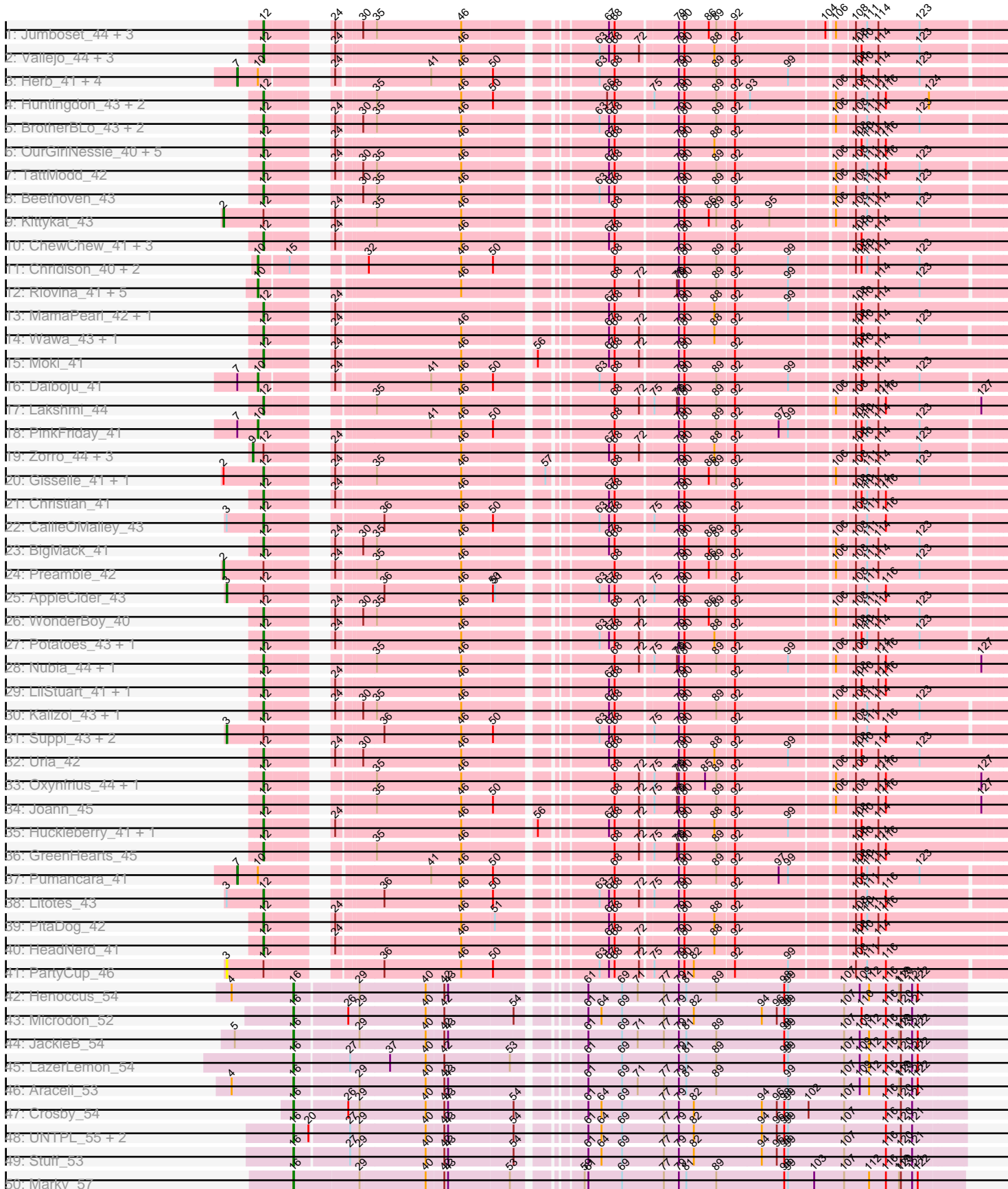
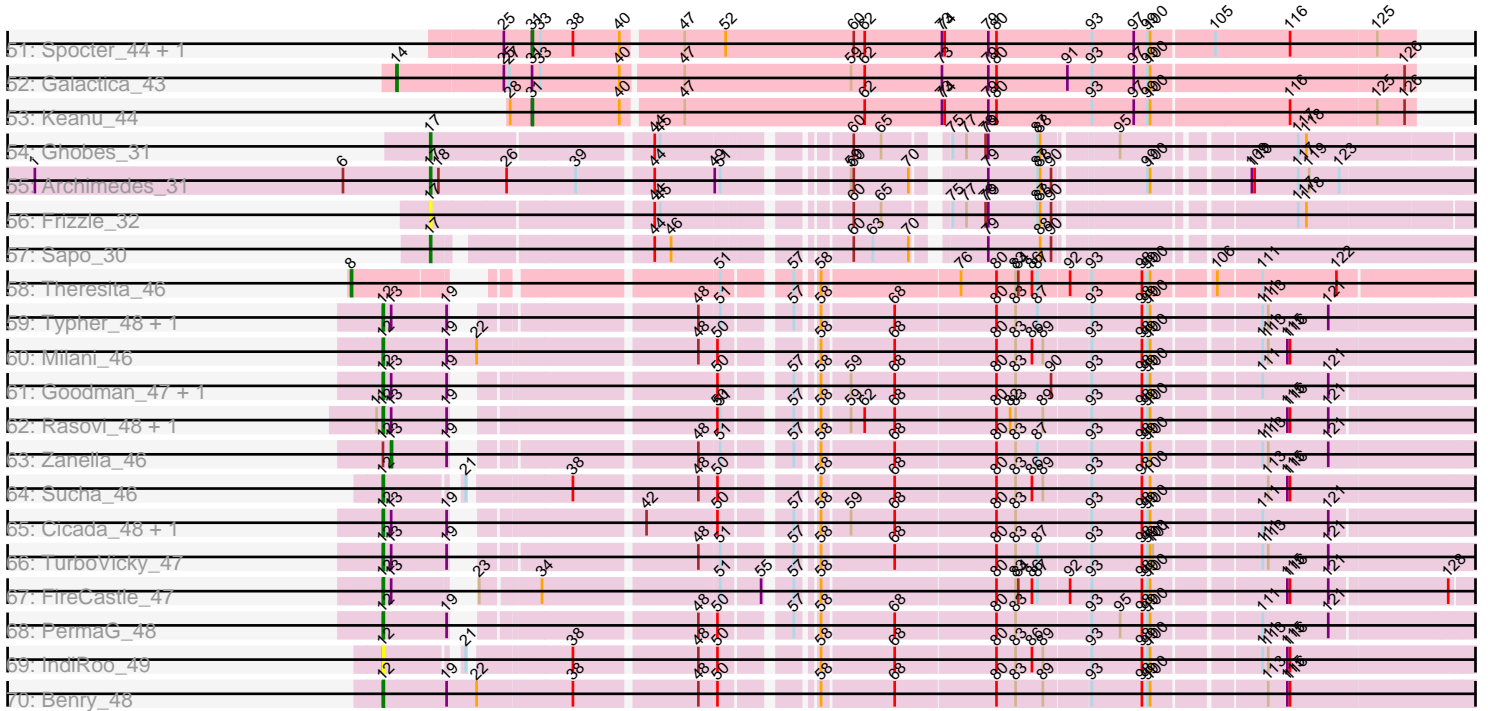


Pham 191161



Pham 191161



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 191161 Report

This analysis was run 11/02/24 on database version 579.

Pham number 191161 has 120 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Jumboset_44, MrGloopy_44, Glenn_44, Savage2526_44
- Track 2 : Vallejo_44, Riverdale_44, Immaculata_43, Carpal_43
- Track 3 : Herb_41, Temper16_41, Maria1952_40, KingBob_41, Sergei_41
- Track 4 : Huntingdon_43, Misaeng_43, RcigaStruga_43
- Track 5 : BrotherBLo_43, Rozby_43, Fluke_44
- Track 6 : OurGirlNessie_40, Lennox_41, Makoto_41, Lucy_41, Pterodactyl_41, DrRobert_40
- Track 7 : TattModd_42
- Track 8 : Beethoven_43
- Track 9 : Kittykat_43
- Track 10 : ChewChew_41, Bodacious_41, CristinaYang_41, Nancia_41
- Track 11 : Chridison_40, Vulture_41, HunterDalle_41
- Track 12 : Riovina_41, AustinPowers_41, Supakev_41, OMalley_41, Eunoia_41, Aledel_41
- Track 13 : MamaPearl_42, EstebanJulior_42
- Track 14 : Wawa_43, Korra_43
- Track 15 : Moki_41
- Track 16 : Daiboju_41
- Track 17 : Lakshmi_44
- Track 18 : PinkFriday_41
- Track 19 : Zorro_44, MeganNoll_43, Dino_44, RAP15_44
- Track 20 : Gisselle_41, DreamTeam_41
- Track 21 : Christian_41
- Track 22 : CallieOMalley_43
- Track 23 : BigMack_41
- Track 24 : Preamble_42
- Track 25 : AppleCider_43
- Track 26 : WonderBoy_40
- Track 27 : Potatoes_43, Cholula_43
- Track 28 : Nubia_44, Albanese_44
- Track 29 : LilStuart_41, Lasagna_40
- Track 30 : Kalizoi_43, Scuttle_43
- Track 31 : Suppi_43, Canowicakte_43, Wayne_43
- Track 32 : Urla_42
- Track 33 : Oxynfrius_44, Greenhouse_45
- Track 34 : Joann_45
- Track 35 : Huckleberry_41, Bennie_41

- Track 36 : GreenHearts_45
- Track 37 : Pumancara_41
- Track 38 : Litotes_43
- Track 39 : PitaDog_42
- Track 40 : HeadNerd_41
- Track 41 : PartyCup_46
- Track 42 : Henoccus_54
- Track 43 : Microdon_52
- Track 44 : JackieB_54
- Track 45 : LazerLemon_54
- Track 46 : Araceli_53
- Track 47 : Crosby_54
- Track 48 : UNTPL_55, Bogota_54, Intolerant_51
- Track 49 : Stuff_53
- Track 50 : Marky_57
- Track 51 : Spocter_44, Hiyaa_45
- Track 52 : Galactica_43
- Track 53 : Keanu_44
- Track 54 : Ghobes_31
- Track 55 : Archimedes_31
- Track 56 : Frizzle_32
- Track 57 : Sapo_30
- Track 58 : Theresita_46
- Track 59 : Typher_48, Jera_47
- Track 60 : Milani_46
- Track 61 : Goodman_47, Johann_47
- Track 62 : Rasovi_48, Htur_48
- Track 63 : Zanella_46
- Track 64 : Sucha_46
- Track 65 : Cicada_48, SBlackberry_46
- Track 66 : TurboVicky_47
- Track 67 : FireCastle_47
- Track 68 : PermaG_48
- Track 69 : IndiRoo_49
- Track 70 : Benry_48

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

The start number called the most often in the published annotations is 12, it was called in 70 of the 117 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Albanese_44, Beethoven_43, Bennie_41, Benry_48, BigMack_41, Bodacious_41, BrotherBLo_43, CallieOMalley_43, Carpal_43, ChewChew_41, Cholula_43, Christian_41, Cicada_48, CristinaYang_41, DrRobert_40, DreamTeam_41, EstebanJulior_42, FireCastle_47, Fluke_44, Gisselle_41, Glenn_44, Goodman_47, GreenHearts_45, Greenhouse_45, HeadNerd_41, Htur_48, Huckleberry_41, Huntingdon_43, Immaculata_43, IndiRoo_49, Jera_47, Joann_45, Johann_47, Jumboset_44, Kalizoi_43, Korra_43, Lakshmi_44, Lasagna_40, Lennox_41, LilStuart_41, Litotes_43, Lucy_41, Makoto_41, MamaPearl_42, Milani_46,

Misaeng_43, Moki_41, MrGloopy_44, Nancia_41, Nubia_44, OurGirlNessie_40, Oxynfrius_44, PermaG_48, PitaDog_42, Potatoes_43, Pterodactyl_41, Rasovi_48, RcigaStruga_43, Riverdale_44, Rozby_43, SBlackberry_46, Savage2526_44, Scuttle_43, Sucha_46, TattModd_42, TurboVicky_47, Typher_48, Urla_42, Vallejo_44, Wawa_43, WonderBoy_40,

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

- AppleCider_43, Canowicakte_43, Dino_44, Kittykat_43, MeganNoll_43, PartyCup_46, Preamble_42, RAP15_44, Suppi_43, Wayne_43, Zanella_46, Zorro_44,

Genes that do not have the "Most Annotated" start:

- Aledel_41, Araceli_53, Archimedes_31, AustinPowers_41, Bogota_54, Chridison_40, Crosby_54, Daiboju_41, Eunoia_41, Frizzle_32, Galactica_43, Ghobes_31, Henoccus_54, Herb_41, Hiya_45, HunterDalle_41, Intolerant_51, JackieB_54, Keanu_44, KingBob_41, LazerLemon_54, Maria1952_40, Marky_57, Microdon_52, OMalley_41, PinkFriday_41, Pumancara_41, Riovina_41, Sapo_30, Sergei_41, Spocster_44, Stuff_53, Supakev_41, Temper16_41, Theresita_46, UNTPL_55, Vulture_41,

Summary by start number:

Start 2:

- Found in 4 of 120 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 117
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kittykat_43 (AK), Preamble_42 (AK),

Start 3:

- Found in 7 of 120 (5.8%) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 71.4% of time when present
- Phage (with cluster) where this start called: AppleCider_43 (AK), Canowicakte_43 (AK), PartyCup_46 (AK), Suppi_43 (AK), Wayne_43 (AK),

Start 7:

- Found in 8 of 120 (6.7%) of genes in pham
- Manual Annotations of this start: 6 of 117
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Herb_41 (AK), KingBob_41 (AK), Maria1952_40 (AK), Pumancara_41 (AK), Sergei_41 (AK), Temper16_41 (AK),

Start 8:

- Found in 1 of 120 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Theresita_46 (EA7),

Start 9:

- Found in 4 of 120 (3.3%) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Dino_44 (AK), MeganNoll_43 (AK), RAP15_44 (AK), Zorro_44 (AK),

Start 10:

- Found in 17 of 120 (14.2%) of genes in pham
- Manual Annotations of this start: 11 of 117
- Called 64.7% of time when present
- Phage (with cluster) where this start called: Aledel_41 (AK), AustinPowers_41 (AK), Chridison_40 (AK), Daiboju_41 (AK), Eunoia_41 (AK), HunterDalle_41 (AK), OMalley_41 (AK), PinkFriday_41 (AK), Riovina_41 (AK), Supakev_41 (AK), Vulture_41 (AK),

Start 12:

- Found in 83 of 120 (69.2%) of genes in pham
- Manual Annotations of this start: 70 of 117
- Called 85.5% of time when present
- Phage (with cluster) where this start called: Albanese_44 (AK), Beethoven_43 (AK), Bennie_41 (AK), Benry_48 (EJ), BigMack_41 (AK), Bodacious_41 (AK), BrotherBLo_43 (AK), CallieOMalley_43 (AK), Carpal_43 (AK), ChewChew_41 (AK), Cholula_43 (AK), Christian_41 (AK), Cicada_48 (EJ), CristinaYang_41 (AK), DrRobert_40 (AK), DreamTeam_41 (AK), EstebanJulior_42 (AK), FireCastle_47 (EJ), Fluke_44 (AK), Gisselle_41 (AK), Glenn_44 (AK), Goodman_47 (EJ), GreenHearts_45 (AK), Greenhouse_45 (AK), HeadNerd_41 (AK), Htur_48 (EJ), Huckleberry_41 (AK), Huntingdon_43 (AK), Immaculata_43 (AK), IndiRoo_49 (EJ), Jera_47 (EJ), Joann_45 (AK), Johann_47 (EJ), Jumboset_44 (AK), Kalizoi_43 (AK), Korra_43 (AK), Lakshmi_44 (AK), Lasagna_40 (AK), Lennox_41 (AK), LilStuart_41 (AK), Litotes_43 (AK), Lucy_41 (AK), Makoto_41 (AK), MamaPearl_42 (AK), Milani_46 (EJ), Misaeng_43 (AK), Moki_41 (AK), MrGloopy_44 (AK), Nancia_41 (AK), Nubia_44 (AK), OurGirlNessie_40 (AK), Oxyntrius_44 (AK), PermaG_48 (EJ), PitaDog_42 (AK), Potatoes_43 (AK), Pterodactyl_41 (AK), Rasovi_48 (EJ), RcigaStruga_43 (AK), Riverdale_44 (AK), Rozby_43 (AK), SBlackberry_46 (EJ), Savage2526_44 (AK), Scuttle_43 (AK), Sucha_46 (EJ), TattModd_42 (AK), TurboVicky_47 (EJ), Typher_48 (EJ), Urla_42 (AK), Vallejo_44 (AK), Wawa_43 (AK), WonderBoy_40 (AK),

Start 13:

- Found in 11 of 120 (9.2%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Zanella_46 (EJ),

Start 14:

- Found in 1 of 120 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Galactica_43 (BQ),

Start 16:

- Found in 11 of 120 (9.2%) of genes in pham
- Manual Annotations of this start: 11 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araceli_53 (BH), Bogota_54 (BH), Crosby_54 (BH), Henoccus_54 (BH), Intolerant_51 (BH), JackieB_54 (BH),

LazerLemon_54 (BH), Marky_57 (BH), Microdon_52 (BH), Stuff_53 (BH), UNTPL_55 (BH),

Start 17:

- Found in 4 of 120 (3.3%) of genes in pham
- Manual Annotations of this start: 3 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_31 (DA), Frizzle_32 (DA), Ghobes_31 (DA), Sapo_30 (DA),

Start 31:

- Found in 4 of 120 (3.3%) of genes in pham
- Manual Annotations of this start: 3 of 117
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Hiyaa_45 (BQ), Keanu_44 (BQ), Spocter_44 (BQ),

Summary by clusters:

There are 6 clusters represented in this pham: EJ, AK, BH, DA, BQ, EA7,

Info for manual annotations of cluster AK:

- Start number 2 was manually annotated 2 times for cluster AK.
- Start number 3 was manually annotated 4 times for cluster AK.
- Start number 7 was manually annotated 6 times for cluster AK.
- Start number 9 was manually annotated 4 times for cluster AK.
- Start number 10 was manually annotated 11 times for cluster AK.
- Start number 12 was manually annotated 56 times for cluster AK.

Info for manual annotations of cluster BH:

- Start number 16 was manually annotated 11 times for cluster BH.

Info for manual annotations of cluster BQ:

- Start number 14 was manually annotated 1 time for cluster BQ.
- Start number 31 was manually annotated 3 times for cluster BQ.

Info for manual annotations of cluster DA:

- Start number 17 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster EA7:

- Start number 8 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:

- Start number 12 was manually annotated 14 times for cluster EJ.
- Start number 13 was manually annotated 1 time for cluster EJ.

Gene Information:

Gene: Albanese_44 Start: 29446, Stop: 30498, Start Num: 12

Candidate Starts for Albanese_44:

(Start: 12 @29446 has 70 MA's), (35, 29572), (46, 29707), (68, 29914), (72, 29953), (75, 29968), (78, 30004), (79, 30007), (80, 30016), (89, 30067), (92, 30091), (99, 30172), (106, 30232), (108, 30259), (114, 30295), (116, 30307), (127, 30457),

Gene: Aledel_41 Start: 28837, Stop: 29880, Start Num: 10

Candidate Starts for Aledel_41:

(Start: 10 @28837 has 11 MA's), (46, 29104), (68, 29311), (72, 29350), (78, 29401), (79, 29404), (80, 29413), (89, 29464), (92, 29488), (99, 29569), (114, 29692), (123, 29758),

Gene: AppleCider_43 Start: 28800, Stop: 29906, Start Num: 3

Candidate Starts for AppleCider_43:

(Start: 3 @28800 has 4 MA's), (Start: 12 @28857 has 70 MA's), (36, 28998), (46, 29121), (50, 29169), (51, 29172), (63, 29304), (67, 29319), (68, 29328), (75, 29382), (79, 29421), (80, 29430), (92, 29505), (108, 29673), (111, 29691), (116, 29721),

Gene: Araceli_53 Start: 37442, Stop: 38452, Start Num: 16

Candidate Starts for Araceli_53:

(4, 37346), (Start: 16 @37442 has 11 MA's), (29, 37538), (40, 37640), (42, 37667), (43, 37673), (61, 37856), (69, 37910), (71, 37934), (77, 37976), (79, 38000), (81, 38012), (89, 38060), (99, 38174), (107, 38264), (109, 38288), (112, 38303), (116, 38330), (119, 38351), (120, 38354), (121, 38372), (122, 38381),

Gene: Archimedes_31 Start: 29275, Stop: 28235, Start Num: 17

Candidate Starts for Archimedes_31:

(1, 29710), (6, 29371), (Start: 17 @29275 has 3 MA's), (18, 29266), (26, 29191), (39, 29116), (44, 29041), (49, 28978), (51, 28972), (59, 28864), (60, 28861), (70, 28801), (79, 28741), (87, 28687), (88, 28684), (90, 28672), (99, 28588), (100, 28585), (109, 28501), (110, 28498), (117, 28450), (119, 28438), (123, 28405),

Gene: AustinPowers_41 Start: 28835, Stop: 29878, Start Num: 10

Candidate Starts for AustinPowers_41:

(Start: 10 @28835 has 11 MA's), (46, 29102), (68, 29309), (72, 29348), (78, 29399), (79, 29402), (80, 29411), (89, 29462), (92, 29486), (99, 29567), (114, 29690), (123, 29756),

Gene: Beethoven_43 Start: 28809, Stop: 29852, Start Num: 12

Candidate Starts for Beethoven_43:

(Start: 12 @28809 has 70 MA's), (30, 28914), (35, 28935), (46, 29070), (63, 29253), (67, 29268), (68, 29277), (79, 29370), (80, 29379), (89, 29430), (92, 29454), (106, 29595), (108, 29622), (111, 29640), (114, 29658), (123, 29724),

Gene: Bennie_41 Start: 27620, Stop: 28669, Start Num: 12

Candidate Starts for Bennie_41:

(Start: 12 @27620 has 70 MA's), (24, 27692), (46, 27881), (56, 27986), (67, 28079), (68, 28088), (72, 28127), (79, 28181), (80, 28190), (88, 28238), (92, 28265), (99, 28346), (108, 28433), (110, 28442), (114, 28469),

Gene: Benry_48 Start: 28836, Stop: 29945, Start Num: 12

Candidate Starts for Benry_48:

(Start: 12 @28836 has 70 MA's), (19, 28905), (22, 28938), (38, 29037), (48, 29163), (50, 29181), (58, 29259), (68, 29334), (80, 29442), (83, 29463), (89, 29493), (93, 29538), (98, 29592), (99, 29598), (100, 29601), (113, 29712), (115, 29733), (116, 29736),

Gene: BigMack_41 Start: 27720, Stop: 28763, Start Num: 12

Candidate Starts for BigMack_41:

(Start: 12 @27720 has 70 MA's), (24, 27792), (30, 27825), (35, 27846), (46, 27981), (67, 28179), (68, 28188), (79, 28281), (80, 28290), (86, 28329), (89, 28341), (92, 28365), (106, 28506), (108, 28533), (111, 28551), (114, 28569), (123, 28635),

Gene: Bodacious_41 Start: 27678, Stop: 28730, Start Num: 12

Candidate Starts for Bodacious_41:

(Start: 12 @27678 has 70 MA's), (24, 27750), (46, 27939), (67, 28137), (68, 28146), (79, 28239), (80, 28248), (92, 28323), (108, 28491), (110, 28500), (114, 28527),

Gene: Bogota_54 Start: 37764, Stop: 38777, Start Num: 16

Candidate Starts for Bogota_54:

(Start: 16 @37764 has 11 MA's), (20, 37788), (27, 37848), (29, 37863), (40, 37965), (42, 37992), (43, 37998), (54, 38097), (61, 38181), (64, 38202), (69, 38235), (77, 38301), (79, 38325), (82, 38349), (94, 38457), (96, 38481), (98, 38493), (99, 38499), (107, 38589), (116, 38655), (120, 38679), (121, 38697),

Gene: BrotherBLo_43 Start: 28841, Stop: 29884, Start Num: 12

Candidate Starts for BrotherBLo_43:

(Start: 12 @28841 has 70 MA's), (24, 28913), (30, 28946), (35, 28967), (46, 29102), (63, 29285), (67, 29300), (68, 29309), (79, 29402), (80, 29411), (89, 29462), (92, 29486), (106, 29627), (108, 29654), (111, 29672), (114, 29690), (123, 29756),

Gene: CallieOMalley_43 Start: 28857, Stop: 29906, Start Num: 12

Candidate Starts for CallieOMalley_43:

(Start: 3 @28800 has 4 MA's), (Start: 12 @28857 has 70 MA's), (36, 28998), (46, 29121), (50, 29169), (63, 29304), (67, 29319), (68, 29328), (75, 29382), (79, 29421), (80, 29430), (92, 29505), (108, 29673), (111, 29691), (116, 29721),

Gene: Canowicakte_43 Start: 28835, Stop: 29941, Start Num: 3

Candidate Starts for Canowicakte_43:

(Start: 3 @28835 has 4 MA's), (Start: 12 @28892 has 70 MA's), (36, 29033), (46, 29156), (50, 29204), (63, 29339), (67, 29354), (68, 29363), (75, 29417), (79, 29456), (80, 29465), (92, 29540), (108, 29708), (111, 29726), (116, 29756),

Gene: Carpal_43 Start: 28821, Stop: 29864, Start Num: 12

Candidate Starts for Carpal_43:

(Start: 12 @28821 has 70 MA's), (24, 28893), (46, 29082), (63, 29265), (67, 29280), (68, 29289), (72, 29328), (79, 29382), (80, 29391), (88, 29439), (92, 29466), (108, 29634), (110, 29643), (114, 29670), (123, 29736),

Gene: ChewChew_41 Start: 27809, Stop: 28861, Start Num: 12

Candidate Starts for ChewChew_41:

(Start: 12 @27809 has 70 MA's), (24, 27881), (46, 28070), (67, 28268), (68, 28277), (79, 28370), (80, 28379), (92, 28454), (108, 28622), (110, 28631), (114, 28658),

Gene: Cholula_43 Start: 28867, Stop: 29910, Start Num: 12

Candidate Starts for Cholula_43:

(Start: 12 @28867 has 70 MA's), (24, 28939), (46, 29128), (63, 29311), (67, 29326), (68, 29335), (72, 29374), (79, 29428), (80, 29437), (88, 29485), (92, 29512), (108, 29680), (110, 29689), (111, 29698), (114, 29716), (123, 29782),

Gene: Chridison_40 Start: 28767, Stop: 29810, Start Num: 10

Candidate Starts for Chridison_40:

(Start: 10 @28767 has 11 MA's), (15, 28812), (32, 28887), (46, 29034), (50, 29082), (68, 29241), (79, 29334), (80, 29343), (89, 29394), (92, 29418), (99, 29499), (108, 29586), (110, 29595), (111, 29604), (114, 29622), (123, 29688),

Gene: Christian_41 Start: 27666, Stop: 28718, Start Num: 12

Candidate Starts for Christian_41:

(Start: 12 @27666 has 70 MA's), (24, 27738), (46, 27927), (67, 28125), (68, 28134), (79, 28227), (80, 28236), (92, 28311), (108, 28479), (110, 28488), (111, 28497), (114, 28515), (116, 28527),

Gene: Cicada_48 Start: 30146, Stop: 31207, Start Num: 12

Candidate Starts for Cicada_48:

(Start: 12 @30146 has 70 MA's), (Start: 13 @30155 has 1 MA's), (19, 30215), (42, 30374), (50, 30449), (57, 30512), (58, 30527), (59, 30554), (68, 30602), (80, 30710), (83, 30731), (93, 30806), (98, 30860), (99, 30866), (100, 30869), (111, 30974), (121, 31046),

Gene: CristinaYang_41 Start: 27805, Stop: 28854, Start Num: 12

Candidate Starts for CristinaYang_41:

(Start: 12 @27805 has 70 MA's), (24, 27877), (46, 28066), (67, 28264), (68, 28273), (79, 28366), (80, 28375), (92, 28450), (108, 28618), (110, 28627), (114, 28654),

Gene: Crosby_54 Start: 37524, Stop: 38537, Start Num: 16

Candidate Starts for Crosby_54:

(Start: 16 @37524 has 11 MA's), (26, 37605), (29, 37623), (40, 37725), (42, 37752), (43, 37758), (54, 37857), (61, 37941), (64, 37962), (69, 37995), (77, 38061), (79, 38085), (82, 38109), (94, 38217), (96, 38241), (98, 38253), (99, 38259), (102, 38292), (107, 38349), (116, 38415), (120, 38439), (121, 38457),

Gene: Daiboju_41 Start: 28848, Stop: 29891, Start Num: 10

Candidate Starts for Daiboju_41:

(Start: 7 @28815 has 6 MA's), (Start: 10 @28848 has 11 MA's), (24, 28929), (41, 29067), (46, 29115), (50, 29163), (63, 29298), (68, 29322), (79, 29415), (80, 29424), (89, 29475), (92, 29499), (99, 29580), (108, 29667), (110, 29676), (114, 29703), (123, 29769),

Gene: Dino_44 Start: 28953, Stop: 30011, Start Num: 9

Candidate Starts for Dino_44:

(Start: 9 @28953 has 4 MA's), (Start: 12 @28968 has 70 MA's), (24, 29040), (46, 29229), (67, 29427), (68, 29436), (72, 29475), (79, 29529), (80, 29538), (88, 29586), (92, 29613), (108, 29781), (110, 29790), (114, 29817), (123, 29883),

Gene: DrRobert_40 Start: 27446, Stop: 28498, Start Num: 12

Candidate Starts for DrRobert_40:

(Start: 12 @27446 has 70 MA's), (24, 27518), (46, 27707), (67, 27905), (68, 27914), (79, 28007), (80, 28016), (88, 28064), (92, 28091), (108, 28259), (110, 28268), (111, 28277), (114, 28295), (116, 28307),

Gene: DreamTeam_41 Start: 27775, Stop: 28827, Start Num: 12

Candidate Starts for DreamTeam_41:

(Start: 2 @27712 has 2 MA's), (Start: 12 @27775 has 70 MA's), (24, 27847), (35, 27901), (46, 28036), (57, 28153), (68, 28243), (79, 28336), (80, 28345), (86, 28384), (89, 28396), (92, 28420), (106, 28561), (108, 28588), (111, 28606), (114, 28624), (123, 28690),

Gene: EstebanJulior_42 Start: 28824, Stop: 29876, Start Num: 12

Candidate Starts for EstebanJulior_42:

(Start: 12 @28824 has 70 MA's), (24, 28896), (67, 29283), (68, 29292), (79, 29385), (80, 29394), (88, 29442), (92, 29469), (99, 29550), (108, 29637), (110, 29646), (114, 29673),

Gene: Eunoia_41 Start: 28837, Stop: 29880, Start Num: 10

Candidate Starts for Eunoia_41:

(Start: 10 @28837 has 11 MA's), (46, 29104), (68, 29311), (72, 29350), (78, 29401), (79, 29404), (80, 29413), (89, 29464), (92, 29488), (99, 29569), (114, 29692), (123, 29758),

Gene: FireCastle_47 Start: 29953, Stop: 31011, Start Num: 12

Candidate Starts for FireCastle_47:

(Start: 12 @29953 has 70 MA's), (Start: 13 @29962 has 1 MA's), (23, 30022), (34, 30079), (51, 30259), (55, 30298), (57, 30319), (58, 30334), (80, 30517), (83, 30538), (84, 30541), (86, 30556), (87, 30562), (92, 30592), (93, 30613), (98, 30667), (99, 30673), (100, 30676), (115, 30808), (116, 30811), (121, 30853), (128, 30976),

Gene: Fluke_44 Start: 29084, Stop: 30127, Start Num: 12

Candidate Starts for Fluke_44:

(Start: 12 @29084 has 70 MA's), (24, 29156), (30, 29189), (35, 29210), (46, 29345), (63, 29528), (67, 29543), (68, 29552), (79, 29645), (80, 29654), (89, 29705), (92, 29729), (106, 29870), (108, 29897), (111, 29915), (114, 29933), (123, 29999),

Gene: Frizzle_32 Start: 29118, Stop: 28120, Start Num: 17

Candidate Starts for Frizzle_32:

(Start: 17 @29118 has 3 MA's), (44, 28893), (45, 28887), (60, 28719), (65, 28689), (75, 28638), (77, 28623), (78, 28602), (79, 28599), (87, 28545), (88, 28542), (90, 28530), (117, 28308), (118, 28299),

Gene: Galactica_43 Start: 30869, Stop: 31960, Start Num: 14

Candidate Starts for Galactica_43:

(Start: 14 @30869 has 1 MA's), (25, 30983), (27, 30989), (Start: 31 @31013 has 3 MA's), (33, 31022), (40, 31109), (47, 31172), (59, 31355), (62, 31370), (73, 31454), (79, 31505), (80, 31514), (91, 31589), (93, 31616), (97, 31661), (99, 31676), (100, 31679), (126, 31949),

Gene: Ghobes_31 Start: 29118, Stop: 28120, Start Num: 17

Candidate Starts for Ghobes_31:

(Start: 17 @29118 has 3 MA's), (44, 28893), (45, 28887), (60, 28719), (65, 28689), (75, 28638), (77, 28623), (78, 28602), (79, 28599), (87, 28545), (88, 28542), (95, 28476), (117, 28308), (118, 28299),

Gene: Gisselle_41 Start: 27775, Stop: 28827, Start Num: 12

Candidate Starts for Gisselle_41:

(Start: 2 @27712 has 2 MA's), (Start: 12 @27775 has 70 MA's), (24, 27847), (35, 27901), (46, 28036), (57, 28153), (68, 28243), (79, 28336), (80, 28345), (86, 28384), (89, 28396), (92, 28420), (106, 28561), (108, 28588), (111, 28606), (114, 28624), (123, 28690),

Gene: Glenn_44 Start: 29075, Stop: 30118, Start Num: 12

Candidate Starts for Glenn_44:

(Start: 12 @29075 has 70 MA's), (24, 29147), (30, 29180), (35, 29201), (46, 29336), (67, 29534), (68, 29543), (79, 29636), (80, 29645), (86, 29684), (89, 29696), (92, 29720), (104, 29852), (106, 29861), (108, 29888), (111, 29906), (114, 29924), (123, 29990),

Gene: Goodman_47 Start: 29916, Stop: 30977, Start Num: 12

Candidate Starts for Goodman_47:

(Start: 12 @29916 has 70 MA's), (Start: 13 @29925 has 1 MA's), (19, 29985), (50, 30219), (57, 30282), (58, 30297), (59, 30324), (68, 30372), (80, 30480), (83, 30501), (90, 30540), (93, 30576), (98,

30630), (99, 30636), (100, 30639), (111, 30744), (121, 30816),

Gene: GreenHearts_45 Start: 29737, Stop: 30792, Start Num: 12

Candidate Starts for GreenHearts_45:

(Start: 12 @29737 has 70 MA's), (35, 29863), (46, 29998), (68, 30205), (72, 30244), (75, 30259), (78, 30295), (79, 30298), (80, 30307), (89, 30358), (92, 30382), (108, 30550), (110, 30559), (114, 30586), (116, 30598),

Gene: Greenhouse_45 Start: 29457, Stop: 30509, Start Num: 12

Candidate Starts for Greenhouse_45:

(Start: 12 @29457 has 70 MA's), (35, 29583), (46, 29718), (68, 29925), (72, 29964), (75, 29979), (78, 30015), (79, 30018), (80, 30027), (85, 30060), (89, 30078), (92, 30102), (106, 30243), (108, 30270), (114, 30306), (116, 30318), (127, 30468),

Gene: HeadNerd_41 Start: 27619, Stop: 28668, Start Num: 12

Candidate Starts for HeadNerd_41:

(Start: 12 @27619 has 70 MA's), (24, 27691), (46, 27880), (67, 28078), (68, 28087), (72, 28126), (79, 28180), (80, 28189), (88, 28237), (92, 28264), (108, 28432), (110, 28441), (114, 28468),

Gene: Henococcus_54 Start: 37465, Stop: 38475, Start Num: 16

Candidate Starts for Henococcus_54:

(4, 37369), (Start: 16 @37465 has 11 MA's), (29, 37561), (40, 37663), (42, 37690), (43, 37696), (61, 37879), (69, 37933), (71, 37957), (77, 37999), (79, 38023), (81, 38035), (89, 38083), (98, 38191), (99, 38197), (107, 38287), (109, 38311), (112, 38326), (116, 38353), (119, 38374), (120, 38377), (121, 38395), (122, 38404),

Gene: Herb_41 Start: 28814, Stop: 29890, Start Num: 7

Candidate Starts for Herb_41:

(Start: 7 @28814 has 6 MA's), (Start: 10 @28847 has 11 MA's), (24, 28928), (41, 29066), (46, 29114), (50, 29162), (63, 29297), (68, 29321), (79, 29414), (80, 29423), (89, 29474), (92, 29498), (99, 29579), (108, 29666), (110, 29675), (114, 29702), (123, 29768),

Gene: Hiyaa_45 Start: 32492, Stop: 33436, Start Num: 31

Candidate Starts for Hiyaa_45:

(25, 32462), (Start: 31 @32492 has 3 MA's), (33, 32501), (38, 32537), (40, 32588), (47, 32648), (52, 32693), (60, 32834), (62, 32846), (73, 32930), (74, 32933), (79, 32981), (80, 32990), (93, 33092), (97, 33137), (99, 33152), (100, 33155), (105, 33221), (116, 33302), (125, 33395),

Gene: Htur_48 Start: 30379, Stop: 31446, Start Num: 12

Candidate Starts for Htur_48:

(11, 30373), (Start: 12 @30379 has 70 MA's), (Start: 13 @30388 has 1 MA's), (19, 30448), (50, 30688), (51, 30691), (57, 30751), (58, 30766), (59, 30793), (62, 30808), (68, 30841), (80, 30949), (82, 30964), (83, 30970), (89, 31000), (93, 31045), (98, 31099), (99, 31105), (100, 31108), (115, 31240), (116, 31243), (121, 31285),

Gene: Huckleberry_41 Start: 27602, Stop: 28651, Start Num: 12

Candidate Starts for Huckleberry_41:

(Start: 12 @27602 has 70 MA's), (24, 27674), (46, 27863), (56, 27968), (67, 28061), (68, 28070), (72, 28109), (79, 28163), (80, 28172), (88, 28220), (92, 28247), (99, 28328), (108, 28415), (110, 28424), (114, 28451),

Gene: HunterDalle_41 Start: 28766, Stop: 29809, Start Num: 10

Candidate Starts for HunterDalle_41:

(Start: 10 @28766 has 11 MA's), (15, 28811), (32, 28886), (46, 29033), (50, 29081), (68, 29240), (79, 29333), (80, 29342), (89, 29393), (92, 29417), (99, 29498), (108, 29585), (110, 29594), (111, 29603), (114, 29621), (123, 29687),

Gene: Huntingdon_43 Start: 29269, Stop: 30324, Start Num: 12

Candidate Starts for Huntingdon_43:

(Start: 12 @29269 has 70 MA's), (35, 29395), (46, 29530), (50, 29578), (66, 29725), (68, 29737), (75, 29791), (79, 29830), (80, 29839), (89, 29890), (92, 29914), (93, 29935), (106, 30055), (108, 30082), (111, 30100), (114, 30118), (116, 30130), (124, 30199),

Gene: Immaculata_43 Start: 28867, Stop: 29910, Start Num: 12

Candidate Starts for Immaculata_43:

(Start: 12 @28867 has 70 MA's), (24, 28939), (46, 29128), (63, 29311), (67, 29326), (68, 29335), (72, 29374), (79, 29428), (80, 29437), (88, 29485), (92, 29512), (108, 29680), (110, 29689), (114, 29716), (123, 29782),

Gene: IndiRoo_49 Start: 28952, Stop: 30028, Start Num: 12

Candidate Starts for IndiRoo_49:

(Start: 12 @28952 has 70 MA's), (21, 29021), (38, 29120), (48, 29246), (50, 29264), (58, 29342), (68, 29417), (80, 29525), (83, 29546), (86, 29564), (89, 29576), (93, 29621), (98, 29675), (99, 29681), (100, 29684), (111, 29789), (113, 29795), (115, 29816), (116, 29819),

Gene: Intolerant_51 Start: 37465, Stop: 38478, Start Num: 16

Candidate Starts for Intolerant_51:

(Start: 16 @37465 has 11 MA's), (20, 37489), (27, 37549), (29, 37564), (40, 37666), (42, 37693), (43, 37699), (54, 37798), (61, 37882), (64, 37903), (69, 37936), (77, 38002), (79, 38026), (82, 38050), (94, 38158), (96, 38182), (98, 38194), (99, 38200), (107, 38290), (116, 38356), (120, 38380), (121, 38398),

Gene: JackieB_54 Start: 37297, Stop: 38307, Start Num: 16

Candidate Starts for JackieB_54:

(5, 37207), (Start: 16 @37297 has 11 MA's), (29, 37393), (40, 37495), (42, 37522), (43, 37528), (61, 37711), (69, 37765), (71, 37789), (77, 37831), (79, 37855), (81, 37867), (89, 37915), (98, 38023), (99, 38029), (107, 38119), (109, 38143), (112, 38158), (116, 38185), (119, 38206), (120, 38209), (121, 38227), (122, 38236),

Gene: Jera_47 Start: 28716, Stop: 29780, Start Num: 12

Candidate Starts for Jera_47:

(Start: 12 @28716 has 70 MA's), (Start: 13 @28725 has 1 MA's), (19, 28785), (48, 29001), (51, 29022), (57, 29082), (58, 29097), (68, 29172), (80, 29280), (83, 29301), (87, 29325), (93, 29376), (98, 29430), (99, 29436), (100, 29439), (111, 29544), (113, 29550), (121, 29616),

Gene: Joann_45 Start: 29532, Stop: 30584, Start Num: 12

Candidate Starts for Joann_45:

(Start: 12 @29532 has 70 MA's), (35, 29658), (46, 29793), (50, 29841), (68, 30000), (72, 30039), (75, 30054), (78, 30090), (79, 30093), (80, 30102), (89, 30153), (92, 30177), (106, 30318), (108, 30345), (114, 30381), (116, 30393), (127, 30543),

Gene: Johann_47 Start: 29916, Stop: 30977, Start Num: 12

Candidate Starts for Johann_47:

(Start: 12 @29916 has 70 MA's), (Start: 13 @29925 has 1 MA's), (19, 29985), (50, 30219), (57, 30282), (58, 30297), (59, 30324), (68, 30372), (80, 30480), (83, 30501), (90, 30540), (93, 30576), (98, 30630), (99, 30636), (100, 30639), (111, 30744), (121, 30816),

Gene: Jumboset_44 Start: 28983, Stop: 30026, Start Num: 12

Candidate Starts for Jumboset_44:

(Start: 12 @28983 has 70 MA's), (24, 29055), (30, 29088), (35, 29109), (46, 29244), (67, 29442), (68, 29451), (79, 29544), (80, 29553), (86, 29592), (89, 29604), (92, 29628), (104, 29760), (106, 29769), (108, 29796), (111, 29814), (114, 29832), (123, 29898),

Gene: Kalizoi_43 Start: 28808, Stop: 29851, Start Num: 12

Candidate Starts for Kalizoi_43:

(Start: 12 @28808 has 70 MA's), (24, 28880), (30, 28913), (35, 28934), (46, 29069), (67, 29267), (68, 29276), (79, 29369), (80, 29378), (89, 29429), (92, 29453), (106, 29594), (108, 29621), (111, 29639), (114, 29657), (123, 29723),

Gene: Keanu_44 Start: 32166, Stop: 33110, Start Num: 31

Candidate Starts for Keanu_44:

(28, 32145), (Start: 31 @32166 has 3 MA's), (40, 32262), (47, 32322), (62, 32520), (73, 32604), (74, 32607), (79, 32655), (80, 32664), (93, 32766), (97, 32811), (99, 32826), (100, 32829), (116, 32976), (125, 33069), (126, 33099),

Gene: KingBob_41 Start: 28815, Stop: 29891, Start Num: 7

Candidate Starts for KingBob_41:

(Start: 7 @28815 has 6 MA's), (Start: 10 @28848 has 11 MA's), (24, 28929), (41, 29067), (46, 29115), (50, 29163), (63, 29298), (68, 29322), (79, 29415), (80, 29424), (89, 29475), (92, 29499), (99, 29580), (108, 29667), (110, 29676), (114, 29703), (123, 29769),

Gene: Kittykat_43 Start: 28006, Stop: 29121, Start Num: 2

Candidate Starts for Kittykat_43:

(Start: 2 @28006 has 2 MA's), (Start: 12 @28069 has 70 MA's), (24, 28141), (35, 28195), (46, 28330), (68, 28537), (79, 28630), (80, 28639), (86, 28678), (89, 28690), (92, 28714), (95, 28765), (106, 28855), (108, 28882), (111, 28900), (114, 28918), (123, 28984),

Gene: Korra_43 Start: 28820, Stop: 29863, Start Num: 12

Candidate Starts for Korra_43:

(Start: 12 @28820 has 70 MA's), (24, 28892), (46, 29081), (67, 29279), (68, 29288), (72, 29327), (79, 29381), (80, 29390), (88, 29438), (92, 29465), (108, 29633), (110, 29642), (114, 29669), (123, 29735),

Gene: Lakshmi_44 Start: 29420, Stop: 30472, Start Num: 12

Candidate Starts for Lakshmi_44:

(Start: 12 @29420 has 70 MA's), (35, 29546), (46, 29681), (68, 29888), (72, 29927), (75, 29942), (78, 29978), (79, 29981), (80, 29990), (89, 30041), (92, 30065), (106, 30206), (108, 30233), (114, 30269), (116, 30281), (127, 30431),

Gene: Lasagna_40 Start: 27444, Stop: 28496, Start Num: 12

Candidate Starts for Lasagna_40:

(Start: 12 @27444 has 70 MA's), (24, 27516), (46, 27705), (67, 27903), (68, 27912), (79, 28005), (80, 28014), (92, 28089), (108, 28257), (110, 28266), (114, 28293), (116, 28305),

Gene: LazerLemon_54 Start: 37996, Stop: 39006, Start Num: 16

Candidate Starts for LazerLemon_54:

(Start: 16 @37996 has 11 MA's), (27, 38077), (37, 38137), (40, 38194), (42, 38221), (53, 38323), (61, 38410), (69, 38464), (79, 38554), (81, 38566), (89, 38614), (98, 38722), (99, 38728), (107, 38818), (109, 38842), (112, 38857), (116, 38884), (120, 38908), (121, 38926), (122, 38935),

Gene: Lennox_41 Start: 27652, Stop: 28704, Start Num: 12

Candidate Starts for Lennox_41:

(Start: 12 @27652 has 70 MA's), (24, 27724), (46, 27913), (67, 28111), (68, 28120), (79, 28213), (80, 28222), (88, 28270), (92, 28297), (108, 28465), (110, 28474), (111, 28483), (114, 28501), (116, 28513),

Gene: LilStuart_41 Start: 27793, Stop: 28845, Start Num: 12

Candidate Starts for LilStuart_41:

(Start: 12 @27793 has 70 MA's), (24, 27865), (46, 28054), (67, 28252), (68, 28261), (79, 28354), (80, 28363), (92, 28438), (108, 28606), (110, 28615), (114, 28642), (116, 28654),

Gene: Litotes_43 Start: 28845, Stop: 29894, Start Num: 12

Candidate Starts for Litotes_43:

(Start: 3 @28788 has 4 MA's), (Start: 12 @28845 has 70 MA's), (36, 28986), (46, 29109), (50, 29157), (63, 29292), (67, 29307), (68, 29316), (72, 29355), (75, 29370), (79, 29409), (80, 29418), (92, 29493), (108, 29661), (111, 29679), (116, 29709),

Gene: Lucy_41 Start: 27790, Stop: 28842, Start Num: 12

Candidate Starts for Lucy_41:

(Start: 12 @27790 has 70 MA's), (24, 27862), (46, 28051), (67, 28249), (68, 28258), (79, 28351), (80, 28360), (88, 28408), (92, 28435), (108, 28603), (110, 28612), (111, 28621), (114, 28639), (116, 28651),

Gene: Makoto_41 Start: 27663, Stop: 28715, Start Num: 12

Candidate Starts for Makoto_41:

(Start: 12 @27663 has 70 MA's), (24, 27735), (46, 27924), (67, 28122), (68, 28131), (79, 28224), (80, 28233), (88, 28281), (92, 28308), (108, 28476), (110, 28485), (111, 28494), (114, 28512), (116, 28524),

Gene: MamaPearl_42 Start: 28824, Stop: 29876, Start Num: 12

Candidate Starts for MamaPearl_42:

(Start: 12 @28824 has 70 MA's), (24, 28896), (67, 29283), (68, 29292), (79, 29385), (80, 29394), (88, 29442), (92, 29469), (99, 29550), (108, 29637), (110, 29646), (114, 29673),

Gene: Maria1952_40 Start: 28814, Stop: 29890, Start Num: 7

Candidate Starts for Maria1952_40:

(Start: 7 @28814 has 6 MA's), (Start: 10 @28847 has 11 MA's), (24, 28928), (41, 29066), (46, 29114), (50, 29162), (63, 29297), (68, 29321), (79, 29414), (80, 29423), (89, 29474), (92, 29498), (99, 29579), (108, 29666), (110, 29675), (114, 29702), (123, 29768),

Gene: Marky_57 Start: 38456, Stop: 39469, Start Num: 16

Candidate Starts for Marky_57:

(Start: 16 @38456 has 11 MA's), (29, 38558), (40, 38660), (42, 38687), (43, 38693), (53, 38789), (59, 38870), (61, 38876), (69, 38930), (77, 38996), (79, 39020), (81, 39032), (89, 39080), (98, 39188), (99, 39194), (103, 39236), (107, 39284), (112, 39323), (116, 39350), (119, 39371), (120, 39374), (121, 39392), (122, 39401),

Gene: MeganNoll_43 Start: 29025, Stop: 30083, Start Num: 9

Candidate Starts for MeganNoll_43:

(Start: 9 @29025 has 4 MA's), (Start: 12 @29040 has 70 MA's), (24, 29112), (46, 29301), (67, 29499), (68, 29508), (72, 29547), (79, 29601), (80, 29610), (88, 29658), (92, 29685), (108, 29853), (110, 29862), (114, 29889), (123, 29955),

Gene: Microdon_52 Start: 37262, Stop: 38275, Start Num: 16

Candidate Starts for Microdon_52:

(Start: 16 @37262 has 11 MA's), (26, 37343), (29, 37361), (40, 37463), (42, 37490), (54, 37595), (61, 37679), (64, 37700), (69, 37733), (77, 37799), (79, 37823), (82, 37847), (94, 37955), (96, 37979), (98, 37991), (99, 37997), (107, 38087), (110, 38114), (116, 38153), (120, 38177), (121, 38195),

Gene: Milani_46 Start: 29258, Stop: 30367, Start Num: 12

Candidate Starts for Milani_46:

(Start: 12 @29258 has 70 MA's), (19, 29327), (22, 29360), (48, 29585), (50, 29603), (58, 29681), (68, 29756), (80, 29864), (83, 29885), (86, 29903), (89, 29915), (93, 29960), (98, 30014), (99, 30020), (100, 30023), (111, 30128), (113, 30134), (115, 30155), (116, 30158),

Gene: Misaeng_43 Start: 29393, Stop: 30448, Start Num: 12

Candidate Starts for Misaeng_43:

(Start: 12 @29393 has 70 MA's), (35, 29519), (46, 29654), (50, 29702), (66, 29849), (68, 29861), (75, 29915), (79, 29954), (80, 29963), (89, 30014), (92, 30038), (93, 30059), (106, 30179), (108, 30206), (111, 30224), (114, 30242), (116, 30254), (124, 30323),

Gene: Moki_41 Start: 27765, Stop: 28814, Start Num: 12

Candidate Starts for Moki_41:

(Start: 12 @27765 has 70 MA's), (24, 27837), (46, 28026), (56, 28131), (67, 28224), (68, 28233), (72, 28272), (79, 28326), (80, 28335), (92, 28410), (108, 28578), (110, 28587), (114, 28614),

Gene: MrGloopy_44 Start: 28969, Stop: 30012, Start Num: 12

Candidate Starts for MrGloopy_44:

(Start: 12 @28969 has 70 MA's), (24, 29041), (30, 29074), (35, 29095), (46, 29230), (67, 29428), (68, 29437), (79, 29530), (80, 29539), (86, 29578), (89, 29590), (92, 29614), (104, 29746), (106, 29755), (108, 29782), (111, 29800), (114, 29818), (123, 29884),

Gene: Nancia_41 Start: 27678, Stop: 28727, Start Num: 12

Candidate Starts for Nancia_41:

(Start: 12 @27678 has 70 MA's), (24, 27750), (46, 27939), (67, 28137), (68, 28146), (79, 28239), (80, 28248), (92, 28323), (108, 28491), (110, 28500), (114, 28527),

Gene: Nubia_44 Start: 29365, Stop: 30417, Start Num: 12

Candidate Starts for Nubia_44:

(Start: 12 @29365 has 70 MA's), (35, 29491), (46, 29626), (68, 29833), (72, 29872), (75, 29887), (78, 29923), (79, 29926), (80, 29935), (89, 29986), (92, 30010), (99, 30091), (106, 30151), (108, 30178), (114, 30214), (116, 30226), (127, 30376),

Gene: OMalley_41 Start: 28837, Stop: 29880, Start Num: 10

Candidate Starts for OMalley_41:

(Start: 10 @28837 has 11 MA's), (46, 29104), (68, 29311), (72, 29350), (78, 29401), (79, 29404), (80, 29413), (89, 29464), (92, 29488), (99, 29569), (114, 29692), (123, 29758),

Gene: OurGirlNessie_40 Start: 27407, Stop: 28459, Start Num: 12

Candidate Starts for OurGirlNessie_40:

(Start: 12 @27407 has 70 MA's), (24, 27479), (46, 27668), (67, 27866), (68, 27875), (79, 27968), (80, 27977), (88, 28025), (92, 28052), (108, 28220), (110, 28229), (111, 28238), (114, 28256), (116, 28268),

Gene: Oxyrfrius_44 Start: 29386, Stop: 30438, Start Num: 12

Candidate Starts for Oxyrfrius_44:

(Start: 12 @29386 has 70 MA's), (35, 29512), (46, 29647), (68, 29854), (72, 29893), (75, 29908), (78, 29944), (79, 29947), (80, 29956), (85, 29989), (89, 30007), (92, 30031), (106, 30172), (108, 30199), (114, 30235), (116, 30247), (127, 30397),

Gene: PartyCup_46 Start: 29014, Stop: 30120, Start Num: 3

Candidate Starts for PartyCup_46:

(Start: 3 @29014 has 4 MA's), (Start: 12 @29071 has 70 MA's), (36, 29212), (46, 29335), (50, 29383), (63, 29518), (67, 29533), (68, 29542), (72, 29581), (75, 29596), (79, 29635), (80, 29644), (82, 29659), (92, 29719), (99, 29800), (108, 29887), (111, 29905), (116, 29935),

Gene: PermaG_48 Start: 30045, Stop: 31100, Start Num: 12

Candidate Starts for PermaG_48:

(Start: 12 @30045 has 70 MA's), (19, 30114), (48, 30327), (50, 30345), (57, 30408), (58, 30423), (68, 30498), (80, 30606), (83, 30627), (93, 30702), (95, 30732), (98, 30756), (99, 30762), (100, 30765), (111, 30870), (121, 30942),

Gene: PinkFriday_41 Start: 27951, Stop: 29000, Start Num: 10

Candidate Starts for PinkFriday_41:

(Start: 7 @27918 has 6 MA's), (Start: 10 @27951 has 11 MA's), (41, 28176), (46, 28224), (50, 28272), (68, 28431), (79, 28524), (80, 28533), (89, 28584), (92, 28608), (97, 28674), (99, 28689), (108, 28776), (110, 28785), (111, 28794), (114, 28812), (123, 28878),

Gene: PitaDog_42 Start: 27803, Stop: 28855, Start Num: 12

Candidate Starts for PitaDog_42:

(Start: 12 @27803 has 70 MA's), (24, 27875), (46, 28064), (51, 28115), (67, 28262), (68, 28271), (79, 28364), (80, 28373), (88, 28421), (92, 28448), (108, 28616), (110, 28625), (111, 28634), (114, 28652), (116, 28664),

Gene: Potatoes_43 Start: 28867, Stop: 29910, Start Num: 12

Candidate Starts for Potatoes_43:

(Start: 12 @28867 has 70 MA's), (24, 28939), (46, 29128), (63, 29311), (67, 29326), (68, 29335), (72, 29374), (79, 29428), (80, 29437), (88, 29485), (92, 29512), (108, 29680), (110, 29689), (111, 29698), (114, 29716), (123, 29782),

Gene: Preamble_42 Start: 27872, Stop: 28987, Start Num: 2

Candidate Starts for Preamble_42:

(Start: 2 @27872 has 2 MA's), (Start: 12 @27935 has 70 MA's), (24, 28007), (35, 28061), (46, 28196), (68, 28403), (79, 28496), (80, 28505), (86, 28544), (89, 28556), (92, 28580), (106, 28721), (108, 28748), (111, 28766), (114, 28784), (123, 28850),

Gene: Pterodactyl_41 Start: 27644, Stop: 28696, Start Num: 12

Candidate Starts for Pterodactyl_41:

(Start: 12 @27644 has 70 MA's), (24, 27716), (46, 27905), (67, 28103), (68, 28112), (79, 28205), (80, 28214), (88, 28262), (92, 28289), (108, 28457), (110, 28466), (111, 28475), (114, 28493), (116, 28505),

Gene: Pumancara_41 Start: 27830, Stop: 28912, Start Num: 7

Candidate Starts for Pumancara_41:

(Start: 7 @27830 has 6 MA's), (Start: 10 @27863 has 11 MA's), (41, 28088), (46, 28136), (50, 28184), (68, 28343), (79, 28436), (80, 28445), (89, 28496), (92, 28520), (97, 28586), (99, 28601), (108, 28688), (110, 28697), (111, 28706), (114, 28724), (123, 28790),

Gene: RAP15_44 Start: 29025, Stop: 30083, Start Num: 9

Candidate Starts for RAP15_44:

(Start: 9 @29025 has 4 MA's), (Start: 12 @29040 has 70 MA's), (24, 29112), (46, 29301), (67, 29499), (68, 29508), (72, 29547), (79, 29601), (80, 29610), (88, 29658), (92, 29685), (108, 29853), (110, 29862), (114, 29889), (123, 29955),

Gene: Rasovi_48 Start: 30379, Stop: 31446, Start Num: 12

Candidate Starts for Rasovi_48:

(11, 30373), (Start: 12 @30379 has 70 MA's), (Start: 13 @30388 has 1 MA's), (19, 30448), (50, 30688), (51, 30691), (57, 30751), (58, 30766), (59, 30793), (62, 30808), (68, 30841), (80, 30949), (82, 30964), (83, 30970), (89, 31000), (93, 31045), (98, 31099), (99, 31105), (100, 31108), (115, 31240), (116, 31243), (121, 31285),

Gene: RcigaStruga_43 Start: 29269, Stop: 30324, Start Num: 12

Candidate Starts for RcigaStruga_43:

(Start: 12 @29269 has 70 MA's), (35, 29395), (46, 29530), (50, 29578), (66, 29725), (68, 29737), (75, 29791), (79, 29830), (80, 29839), (89, 29890), (92, 29914), (93, 29935), (106, 30055), (108, 30082), (111, 30100), (114, 30118), (116, 30130), (124, 30199),

Gene: Riovina_41 Start: 28837, Stop: 29880, Start Num: 10

Candidate Starts for Riovina_41:

(Start: 10 @28837 has 11 MA's), (46, 29104), (68, 29311), (72, 29350), (78, 29401), (79, 29404), (80, 29413), (89, 29464), (92, 29488), (99, 29569), (114, 29692), (123, 29758),

Gene: Riverdale_44 Start: 29005, Stop: 30048, Start Num: 12

Candidate Starts for Riverdale_44:

(Start: 12 @29005 has 70 MA's), (24, 29077), (46, 29266), (63, 29449), (67, 29464), (68, 29473), (72, 29512), (79, 29566), (80, 29575), (88, 29623), (92, 29650), (108, 29818), (110, 29827), (114, 29854), (123, 29920),

Gene: Rozby_43 Start: 28797, Stop: 29840, Start Num: 12

Candidate Starts for Rozby_43:

(Start: 12 @28797 has 70 MA's), (24, 28869), (30, 28902), (35, 28923), (46, 29058), (63, 29241), (67, 29256), (68, 29265), (79, 29358), (80, 29367), (89, 29418), (92, 29442), (106, 29583), (108, 29610), (111, 29628), (114, 29646), (123, 29712),

Gene: SBlackberry_46 Start: 29789, Stop: 30850, Start Num: 12

Candidate Starts for SBlackberry_46:

(Start: 12 @29789 has 70 MA's), (Start: 13 @29798 has 1 MA's), (19, 29858), (42, 30017), (50, 30092), (57, 30155), (58, 30170), (59, 30197), (68, 30245), (80, 30353), (83, 30374), (93, 30449), (98, 30503), (99, 30509), (100, 30512), (111, 30617), (121, 30689),

Gene: Sapo_30 Start: 29120, Stop: 28092, Start Num: 17

Candidate Starts for Sapo_30:

(Start: 17 @29120 has 3 MA's), (44, 28919), (46, 28901), (60, 28745), (63, 28724), (70, 28685), (79, 28625), (88, 28568), (90, 28556),

Gene: Savage2526_44 Start: 29034, Stop: 30077, Start Num: 12

Candidate Starts for Savage2526_44:

(Start: 12 @29034 has 70 MA's), (24, 29106), (30, 29139), (35, 29160), (46, 29295), (67, 29493), (68, 29502), (79, 29595), (80, 29604), (86, 29643), (89, 29655), (92, 29679), (104, 29811), (106, 29820), (108, 29847), (111, 29865), (114, 29883), (123, 29949),

Gene: Scuttle_43 Start: 28994, Stop: 30037, Start Num: 12

Candidate Starts for Scuttle_43:

(Start: 12 @28994 has 70 MA's), (24, 29066), (30, 29099), (35, 29120), (46, 29255), (67, 29453), (68, 29462), (79, 29555), (80, 29564), (89, 29615), (92, 29639), (106, 29780), (108, 29807), (111, 29825), (114, 29843), (123, 29909),

Gene: Sergei_41 Start: 28815, Stop: 29891, Start Num: 7

Candidate Starts for Sergei_41:

(Start: 7 @28815 has 6 MA's), (Start: 10 @28848 has 11 MA's), (24, 28929), (41, 29067), (46, 29115), (50, 29163), (63, 29298), (68, 29322), (79, 29415), (80, 29424), (89, 29475), (92, 29499), (99, 29580), (108, 29667), (110, 29676), (114, 29703), (123, 29769),

Gene: Spocter_44 Start: 32522, Stop: 33466, Start Num: 31

Candidate Starts for Spocter_44:

(25, 32492), (Start: 31 @32522 has 3 MA's), (33, 32531), (38, 32567), (40, 32618), (47, 32678), (52, 32723), (60, 32864), (62, 32876), (73, 32960), (74, 32963), (79, 33011), (80, 33020), (93, 33122), (97, 33167), (99, 33182), (100, 33185), (105, 33251), (116, 33332), (125, 33425),

Gene: Stuff_53 Start: 37765, Stop: 38778, Start Num: 16

Candidate Starts for Stuff_53:

(Start: 16 @37765 has 11 MA's), (27, 37849), (29, 37864), (40, 37966), (42, 37993), (43, 37999), (54, 38098), (61, 38182), (64, 38203), (69, 38236), (77, 38302), (79, 38326), (82, 38350), (94, 38458), (96, 38482), (98, 38494), (99, 38500), (107, 38590), (116, 38656), (120, 38680), (121, 38698),

Gene: Sucha_46 Start: 28453, Stop: 29529, Start Num: 12

Candidate Starts for Sucha_46:

(Start: 12 @28453 has 70 MA's), (21, 28522), (38, 28621), (48, 28747), (50, 28765), (58, 28843), (68, 28918), (80, 29026), (83, 29047), (86, 29065), (89, 29077), (93, 29122), (98, 29176), (100, 29185), (113, 29296), (115, 29317), (116, 29320),

Gene: Supakev_41 Start: 28837, Stop: 29880, Start Num: 10

Candidate Starts for Supakev_41:

(Start: 10 @28837 has 11 MA's), (46, 29104), (68, 29311), (72, 29350), (78, 29401), (79, 29404), (80, 29413), (89, 29464), (92, 29488), (99, 29569), (114, 29692), (123, 29758),

Gene: Suppi_43 Start: 28835, Stop: 29941, Start Num: 3

Candidate Starts for Suppi_43:

(Start: 3 @28835 has 4 MA's), (Start: 12 @28892 has 70 MA's), (36, 29033), (46, 29156), (50, 29204), (63, 29339), (67, 29354), (68, 29363), (75, 29417), (79, 29456), (80, 29465), (92, 29540), (108, 29708), (111, 29726), (116, 29756),

Gene: TattModd_42 Start: 28654, Stop: 29697, Start Num: 12

Candidate Starts for TattModd_42:

(Start: 12 @28654 has 70 MA's), (24, 28726), (30, 28759), (35, 28780), (46, 28915), (67, 29113), (68, 29122), (79, 29215), (80, 29224), (89, 29275), (92, 29299), (106, 29440), (108, 29467), (111, 29485), (114, 29503), (116, 29515), (123, 29569),

Gene: Temper16_41 Start: 28815, Stop: 29891, Start Num: 7

Candidate Starts for Temper16_41:

(Start: 7 @28815 has 6 MA's), (Start: 10 @28848 has 11 MA's), (24, 28929), (41, 29067), (46, 29115), (50, 29163), (63, 29298), (68, 29322), (79, 29415), (80, 29424), (89, 29475), (92, 29499), (99, 29580), (108, 29667), (110, 29676), (114, 29703), (123, 29769),

Gene: Theresita_46 Start: 28078, Stop: 29154, Start Num: 8

Candidate Starts for Theresita_46:

(Start: 8 @28078 has 1 MA's), (51, 28396), (57, 28456), (58, 28471), (76, 28615), (80, 28654), (83, 28675), (84, 28678), (86, 28693), (87, 28699), (92, 28729), (93, 28750), (98, 28804), (99, 28810), (100, 28813), (106, 28873), (111, 28918), (122, 28999),

Gene: TurboVicky_47 Start: 30002, Stop: 31069, Start Num: 12

Candidate Starts for TurboVicky_47:

(Start: 12 @30002 has 70 MA's), (Start: 13 @30011 has 1 MA's), (19, 30071), (48, 30287), (51, 30308), (57, 30368), (58, 30383), (68, 30458), (80, 30566), (83, 30587), (87, 30611), (93, 30662), (98, 30716), (99, 30722), (100, 30725), (101, 30728), (111, 30830), (113, 30836), (121, 30902),

Gene: Typher_48 Start: 29589, Stop: 30656, Start Num: 12

Candidate Starts for Typher_48:

(Start: 12 @29589 has 70 MA's), (Start: 13 @29598 has 1 MA's), (19, 29658), (48, 29874), (51, 29895), (57, 29955), (58, 29970), (68, 30045), (80, 30153), (83, 30174), (87, 30198), (93, 30249), (98, 30303), (99, 30309), (100, 30312), (111, 30417), (113, 30423), (121, 30489),

Gene: UNTPL_55 Start: 37799, Stop: 38812, Start Num: 16

Candidate Starts for UNTPL_55:

(Start: 16 @37799 has 11 MA's), (20, 37823), (27, 37883), (29, 37898), (40, 38000), (42, 38027), (43, 38033), (54, 38132), (61, 38216), (64, 38237), (69, 38270), (77, 38336), (79, 38360), (82, 38384), (94, 38492), (96, 38516), (98, 38528), (99, 38534), (107, 38624), (116, 38690), (120, 38714), (121, 38732),

Gene: Urla_42 Start: 28818, Stop: 29870, Start Num: 12

Candidate Starts for Urla_42:

(Start: 12 @28818 has 70 MA's), (24, 28890), (30, 28923), (46, 29079), (67, 29277), (68, 29286), (79, 29379), (80, 29388), (88, 29436), (92, 29463), (99, 29544), (108, 29631), (110, 29640), (114, 29667), (123, 29733),

Gene: Vallejo_44 Start: 29008, Stop: 30051, Start Num: 12

Candidate Starts for Vallejo_44:

(Start: 12 @29008 has 70 MA's), (24, 29080), (46, 29269), (63, 29452), (67, 29467), (68, 29476), (72, 29515), (79, 29569), (80, 29578), (88, 29626), (92, 29653), (108, 29821), (110, 29830), (114, 29857), (123, 29923),

Gene: Vulture_41 Start: 28766, Stop: 29809, Start Num: 10

Candidate Starts for Vulture_41:

(Start: 10 @28766 has 11 MA's), (15, 28811), (32, 28886), (46, 29033), (50, 29081), (68, 29240), (79, 29333), (80, 29342), (89, 29393), (92, 29417), (99, 29498), (108, 29585), (110, 29594), (111, 29603), (114, 29621), (123, 29687),

Gene: Wawa_43 Start: 28841, Stop: 29884, Start Num: 12

Candidate Starts for Wawa_43:

(Start: 12 @28841 has 70 MA's), (24, 28913), (46, 29102), (67, 29300), (68, 29309), (72, 29348), (79, 29402), (80, 29411), (88, 29459), (92, 29486), (108, 29654), (110, 29663), (114, 29690), (123, 29756),

Gene: Wayne_43 Start: 28881, Stop: 29987, Start Num: 3

Candidate Starts for Wayne_43:

(Start: 3 @28881 has 4 MA's), (Start: 12 @28938 has 70 MA's), (36, 29079), (46, 29202), (50, 29250), (63, 29385), (67, 29400), (68, 29409), (75, 29463), (79, 29502), (80, 29511), (92, 29586), (108, 29754), (111, 29772), (116, 29802),

Gene: WonderBoy_40 Start: 27638, Stop: 28687, Start Num: 12

Candidate Starts for WonderBoy_40:

(Start: 12 @27638 has 70 MA's), (24, 27710), (30, 27743), (35, 27764), (46, 27899), (68, 28106), (72, 28145), (79, 28199), (80, 28208), (86, 28247), (89, 28259), (92, 28283), (106, 28424), (108, 28451), (111, 28469), (114, 28487), (123, 28553),

Gene: Zanella_46 Start: 29837, Stop: 30895, Start Num: 13

Candidate Starts for Zanella_46:

(Start: 12 @29828 has 70 MA's), (Start: 13 @29837 has 1 MA's), (19, 29897), (48, 30113), (51, 30134), (57, 30194), (58, 30209), (68, 30284), (80, 30392), (83, 30413), (87, 30437), (93, 30488), (98, 30542), (99, 30548), (100, 30551), (111, 30656), (113, 30662), (121, 30728),

Gene: Zorro_44 Start: 28953, Stop: 30011, Start Num: 9

Candidate Starts for Zorro_44:

(Start: 9 @28953 has 4 MA's), (Start: 12 @28968 has 70 MA's), (24, 29040), (46, 29229), (67, 29427), (68, 29436), (72, 29475), (79, 29529), (80, 29538), (88, 29586), (92, 29613), (108, 29781), (110, 29790), (114, 29817), (123, 29883),