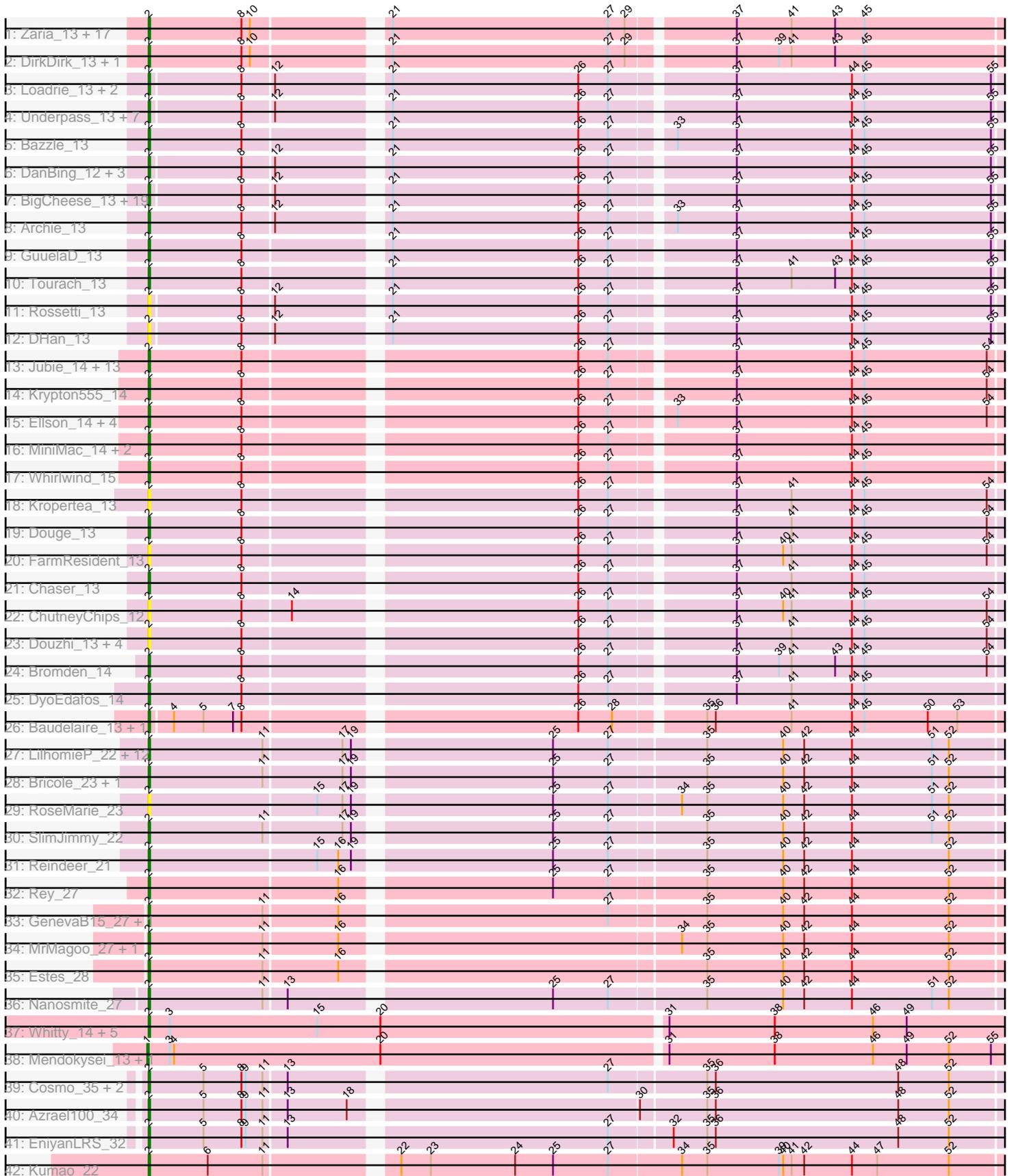Zoomed Pham 289174

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 289174 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289174 has 138 members, 28 are drafts.

Phages represented in each track:
• Track 1 : Zaria_13, Wyatt2_13, Silverleaf_13, Appletree2_13, AvadaKedavra_13, Rose5_13, Acquire49_13, Tyson_13, LeBron_13, JoeDirt_13, UPIE_13, Poochiewood_13, Halena_13, CicholasNage_13, Enceladus_13, MAckerman_13, Wamburgrxpress_13, Calm_13
• Track 2 : DirkDirk_13, OhShagHennessy_13
• Track 3 : Loadrie_13, OverPar_13, Wigglewiggle_13
• Track 4 : Underpass_13, LilDestine_13, Kahlid_13, Nicholasp3_13, SoJulia_13, Finemlucis_13, Gardann_13, Wilder_13
• Track 5 : Bazzle_13
• Track 6 : DanBing_12, Baoshan_12, Claus_13, ZhongYanYuan_12
• Track 7 : BigCheese_13, Miley16_13, DrSeegs_13, Lewan_13, MkaliMitinis3_13, BobsGarage_13, Faith1_13, Sarshaun_13, Zakai_13, Hafay_13, Vetrix_13, Soap141_13, Crossroads_13, Gabriela_13, Itos_13, Winky_13, Breezona_13, Lynnae_13, Rumpelstiltskin_13, Netyap_13
• Track 8 : Archie_13
• Track 9 : GuuelaD_13
• Track 10 : Tourach_13
• Track 11 : Rossetti_13
• Track 12 : DHan_13
• Track 13 : Jubie_14, Kingsolomon_14, TriFive_14, Clautastrophe_14, Snenia_14, Finnry_14, Nicholas_14, Moostard_14, MsGreen_14, Jobypre_14, Bellis_14, Red305_14, Samty_14, Lumos_14
• Track 14 : Krypton555_14
• Track 15 : Ellson_14, KirDoubleO7_12, BourbonZero_13, DuncansLeg_14, LiyuLake_14
• Track 16 : MiniMac_14, Lolly9_14, MiniLon_14
• Track 17 : Whirlwind_15
• Track 18 : Kropertea_13
• Track 19 : Douge_13
• Track 20 : FarmResident_13
• Track 21 : Chaser_13
• Track 22 : ChutneyChips_12
• Track 23 : Douzhi_13, Quby_13, BrainDrainer_14, Sheng711_13, PYPDinur_13
• Track 24 : Bromden_14
• Track 25 : DyoEdafos_14
• Track 26 : Baudelaire_13, Aegeus_13

• Track 27 : LilhomieP_22, Dulcita_24, TyDawg_23, Auspice_23, IPhane7_23, Glaske16_24, Skinny_24, Bongo_23, Izel_24, FreakyGoo_24, PegLeg_23, TpudiCK_24, Diminimus_24
• Track 28 : Bricole_23, KleverKiS_23
• Track 29 : RoseMarie_23
• Track 30 : SlimJimmy_22
• Track 31 : Reindeer_21
• Track 32 : Rey_27
• Track 33 : GenevaB15_27, Aziz_27
• Track 34 : MrMagoo_27, GardenSalsa_27
• Track 35 : Estes_28
• Track 36 : Nanosmite_27
• Track 37 : Whitty_14, RonRayGun_14, Bernal13_14, ZenTime222_14, Nairb_14, Ibrahim_14
• Track 38 : Mendokysei_13, Nette_14
• Track 39 : Cosmo_35, MaryV_35, Wildcat_35
• Track 40 : Azrael100_34
• Track 41 : EniyanLRS_32
• Track 42 : Kumao_22

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

The start number called the most often in the published annotations is 2, it was called in 109 of the 110 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acquire49_13, Aegeus_13, Appletree2_13, Archie_13, Auspice_23, AvadaKedavra_13, Aziz_27, Azrael100_34, Baoshan_12, Baudelaire_13, Bazzle_13, Bellis_14, Bernal13_14, BigCheese_13, BobsGarage_13, Bongo_23, BourbonZero_13, BrainDrainer_14, Breezona_13, Bricole_23, Bromden_14, Calm_13, Chaser_13, ChutneyChips_12, CicholasNage_13, Claus_13, Clautastrophe_14, Cosmo_35, Crossroads_13, DHan_13, DanBing_12, Diminimus_24, DirkDirk_13, Douge_13, Douzhi_13, DrSeegs_13, Dulcita_24, DuncansLeg_14, DyoEdafos_14, Ellson_14, Enceladus_13, EniyanLRS_32, Estes_28, Faith1_13, FarmResident_13, Finemlucis_13, Finnry_14, FreakyGoo_24, Gabriela_13, Gardann_13, GardenSalsa_27, GenevaB15_27, Glaske16_24, GuuelaD_13, Hafay_13, Halena_13, IPhane7_23, Ibrahim_14, Itos_13, Izel_24, Jobypre_14, JoeDirt_13, Jubie_14, Kahlid_13, Kingsolomon_14, KirDoubleO7_12, KleverKiS_23, Kropertea_13, Krypton555_14, Kumao_22, LeBron_13, Lewan_13, LilDestine_13, LilhomieP_22, LiyuLake_14, Loadrie_13, Lolly9_14, Lumos_14, Lynnae_13, MAckerman_13, MaryV_35, Miley16_13, MiniLon_14, MiniMac_14, MkaliMitinis3_13, Moostard_14, MrMagoo_27, MsGreen_14, Nairb_14, Nanosmite_27, Netyap_13, Nicholas_14, Nicholasp3_13, OhShagHennessy_13, OverPar_13, PYPDinur_13, PegLeg_23, Poochiewood_13, Quby_13, Red305_14, Reindeer_21, Rey_27, RonRayGun_14, Rose5_13, RoseMarie_23, Rossetti_13, Rumpelstiltskin_13, Samty_14, Sarshaun_13, Sheng711_13, Silverleaf_13, Skinny_24, SlimJimmy_22, Snenia_14, SoJulia_13, Soap141_13, Tourach_13, TpudiCK_24, TriFive_14, TyDawg_23, Tyson_13, UPIE_13, Underpass_13, Vetrix_13, Wamburgrxpress_13, Whirlwind_15, Whitty_14, Wigglewiggle_13, Wildcat_35, Wilder_13, Winky_13, Wyatt2_13, Zakai_13, Zaria_13, ZenTime222_14,

ZhongYanYuan_12,

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

Genes that do not have the "Most Annotated" start:
• Mendokysei_13, Nette_14,

Summary by start number:

Start 1:
• Found in 2 of 138 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mendokysei_13 (T), Nette_14 (T),

Start 2:
• Found in 136 of 138 (98.6%) of genes in pham
• Manual Annotations of this start: 109 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acquire49_13 (L1), Aegeus_13 (L5), Appletree2_13 (L1), Archie_13 (L2), Auspice_23 (M1), AvadaKedavra_13 (L1), Aziz_27 (M2), Azrael100_34 (V), Baoshan_12 (L2), Baudelaire_13 (L5), Bazzle_13 (L2), Bellis_14 (L3), Bernal13_14 (T), BigCheese_13 (L2), BobsGarage_13 (L2), Bongo_23 (M1), BourbonZero_13 (L3), BrainDrainer_14 (L4), Breezona_13 (L2), Bricole_23 (M1), Bromden_14 (L4), Calm_13 (L1), Chaser_13 (L4), ChutneyChips_12 (L4), CicholasNage_13 (L1), Claus_13 (L2), Clautastrophe_14 (L3), Cosmo_35 (V), Crossroads_13 (L2), DHan_13 (L2), DanBing_12 (L2), Diminimus_24 (M1), DirkDirk_13 (L1), Douge_13 (L4), Douzhi_13 (L4), DrSeegs_13 (L2), Dulcita_24 (M1), DuncansLeg_14 (L3), DyoEdafos_14 (L4), Ellson_14 (L3), Enceladus_13 (L1), EniyanLRS_32 (V), Estes_28 (M2), Faith1_13 (L2), FarmResident_13 (L4), Finemlucis_13 (L2), Finnry_14 (L3), FreakyGoo_24 (M1), Gabriela_13 (L2), Gardann_13 (L2), GardenSalsa_27 (M2), GenevaB15_27 (M2), Glaske16_24 (M1), GuuelaD_13 (L2), Hafay_13 (L2), Halena_13 (L1), IPhane7_23 (M1), Ibrahim_14 (T), Itos_13 (L2), Izel_24 (M1), Jobypre_14 (L3), JoeDirt_13 (L1), Jubie_14 (L3), Kahlid_13 (L2), Kingsolomon_14 (L3), KirDoubleO7_12 (L3), KleverKiS_23 (M1), Kropertea_13 (L4), Krypton555_14 (L3), Kumao_22 (singleton), LeBron_13 (L1), Lewan_13 (L2), LilDestine_13 (L2), LilhomieP_22 (M1), LiyuLake_14 (L3), Loadrie_13 (L2), Lolly9_14 (L3), Lumos_14 (L3), Lynnae_13 (L2), MAckerman_13 (L1), MaryV_35 (V), Miley16_13 (L2), MiniLon_14 (L3), MiniMac_14 (L3), MkaliMitinis3_13 (L2), Moostard_14 (L3), MrMagoo_27 (M2), MsGreen_14 (L3), Nairb_14 (T), Nanosmite_27 (M3), Netyap_13 (L2), Nicholas_14 (L3), Nicholasp3_13 (L2), OhShagHennessy_13 (L1), OverPar_13 (L2), PYPDinur_13 (L4), PegLeg_23 (M1), Poochiewood_13 (L1), Quby_13 (L4), Red305_14 (L3), Reindeer_21 (M1), Rey_27 (M2), RonRayGun_14 (T), Rose5_13 (L1), RoseMarie_23 (M1), Rossetti_13 (L2), Rumpelstiltskin_13 (L2), Samty_14 (L3), Sarshaun_13 (L2), Sheng711_13 (L4), Silverleaf_13 (L1), Skinny_24 (M1), SlimJimmy_22 (M1), Snenia_14 (L3), SoJulia_13 (L2), Soap141_13 (L2), Tourach_13 (L2), TpudiCK_24 (M1), TriFive_14 (L3), TyDawg_23 (M1), Tyson_13 (L1), UPIE_13 (L1), Underpass_13 (L2), Vetrix_13 (L2), Wamburgrxpress_13 (L1), Whirlwind_15 (L3), Whitty_14 (T), Wigglewiggle_13 (L2), Wildcat_35 (V), Wilder_13 (L2), Winky_13 (L2), Wyatt2_13 (L1), Zakai_13 (L2), Zaria_13 (L1), ZenTime222_14 (T), ZhongYanYuan_12 (L2),

Summary by clusters:

There are 11 clusters represented in this pham: V, L1, singleton, L4, L5, M1, L3, M3, M2, L2, T,

Info for manual annotations of cluster L1:
•Start number 2 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 2 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:
•Start number 2 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 2 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 2 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:
•Start number 2 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 2 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 2 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster T:
•Start number 1 was manually annotated 1 time for cluster T.
•Start number 2 was manually annotated 6 times for cluster T.

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

Gene Information:

Gene: Acquire49_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Acquire49_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Aegeus_13 Start: 8615, Stop: 9511, Start Num: 2
Candidate Starts for Aegeus_13:
(Start: 2 @8615 has 109 MA's), (4, 8630), (5, 8651), (7, 8672), (8, 8678), (26, 8900), (28, 8924), (35, 8981), (36, 8987), (41, 9041), (44, 9083), (45, 9092), (50, 9137), (53, 9158), (61, 9260), (62, 9269), (66, 9296), (70, 9326), (71, 9332), (72, 9335), (79, 9383), (85, 9425), (86, 9428), (95, 9491),

Gene: Appletree2_13 Start: 8963, Stop: 9865, Start Num: 2
Candidate Starts for Appletree2_13:

(Start: 2 @8963 has 109 MA's), (8, 9029), (10, 9035), (21, 9119), (27, 9272), (29, 9284), (37, 9353), (41, 9392), (43, 9422), (45, 9443), (66, 9647), (72, 9686), (86, 9779), (88, 9803), (96, 9848),

Gene: Archie_13 Start: 8948, Stop: 9850, Start Num: 2
Candidate Starts for Archie_13:
(Start: 2 @8948 has 109 MA's), (8, 9014), (12, 9035), (21, 9104), (26, 9236), (27, 9257), (33, 9296), (37, 9338), (44, 9419), (45, 9428), (55, 9518), (56, 9530), (59, 9569), (67, 9638), (86, 9764), (96, 9833),

Gene: Auspice_23 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for Auspice_23:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: AvadaKedavra_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for AvadaKedavra_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Aziz_27 Start: 13394, Stop: 14293, Start Num: 2
Candidate Starts for Aziz_27:
(Start: 2 @13394 has 109 MA's), (11, 13475), (16, 13526), (27, 13703), (35, 13769), (40, 13823), (42, 13838), (44, 13871), (52, 13940), (68, 14090), (73, 14114), (77, 14150), (80, 14162), (84, 14189), (86, 14207), (89, 14237), (95, 14270),

Gene: Azrael100_34 Start: 15887, Stop: 16798, Start Num: 2
Candidate Starts for Azrael100_34:
(Start: 2 @15887 has 109 MA's), (5, 15926), (8, 15953), (9, 15956), (11, 15968), (13, 15983), (18, 16025), (30, 16217), (35, 16262), (36, 16268), (48, 16397), (52, 16433), (63, 16553), (65, 16571), (66, 16577), (73, 16607), (74, 16610), (81, 16667), (86, 16697), (90, 16733), (94, 16763), (95, 16775),

Gene: Baoshan_12 Start: 8830, Stop: 9729, Start Num: 2
Candidate Starts for Baoshan_12:
(Start: 2 @8830 has 109 MA's), (8, 8893), (12, 8914), (21, 8983), (26, 9115), (27, 9136), (37, 9217), (44, 9298), (45, 9307), (55, 9397), (56, 9409), (59, 9448), (64, 9490), (66, 9511), (67, 9517), (86, 9643), (96, 9712),

Gene: Baudelaire_13 Start: 8615, Stop: 9511, Start Num: 2
Candidate Starts for Baudelaire_13:
(Start: 2 @8615 has 109 MA's), (4, 8630), (5, 8651), (7, 8672), (8, 8678), (26, 8900), (28, 8924), (35, 8981), (36, 8987), (41, 9041), (44, 9083), (45, 9092), (50, 9137), (53, 9158), (61, 9260), (62, 9269), (66, 9296), (70, 9326), (71, 9332), (72, 9335), (79, 9383), (85, 9425), (86, 9428), (95, 9491),

Gene: Bazzle_13 Start: 8951, Stop: 9853, Start Num: 2
Candidate Starts for Bazzle_13:
(Start: 2 @8951 has 109 MA's), (8, 9017), (21, 9107), (26, 9239), (27, 9260), (33, 9299), (37, 9341), (44, 9422), (45, 9431), (55, 9521), (56, 9533), (59, 9572), (66, 9635), (67, 9641), (79, 9722), (86, 9767), (96, 9836),

Gene: Bellis_14 Start: 9118, Stop: 10020, Start Num: 2
Candidate Starts for Bellis_14:
(Start: 2 @9118 has 109 MA's), (8, 9184), (26, 9406), (27, 9427), (37, 9508), (44, 9589), (45, 9598), (54, 9685), (56, 9700), (59, 9739), (70, 9832), (78, 9883), (86, 9934),

Gene: Bernal13_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for Bernal13_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: BigCheese_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for BigCheese_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: BobsGarage_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for BobsGarage_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Bongo_23 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for Bongo_23:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: BourbonZero_13 Start: 9125, Stop: 10027, Start Num: 2
Candidate Starts for BourbonZero_13:
(Start: 2 @9125 has 109 MA's), (8, 9191), (26, 9413), (27, 9434), (33, 9473), (37, 9515), (44, 9596), (45, 9605), (54, 9692), (56, 9707), (59, 9746), (78, 9890), (86, 9941),

Gene: BrainDrainer_14 Start: 8811, Stop: 9713, Start Num: 2
Candidate Starts for BrainDrainer_14:
(Start: 2 @8811 has 109 MA's), (8, 8877), (26, 9099), (27, 9120), (37, 9201), (41, 9240), (44, 9282), (45, 9291), (54, 9378), (56, 9393), (59, 9432), (61, 9459), (66, 9495), (67, 9501), (72, 9534), (77, 9573), (78, 9576), (86, 9627), (92, 9678),

Gene: Breezona_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Breezona_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Bricole_23 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for Bricole_23:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (90, 13664), (95, 13691),

Gene: Bromden_14 Start: 9135, Stop: 10037, Start Num: 2
Candidate Starts for Bromden_14:
(Start: 2 @9135 has 109 MA's), (8, 9201), (26, 9423), (27, 9444), (37, 9525), (39, 9555), (41, 9564), (43, 9594), (44, 9606), (45, 9615), (54, 9702), (56, 9717), (59, 9756), (61, 9783), (72, 9858), (77, 9897), (78, 9900), (86, 9951), (92, 10002),

Gene: Calm_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for Calm_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: Chaser_13 Start: 8726, Stop: 9628, Start Num: 2
Candidate Starts for Chaser_13:
(Start: 2 @8726 has 109 MA's), (8, 8792), (26, 9014), (27, 9035), (37, 9116), (41, 9155), (44, 9197), (45, 9206), (56, 9308), (59, 9347), (61, 9374), (66, 9410), (67, 9416), (72, 9449), (77, 9488), (78, 9491), (86, 9542), (92, 9593),

Gene: ChutneyChips_12 Start: 8715, Stop: 9617, Start Num: 2
Candidate Starts for ChutneyChips_12:
(Start: 2 @8715 has 109 MA's), (8, 8781), (14, 8814), (26, 9003), (27, 9024), (37, 9105), (40, 9138), (41, 9144), (44, 9186), (45, 9195), (54, 9282), (56, 9297), (61, 9363), (66, 9399), (77, 9477), (78, 9480), (86, 9531), (92, 9582),

Gene: CicholasNage_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for CicholasNage_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: Claus_13 Start: 9010, Stop: 9909, Start Num: 2
Candidate Starts for Claus_13:
(Start: 2 @9010 has 109 MA's), (8, 9073), (12, 9094), (21, 9163), (26, 9295), (27, 9316), (37, 9397), (44, 9478), (45, 9487), (55, 9577), (56, 9589), (59, 9628), (64, 9670), (66, 9691), (67, 9697), (86, 9823), (96, 9892),

Gene: Clautastrophe_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Clautastrophe_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Cosmo_35 Start: 15894, Stop: 16805, Start Num: 2
Candidate Starts for Cosmo_35:
(Start: 2 @15894 has 109 MA's), (5, 15933), (8, 15960), (9, 15963), (11, 15975), (13, 15990), (27, 16203), (35, 16269), (36, 16275), (48, 16404), (52, 16440), (60, 16539), (63, 16560), (73, 16614), (74, 16617), (82, 16677), (85, 16701), (86, 16704), (87, 16713), (90, 16740), (94, 16770), (95, 16782),

Gene: Crossroads_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Crossroads_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: DHan_13 Start: 8946, Stop: 9845, Start Num: 2
Candidate Starts for DHan_13:
(Start: 2 @8946 has 109 MA's), (8, 9009), (12, 9030), (21, 9099), (26, 9231), (27, 9252), (37, 9333), (44, 9414), (45, 9423), (55, 9513), (56, 9525), (59, 9564), (64, 9606), (66, 9627), (67, 9633), (79, 9714), (86, 9759), (96, 9828),

Gene: DanBing_12 Start: 8829, Stop: 9728, Start Num: 2

Candidate Starts for DanBing_12:
(Start: 2 @8829 has 109 MA's), (8, 8892), (12, 8913), (21, 8982), (26, 9114), (27, 9135), (37, 9216), (44, 9297), (45, 9306), (55, 9396), (56, 9408), (59, 9447), (64, 9489), (66, 9510), (67, 9516), (86, 9642), (96, 9711),

Gene: Diminimus_24 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for Diminimus_24:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: DirkDirk_13 Start: 8991, Stop: 9893, Start Num: 2
Candidate Starts for DirkDirk_13:
(Start: 2 @8991 has 109 MA's), (8, 9057), (10, 9063), (21, 9147), (27, 9300), (29, 9312), (37, 9381), (39, 9411), (41, 9420), (43, 9450), (45, 9471), (66, 9675), (72, 9714), (86, 9807), (88, 9831), (96, 9876),

Gene: Douge_13 Start: 8672, Stop: 9574, Start Num: 2
Candidate Starts for Douge_13:
(Start: 2 @8672 has 109 MA's), (8, 8738), (26, 8960), (27, 8981), (37, 9062), (41, 9101), (44, 9143), (45, 9152), (54, 9239), (56, 9254), (59, 9293), (61, 9320), (66, 9356), (72, 9395), (77, 9434), (78, 9437), (86, 9488), (92, 9539),

Gene: Douzhi_13 Start: 8672, Stop: 9574, Start Num: 2
Candidate Starts for Douzhi_13:
(Start: 2 @8672 has 109 MA's), (8, 8738), (26, 8960), (27, 8981), (37, 9062), (41, 9101), (44, 9143), (45, 9152), (54, 9239), (56, 9254), (59, 9293), (61, 9320), (66, 9356), (67, 9362), (72, 9395), (77, 9434), (78, 9437), (86, 9488), (92, 9539),

Gene: DrSeegs_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for DrSeegs_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Dulcita_24 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for Dulcita_24:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: DuncansLeg_14 Start: 9127, Stop: 10029, Start Num: 2
Candidate Starts for DuncansLeg_14:
(Start: 2 @9127 has 109 MA's), (8, 9193), (26, 9415), (27, 9436), (33, 9475), (37, 9517), (44, 9598), (45, 9607), (54, 9694), (56, 9709), (59, 9748), (78, 9892), (86, 9943),

Gene: DyoEdafos_14 Start: 8883, Stop: 9785, Start Num: 2
Candidate Starts for DyoEdafos_14:
(Start: 2 @8883 has 109 MA's), (8, 8949), (26, 9171), (27, 9192), (37, 9273), (41, 9312), (44, 9354), (45, 9363), (56, 9465), (59, 9504), (77, 9645), (78, 9648), (86, 9699), (92, 9750),

Gene: Ellson_14 Start: 9135, Stop: 10037, Start Num: 2
Candidate Starts for Ellson_14:

(Start: 2 @9135 has 109 MA's), (8, 9201), (26, 9423), (27, 9444), (33, 9483), (37, 9525), (44, 9606), (45, 9615), (54, 9702), (56, 9717), (59, 9756), (78, 9900), (86, 9951),

Gene: Enceladus_13 Start: 8991, Stop: 9893, Start Num: 2
Candidate Starts for Enceladus_13:
(Start: 2 @8991 has 109 MA's), (8, 9057), (10, 9063), (21, 9147), (27, 9300), (29, 9312), (37, 9381), (41, 9420), (43, 9450), (45, 9471), (66, 9675), (72, 9714), (86, 9807), (88, 9831), (96, 9876),

Gene: EniyanLRS_32 Start: 15588, Stop: 16499, Start Num: 2
Candidate Starts for EniyanLRS_32:
(Start: 2 @15588 has 109 MA's), (5, 15627), (8, 15654), (9, 15657), (11, 15669), (13, 15684), (27, 15897), (32, 15939), (35, 15963), (36, 15969), (48, 16098), (52, 16134), (60, 16233), (63, 16254), (73, 16308), (74, 16311), (86, 16398), (90, 16434), (93, 16461),

Gene: Estes_28 Start: 13531, Stop: 14430, Start Num: 2
Candidate Starts for Estes_28:
(Start: 2 @13531 has 109 MA's), (11, 13612), (16, 13663), (35, 13906), (40, 13960), (42, 13975), (44, 14008), (52, 14077), (60, 14176), (68, 14227), (73, 14251), (77, 14287), (80, 14299), (83, 14320), (86, 14344), (89, 14374), (95, 14407),

Gene: Faith1_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Faith1_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: FarmResident_13 Start: 8717, Stop: 9619, Start Num: 2
Candidate Starts for FarmResident_13:
(Start: 2 @8717 has 109 MA's), (8, 8783), (26, 9005), (27, 9026), (37, 9107), (40, 9140), (41, 9146), (44, 9188), (45, 9197), (54, 9284), (56, 9299), (59, 9338), (61, 9365), (66, 9401), (67, 9407), (72, 9440), (77, 9479), (78, 9482), (86, 9533), (92, 9584),

Gene: Finemlucis_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Finemlucis_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: Finnry_14 Start: 9120, Stop: 10022, Start Num: 2
Candidate Starts for Finnry_14:
(Start: 2 @9120 has 109 MA's), (8, 9186), (26, 9408), (27, 9429), (37, 9510), (44, 9591), (45, 9600), (54, 9687), (56, 9702), (59, 9741), (70, 9834), (78, 9885), (86, 9936),

Gene: FreakyGoo_24 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for FreakyGoo_24:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: Gabriela_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Gabriela_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Gardann_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Gardann_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: GardenSalsa_27 Start: 13367, Stop: 14266, Start Num: 2
Candidate Starts for GardenSalsa_27:
(Start: 2 @13367 has 109 MA's), (11, 13448), (16, 13499), (34, 13724), (35, 13742), (40, 13796), (42, 13811), (44, 13844), (52, 13913), (56, 13955), (73, 14087), (77, 14123), (80, 14135), (84, 14162), (86, 14180), (89, 14210), (95, 14243),

Gene: GenevaB15_27 Start: 13394, Stop: 14293, Start Num: 2
Candidate Starts for GenevaB15_27:
(Start: 2 @13394 has 109 MA's), (11, 13475), (16, 13526), (27, 13703), (35, 13769), (40, 13823), (42, 13838), (44, 13871), (52, 13940), (68, 14090), (73, 14114), (77, 14150), (80, 14162), (84, 14189), (86, 14207), (89, 14237), (95, 14270),

Gene: Glaske16_24 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for Glaske16_24:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: GuuelaD_13 Start: 9034, Stop: 9936, Start Num: 2
Candidate Starts for GuuelaD_13:
(Start: 2 @9034 has 109 MA's), (8, 9100), (21, 9190), (26, 9322), (27, 9343), (37, 9424), (44, 9505), (45, 9514), (55, 9604), (56, 9616), (59, 9655), (66, 9718), (67, 9724), (86, 9850), (96, 9919),

Gene: Hafay_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for Hafay_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (96, 9917),

Gene: Halena_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for Halena_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: IPhane7_23 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for IPhane7_23:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: Ibrahim_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for Ibrahim_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: Itos_13 Start: 9002, Stop: 9901, Start Num: 2

Candidate Starts for Itos_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Izel_24 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for Izel_24:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: Jobypre_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Jobypre_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: JoeDirt_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for JoeDirt_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: Jubie_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Jubie_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Kahlid_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Kahlid_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: Kingsolomon_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Kingsolomon_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: KirDoubleO7_12 Start: 9136, Stop: 10038, Start Num: 2
Candidate Starts for KirDoubleO7_12:
(Start: 2 @9136 has 109 MA's), (8, 9202), (26, 9424), (27, 9445), (33, 9484), (37, 9526), (44, 9607), (45, 9616), (54, 9703), (56, 9718), (59, 9757), (78, 9901), (86, 9952),

Gene: KleverKiS_23 Start: 12812, Stop: 13711, Start Num: 2
Candidate Starts for KleverKiS_23:
(Start: 2 @12812 has 109 MA's), (11, 12893), (17, 12947), (19, 12953), (25, 13082), (27, 13121), (35, 13187), (40, 13241), (42, 13256), (44, 13289), (51, 13346), (52, 13358), (61, 13466), (68, 13508), (73, 13532), (80, 13580), (89, 13655), (90, 13661), (95, 13688),

Gene: Kropertea_13 Start: 8689, Stop: 9591, Start Num: 2
Candidate Starts for Kropertea_13:
(Start: 2 @8689 has 109 MA's), (8, 8755), (26, 8977), (27, 8998), (37, 9079), (41, 9118), (44, 9160), (45, 9169), (54, 9256), (56, 9271), (59, 9310), (77, 9451), (78, 9454), (86, 9505), (92, 9556),

Gene: Krypton555_14 Start: 9112, Stop: 10011, Start Num: 2

Candidate Starts for Krypton555_14:
(Start: 2 @9112 has 109 MA's), (8, 9178), (26, 9400), (27, 9421), (37, 9502), (44, 9583), (45, 9592), (54, 9679), (56, 9694), (59, 9733), (66, 9796), (67, 9802), (77, 9874), (86, 9928), (96, 9997),

Gene: Kumao_22 Start: 12078, Stop: 12980, Start Num: 2
Candidate Starts for Kumao_22:
(Start: 2 @12078 has 109 MA's), (6, 12120), (11, 12159), (22, 12240), (23, 12261), (24, 12321), (25, 12348), (27, 12387), (34, 12438), (35, 12456), (39, 12507), (40, 12510), (41, 12516), (42, 12525), (44, 12558), (47, 12576), (52, 12627), (56, 12669), (74, 12804), (82, 12864), (86, 12891),

Gene: LeBron_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for LeBron_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: Lewan_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Lewan_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: LilDestine_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for LilDestine_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: LilhomieP_22 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for LilhomieP_22:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: LiyuLake_14 Start: 9127, Stop: 10029, Start Num: 2
Candidate Starts for LiyuLake_14:
(Start: 2 @9127 has 109 MA's), (8, 9193), (26, 9415), (27, 9436), (33, 9475), (37, 9517), (44, 9598), (45, 9607), (54, 9694), (56, 9709), (59, 9748), (78, 9892), (86, 9943),

Gene: Loadrie_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for Loadrie_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (88, 9872), (96, 9917),

Gene: Lolly9_14 Start: 9130, Stop: 10029, Start Num: 2
Candidate Starts for Lolly9_14:
(Start: 2 @9130 has 109 MA's), (8, 9196), (26, 9418), (27, 9439), (37, 9520), (44, 9601), (45, 9610), (56, 9712), (59, 9751), (66, 9814), (77, 9892), (78, 9895), (86, 9946), (88, 9970), (96, 10015),

Gene: Lumos_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Lumos_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Lynnae_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Lynnae_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389),
(44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815),
(96, 9884),

Gene: MAckerman_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for MAckerman_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379),
(41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: MaryV_35 Start: 15860, Stop: 16771, Start Num: 2
Candidate Starts for MaryV_35:
(Start: 2 @15860 has 109 MA's), (5, 15899), (8, 15926), (9, 15929), (11, 15941), (13, 15956), (27,
16169), (35, 16235), (36, 16241), (48, 16370), (52, 16406), (60, 16505), (63, 16526), (73, 16580), (74,
16583), (82, 16643), (85, 16667), (86, 16670), (87, 16679), (90, 16706), (94, 16736), (95, 16748),

Gene: Mendokysei_13 Start: 9859, Stop: 10791, Start Num: 1
Candidate Starts for Mendokysei_13:
(Start: 1 @9859 has 1 MA's), (3, 9874), (4, 9877), (20, 10024), (31, 10222), (38, 10297), (46, 10366),
(49, 10390), (52, 10420), (55, 10450), (57, 10477), (66, 10573), (69, 10585), (82, 10675), (84, 10684),
(86, 10702),

Gene: Miley16_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Miley16_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389),
(44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815),
(96, 9884),

Gene: MiniLon_14 Start: 9130, Stop: 10029, Start Num: 2
Candidate Starts for MiniLon_14:
(Start: 2 @9130 has 109 MA's), (8, 9196), (26, 9418), (27, 9439), (37, 9520), (44, 9601), (45, 9610),
(56, 9712), (59, 9751), (66, 9814), (77, 9892), (78, 9895), (86, 9946), (88, 9970), (96, 10015),

Gene: MiniMac_14 Start: 9131, Stop: 10030, Start Num: 2
Candidate Starts for MiniMac_14:
(Start: 2 @9131 has 109 MA's), (8, 9197), (26, 9419), (27, 9440), (37, 9521), (44, 9602), (45, 9611),
(56, 9713), (59, 9752), (66, 9815), (77, 9893), (78, 9896), (86, 9947), (88, 9971), (96, 10016),

Gene: MkaliMitinis3_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for MkaliMitinis3_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389),
(44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815),
(96, 9884),

Gene: Moostard_14 Start: 9119, Stop: 10021, Start Num: 2
Candidate Starts for Moostard_14:
(Start: 2 @9119 has 109 MA's), (8, 9185), (26, 9407), (27, 9428), (37, 9509), (44, 9590), (45, 9599),
(54, 9686), (56, 9701), (59, 9740), (70, 9833), (78, 9884), (86, 9935),

Gene: MrMagoo_27 Start: 13367, Stop: 14266, Start Num: 2
Candidate Starts for MrMagoo_27:

(Start: 2 @13367 has 109 MA's), (11, 13448), (16, 13499), (34, 13724), (35, 13742), (40, 13796), (42, 13811), (44, 13844), (52, 13913), (56, 13955), (73, 14087), (77, 14123), (80, 14135), (84, 14162), (86, 14180), (89, 14210), (95, 14243),

Gene: MsGreen_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for MsGreen_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Nairb_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for Nairb_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: Nanosmite_27 Start: 13585, Stop: 14487, Start Num: 2
Candidate Starts for Nanosmite_27:
(Start: 2 @13585 has 109 MA's), (11, 13666), (13, 13681), (25, 13855), (27, 13894), (35, 13960), (40, 14014), (42, 14029), (44, 14062), (51, 14119), (52, 14131), (73, 14311), (80, 14359), (82, 14377), (85, 14398), (86, 14401), (87, 14410), (89, 14431), (90, 14437),

Gene: Nette_14 Start: 9868, Stop: 10800, Start Num: 1
Candidate Starts for Nette_14:
(Start: 1 @9868 has 1 MA's), (3, 9883), (4, 9886), (20, 10033), (31, 10231), (38, 10306), (46, 10375), (49, 10399), (52, 10429), (55, 10459), (57, 10486), (66, 10582), (69, 10594), (82, 10684), (84, 10693), (86, 10711),

Gene: Netyap_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Netyap_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Nicholas_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Nicholas_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Nicholasp3_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Nicholasp3_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: OhShagHennessy_13 Start: 8963, Stop: 9865, Start Num: 2
Candidate Starts for OhShagHennessy_13:
(Start: 2 @8963 has 109 MA's), (8, 9029), (10, 9035), (21, 9119), (27, 9272), (29, 9284), (37, 9353), (39, 9383), (41, 9392), (43, 9422), (45, 9443), (66, 9647), (72, 9686), (86, 9779), (88, 9803), (96, 9848),

Gene: OverPar_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for OverPar_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (88, 9872), (96, 9917),

Gene: PYPDinur_13 Start: 8672, Stop: 9574, Start Num: 2
Candidate Starts for PYPDinur_13:
(Start: 2 @8672 has 109 MA's), (8, 8738), (26, 8960), (27, 8981), (37, 9062), (41, 9101), (44, 9143), (45, 9152), (54, 9239), (56, 9254), (59, 9293), (61, 9320), (66, 9356), (67, 9362), (72, 9395), (77, 9434), (78, 9437), (86, 9488), (92, 9539),

Gene: PegLeg_23 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for PegLeg_23:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: Poochiewood_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Poochiewood_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Quby_13 Start: 8671, Stop: 9573, Start Num: 2
Candidate Starts for Quby_13:
(Start: 2 @8671 has 109 MA's), (8, 8737), (26, 8959), (27, 8980), (37, 9061), (41, 9100), (44, 9142), (45, 9151), (54, 9238), (56, 9253), (59, 9292), (61, 9319), (66, 9355), (67, 9361), (72, 9394), (77, 9433), (78, 9436), (86, 9487), (92, 9538),

Gene: Red305_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for Red305_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: Reindeer_21 Start: 12668, Stop: 13567, Start Num: 2
Candidate Starts for Reindeer_21:
(Start: 2 @12668 has 109 MA's), (15, 12785), (16, 12800), (19, 12809), (25, 12938), (27, 12977), (35, 13043), (40, 13097), (42, 13112), (44, 13145), (52, 13214), (68, 13364), (73, 13388), (80, 13436), (89, 13511),

Gene: Rey_27 Start: 13596, Stop: 14495, Start Num: 2
Candidate Starts for Rey_27:
(Start: 2 @13596 has 109 MA's), (16, 13728), (25, 13866), (27, 13905), (35, 13971), (40, 14025), (42, 14040), (44, 14073), (52, 14142), (60, 14241), (72, 14313), (73, 14316), (77, 14352), (80, 14364), (84, 14391), (86, 14409), (89, 14439), (95, 14472),

Gene: RonRayGun_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for RonRayGun_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: Rose5_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Rose5_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: RoseMarie_23 Start: 13058, Stop: 13957, Start Num: 2

Candidate Starts for RoseMarie_23:
(Start: 2 @13058 has 109 MA's), (15, 13175), (17, 13193), (19, 13199), (25, 13328), (27, 13367), (34, 13415), (35, 13433), (40, 13487), (42, 13502), (44, 13535), (51, 13592), (52, 13604), (60, 13703), (68, 13754), (73, 13778), (80, 13826), (89, 13901), (90, 13907), (95, 13934),

Gene: Rossetti_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Rossetti_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (64, 9662), (67, 9689), (86, 9815), (96, 9884),

Gene: Rumpelstiltskin_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Rumpelstiltskin_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Samty_14 Start: 9119, Stop: 10021, Start Num: 2
Candidate Starts for Samty_14:
(Start: 2 @9119 has 109 MA's), (8, 9185), (26, 9407), (27, 9428), (37, 9509), (44, 9590), (45, 9599), (54, 9686), (56, 9701), (59, 9740), (70, 9833), (78, 9884), (86, 9935),

Gene: Sarshaun_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for Sarshaun_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (96, 9917),

Gene: Sheng711_13 Start: 8672, Stop: 9574, Start Num: 2
Candidate Starts for Sheng711_13:
(Start: 2 @8672 has 109 MA's), (8, 8738), (26, 8960), (27, 8981), (37, 9062), (41, 9101), (44, 9143), (45, 9152), (54, 9239), (56, 9254), (59, 9293), (61, 9320), (66, 9356), (67, 9362), (72, 9395), (77, 9434), (78, 9437), (86, 9488), (92, 9539),

Gene: Silverleaf_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Silverleaf_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Skinny_24 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for Skinny_24:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: SlimJimmy_22 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for SlimJimmy_22:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (90, 13664), (95, 13691),

Gene: Snenia_14 Start: 9124, Stop: 10026, Start Num: 2
Candidate Starts for Snenia_14:

(Start: 2 @9124 has 109 MA's), (8, 9190), (26, 9412), (27, 9433), (37, 9514), (44, 9595), (45, 9604), (54, 9691), (56, 9706), (59, 9745), (70, 9838), (78, 9889), (86, 9940),

Gene: SoJulia_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for SoJulia_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: Soap141_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for Soap141_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (96, 9917),

Gene: Tourach_13 Start: 9015, Stop: 9917, Start Num: 2
Candidate Starts for Tourach_13:
(Start: 2 @9015 has 109 MA's), (8, 9081), (21, 9171), (26, 9303), (27, 9324), (37, 9405), (41, 9444), (43, 9474), (44, 9486), (45, 9495), (55, 9585), (56, 9597), (59, 9636), (66, 9699), (86, 9831), (96, 9900),

Gene: TpudiCK_24 Start: 12815, Stop: 13714, Start Num: 2
Candidate Starts for TpudiCK_24:
(Start: 2 @12815 has 109 MA's), (11, 12896), (17, 12950), (19, 12956), (25, 13085), (27, 13124), (35, 13190), (40, 13244), (42, 13259), (44, 13292), (51, 13349), (52, 13361), (61, 13469), (68, 13511), (73, 13535), (80, 13583), (89, 13658), (95, 13691),

Gene: TriFive_14 Start: 9123, Stop: 10025, Start Num: 2
Candidate Starts for TriFive_14:
(Start: 2 @9123 has 109 MA's), (8, 9189), (26, 9411), (27, 9432), (37, 9513), (44, 9594), (45, 9603), (54, 9690), (56, 9705), (59, 9744), (70, 9837), (78, 9888), (86, 9939),

Gene: TyDawg_23 Start: 12816, Stop: 13715, Start Num: 2
Candidate Starts for TyDawg_23:
(Start: 2 @12816 has 109 MA's), (11, 12897), (17, 12951), (19, 12957), (25, 13086), (27, 13125), (35, 13191), (40, 13245), (42, 13260), (44, 13293), (51, 13350), (52, 13362), (61, 13470), (68, 13512), (73, 13536), (80, 13584), (89, 13659), (95, 13692),

Gene: Tyson_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Tyson_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: UPIE_13 Start: 8987, Stop: 9889, Start Num: 2
Candidate Starts for UPIE_13:
(Start: 2 @8987 has 109 MA's), (8, 9053), (10, 9059), (21, 9143), (27, 9296), (29, 9308), (37, 9377), (41, 9416), (43, 9446), (45, 9467), (66, 9671), (72, 9710), (86, 9803), (88, 9827), (96, 9872),

Gene: Underpass_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Underpass_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: Vetrix_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Vetrix_13:

(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Wamburgrxpress_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Wamburgrxpress_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Whirlwind_15 Start: 9117, Stop: 10016, Start Num: 2
Candidate Starts for Whirlwind_15:
(Start: 2 @9117 has 109 MA's), (8, 9183), (26, 9405), (27, 9426), (37, 9507), (44, 9588), (45, 9597), (56, 9699), (59, 9738), (66, 9801), (86, 9933), (96, 10002),

Gene: Whitty_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for Whitty_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: Wigglewiggle_13 Start: 9035, Stop: 9934, Start Num: 2
Candidate Starts for Wigglewiggle_13:
(Start: 2 @9035 has 109 MA's), (8, 9098), (12, 9119), (21, 9188), (26, 9320), (27, 9341), (37, 9422), (44, 9503), (45, 9512), (55, 9602), (56, 9614), (59, 9653), (66, 9716), (67, 9722), (79, 9803), (86, 9848), (88, 9872), (96, 9917),

Gene: Wildcat_35 Start: 15870, Stop: 16781, Start Num: 2
Candidate Starts for Wildcat_35:
(Start: 2 @15870 has 109 MA's), (5, 15909), (8, 15936), (9, 15939), (11, 15951), (13, 15966), (27, 16179), (35, 16245), (36, 16251), (48, 16380), (52, 16416), (60, 16515), (63, 16536), (73, 16590), (74, 16593), (82, 16653), (85, 16677), (86, 16680), (87, 16689), (90, 16716), (94, 16746), (95, 16758),

Gene: Wilder_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Wilder_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (67, 9689), (86, 9815), (96, 9884),

Gene: Winky_13 Start: 9002, Stop: 9901, Start Num: 2
Candidate Starts for Winky_13:
(Start: 2 @9002 has 109 MA's), (8, 9065), (12, 9086), (21, 9155), (26, 9287), (27, 9308), (37, 9389), (44, 9470), (45, 9479), (55, 9569), (56, 9581), (59, 9620), (66, 9683), (67, 9689), (79, 9770), (86, 9815), (96, 9884),

Gene: Wyatt2_13 Start: 8989, Stop: 9891, Start Num: 2
Candidate Starts for Wyatt2_13:
(Start: 2 @8989 has 109 MA's), (8, 9055), (10, 9061), (21, 9145), (27, 9298), (29, 9310), (37, 9379), (41, 9418), (43, 9448), (45, 9469), (66, 9673), (72, 9712), (86, 9805), (88, 9829), (96, 9874),

Gene: Zakai_13 Start: 8990, Stop: 9889, Start Num: 2
Candidate Starts for Zakai_13:
(Start: 2 @8990 has 109 MA's), (8, 9053), (12, 9074), (21, 9143), (26, 9275), (27, 9296), (37, 9377), (44, 9458), (45, 9467), (55, 9557), (56, 9569), (59, 9608), (66, 9671), (67, 9677), (79, 9758), (86, 9803), (96, 9872),

Gene: Zaria_13 Start: 8990, Stop: 9892, Start Num: 2
Candidate Starts for Zaria_13:
(Start: 2 @8990 has 109 MA's), (8, 9056), (10, 9062), (21, 9146), (27, 9299), (29, 9311), (37, 9380), (41, 9419), (43, 9449), (45, 9470), (66, 9674), (72, 9713), (86, 9806), (88, 9830), (96, 9875),

Gene: ZenTime222_14 Start: 9882, Stop: 10814, Start Num: 2
Candidate Starts for ZenTime222_14:
(Start: 2 @9882 has 109 MA's), (3, 9897), (15, 10002), (20, 10047), (31, 10245), (38, 10320), (46, 10389), (49, 10413), (58, 10524), (73, 10635), (75, 10653), (76, 10668), (84, 10707), (86, 10725), (91, 10764),

Gene: ZhongYanYuan_12 Start: 8830, Stop: 9729, Start Num: 2
Candidate Starts for ZhongYanYuan_12:
(Start: 2 @8830 has 109 MA's), (8, 8893), (12, 8914), (21, 8983), (26, 9115), (27, 9136), (37, 9217), (44, 9298), (45, 9307), (55, 9397), (56, 9409), (59, 9448), (64, 9490), (66, 9511), (67, 9517), (86, 9643), (96, 9712),