183), (201, 2231), (264, 2309), (292, 2357), (345, 2444),

Gene: MiniBagel_22 Start: 18888, Stop: 19826, Start Num: 2
Candidate Starts for MiniBagel_22:
(Start: 2 @18888 has 40 MA's), (65, 19203), (72, 19212), (86, 19233), (101, 19254), (124, 19293), (157, 19401), (164, 19449), (215, 19539), (225, 19548), (228, 19554), (305, 19653), (307, 19656), (317, 19668), (334, 19686), (382, 19752), (384, 19755),

Gene: MiniBagel_23 Start: 19838, Stop: 20662, Start Num: 11
Candidate Starts for MiniBagel_23:
(Start: 11 @19838 has 20 MA's), (Start: 46 @19988 has 2 MA's), (56, 20021), (84, 20063), (164, 20279), (186, 20330), (192, 20339), (208, 20354),

Gene: Misaeng_2 Start: 1719, Stop: 2600, Start Num: 10
Candidate Starts for Misaeng_2:
(6, 1650), (Start: 10 @1719 has 56 MA's), (37, 1839), (54, 1896), (83, 1950), (100, 1971), (116, 1995), (148, 2061), (149, 2070), (152, 2088), (159, 2130), (165, 2169), (169, 2196), (261, 2319), (265, 2325), (345, 2457),

Gene: MrBoss_2 Start: 1688, Stop: 2512, Start Num: 10
Candidate Starts for MrBoss_2:
(Start: 10 @1688 has 56 MA's), (29, 1757), (51, 1856), (54, 1865), (83, 1919), (100, 1940), (116, 1964), (144, 2018), (189, 2201), (210, 2228), (265, 2282), (267, 2285), (274, 2294),

Gene: MrGloopy_2 Start: 1696, Stop: 2520, Start Num: 10
Candidate Starts for MrGloopy_2:
(7, 1636), (Start: 10 @1696 has 56 MA's), (83, 1927), (142, 2020), (160, 2113), (194, 2215), (201, 2224), (274, 2302), (340, 2401), (392, 2479),

Gene: Muglass_22 Start: 17027, Stop: 17872, Start Num: 12

Candidate Starts for Muglass_22:
(Start: 12 @17027 has 14 MA's), (54, 17201), (73, 17234), (80, 17246), (159, 17444), (164, 17480), (194, 17543), (228, 17576), (231, 17579), (319, 17702), (334, 17717), (340, 17726), (351, 17747), (367, 17777),

Gene: Muglass_21 Start: 16068, Stop: 17015, Start Num: 2
Candidate Starts for Muglass_21:
(Start: 2 @16068 has 40 MA's), (47, 16344), (140, 16512), (146, 16527), (237, 16755), (393, 16977),

Gene: Navi1117_20 Start: 15794, Stop: 16630, Start Num: 10
Candidate Starts for Navi1117_20:
(Start: 10 @15794 has 56 MA's), (97, 16040), (188, 16310),

Gene: Navi1117_19 Start: 14814, Stop: 15782, Start Num: 2
Candidate Starts for Navi1117_19:
(Start: 2 @14814 has 40 MA's), (8, 14883), (92, 15177), (153, 15300), (164, 15375), (191, 15441), (300, 15582), (308, 15594), (311, 15600), (326, 15621), (338, 15636), (354, 15669), (356, 15672), (389, 15723),

Gene: Nightmare_24 Start: 19157, Stop: 19975, Start Num: 10
Candidate Starts for Nightmare_24:
(Start: 10 @19157 has 56 MA's), (36, 19271), (39, 19286), (62, 19355), (68, 19364), (83, 19385), (140, 19475), (144, 19484), (164, 19601), (183, 19643), (229, 19691), (243, 19709), (265, 19742), (318, 19817), (345, 19856), (372, 19901), (390, 19934),

Gene: Nightmare_23 Start: 18210, Stop: 19145, Start Num: 2
Candidate Starts for Nightmare_23:
(Start: 2 @18210 has 40 MA's), (Start: 46 @18477 has 2 MA's), (115, 18594), (156, 18708), (164, 18768), (175, 18810), (196, 18837), (265, 18918), (331, 18999),

Gene: Niktson_22 Start: 18383, Stop: 19327, Start Num: 2
Candidate Starts for Niktson_22:
(Start: 2 @18383 has 40 MA's), (30, 18569), (36, 18614), (54, 18674), (65, 18698), (72, 18707), (86, 18728), (101, 18749), (147, 18836), (160, 18914), (165, 18947), (175, 18986), (348, 19202), (382, 19253),

Gene: Niktson_23 Start: 19339, Stop: 20136, Start Num: 11
Candidate Starts for Niktson_23:
(Start: 11 @19339 has 20 MA's), (65, 19546), (88, 19573), (102, 19591), (105, 19594), (118, 19621), (128, 19639), (136, 19657), (159, 19744), (164, 19780), (169, 19810), (171, 19819), (274, 19921), (357, 20050), (380, 20077),

Gene: Nivinsha_23 Start: 18649, Stop: 19527, Start Num: 10
Candidate Starts for Nivinsha_23:
(Start: 10 @18649 has 56 MA's), (36, 18763), (39, 18778), (62, 18847), (68, 18856), (83, 18877), (144, 18976), (148, 18988), (159, 19057), (167, 19114), (169, 19123), (218, 19189), (253, 19234), (265, 19252), (322, 19351), (329, 19360), (345, 19384),

Gene: Nivinsha_22 Start: 17690, Stop: 18637, Start Num: 2
Candidate Starts for Nivinsha_22:
(Start: 2 @17690 has 40 MA's), (Start: 46 @17957 has 2 MA's), (79, 18026), (115, 18074), (175, 18290), (234, 18359), (252, 18386), (370, 18548),

Gene: Nubia_2 Start: 1706, Stop: 2521, Start Num: 10
Candidate Starts for Nubia_2:
(Start: 10 @1706 has 56 MA's), (40, 1838), (Start: 46 @1856 has 2 MA's), (142, 2021), (159, 2108), (190, 2210), (230, 2252), (274, 2300),

Gene: Oxynfrius_2 Start: 1709, Stop: 2536, Start Num: 10
Candidate Starts for Oxynfrius_2:
(Start: 10 @1709 has 56 MA's), (37, 1829), (62, 1910), (83, 1940), (88, 1952), (118, 1988), (152, 2078), (192, 2228), (208, 2249), (218, 2258), (274, 2312), (322, 2390), (324, 2393),

Gene: PartyCup_2 Start: 1727, Stop: 2557, Start Num: 10
Candidate Starts for PartyCup_2:
(Start: 10 @1727 has 56 MA's), (21, 1763), (54, 1904), (62, 1928), (83, 1958), (88, 1970), (100, 1979), (116, 2003), (144, 2057), (152, 2096), (164, 2174), (172, 2216), (218, 2276), (229, 2282), (342, 2432),

Gene: Phaby_23 Start: 17892, Stop: 18863, Start Num: 1
Candidate Starts for Phaby_23:
(Start: 1 @17892 has 4 MA's), (16, 18027), (42, 18141), (95, 18258), (105, 18270), (162, 18456), (167, 18495), (184, 18525), (317, 18699),

Gene: Phaby_24 Start: 18875, Stop: 19708, Start Num: 11
Candidate Starts for Phaby_24:
(Start: 11 @18875 has 20 MA's), (71, 19082), (108, 19133), (114, 19148), (124, 19169), (136, 19199), (164, 19322), (175, 19367), (225, 19427), (229, 19433), (327, 19562), (355, 19607),

Gene: Phaila_19 Start: 15100, Stop: 15957, Start Num: 10
Candidate Starts for Phaila_19:
(Start: 10 @15100 has 56 MA's), (74, 15310), (91, 15337), (123, 15385), (278, 15724), (324, 15793), (351, 15835), (379, 15883),

Gene: Phaila_18 Start: 14130, Stop: 15086, Start Num: 2
Candidate Starts for Phaila_18:
(Start: 2 @14130 has 40 MA's), (8, 14199), (21, 14283), (47, 14409), (53, 14424), (164, 14715), (308, 14916),

Gene: PoeMe_20 Start: 15444, Stop: 16394, Start Num: 2
Candidate Starts for PoeMe_20:
(Start: 2 @15444 has 40 MA's), (8, 15513), (40, 15699), (Start: 46 @15717 has 2 MA's), (75, 15777), (87, 15798), (147, 15900), (159, 15972), (164, 16008), (225, 16110), (377, 16317), (382, 16320),

Gene: PoeMe_21 Start: 16406, Stop: 17233, Start Num: 10
Candidate Starts for PoeMe_21:
(Start: 10 @16406 has 56 MA's), (95, 16649), (97, 16652), (164, 16856), (174, 16895), (223, 16943), (271, 17000), (299, 17042), (322, 17069), (376, 17156),

Gene: Potatoes_2 Start: 1700, Stop: 2581, Start Num: 10
Candidate Starts for Potatoes_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (157, 2099), (164, 2147), (167, 2168), (169, 2177), (201, 2225), (264, 2303), (292, 2351), (345, 2438),

Gene: Prairie_32 Start: 26225, Stop: 27085, Start Num: 10
Candidate Starts for Prairie_32:

(Start: 10 @26225 has 56 MA's), (125, 26519), (152, 26600), (160, 26648), (171, 26717), (246, 26798), (300, 26891),

Gene: RAP15_2 Start: 1706, Stop: 2587, Start Num: 10
Candidate Starts for RAP15_2:
(Start: 10 @1706 has 56 MA's), (48, 1868), (83, 1937), (157, 2105), (164, 2153), (167, 2174), (169, 2183), (201, 2231), (264, 2309), (292, 2357), (345, 2444),

Gene: RcigaStruga_2 Start: 1717, Stop: 2535, Start Num: 10
Candidate Starts for RcigaStruga_2:
(Start: 10 @1717 has 56 MA's), (48, 1879), (54, 1894), (83, 1948), (88, 1960), (118, 1996), (148, 2059), (152, 2086), (165, 2167), (192, 2233), (268, 2308), (355, 2416), (375, 2446), (388, 2473),

Gene: Remlit_20 Start: 14135, Stop: 15100, Start Num: 2
Candidate Starts for Remlit_20:
(Start: 2 @14135 has 40 MA's), (8, 14204), (Start: 10 @14249 has 56 MA's), (68, 14459), (98, 14504), (121, 14537), (164, 14711), (221, 14816), (238, 14834), (303, 14912),

Gene: Remlit_21 Start: 15112, Stop: 15933, Start Num: 10
Candidate Starts for Remlit_21:
(Start: 10 @15112 has 56 MA's), (77, 15316), (82, 15325), (107, 15349), (137, 15415), (159, 15502), (173, 15580), (189, 15607), (220, 15634), (233, 15646), (263, 15676),

Gene: Renaldo_25 Start: 17448, Stop: 18311, Start Num: 10
Candidate Starts for Renaldo_25:
(Start: 10 @17448 has 56 MA's), (54, 17619), (97, 17694), (151, 17805), (227, 18009), (256, 18045), (290, 18099), (306, 18129), (366, 18219),

Gene: Renaldo_24 Start: 16468, Stop: 17436, Start Num: 2
Candidate Starts for Renaldo_24:
(Start: 2 @16468 has 40 MA's), (20, 16615), (Start: 46 @16738 has 2 MA's), (102, 16840), (122, 16876), (129, 16894), (140, 16924), (164, 17050), (175, 17095), (225, 17155), (229, 17161), (235, 17167), (266, 17203), (355, 17335), (373, 17359),

Gene: Riverdale_2 Start: 1706, Stop: 2518, Start Num: 10
Candidate Starts for Riverdale_2:
(Start: 10 @1706 has 56 MA's), (62, 1907), (83, 1937), (100, 1958), (116, 1982), (144, 2036), (152, 2075), (165, 2156), (208, 2234), (274, 2297), (322, 2375),

Gene: Rozby_2 Start: 1706, Stop: 2518, Start Num: 10
Candidate Starts for Rozby_2:
(Start: 10 @1706 has 56 MA's), (62, 1907), (83, 1937), (100, 1958), (116, 1982), (144, 2036), (152, 2075), (165, 2156), (208, 2234), (274, 2297), (322, 2375),

Gene: Salgado_29 Start: 21831, Stop: 22676, Start Num: 10
Candidate Starts for Salgado_29:
(Start: 10 @21831 has 56 MA's), (49, 21993), (90, 22074), (93, 22080), (100, 22089), (143, 22167), (164, 22287), (171, 22326), (218, 22389), (220, 22392), (249, 22416), (268, 22446), (320, 22533),

Gene: Savage2526_2 Start: 1700, Stop: 2581, Start Num: 10
Candidate Starts for Savage2526_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (157, 2099), (164, 2147), (167, 2168), (169, 2177), (201, 2225), (264, 2303), (292, 2351), (345, 2438),

Gene: ScienceWizSam_25 Start: 19098, Stop: 19928, Start Num: 12
Candidate Starts for ScienceWizSam_25:
(Start: 12 @19098 has 14 MA's), (40, 19230), (81, 19326), (140, 19437), (152, 19485), (159, 19527), (160, 19533), (164, 19563), (187, 19626), (203, 19644), (206, 19647), (249, 19692), (296, 19737), (313, 19764), (333, 19785), (358, 19830), (360, 19833), (382, 19863),

Gene: ScienceWizSam_23 Start: 17645, Stop: 18610, Start Num: 2
Candidate Starts for ScienceWizSam_23:
(Start: 2 @17645 has 40 MA's), (57, 17945), (81, 17987), (149, 18125), (164, 18221), (192, 18284), (204, 18299), (219, 18317), (237, 18335), (241, 18341), (264, 18371), (273, 18380), (359, 18506),

Gene: Scuttle_2 Start: 1706, Stop: 2587, Start Num: 10
Candidate Starts for Scuttle_2:
(Start: 10 @1706 has 56 MA's), (48, 1868), (83, 1937), (142, 2030), (152, 2075), (164, 2153), (167, 2174), (169, 2183), (201, 2231), (264, 2309), (292, 2357), (345, 2444),

Gene: Shepard_23 Start: 17954, Stop: 18916, Start Num: 2
Candidate Starts for Shepard_23:
(Start: 2 @17954 has 40 MA's), (167, 18551), (172, 18569), (237, 18647), (398, 18911),

Gene: Shepard_24 Start: 18928, Stop: 19782, Start Num: 12
Candidate Starts for Shepard_24:
(Start: 12 @18928 has 14 MA's), (75, 19138), (153, 19300), (164, 19375), (275, 19543), (309, 19600), (324, 19618), (351, 19660),

Gene: Stardrop_20 Start: 16092, Stop: 16928, Start Num: 12
Candidate Starts for Stardrop_20:
(Start: 12 @16092 has 14 MA's), (14, 16098), (49, 16254), (151, 16449),

Gene: Stardrop_19 Start: 15080, Stop: 16078, Start Num: 2
Candidate Starts for Stardrop_19:
(Start: 2 @15080 has 40 MA's), (8, 15149), (97, 15455), (140, 15533), (164, 15659), (198, 15734), (225, 15764), (241, 15785), (297, 15872), (314, 15902), (359, 15971),

Gene: Suppi_2 Start: 1727, Stop: 2557, Start Num: 10
Candidate Starts for Suppi_2:
(Start: 10 @1727 has 56 MA's), (21, 1763), (54, 1904), (62, 1928), (68, 1937), (83, 1958), (88, 1970), (100, 1979), (116, 2003), (144, 2057), (152, 2096), (164, 2174), (172, 2216), (218, 2276), (229, 2282), (342, 2432),

Gene: Synepsis_21 Start: 17802, Stop: 18749, Start Num: 2
Candidate Starts for Synepsis_21:
(Start: 2 @17802 has 40 MA's), (19, 17943), (38, 18039), (Start: 46 @18069 has 2 MA's), (115, 18186), (172, 18399), (175, 18402), (180, 18408), (200, 18435), (220, 18459), (304, 18564), (331, 18597), (347, 18624), (351, 18630),

Gene: Synepsis_22 Start: 18761, Stop: 19588, Start Num: 11
Candidate Starts for Synepsis_22:
(Start: 11 @18761 has 20 MA's), (36, 18875), (40, 18890), (62, 18959), (68, 18968), (83, 18989), (142, 19088), (146, 19100), (164, 19205), (186, 19256), (208, 19280), (342, 19460),

Gene: TailX7_15 Start: 10464, Stop: 11192, Start Num: 32

Candidate Starts for TailX7_15:
(31, 10461), (32, 10464), (44, 10527), (78, 10617), (115, 10683), (164, 10809), (169, 10839), (228, 10926), (291, 11013),

Gene: Tatanka_23 Start: 19176, Stop: 20075, Start Num: 12
Candidate Starts for Tatanka_23:
(Start: 12 @19176 has 14 MA's), (40, 19308), (65, 19380), (160, 19611), (164, 19641), (167, 19662), (169, 19671), (215, 19737), (248, 19782), (264, 19800), (321, 19899), (344, 19932),

Gene: Tatanka_21 Start: 17747, Stop: 18700, Start Num: 2
Candidate Starts for Tatanka_21:
(Start: 2 @17747 has 40 MA's), (98, 18107), (140, 18185), (172, 18350), (204, 18389), (219, 18407), (237, 18425), (241, 18431), (273, 18470),

Gene: TattModd_2 Start: 1700, Stop: 2581, Start Num: 10
Candidate Starts for TattModd_2:
(Start: 10 @1700 has 56 MA's), (48, 1862), (83, 1931), (164, 2147), (169, 2177), (171, 2183), (180, 2195), (201, 2225), (264, 2303), (289, 2345), (345, 2438),

Gene: Teacup_23 Start: 18620, Stop: 19441, Start Num: 11
Candidate Starts for Teacup_23:
(Start: 11 @18620 has 20 MA's), (48, 18782), (102, 18872), (128, 18920), (136, 18938), (159, 19025), (178, 19109), (219, 19151), (273, 19208), (289, 19235), (330, 19292), (340, 19304), (393, 19403),

Gene: Teacup_22 Start: 17655, Stop: 18608, Start Num: 2
Candidate Starts for Teacup_22:
(Start: 2 @17655 has 40 MA's), (Start: 46 @17919 has 2 MA's), (54, 17943), (93, 18012), (98, 18018), (140, 18105), (164, 18231), (191, 18291), (204, 18306), (262, 18372), (332, 18462), (344, 18480), (381, 18531), (398, 18603),

Gene: Tenney120_19 Start: 14807, Stop: 15781, Start Num: 2
Candidate Starts for Tenney120_19:
(Start: 2 @14807 has 40 MA's), (8, 14876), (146, 15284), (152, 15317), (164, 15395), (172, 15437), (175, 15440), (273, 15554), (303, 15596), (346, 15656), (393, 15746),

Gene: Tenney120_20 Start: 15793, Stop: 16665, Start Num: 10
Candidate Starts for Tenney120_20:
(Start: 10 @15793 has 56 MA's), (49, 15955), (74, 16003), (94, 16033), (159, 16198), (160, 16204), (168, 16261), (282, 16432), (295, 16453), (341, 16525),

Gene: Tenno_23 Start: 18897, Stop: 19835, Start Num: 2
Candidate Starts for Tenno_23:
(Start: 2 @18897 has 40 MA's), (65, 19212), (72, 19221), (86, 19242), (101, 19263), (124, 19302), (157, 19410), (164, 19458), (215, 19548), (225, 19557), (228, 19563), (305, 19662), (307, 19665), (317, 19677), (334, 19695), (382, 19761), (384, 19764),

Gene: Tenno_24 Start: 19847, Stop: 20671, Start Num: 11
Candidate Starts for Tenno_24:
(Start: 11 @19847 has 20 MA's), (Start: 46 @19997 has 2 MA's), (56, 20030), (84, 20072), (164, 20288), (186, 20339), (192, 20348), (208, 20363),

Gene: Tipton_23 Start: 17933, Stop: 18919, Start Num: 1
Candidate Starts for Tipton_23:

(Start: 1 @17933 has 4 MA's), (16, 18068), (40, 18182), (50, 18212), (63, 18251), (79, 18275), (112, 18332), (113, 18335), (117, 18341), (162, 18509), (215, 18614), (225, 18623), (234, 18632), (336, 18773), (361, 18821), (368, 18824), (386, 18854),

Gene: Tipton_24 Start: 18931, Stop: 19770, Start Num: 2
Candidate Starts for Tipton_24:
(Start: 2 @18931 has 40 MA's), (52, 19171), (71, 19207), (72, 19210), (89, 19231), (138, 19276), (196, 19456), (215, 19480), (237, 19504), (329, 19609),

Gene: Tokki_24 Start: 18898, Stop: 19734, Start Num: 11
Candidate Starts for Tokki_24:
(Start: 11 @18898 has 20 MA's), (71, 19105), (108, 19153), (114, 19171), (136, 19225), (164, 19348), (217, 19447), (222, 19453), (258, 19495), (265, 19504), (385, 19669),

Gene: Tokki_23 Start: 17924, Stop: 18886, Start Num: 1
Candidate Starts for Tokki_23:
(Start: 1 @17924 has 4 MA's), (16, 18059), (28, 18098), (Start: 46 @18185 has 2 MA's), (107, 18296), (132, 18353), (133, 18359), (140, 18377), (160, 18464), (164, 18494), (215, 18581), (336, 18740), (361, 18788), (368, 18791),

Gene: TrixiePhattel_20 Start: 15755, Stop: 16582, Start Num: 13
Candidate Starts for TrixiePhattel_20:
(Start: 13 @15755 has 1 MA's), (154, 16148), (164, 16214), (210, 16301), (215, 16307), (352, 16466),

Gene: TrixiePhattel_19 Start: 14746, Stop: 15741, Start Num: 2
Candidate Starts for TrixiePhattel_19:
(Start: 2 @14746 has 40 MA's), (8, 14815), (34, 14962), (208, 15403), (260, 15472), (297, 15529), (374, 15655),

Gene: Trustiboi_24 Start: 19319, Stop: 20140, Start Num: 11
Candidate Starts for Trustiboi_24:
(Start: 11 @19319 has 20 MA's), (48, 19481), (88, 19553), (102, 19571), (159, 19724), (164, 19760), (219, 19850), (273, 19907), (274, 19910), (289, 19934), (330, 19991), (340, 20003), (356, 20036), (393, 20102),

Gene: Trustiboi_23 Start: 18375, Stop: 19307, Start Num: 2
Candidate Starts for Trustiboi_23:
(Start: 2 @18375 has 40 MA's), (38, 18612), (Start: 46 @18642 has 2 MA's), (75, 18702), (115, 18759), (225, 19035), (230, 19041), (324, 19152), (393, 19272),

Gene: Uzumaki_19 Start: 15357, Stop: 16349, Start Num: 2
Candidate Starts for Uzumaki_19:
(Start: 2 @15357 has 40 MA's), (8, 15426), (161, 15906), (218, 16026), (225, 16032), (237, 16047), (254, 16074), (374, 16263), (386, 16284),

Gene: Uzumaki_20 Start: 16361, Stop: 17194, Start Num: 10
Candidate Starts for Uzumaki_20:
(Start: 10 @16361 has 56 MA's), (76, 16571), (111, 16619), (119, 16640), (121, 16643), (146, 16709), (152, 16742), (164, 16820), (195, 16895), (256, 16970), (284, 17003), (329, 17075), (364, 17108), (366, 17111), (372, 17120),

Gene: Vallejo_2 Start: 1706, Stop: 2518, Start Num: 10
Candidate Starts for Vallejo_2:

(Start: 10 @1706 has 56 MA's), (62, 1907), (83, 1937), (100, 1958), (116, 1982), (144, 2036), (152, 2075), (165, 2156), (208, 2234), (274, 2297), (322, 2375),

Gene: Wawa_2 Start: 1700, Stop: 2557, Start Num: 12
Candidate Starts for Wawa_2:
(Start: 12 @1700 has 14 MA's), (21, 1736), (40, 1835), (45, 1847), (56, 1886), (65, 1907), (152, 2087), (164, 2165), (169, 2195), (176, 2207), (179, 2210), (281, 2318), (286, 2327), (339, 2402), (343, 2408), (391, 2504), (393, 2519),

Gene: Wayne_2 Start: 1727, Stop: 2605, Start Num: 10
Candidate Starts for Wayne_2:
(Start: 10 @1727 has 56 MA's), (51, 1895), (54, 1904), (62, 1928), (68, 1937), (83, 1958), (88, 1970), (100, 1979), (116, 2003), (144, 2057), (152, 2096), (169, 2204), (171, 2210), (201, 2252), (208, 2261), (292, 2375), (329, 2438), (364, 2501),

Gene: Westerlin_22 Start: 18897, Stop: 19862, Start Num: 2
Candidate Starts for Westerlin_22:
(Start: 2 @18897 has 40 MA's), (Start: 46 @19164 has 2 MA's), (55, 19194), (81, 19239), (140, 19347), (148, 19368), (204, 19551), (273, 19632),

Gene: Westerlin_24 Start: 20357, Stop: 21253, Start Num: 12
Candidate Starts for Westerlin_24:
(Start: 12 @20357 has 14 MA's), (40, 20489), (65, 20561), (79, 20582), (148, 20717), (160, 20792), (203, 20909), (206, 20912), (301, 21047), (317, 21074), (365, 21149),

Gene: Wheelbite_28 Start: 21949, Stop: 22797, Start Num: 10
Candidate Starts for Wheelbite_28:
(Start: 10 @21949 has 56 MA's), (85, 22180), (96, 22201), (98, 22204), (106, 22213), (165, 22411), (171, 22447), (220, 22513), (249, 22537), (294, 22612), (320, 22654),

Gene: Zeina_20 Start: 15710, Stop: 16579, Start Num: 10
Candidate Starts for Zeina_20:
(Start: 10 @15710 has 56 MA's), (105, 15965), (126, 16010), (184, 16229), (309, 16391), (324, 16415), (378, 16505),

Gene: Zeina_19 Start: 14703, Stop: 15698, Start Num: 2
Candidate Starts for Zeina_19:
(Start: 2 @14703 has 40 MA's), (8, 14772), (36, 14940), (169, 15303), (228, 15384), (285, 15468), (287, 15471), (331, 15540),

Gene: Zorro_2 Start: 1706, Stop: 2536, Start Num: 10
Candidate Starts for Zorro_2:
(Start: 10 @1706 has 56 MA's), (83, 1937), (142, 2030), (152, 2075), (218, 2255), (268, 2303), (320, 2387), (362, 2429),