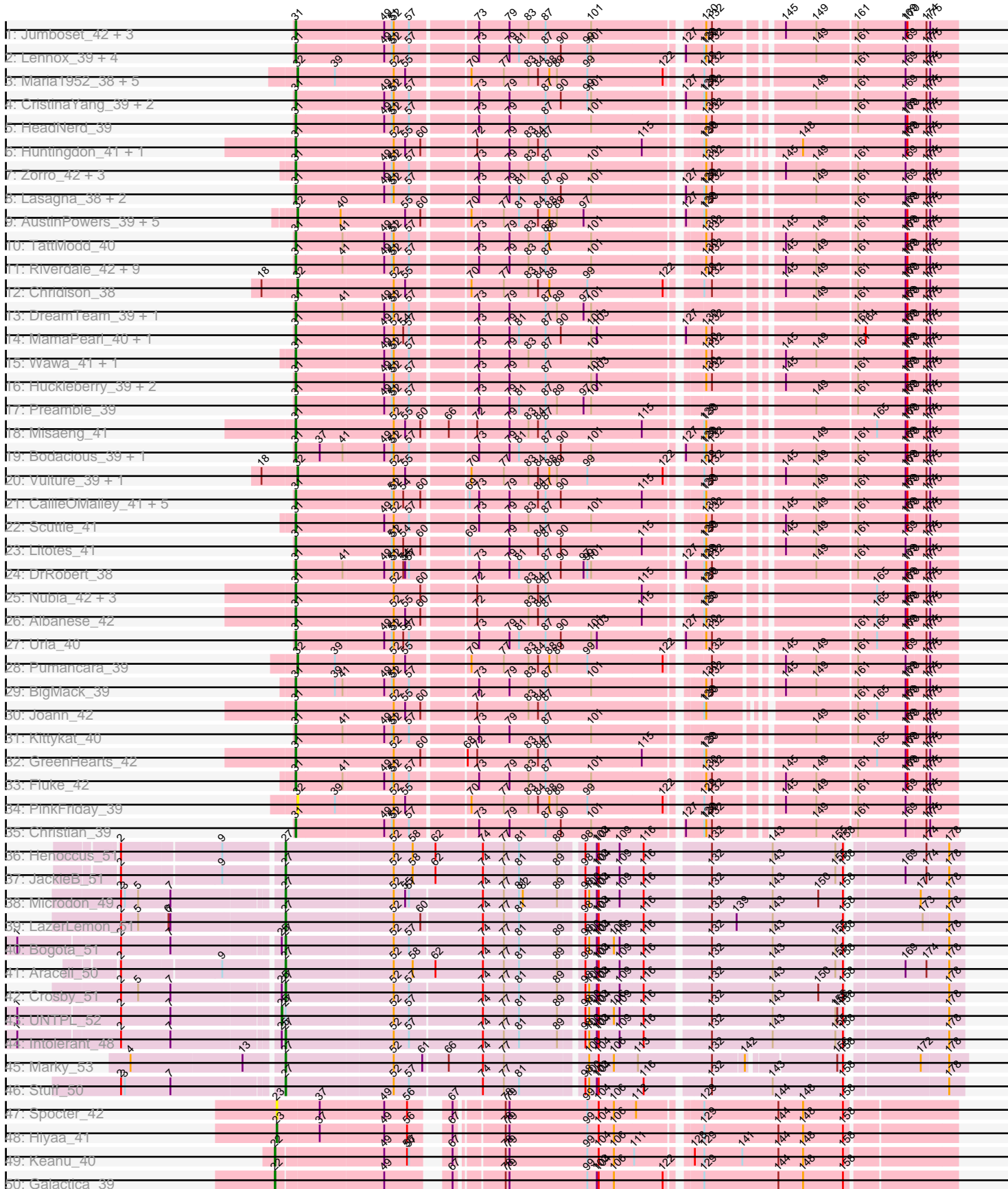
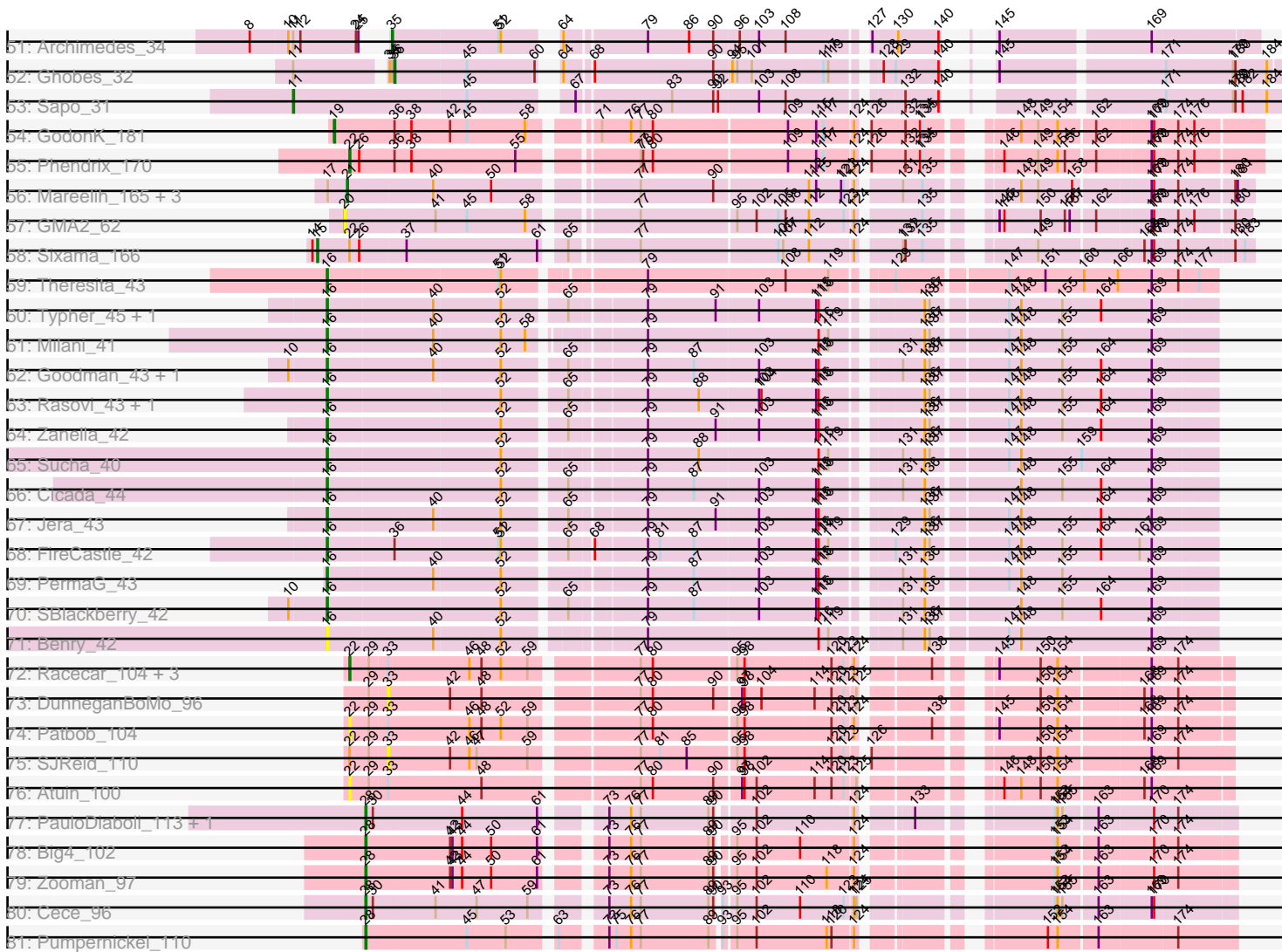


Pham 163417



Pham 163417



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 163417 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163417 has 140 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Jumboset_42, MrGloopy_42, Glenn_42, Savage2526_42
- Track 2 : Lennox_39, WonderBoy_38, PitaDog_39, Makoto_39, Lucy_39
- Track 3 : Maria1952_38, Daiboju_39, Temper16_39, Herb_39, Sergei_39, KingBob_39
- Track 4 : CristinaYang_39, ChewChew_39, LilStuart_39
- Track 5 : HeadNerd_39
- Track 6 : Huntingdon_41, RcigaStruga_41
- Track 7 : Zorro_42, MeganNoll_41, Dino_42, RAP15_42
- Track 8 : Lasagna_38, OurGirlNessie_38, Pterodactyl_39
- Track 9 : AustinPowers_39, Supakev_39, Eunoia_39, Riovina_39, OMalley_39, Aledel_39
- Track 10 : TattModd_40
- Track 11 : Riverdale_42, Beethoven_41, Vallejo_42, Immaculata_41, BrotherBLo_41, Kalizoi_42, Carpal_41, Cholula_41, Rozby_41, Potatoes_41
- Track 12 : Chridison_38
- Track 13 : DreamTeam_39, Gisselle_39
- Track 14 : MamaPearl_40, EstebanJulior_40
- Track 15 : Wawa_41, Korra_41
- Track 16 : Huckleberry_39, Moki_39, Bennie_39
- Track 17 : Preamble_39
- Track 18 : Misaeng_41
- Track 19 : Bodacious_39, Nancia_39
- Track 20 : Vulture_39, HunterDalle_39
- Track 21 : CallieOMalley_41, AppleCider_41, Wayne_41, Canowicakte_41, Suppi_41, PartyCup_44
- Track 22 : Scuttle_41
- Track 23 : Litotes_41
- Track 24 : DrRobert_38
- Track 25 : Nubia_42, Oxynfrius_42, Greenhouse_43, Lakshmi_42
- Track 26 : Albanese_42
- Track 27 : Urla_40
- Track 28 : Pumancara_39
- Track 29 : BigMack_39
- Track 30 : Joann_42
- Track 31 : Kittykat_40
- Track 32 : GreenHearts_42
- Track 33 : Fluke_42

- Track 34 : PinkFriday_39
- Track 35 : Christian_39
- Track 36 : Henoccus_51
- Track 37 : JackieB_51
- Track 38 : Microdon_49
- Track 39 : LazerLemon_51
- Track 40 : Bogota_51
- Track 41 : Araceli_50
- Track 42 : Crosby_51
- Track 43 : UNTPL_52
- Track 44 : Intolerant_48
- Track 45 : Marky_53
- Track 46 : Stuff_50
- Track 47 : Spocter_42
- Track 48 : Hiyaa_41
- Track 49 : Keanu_40
- Track 50 : Galactica_39
- Track 51 : Archimedes_34
- Track 52 : Ghobes_32
- Track 53 : Sapo_31
- Track 54 : GodonK_181
- Track 55 : Phendrix_170
- Track 56 : Mareelih_165, Forza_168, Boopy_167, BlueNGold_164
- Track 57 : GMA2_62
- Track 58 : Sixama_166
- Track 59 : Theresita_43
- Track 60 : Typher_45, TurboVicky_43
- Track 61 : Milani_41
- Track 62 : Goodman_43, Johann_43
- Track 63 : Rasovi_43, Htur_43
- Track 64 : Zanella_42
- Track 65 : Sucha_40
- Track 66 : Cicada_44
- Track 67 : Jera_43
- Track 68 : FireCastle_42
- Track 69 : PermaG_43
- Track 70 : SBlackberry_42
- Track 71 : Benry_42
- Track 72 : Racecar_104, Bloom_107, Mimi_109, Talia1610_105
- Track 73 : DunneganBoMo_96
- Track 74 : Patbob_104
- Track 75 : SJReid_110
- Track 76 : Atuin_100
- Track 77 : PauloDiaboli_113, A3Wally_113
- Track 78 : Big4_102
- Track 79 : Zooman_97
- Track 80 : Cece_96
- Track 81 : Pumpernickel_110

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

The start number called the most often in the published annotations is 31, it was called in 65 of the 125 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_42, AppleCider_41, Beethoven_41, Bennie_39, BigMack_39, Bodacious_39, BrotherBLo_41, CallieOMalley_41, Canowicakte_41, Carpal_41, ChewChew_39, Cholula_41, Christian_39, CristinaYang_39, Dino_42, DrRobert_38, DreamTeam_39, EstebanJulior_40, Fluke_42, Gisselle_39, Glenn_42, GreenHearts_42, Greenhouse_43, HeadNerd_39, Huckleberry_39, Huntingdon_41, Immaculata_41, Joann_42, Jumboset_42, Kalizoi_42, Kittykat_40, Korra_41, Lakshmi_42, Lasagna_38, Lennox_39, LilStuart_39, Litotes_41, Lucy_39, Makoto_39, MamaPearl_40, MeganNoll_41, Misaeng_41, Moki_39, MrGloopy_42, Nancia_39, Nubia_42, OurGirlNessie_38, Oxyfrius_42, PartyCup_44, PitaDog_39, Potatoes_41, Preamble_39, Pterodactyl_39, RAP15_42, RcigaStruga_41, Riverdale_42, Rozby_41, Savage2526_42, Scuttle_41, Suppi_41, TattModd_40, Urla_40, Vallejo_42, Wawa_41, Wayne_41, WonderBoy_38, Zorro_42,

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

-

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

- A3Wally_113, Aledel_39, Araceli_50, Archimedes_34, Atuin_100, AustinPowers_39, Benry_42, Big4_102, Bloom_107, BlueNGold_164, Bogota_51, Boopy_167, Cece_96, Chridison_38, Cicada_44, Crosby_51, Daiboju_39, DunneganBoMo_96, Eunoia_39, FireCastle_42, Forza_168, GMA2_62, Galactica_39, Ghobes_32, GodonK_181, Goodman_43, Henoccus_51, Herb_39, Hiyaa_41, Htur_43, HunterDalle_39, Intolerant_48, JackieB_51, Jera_43, Johann_43, Keanu_40, KingBob_39, LazerLemon_51, Mareelih_165, Maria1952_38, Marky_53, Microdon_49, Milani_41, Mimi_109, OMalley_39, Patbob_104, PauloDiaboli_113, PermaG_43, Phendrix_170, PinkFriday_39, Pumancara_39, Pumpernickel_110, Racecar_104, Rasovi_43, Riovina_39, SBlackberry_42, SJReid_110, Sapo_31, Sergei_39, Sixama_166, Spocter_42, Stuff_50, Sucha_40, Supakev_39, Talia1610_105, Temper16_39, Theresita_43, TurboVicky_43, Typher_45, UNTPL_52, Vulture_39, Zanella_42, Zooman_97,

Summary by start number:

Start 11:

- Found in 3 of 140 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Sapo_31 (DA),

Start 15:

- Found in 1 of 140 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama_166 (DS),

Start 16:

- Found in 16 of 140 (11.4%) of genes in pham
- Manual Annotations of this start: 14 of 125

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Berry_42 (EJ), Cicada_44 (EJ), FireCastle_42 (EJ), Goodman_43 (EJ), Htur_43 (EJ), Jera_43 (EJ), Johann_43 (EJ), Milani_41 (EJ), PermaG_43 (EJ), Rasovi_43 (EJ), SBlackberry_42 (EJ), Sucha_40 (EJ), Theresita_43 (EA7), TurboVicky_43 (EJ), Typher_45 (EJ), Zanella_42 (EJ),

Start 19:

- Found in 1 of 140 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK_181 (DK),

Start 20:

- Found in 1 of 140 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2_62 (DS),

Start 21:

- Found in 4 of 140 (2.9%) of genes in pham
- Manual Annotations of this start: 4 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_164 (DS), Boopy_167 (DS), Forza_168 (DS), Mareelih_165 (DS),

Start 22:

- Found in 11 of 140 (7.9%) of genes in pham
- Manual Annotations of this start: 4 of 125
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Atuin_100 (FC), Bloom_107 (FC), Galactica_39 (BQ), Keanu_40 (BQ), Mimi_109 (FC), Patbob_104 (FC), Phendrix_170 (DK), Racecar_104 (FC), Talia1610_105 (FC),

Start 23:

- Found in 2 of 140 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hiyaa_41 (BQ), Spocter_42 (BQ),

Start 25:

- Found in 5 of 140 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 20.0% of time when present
- Phage (with cluster) where this start called: UNTPL_52 (BH),

Start 27:

- Found in 11 of 140 (7.9%) of genes in pham
- Manual Annotations of this start: 10 of 125
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Araceli_50 (BH), Bogota_51 (BH), Crosby_51 (BH), Henoccus_51 (BH), Intolerant_48 (BH), JackieB_51 (BH), LazerLemon_51 (BH), Marky_53 (BH), Microdon_49 (BH), Stuff_50 (BH),

Start 28:

- Found in 6 of 140 (4.3%) of genes in pham
- Manual Annotations of this start: 6 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_113 (GD1), Big4_102 (GD2), Cece_96 (GD3), PauloDiaboli_113 (GD1), Pumpernickel_110 (GD4), Zooman_97 (GD2),

Start 31:

- Found in 67 of 140 (47.9%) of genes in pham
- Manual Annotations of this start: 65 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese_42 (AK), AppleCider_41 (AK), Beethoven_41 (AK), Bennie_39 (AK), BigMack_39 (AK), Bodacious_39 (AK), BrotherBLo_41 (AK), CallieOMalley_41 (AK), Canowicakte_41 (AK), Carpal_41 (AK), ChewChew_39 (AK), Cholula_41 (AK), Christian_39 (AK), CristinaYang_39 (AK), Dino_42 (AK), DrRobert_38 (AK), DreamTeam_39 (AK), EstebanJulior_40 (AK), Fluke_42 (AK), Gisselle_39 (AK), Glenn_42 (AK), GreenHearts_42 (AK), Greenhouse_43 (AK), HeadNerd_39 (AK), Huckleberry_39 (AK), Huntingdon_41 (AK), Immaculata_41 (AK), Joann_42 (AK), Jumboset_42 (AK), Kalizoi_42 (AK), Kittykat_40 (AK), Korra_41 (AK), Lakshmi_42 (AK), Lasagna_38 (AK), Lennox_39 (AK), LilStuart_39 (AK), Litotes_41 (AK), Lucy_39 (AK), Makoto_39 (AK), MamaPearl_40 (AK), MeganNoll_41 (AK), Misaeng_41 (AK), Moki_39 (AK), MrGloopy_42 (AK), Nancia_39 (AK), Nubia_42 (AK), OurGirlNessie_38 (AK), Oxyfnrius_42 (AK), PartyCup_44 (AK), PitaDog_39 (AK), Potatoes_41 (AK), Preamble_39 (AK), Pterodactyl_39 (AK), RAP15_42 (AK), RcigaStruga_41 (AK), Riverdale_42 (AK), Rozby_41 (AK), Savage2526_42 (AK), Scuttle_41 (AK), Suppi_41 (AK), TattModd_40 (AK), Urla_40 (AK), Vallejo_42 (AK), Wawa_41 (AK), Wayne_41 (AK), WonderBoy_38 (AK), Zorro_42 (AK),

Start 32:

- Found in 17 of 140 (12.1%) of genes in pham
- Manual Annotations of this start: 15 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aledel_39 (AK), AustinPowers_39 (AK), Chridison_38 (AK), Daiboju_39 (AK), Eunoia_39 (AK), Herb_39 (AK), HunterDalle_39 (AK), KingBob_39 (AK), Maria1952_38 (AK), OMalley_39 (AK), PinkFriday_39 (AK), Pumancara_39 (AK), Riovina_39 (AK), Sergei_39 (AK), Supakev_39 (AK), Temper16_39 (AK), Vulture_39 (AK),

Start 33:

- Found in 8 of 140 (5.7%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: DunneganBoMo_96 (FC), SJReid_110 (FC),

Start 35:

- Found in 2 of 140 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Archimedes_34 (DA),

Start 36:

- Found in 4 of 140 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Ghobes_32 (DA),

Summary by clusters:

There are 13 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, EJ, AK, BH, DA, FC, BQ, DS, EA7,

Info for manual annotations of cluster AK:

- Start number 31 was manually annotated 65 times for cluster AK.
- Start number 32 was manually annotated 15 times for cluster AK.

Info for manual annotations of cluster BH:

- Start number 25 was manually annotated 1 time for cluster BH.
- Start number 27 was manually annotated 10 times for cluster BH.

Info for manual annotations of cluster BQ:

- Start number 22 was manually annotated 2 times for cluster BQ.
- Start number 23 was manually annotated 1 time for cluster BQ.

Info for manual annotations of cluster DA:

- Start number 11 was manually annotated 1 time for cluster DA.
- Start number 35 was manually annotated 1 time for cluster DA.
- Start number 36 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DK:

- Start number 19 was manually annotated 1 time for cluster DK.
- Start number 22 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

- Start number 15 was manually annotated 1 time for cluster DS.
- Start number 21 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster EA7:

- Start number 16 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:

- Start number 16 was manually annotated 13 times for cluster EJ.

Info for manual annotations of cluster FC:

- Start number 22 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 28 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 28 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 28 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 28 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_113 Start: 77350, Stop: 76415, Start Num: 28

Candidate Starts for A3Wally_113:

(Start: 28 @77350 has 6 MA's), (30, 77341), (44, 77233), (61, 77143), (73, 77092), (76, 77065), (77, 77053), (89, 76969), (90, 76963), (102, 76924), (124, 76807), (133, 76756), (153, 76624), (154, 76621), (155, 76615), (163, 76576), (170, 76510), (174, 76483),

Gene: Albanese_42 Start: 28164, Stop: 29111, Start Num: 31

Candidate Starts for Albanese_42:

(Start: 31 @28164 has 65 MA's), (52, 28311), (55, 28329), (60, 28353), (72, 28428), (83, 28509), (84, 28524), (87, 28536), (115, 28686), (129, 28755), (130, 28758), (165, 28992), (169, 29037), (170, 29040), (174, 29067), (175, 29070),

Gene: Aledel_39 Start: 27504, Stop: 28451, Start Num: 32

Candidate Starts for Aledel_39:

(Start: 32 @27504 has 15 MA's), (40, 27570), (55, 27669), (60, 27693), (70, 27759), (77, 27807), (81, 27831), (84, 27861), (88, 27879), (89, 27891), (97, 27933), (127, 28071), (129, 28092), (130, 28095), (161, 28302), (169, 28377), (170, 28380), (174, 28407), (175, 28410),

Gene: AppleCider_41 Start: 27545, Stop: 28492, Start Num: 31

Candidate Starts for AppleCider_41:

(Start: 31 @27545 has 65 MA's), (51, 27689), (52, 27692), (54, 27707), (60, 27734), (69, 27797), (73, 27812), (79, 27860), (84, 27905), (87, 27917), (90, 27941), (115, 28067), (129, 28136), (130, 28139), (149, 28283), (161, 28343), (169, 28418), (170, 28421), (174, 28448), (175, 28451),

Gene: Araceli_50 Start: 35827, Stop: 36834, Start Num: 27

Candidate Starts for Araceli_50:

(2, 35590), (9, 35740), (Start: 27 @35827 has 10 MA's), (52, 35992), (58, 36022), (62, 36058), (74, 36133), (77, 36166), (81, 36190), (89, 36250), (98, 36280), (103, 36298), (104, 36301), (109, 36334), (116, 36370), (132, 36460), (143, 36556), (155, 36655), (158, 36667), (169, 36745), (174, 36778), (178, 36811),

Gene: Archimedes_34 Start: 31001, Stop: 30105, Start Num: 35

Candidate Starts for Archimedes_34:

(8, 31136), (10, 31091), (Start: 11 @31085 has 1 MA's), (12, 31076), (24, 31007), (Start: 25 @31004 has 1 MA's), (Start: 35 @31001 has 1 MA's), (51, 30872), (52, 30869), (64, 30821), (79, 30728), (86, 30677), (90, 30647), (96, 30617), (103, 30593), (108, 30560), (127, 30476), (130, 30452), (140, 30404), (145, 30398), (169, 30227),

Gene: Atuin_100 Start: 83319, Stop: 84290, Start Num: 22

Candidate Starts for Atuin_100:

(Start: 22 @83319 has 4 MA's), (29, 83343), (33, 83364), (48, 83478), (77, 83652), (80, 83667), (90, 83742), (97, 83769), (98, 83772), (102, 83787), (114, 83856), (120, 83877), (123, 83892), (125, 83904), (146, 84024), (148, 84045), (150, 84069), (154, 84090), (168, 84189), (169, 84198),

Gene: AustinPowers_39 Start: 27502, Stop: 28449, Start Num: 32

Candidate Starts for AustinPowers_39:

(Start: 32 @27502 has 15 MA's), (40, 27568), (55, 27667), (60, 27691), (70, 27757), (77, 27805), (81, 27829), (84, 27859), (88, 27877), (89, 27889), (97, 27931), (127, 28069), (129, 28090), (130, 28093), (161, 28300), (169, 28375), (170, 28378), (174, 28405), (175, 28408),

Gene: Beethoven_41 Start: 27476, Stop: 28423, Start Num: 31

Candidate Starts for Beethoven_41:

(Start: 31 @27476 has 65 MA's), (41, 27545), (49, 27608), (51, 27620), (52, 27623), (57, 27647), (73, 27743), (79, 27791), (83, 27821), (87, 27848), (101, 27920), (130, 28070), (132, 28079), (145, 28166), (149, 28214), (161, 28274), (169, 28349), (170, 28352), (174, 28379), (175, 28382),

Gene: Bennie_39 Start: 26287, Stop: 27234, Start Num: 31

Candidate Starts for Bennie_39:

(Start: 31 @26287 has 65 MA's), (49, 26419), (51, 26431), (52, 26434), (57, 26458), (73, 26554), (79, 26602), (87, 26659), (101, 26731), (103, 26740), (130, 26881), (132, 26890), (145, 26977), (161, 27085), (169, 27160), (170, 27163), (174, 27190), (175, 27193),

Gene: Benry_42 Start: 26004, Stop: 27011, Start Num: 16

Candidate Starts for Benry_42:

(Start: 16 @26004 has 14 MA's), (40, 26133), (52, 26214), (79, 26361), (116, 26568), (119, 26580), (131, 26643), (136, 26670), (137, 26676), (147, 26760), (148, 26775), (169, 26937),

Gene: Big4_102 Start: 76433, Stop: 75498, Start Num: 28

Candidate Starts for Big4_102:

(Start: 28 @76433 has 6 MA's), (42, 76331), (43, 76328), (44, 76316), (50, 76280), (61, 76226), (73, 76175), (76, 76148), (77, 76136), (89, 76052), (90, 76046), (95, 76031), (102, 76007), (110, 75953), (124, 75890), (153, 75707), (154, 75704), (163, 75659), (170, 75593), (174, 75566),

Gene: BigMack_39 Start: 26387, Stop: 27334, Start Num: 31

Candidate Starts for BigMack_39:

(Start: 31 @26387 has 65 MA's), (39, 26444), (41, 26456), (49, 26519), (51, 26531), (52, 26534), (57, 26558), (73, 26654), (79, 26702), (83, 26732), (87, 26759), (101, 26831), (130, 26981), (132, 26990), (145, 27077), (149, 27125), (161, 27185), (169, 27260), (170, 27263), (174, 27290), (175, 27293),

Gene: Bloom_107 Start: 83495, Stop: 84466, Start Num: 22

Candidate Starts for Bloom_107:

(Start: 22 @83495 has 4 MA's), (29, 83519), (33, 83540), (46, 83639), (48, 83654), (52, 83678), (59, 83711), (77, 83828), (80, 83843), (95, 83939), (98, 83948), (120, 84053), (123, 84068), (124, 84077), (138, 84152), (145, 84194), (150, 84245), (154, 84266), (169, 84374), (174, 84404),

Gene: BlueNGold_164 Start: 94575, Stop: 93583, Start Num: 21

Candidate Starts for BlueNGold_164:

(17, 94599), (Start: 21 @94575 has 4 MA's), (40, 94473), (50, 94401), (77, 94248), (90, 94158), (112, 94050), (115, 94041), (121, 94011), (123, 94008), (124, 93999), (131, 93954), (135, 93930), (148, 93849), (149, 93828), (158, 93786), (169, 93699), (170, 93696), (174, 93669), (180, 93606), (181, 93603),

Gene: Bodacious_39 Start: 26343, Stop: 27293, Start Num: 31

Candidate Starts for Bodacious_39:

(Start: 31 @26343 has 65 MA's), (37, 26376), (41, 26412), (49, 26475), (51, 26487), (52, 26490), (57, 26514), (73, 26610), (79, 26658), (81, 26673), (87, 26715), (90, 26739), (101, 26787), (127, 26913), (129, 26937), (130, 26940), (132, 26949), (149, 27084), (161, 27144), (169, 27219), (170, 27222), (174, 27249), (175, 27252),

Gene: Bogota_51 Start: 36181, Stop: 37179, Start Num: 27

Candidate Starts for Bogota_51:

(1, 35788), (2, 35944), (7, 36022), (Start: 25 @36175 has 1 MA's), (Start: 27 @36181 has 10 MA's), (52, 36346), (57, 36370), (74, 36478), (77, 36511), (81, 36535), (89, 36595), (98, 36625), (100, 36631), (103, 36643), (104, 36646), (106, 36670), (109, 36679), (116, 36715), (132, 36805), (143, 36901), (155, 37000), (158, 37012), (178, 37156),

Gene: Boopy_167 Start: 94586, Stop: 93594, Start Num: 21

Candidate Starts for Boopy_167:

(17, 94610), (Start: 21 @94586 has 4 MA's), (40, 94484), (50, 94412), (77, 94259), (90, 94169), (112, 94061), (115, 94052), (121, 94022), (123, 94019), (124, 94010), (131, 93965), (135, 93941), (148, 93860), (149, 93839), (158, 93797), (169, 93710), (170, 93707), (174, 93680), (180, 93617), (181, 93614),

Gene: BrotherBLo_41 Start: 27508, Stop: 28455, Start Num: 31

Candidate Starts for BrotherBLo_41:

(Start: 31 @27508 has 65 MA's), (41, 27577), (49, 27640), (51, 27652), (52, 27655), (57, 27679), (73, 27775), (79, 27823), (83, 27853), (87, 27880), (101, 27952), (130, 28102), (132, 28111), (145, 28198), (149, 28246), (161, 28306), (169, 28381), (170, 28384), (174, 28411), (175, 28414),

Gene: CallieOMalley_41 Start: 27545, Stop: 28492, Start Num: 31

Candidate Starts for CallieOMalley_41:

(Start: 31 @27545 has 65 MA's), (51, 27689), (52, 27692), (54, 27707), (60, 27734), (69, 27797), (73, 27812), (79, 27860), (84, 27905), (87, 27917), (90, 27941), (115, 28067), (129, 28136), (130, 28139), (149, 28283), (161, 28343), (169, 28418), (170, 28421), (174, 28448), (175, 28451),

Gene: Canowicakte_41 Start: 27580, Stop: 28527, Start Num: 31

Candidate Starts for Canowicakte_41:

(Start: 31 @27580 has 65 MA's), (51, 27724), (52, 27727), (54, 27742), (60, 27769), (69, 27832), (73, 27847), (79, 27895), (84, 27940), (87, 27952), (90, 27976), (115, 28102), (129, 28171), (130, 28174), (149, 28318), (161, 28378), (169, 28453), (170, 28456), (174, 28483), (175, 28486),

Gene: Carpal_41 Start: 27488, Stop: 28435, Start Num: 31

Candidate Starts for Carpal_41:

(Start: 31 @27488 has 65 MA's), (41, 27557), (49, 27620), (51, 27632), (52, 27635), (57, 27659), (73, 27755), (79, 27803), (83, 27833), (87, 27860), (101, 27932), (130, 28082), (132, 28091), (145, 28178), (149, 28226), (161, 28286), (169, 28361), (170, 28364), (174, 28391), (175, 28394),

Gene: Cece_96 Start: 79474, Stop: 78539, Start Num: 28

Candidate Starts for Cece_96:

(Start: 28 @79474 has 6 MA's), (30, 79465), (41, 79390), (47, 79339), (59, 79279), (73, 79216), (76, 79189), (77, 79177), (89, 79093), (90, 79087), (93, 79084), (95, 79072), (102, 79048), (110, 78994), (123, 78940), (124, 78931), (125, 78928), (153, 78748), (154, 78745), (155, 78739), (163, 78700), (169, 78637), (170, 78634),

Gene: ChewChew_39 Start: 26335, Stop: 27285, Start Num: 31

Candidate Starts for ChewChew_39:

(Start: 31 @26335 has 65 MA's), (49, 26467), (51, 26479), (52, 26482), (57, 26506), (73, 26602), (79, 26650), (87, 26707), (90, 26731), (99, 26773), (101, 26779), (127, 26905), (129, 26929), (130, 26932), (132, 26941), (149, 27076), (161, 27136), (169, 27211), (174, 27241), (175, 27244),

Gene: Cholula_41 Start: 27534, Stop: 28481, Start Num: 31

Candidate Starts for Cholula_41:

(Start: 31 @27534 has 65 MA's), (41, 27603), (49, 27666), (51, 27678), (52, 27681), (57, 27705), (73, 27801), (79, 27849), (83, 27879), (87, 27906), (101, 27978), (130, 28128), (132, 28137), (145, 28224), (149, 28272), (161, 28332), (169, 28407), (170, 28410), (174, 28437), (175, 28440),

Gene: Chridison_38 Start: 27433, Stop: 28383, Start Num: 32

Candidate Starts for Chridison_38:

(18, 27379), (Start: 32 @27433 has 15 MA's), (52, 27580), (55, 27598), (70, 27688), (77, 27739), (83, 27778), (84, 27793), (88, 27811), (99, 27871), (122, 27988), (129, 28027), (132, 28039), (145, 28126), (149, 28174), (161, 28234), (169, 28309), (170, 28312), (174, 28339), (175, 28342),

Gene: Christian_39 Start: 26331, Stop: 27281, Start Num: 31

Candidate Starts for Christian_39:

(Start: 31 @26331 has 65 MA's), (49, 26463), (51, 26475), (52, 26478), (57, 26502), (73, 26598), (79, 26646), (87, 26703), (90, 26727), (101, 26775), (127, 26901), (129, 26925), (130, 26928), (132, 26937), (149, 27072), (161, 27132), (169, 27207), (174, 27237), (175, 27240),

Gene: Cicada_44 Start: 27802, Stop: 28815, Start Num: 16

Candidate Starts for Cicada_44:

(Start: 16 @27802 has 14 MA's), (52, 28012), (65, 28081), (79, 28165), (87, 28222), (103, 28300), (115, 28369), (116, 28372), (131, 28447), (136, 28474), (148, 28579), (155, 28630), (164, 28678), (169, 28741),

Gene: CristinaYang_39 Start: 26331, Stop: 27281, Start Num: 31

Candidate Starts for CristinaYang_39:

(Start: 31 @26331 has 65 MA's), (49, 26463), (51, 26475), (52, 26478), (57, 26502), (73, 26598), (79, 26646), (87, 26703), (90, 26727), (99, 26769), (101, 26775), (127, 26901), (129, 26925), (130, 26928), (132, 26937), (149, 27072), (161, 27132), (169, 27207), (174, 27237), (175, 27240),

Gene: Crosby_51 Start: 35943, Stop: 36941, Start Num: 27

Candidate Starts for Crosby_51:

(2, 35706), (5, 35733), (7, 35784), (Start: 25 @35937 has 1 MA's), (Start: 27 @35943 has 10 MA's), (52, 36108), (57, 36132), (74, 36240), (77, 36273), (81, 36297), (89, 36357), (98, 36387), (100, 36393), (103, 36405), (104, 36408), (109, 36441), (116, 36477), (132, 36567), (143, 36663), (150, 36735), (158, 36774), (178, 36918),

Gene: Daiboju_39 Start: 27511, Stop: 28464, Start Num: 32

Candidate Starts for Daiboju_39:

(Start: 32 @27511 has 15 MA's), (39, 27568), (52, 27658), (55, 27676), (70, 27766), (77, 27817), (83, 27856), (84, 27871), (88, 27889), (89, 27901), (99, 27949), (122, 28066), (129, 28105), (132, 28117), (161, 28315), (169, 28390), (174, 28420), (175, 28423),

Gene: Dino_42 Start: 27635, Stop: 28582, Start Num: 31

Candidate Starts for Dino_42:

(Start: 31 @27635 has 65 MA's), (49, 27767), (51, 27779), (52, 27782), (57, 27806), (73, 27902), (79, 27950), (83, 27980), (87, 28007), (101, 28079), (130, 28229), (132, 28238), (145, 28325), (149, 28373), (161, 28433), (169, 28508), (174, 28538), (175, 28541),

Gene: DrRobert_38 Start: 26111, Stop: 27061, Start Num: 31

Candidate Starts for DrRobert_38:

(Start: 31 @26111 has 65 MA's), (41, 26180), (49, 26243), (51, 26255), (52, 26258), (54, 26273), (55, 26276), (57, 26282), (73, 26378), (79, 26426), (81, 26441), (87, 26483), (90, 26507), (97, 26543), (99, 26549), (101, 26555), (127, 26681), (129, 26705), (130, 26708), (132, 26717), (149, 26852), (161,

26912), (169, 26987), (170, 26990), (174, 27017), (175, 27020),

Gene: DreamTeam_39 Start: 26441, Stop: 27388, Start Num: 31

Candidate Starts for DreamTeam_39:

(Start: 31 @26441 has 65 MA's), (41, 26510), (49, 26573), (51, 26585), (52, 26588), (57, 26612), (73, 26708), (79, 26756), (87, 26813), (89, 26831), (97, 26873), (101, 26885), (149, 27179), (161, 27239), (169, 27314), (170, 27317), (174, 27344), (175, 27347),

Gene: DunneganBoMo_96 Start: 79281, Stop: 80207, Start Num: 33

Candidate Starts for DunneganBoMo_96:

(29, 79260), (33, 79281), (42, 79356), (48, 79395), (77, 79569), (80, 79584), (90, 79659), (97, 79686), (98, 79689), (104, 79710), (114, 79773), (120, 79794), (123, 79809), (125, 79821), (150, 79986), (154, 80007), (168, 80106), (169, 80115), (174, 80145),

Gene: EstebanJulior_40 Start: 27489, Stop: 28439, Start Num: 31

Candidate Starts for EstebanJulior_40:

(Start: 31 @27489 has 65 MA's), (49, 27621), (52, 27636), (54, 27651), (57, 27660), (73, 27756), (79, 27804), (81, 27819), (87, 27861), (90, 27885), (101, 27933), (103, 27942), (127, 28059), (130, 28086), (132, 28095), (161, 28290), (164, 28302), (169, 28365), (170, 28368), (174, 28395), (175, 28398),

Gene: Eunoia_39 Start: 27504, Stop: 28451, Start Num: 32

Candidate Starts for Eunoia_39:

(Start: 32 @27504 has 15 MA's), (40, 27570), (55, 27669), (60, 27693), (70, 27759), (77, 27807), (81, 27831), (84, 27861), (88, 27879), (89, 27891), (97, 27933), (127, 28071), (129, 28092), (130, 28095), (161, 28302), (169, 28377), (170, 28380), (174, 28407), (175, 28410),

Gene: FireCastle_42 Start: 27533, Stop: 28546, Start Num: 16

Candidate Starts for FireCastle_42:

(Start: 16 @27533 has 14 MA's), (Start: 36 @27614 has 1 MA's), (51, 27740), (52, 27743), (65, 27812), (68, 27836), (79, 27896), (81, 27911), (87, 27953), (103, 28031), (115, 28100), (116, 28103), (119, 28115), (129, 28169), (136, 28205), (137, 28211), (147, 28295), (148, 28310), (155, 28361), (164, 28409), (167, 28457), (169, 28472),

Gene: Fluke_42 Start: 27751, Stop: 28698, Start Num: 31

Candidate Starts for Fluke_42:

(Start: 31 @27751 has 65 MA's), (41, 27820), (49, 27883), (51, 27895), (52, 27898), (57, 27922), (73, 28018), (79, 28066), (83, 28096), (87, 28123), (101, 28195), (130, 28345), (132, 28354), (145, 28441), (149, 28489), (161, 28549), (169, 28624), (170, 28627), (174, 28654), (175, 28657),

Gene: Forza_168 Start: 94503, Stop: 93511, Start Num: 21

Candidate Starts for Forza_168:

(17, 94527), (Start: 21 @94503 has 4 MA's), (40, 94401), (50, 94329), (77, 94176), (90, 94086), (112, 93978), (115, 93969), (121, 93939), (123, 93936), (124, 93927), (131, 93882), (135, 93858), (148, 93777), (149, 93756), (158, 93714), (169, 93627), (170, 93624), (174, 93597), (180, 93534), (181, 93531),

Gene: GMA2_62 Start: 65413, Stop: 64418, Start Num: 20

Candidate Starts for GMA2_62:

(20, 65413), (41, 65302), (45, 65263), (58, 65191), (77, 65080), (95, 64966), (102, 64942), (105, 64915), (108, 64906), (112, 64879), (123, 64837), (124, 64828), (135, 64762), (145, 64708), (146, 64702), (150, 64657), (156, 64627), (157, 64621), (162, 64594), (169, 64531), (170, 64528), (174, 64501), (176, 64483), (180, 64438),

Gene: Galactica_39 Start: 28326, Stop: 29291, Start Num: 22

Candidate Starts for Galactica_39:

(Start: 22 @28326 has 4 MA's), (49, 28488), (67, 28563), (78, 28626), (79, 28632), (99, 28755), (103, 28770), (104, 28773), (106, 28797), (122, 28872), (129, 28908), (144, 29025), (148, 29064), (158, 29127),

Gene: Ghobes_32 Start: 30098, Stop: 29172, Start Num: 36

Candidate Starts for Ghobes_32:

(Start: 11 @30206 has 1 MA's), (34, 30104), (Start: 35 @30101 has 1 MA's), (Start: 36 @30098 has 1 MA's), (45, 30011), (60, 29927), (64, 29921), (68, 29894), (90, 29747), (94, 29726), (95, 29720), (101, 29702), (117, 29615), (119, 29609), (128, 29567), (129, 29555), (140, 29504), (145, 29498), (171, 29309), (179, 29228), (180, 29225), (184, 29186),

Gene: Gisselle_39 Start: 26441, Stop: 27388, Start Num: 31

Candidate Starts for Gisselle_39:

(Start: 31 @26441 has 65 MA's), (41, 26510), (49, 26573), (51, 26585), (52, 26588), (57, 26612), (73, 26708), (79, 26756), (87, 26813), (89, 26831), (97, 26873), (101, 26885), (149, 27179), (161, 27239), (169, 27314), (170, 27317), (174, 27344), (175, 27347),

Gene: Glenn_42 Start: 27742, Stop: 28689, Start Num: 31

Candidate Starts for Glenn_42:

(Start: 31 @27742 has 65 MA's), (49, 27874), (51, 27886), (52, 27889), (57, 27913), (73, 28009), (79, 28057), (83, 28087), (87, 28114), (101, 28186), (130, 28336), (132, 28345), (145, 28432), (149, 28480), (161, 28540), (169, 28615), (170, 28618), (174, 28645), (175, 28648),

Gene: GodonK_181 Start: 91029, Stop: 90010, Start Num: 19

Candidate Starts for GodonK_181:

(Start: 19 @91029 has 1 MA's), (Start: 36 @90957 has 1 MA's), (38, 90936), (42, 90888), (45, 90867), (58, 90795), (71, 90732), (76, 90696), (77, 90684), (80, 90669), (109, 90510), (115, 90477), (117, 90468), (124, 90435), (126, 90429), (132, 90390), (134, 90372), (135, 90369), (148, 90288), (149, 90267), (154, 90243), (162, 90201), (169, 90138), (170, 90135), (174, 90108), (176, 90090),

Gene: Goodman_43 Start: 27572, Stop: 28585, Start Num: 16

Candidate Starts for Goodman_43:

(10, 27527), (Start: 16 @27572 has 14 MA's), (40, 27701), (52, 27782), (65, 27851), (79, 27935), (87, 27992), (103, 28070), (115, 28139), (116, 28142), (131, 28217), (136, 28244), (137, 28250), (147, 28334), (148, 28349), (155, 28400), (164, 28448), (169, 28511),

Gene: GreenHearts_42 Start: 28250, Stop: 29197, Start Num: 31

Candidate Starts for GreenHearts_42:

(Start: 31 @28250 has 65 MA's), (52, 28397), (60, 28439), (68, 28499), (72, 28514), (83, 28595), (84, 28610), (87, 28622), (115, 28772), (129, 28841), (130, 28844), (165, 29078), (169, 29123), (170, 29126), (174, 29153), (175, 29156),

Gene: Greenhouse_43 Start: 28175, Stop: 29122, Start Num: 31

Candidate Starts for Greenhouse_43:

(Start: 31 @28175 has 65 MA's), (52, 28322), (60, 28364), (72, 28439), (83, 28520), (84, 28535), (87, 28547), (115, 28697), (129, 28766), (130, 28769), (165, 29003), (169, 29048), (170, 29051), (174, 29078), (175, 29081),

Gene: HeadNerd_39 Start: 26287, Stop: 27234, Start Num: 31

Candidate Starts for HeadNerd_39:

(Start: 31 @26287 has 65 MA's), (49, 26419), (51, 26431), (52, 26434), (57, 26458), (73, 26554), (79, 26602), (87, 26659), (101, 26731), (130, 26881), (132, 26890), (161, 27085), (169, 27160), (170, 27163), (174, 27190), (175, 27193),

Gene: Henococcus_51 Start: 35844, Stop: 36851, Start Num: 27

Candidate Starts for Henococcus_51:

(2, 35607), (9, 35757), (Start: 27 @35844 has 10 MA's), (52, 36009), (58, 36039), (62, 36075), (74, 36150), (77, 36183), (81, 36207), (89, 36267), (98, 36297), (103, 36315), (104, 36318), (109, 36351), (116, 36387), (132, 36477), (143, 36573), (155, 36672), (158, 36684), (174, 36795), (178, 36828),

Gene: Herb_39 Start: 27510, Stop: 28463, Start Num: 32

Candidate Starts for Herb_39:

(Start: 32 @27510 has 15 MA's), (39, 27567), (52, 27657), (55, 27675), (70, 27765), (77, 27816), (83, 27855), (84, 27870), (88, 27888), (89, 27900), (99, 27948), (122, 28065), (129, 28104), (132, 28116), (161, 28314), (169, 28389), (174, 28419), (175, 28422),

Gene: Hiyaa_41 Start: 29720, Stop: 30685, Start Num: 23

Candidate Starts for Hiyaa_41:

(Start: 23 @29720 has 1 MA's), (37, 29783), (49, 29882), (56, 29918), (67, 29957), (78, 30020), (79, 30026), (99, 30149), (104, 30167), (106, 30191), (129, 30302), (144, 30419), (148, 30458), (158, 30521),

Gene: Htur_43 Start: 27973, Stop: 28986, Start Num: 16

Candidate Starts for Htur_43:

(Start: 16 @27973 has 14 MA's), (52, 28183), (65, 28252), (79, 28336), (88, 28399), (103, 28471), (104, 28474), (115, 28540), (116, 28543), (136, 28645), (137, 28651), (147, 28735), (148, 28750), (155, 28801), (164, 28849), (169, 28912),

Gene: Huckleberry_39 Start: 26270, Stop: 27217, Start Num: 31

Candidate Starts for Huckleberry_39:

(Start: 31 @26270 has 65 MA's), (49, 26402), (51, 26414), (52, 26417), (57, 26441), (73, 26537), (79, 26585), (87, 26642), (101, 26714), (103, 26723), (130, 26864), (132, 26873), (145, 26960), (161, 27068), (169, 27143), (170, 27146), (174, 27173), (175, 27176),

Gene: HunterDalle_39 Start: 27432, Stop: 28382, Start Num: 32

Candidate Starts for HunterDalle_39:

(18, 27378), (Start: 32 @27432 has 15 MA's), (52, 27579), (55, 27597), (70, 27687), (77, 27738), (83, 27777), (84, 27792), (88, 27810), (89, 27822), (99, 27870), (122, 27987), (129, 28026), (132, 28038), (145, 28125), (149, 28173), (161, 28233), (169, 28308), (170, 28311), (174, 28338), (175, 28341),

Gene: Huntingdon_41 Start: 27893, Stop: 28828, Start Num: 31

Candidate Starts for Huntingdon_41:

(Start: 31 @27893 has 65 MA's), (52, 28040), (55, 28058), (60, 28082), (72, 28157), (79, 28208), (83, 28238), (84, 28253), (87, 28265), (115, 28415), (129, 28484), (130, 28487), (148, 28598), (169, 28754), (170, 28757), (174, 28784), (175, 28787),

Gene: Immaculata_41 Start: 27533, Stop: 28480, Start Num: 31

Candidate Starts for Immaculata_41:

(Start: 31 @27533 has 65 MA's), (41, 27602), (49, 27665), (51, 27677), (52, 27680), (57, 27704), (73, 27800), (79, 27848), (83, 27878), (87, 27905), (101, 27977), (130, 28127), (132, 28136), (145, 28223), (149, 28271), (161, 28331), (169, 28406), (170, 28409), (174, 28436), (175, 28439),

Gene: Intolerant_48 Start: 35879, Stop: 36877, Start Num: 27

Candidate Starts for Intolerant_48:

(1, 35486), (2, 35642), (7, 35720), (Start: 25 @35873 has 1 MA's), (Start: 27 @35879 has 10 MA's), (52, 36044), (57, 36068), (74, 36176), (77, 36209), (81, 36233), (89, 36293), (98, 36323), (100, 36329), (103, 36341), (104, 36344), (109, 36377), (116, 36413), (132, 36503), (143, 36599), (155, 36698), (158, 36710), (178, 36854),

Gene: JackieB_51 Start: 35683, Stop: 36690, Start Num: 27

Candidate Starts for JackieB_51:

(2, 35446), (9, 35596), (Start: 27 @35683 has 10 MA's), (52, 35848), (58, 35878), (62, 35914), (74, 35989), (77, 36022), (81, 36046), (89, 36106), (98, 36136), (103, 36154), (104, 36157), (109, 36190), (116, 36226), (132, 36316), (143, 36412), (155, 36511), (158, 36523), (169, 36601), (174, 36634), (178, 36667),

Gene: Jera_43 Start: 26765, Stop: 27778, Start Num: 16

Candidate Starts for Jera_43:

(Start: 16 @26765 has 14 MA's), (40, 26894), (52, 26975), (65, 27044), (79, 27128), (91, 27212), (103, 27263), (115, 27332), (116, 27335), (136, 27437), (137, 27443), (147, 27527), (148, 27542), (164, 27641), (169, 27704),

Gene: Joann_42 Start: 28143, Stop: 29078, Start Num: 31

Candidate Starts for Joann_42:

(Start: 31 @28143 has 65 MA's), (52, 28290), (55, 28308), (60, 28332), (72, 28407), (83, 28488), (84, 28503), (87, 28515), (129, 28734), (130, 28737), (161, 28929), (165, 28959), (169, 29004), (170, 29007), (174, 29034), (175, 29037),

Gene: Johann_43 Start: 27572, Stop: 28585, Start Num: 16

Candidate Starts for Johann_43:

(10, 27527), (Start: 16 @27572 has 14 MA's), (40, 27701), (52, 27782), (65, 27851), (79, 27935), (87, 27992), (103, 28070), (115, 28139), (116, 28142), (131, 28217), (136, 28244), (137, 28250), (147, 28334), (148, 28349), (155, 28400), (164, 28448), (169, 28511),

Gene: Jumboset_42 Start: 27650, Stop: 28597, Start Num: 31

Candidate Starts for Jumboset_42:

(Start: 31 @27650 has 65 MA's), (49, 27782), (51, 27794), (52, 27797), (57, 27821), (73, 27917), (79, 27965), (83, 27995), (87, 28022), (101, 28094), (130, 28244), (132, 28253), (145, 28340), (149, 28388), (161, 28448), (169, 28523), (170, 28526), (174, 28553), (175, 28556),

Gene: Kalizoi_42 Start: 27475, Stop: 28422, Start Num: 31

Candidate Starts for Kalizoi_42:

(Start: 31 @27475 has 65 MA's), (41, 27544), (49, 27607), (51, 27619), (52, 27622), (57, 27646), (73, 27742), (79, 27790), (83, 27820), (87, 27847), (101, 27919), (130, 28069), (132, 28078), (145, 28165), (149, 28213), (161, 28273), (169, 28348), (170, 28351), (174, 28378), (175, 28381),

Gene: Keanu_40 Start: 29418, Stop: 30383, Start Num: 22

Candidate Starts for Keanu_40:

(Start: 22 @29418 has 4 MA's), (49, 29580), (56, 29616), (57, 29619), (67, 29655), (78, 29718), (79, 29724), (99, 29847), (104, 29865), (106, 29889), (111, 29919), (128, 29988), (129, 30000), (141, 30060), (144, 30117), (148, 30156), (158, 30219),

Gene: KingBob_39 Start: 27511, Stop: 28464, Start Num: 32

Candidate Starts for KingBob_39:

(Start: 32 @27511 has 15 MA's), (39, 27568), (52, 27658), (55, 27676), (70, 27766), (77, 27817), (83, 27856), (84, 27871), (88, 27889), (89, 27901), (99, 27949), (122, 28066), (129, 28105), (132, 28117),

(161, 28315), (169, 28390), (174, 28420), (175, 28423),

Gene: Kittykat_40 Start: 26532, Stop: 27479, Start Num: 31

Candidate Starts for Kittykat_40:

(Start: 31 @26532 has 65 MA's), (41, 26601), (49, 26664), (51, 26676), (52, 26679), (57, 26703), (73, 26799), (79, 26847), (87, 26904), (101, 26976), (149, 27270), (161, 27330), (169, 27405), (170, 27408), (174, 27435), (175, 27438),

Gene: Korra_41 Start: 27487, Stop: 28434, Start Num: 31

Candidate Starts for Korra_41:

(Start: 31 @27487 has 65 MA's), (49, 27619), (51, 27631), (52, 27634), (57, 27658), (73, 27754), (79, 27802), (83, 27832), (87, 27859), (101, 27931), (130, 28081), (132, 28090), (145, 28177), (149, 28225), (161, 28285), (169, 28360), (170, 28363), (174, 28390), (175, 28393),

Gene: Lakshmi_42 Start: 28138, Stop: 29085, Start Num: 31

Candidate Starts for Lakshmi_42:

(Start: 31 @28138 has 65 MA's), (52, 28285), (60, 28327), (72, 28402), (83, 28483), (84, 28498), (87, 28510), (115, 28660), (129, 28729), (130, 28732), (165, 28966), (169, 29011), (170, 29014), (174, 29041), (175, 29044),

Gene: Lasagna_38 Start: 26108, Stop: 27058, Start Num: 31

Candidate Starts for Lasagna_38:

(Start: 31 @26108 has 65 MA's), (49, 26240), (51, 26252), (52, 26255), (57, 26279), (73, 26375), (79, 26423), (81, 26438), (87, 26480), (90, 26504), (101, 26552), (127, 26678), (129, 26702), (130, 26705), (132, 26714), (149, 26849), (161, 26909), (169, 26984), (174, 27014), (175, 27017),

Gene: LazerLemon_51 Start: 36312, Stop: 37310, Start Num: 27

Candidate Starts for LazerLemon_51:

(2, 36060), (5, 36087), (6, 36132), (7, 36135), (Start: 27 @36312 has 10 MA's), (52, 36477), (60, 36519), (74, 36609), (77, 36642), (81, 36666), (98, 36756), (103, 36774), (104, 36777), (116, 36846), (132, 36936), (139, 36975), (143, 37032), (158, 37143), (173, 37248), (178, 37287),

Gene: Lennox_39 Start: 26316, Stop: 27266, Start Num: 31

Candidate Starts for Lennox_39:

(Start: 31 @26316 has 65 MA's), (49, 26448), (51, 26460), (52, 26463), (57, 26487), (73, 26583), (79, 26631), (81, 26646), (87, 26688), (90, 26712), (99, 26754), (101, 26760), (127, 26886), (129, 26910), (130, 26913), (132, 26922), (149, 27057), (161, 27117), (169, 27192), (174, 27222), (175, 27225),

Gene: LilStuart_39 Start: 26319, Stop: 27269, Start Num: 31

Candidate Starts for LilStuart_39:

(Start: 31 @26319 has 65 MA's), (49, 26451), (51, 26463), (52, 26466), (57, 26490), (73, 26586), (79, 26634), (87, 26691), (90, 26715), (99, 26757), (101, 26763), (127, 26889), (129, 26913), (130, 26916), (132, 26925), (149, 27060), (161, 27120), (169, 27195), (174, 27225), (175, 27228),

Gene: Litotes_41 Start: 27533, Stop: 28480, Start Num: 31

Candidate Starts for Litotes_41:

(Start: 31 @27533 has 65 MA's), (51, 27677), (52, 27680), (54, 27695), (60, 27722), (69, 27785), (79, 27848), (84, 27893), (87, 27905), (90, 27929), (115, 28055), (129, 28124), (130, 28127), (145, 28223), (149, 28271), (161, 28331), (169, 28406), (174, 28436), (175, 28439),

Gene: Lucy_39 Start: 26316, Stop: 27266, Start Num: 31

Candidate Starts for Lucy_39:

(Start: 31 @26316 has 65 MA's), (49, 26448), (51, 26460), (52, 26463), (57, 26487), (73, 26583), (79, 26631), (81, 26646), (87, 26688), (90, 26712), (99, 26754), (101, 26760), (127, 26886), (129, 26910), (130, 26913), (132, 26922), (149, 27057), (161, 27117), (169, 27192), (174, 27222), (175, 27225),

Gene: Makoto_39 Start: 26327, Stop: 27277, Start Num: 31

Candidate Starts for Makoto_39:

(Start: 31 @26327 has 65 MA's), (49, 26459), (51, 26471), (52, 26474), (57, 26498), (73, 26594), (79, 26642), (81, 26657), (87, 26699), (90, 26723), (99, 26765), (101, 26771), (127, 26897), (129, 26921), (130, 26924), (132, 26933), (149, 27068), (161, 27128), (169, 27203), (174, 27233), (175, 27236),

Gene: MamaPearl_40 Start: 27489, Stop: 28439, Start Num: 31

Candidate Starts for MamaPearl_40:

(Start: 31 @27489 has 65 MA's), (49, 27621), (52, 27636), (54, 27651), (57, 27660), (73, 27756), (79, 27804), (81, 27819), (87, 27861), (90, 27885), (101, 27933), (103, 27942), (127, 28059), (130, 28086), (132, 28095), (161, 28290), (164, 28302), (169, 28365), (170, 28368), (174, 28395), (175, 28398),

Gene: Mareelih_165 Start: 94021, Stop: 93029, Start Num: 21

Candidate Starts for Mareelih_165:

(17, 94045), (Start: 21 @94021 has 4 MA's), (40, 93919), (50, 93847), (77, 93694), (90, 93604), (112, 93496), (115, 93487), (121, 93457), (123, 93454), (124, 93445), (131, 93400), (135, 93376), (148, 93295), (149, 93274), (158, 93232), (169, 93145), (170, 93142), (174, 93115), (180, 93052), (181, 93049),

Gene: Maria1952_38 Start: 27510, Stop: 28463, Start Num: 32

Candidate Starts for Maria1952_38:

(Start: 32 @27510 has 15 MA's), (39, 27567), (52, 27657), (55, 27675), (70, 27765), (77, 27816), (83, 27855), (84, 27870), (88, 27888), (89, 27900), (99, 27948), (122, 28065), (129, 28104), (132, 28116), (161, 28314), (169, 28389), (174, 28419), (175, 28422),

Gene: Marky_53 Start: 36621, Stop: 37619, Start Num: 27

Candidate Starts for Marky_53:

(4, 36390), (13, 36564), (Start: 27 @36621 has 10 MA's), (52, 36786), (61, 36831), (66, 36867), (74, 36918), (77, 36951), (100, 37071), (104, 37086), (106, 37110), (113, 37146), (132, 37263), (142, 37311), (156, 37437), (158, 37446), (172, 37548), (178, 37590),

Gene: MeganNoll_41 Start: 27707, Stop: 28654, Start Num: 31

Candidate Starts for MeganNoll_41:

(Start: 31 @27707 has 65 MA's), (49, 27839), (51, 27851), (52, 27854), (57, 27878), (73, 27974), (79, 28022), (83, 28052), (87, 28079), (101, 28151), (130, 28301), (132, 28310), (145, 28397), (149, 28445), (161, 28505), (169, 28580), (174, 28610), (175, 28613),

Gene: Microdon_49 Start: 35690, Stop: 36691, Start Num: 27

Candidate Starts for Microdon_49:

(2, 35453), (3, 35459), (5, 35480), (7, 35531), (Start: 27 @35690 has 10 MA's), (52, 35855), (55, 35873), (57, 35879), (74, 35990), (77, 36023), (81, 36047), (82, 36053), (89, 36107), (98, 36137), (100, 36143), (103, 36155), (104, 36158), (109, 36191), (116, 36227), (132, 36317), (143, 36413), (150, 36485), (158, 36524), (172, 36626), (178, 36668),

Gene: Milani_41 Start: 26576, Stop: 27577, Start Num: 16

Candidate Starts for Milani_41:

(Start: 16 @26576 has 14 MA's), (40, 26705), (52, 26786), (58, 26816), (79, 26927), (116, 27134), (119, 27146), (136, 27236), (137, 27242), (147, 27326), (148, 27341), (155, 27392), (169, 27503),

Gene: Mimi_109 Start: 82842, Stop: 83813, Start Num: 22

Candidate Starts for Mimi_109:

(Start: 22 @82842 has 4 MA's), (29, 82866), (33, 82887), (46, 82986), (48, 83001), (52, 83025), (59, 83058), (77, 83175), (80, 83190), (95, 83286), (98, 83295), (120, 83400), (123, 83415), (124, 83424), (138, 83499), (145, 83541), (150, 83592), (154, 83613), (169, 83721), (174, 83751),

Gene: Misaeng_41 Start: 28126, Stop: 29073, Start Num: 31

Candidate Starts for Misaeng_41:

(Start: 31 @28126 has 65 MA's), (52, 28273), (55, 28291), (60, 28315), (66, 28351), (72, 28390), (79, 28441), (83, 28471), (84, 28486), (87, 28498), (115, 28648), (129, 28717), (130, 28720), (165, 28954), (169, 28999), (170, 29002), (174, 29029), (175, 29032),

Gene: Moki_39 Start: 26432, Stop: 27379, Start Num: 31

Candidate Starts for Moki_39:

(Start: 31 @26432 has 65 MA's), (49, 26564), (51, 26576), (52, 26579), (57, 26603), (73, 26699), (79, 26747), (87, 26804), (101, 26876), (103, 26885), (130, 27026), (132, 27035), (145, 27122), (161, 27230), (169, 27305), (170, 27308), (174, 27335), (175, 27338),

Gene: MrGloopy_42 Start: 27636, Stop: 28583, Start Num: 31

Candidate Starts for MrGloopy_42:

(Start: 31 @27636 has 65 MA's), (49, 27768), (51, 27780), (52, 27783), (57, 27807), (73, 27903), (79, 27951), (83, 27981), (87, 28008), (101, 28080), (130, 28230), (132, 28239), (145, 28326), (149, 28374), (161, 28434), (169, 28509), (170, 28512), (174, 28539), (175, 28542),

Gene: Nancia_39 Start: 26343, Stop: 27293, Start Num: 31

Candidate Starts for Nancia_39:

(Start: 31 @26343 has 65 MA's), (37, 26376), (41, 26412), (49, 26475), (51, 26487), (52, 26490), (57, 26514), (73, 26610), (79, 26658), (81, 26673), (87, 26715), (90, 26739), (101, 26787), (127, 26913), (129, 26937), (130, 26940), (132, 26949), (149, 27084), (161, 27144), (169, 27219), (170, 27222), (174, 27249), (175, 27252),

Gene: Nubia_42 Start: 28083, Stop: 29030, Start Num: 31

Candidate Starts for Nubia_42:

(Start: 31 @28083 has 65 MA's), (52, 28230), (60, 28272), (72, 28347), (83, 28428), (84, 28443), (87, 28455), (115, 28605), (129, 28674), (130, 28677), (165, 28911), (169, 28956), (170, 28959), (174, 28986), (175, 28989),

Gene: OMalley_39 Start: 27504, Stop: 28451, Start Num: 32

Candidate Starts for OMalley_39:

(Start: 32 @27504 has 15 MA's), (40, 27570), (55, 27669), (60, 27693), (70, 27759), (77, 27807), (81, 27831), (84, 27861), (88, 27879), (89, 27891), (97, 27933), (127, 28071), (129, 28092), (130, 28095), (161, 28302), (169, 28377), (170, 28380), (174, 28407), (175, 28410),

Gene: OurGirlNessie_38 Start: 26071, Stop: 27021, Start Num: 31

Candidate Starts for OurGirlNessie_38:

(Start: 31 @26071 has 65 MA's), (49, 26203), (51, 26215), (52, 26218), (57, 26242), (73, 26338), (79, 26386), (81, 26401), (87, 26443), (90, 26467), (101, 26515), (127, 26641), (129, 26665), (130, 26668), (132, 26677), (149, 26812), (161, 26872), (169, 26947), (174, 26977), (175, 26980),

Gene: Oxynfrius_42 Start: 28104, Stop: 29051, Start Num: 31

Candidate Starts for Oxynfrius_42:

(Start: 31 @28104 has 65 MA's), (52, 28251), (60, 28293), (72, 28368), (83, 28449), (84, 28464), (87, 28476), (115, 28626), (129, 28695), (130, 28698), (165, 28932), (169, 28977), (170, 28980), (174,

29007), (175, 29010),

Gene: PartyCup_44 Start: 27759, Stop: 28706, Start Num: 31

Candidate Starts for PartyCup_44:

(Start: 31 @27759 has 65 MA's), (51, 27903), (52, 27906), (54, 27921), (60, 27948), (69, 28011), (73, 28026), (79, 28074), (84, 28119), (87, 28131), (90, 28155), (115, 28281), (129, 28350), (130, 28353), (149, 28497), (161, 28557), (169, 28632), (170, 28635), (174, 28662), (175, 28665),

Gene: Patbob_104 Start: 83577, Stop: 84548, Start Num: 22

Candidate Starts for Patbob_104:

(Start: 22 @83577 has 4 MA's), (29, 83601), (33, 83622), (46, 83721), (48, 83736), (52, 83760), (59, 83793), (77, 83910), (80, 83925), (95, 84021), (98, 84030), (120, 84135), (123, 84150), (124, 84159), (138, 84234), (145, 84276), (150, 84327), (154, 84348), (168, 84447), (169, 84456), (174, 84486),

Gene: PauloDiaboli_113 Start: 76695, Stop: 75760, Start Num: 28

Candidate Starts for PauloDiaboli_113:

(Start: 28 @76695 has 6 MA's), (30, 76686), (44, 76578), (61, 76488), (73, 76437), (76, 76410), (77, 76398), (89, 76314), (90, 76308), (102, 76269), (124, 76152), (133, 76101), (153, 75969), (154, 75966), (155, 75960), (163, 75921), (170, 75855), (174, 75828),

Gene: PermaG_43 Start: 27639, Stop: 28652, Start Num: 16

Candidate Starts for PermaG_43:

(Start: 16 @27639 has 14 MA's), (40, 27768), (52, 27849), (79, 28002), (87, 28059), (103, 28137), (115, 28206), (116, 28209), (131, 28284), (136, 28311), (147, 28401), (148, 28416), (155, 28467), (169, 28578),

Gene: Phendrix_170 Start: 90108, Stop: 89107, Start Num: 22

Candidate Starts for Phendrix_170:

(Start: 22 @90108 has 4 MA's), (26, 90096), (Start: 36 @90054 has 1 MA's), (38, 90033), (55, 89904), (77, 89781), (78, 89778), (80, 89766), (109, 89607), (115, 89574), (117, 89565), (124, 89532), (126, 89526), (132, 89487), (134, 89469), (135, 89466), (146, 89406), (149, 89364), (154, 89340), (156, 89331), (162, 89298), (169, 89235), (170, 89232), (174, 89205), (176, 89187),

Gene: PinkFriday_39 Start: 26620, Stop: 27570, Start Num: 32

Candidate Starts for PinkFriday_39:

(Start: 32 @26620 has 15 MA's), (39, 26677), (52, 26767), (55, 26785), (70, 26875), (77, 26926), (83, 26965), (84, 26980), (88, 26998), (89, 27010), (99, 27058), (122, 27175), (129, 27214), (132, 27226), (145, 27313), (149, 27361), (161, 27421), (169, 27496), (174, 27526), (175, 27529),

Gene: PitaDog_39 Start: 26328, Stop: 27278, Start Num: 31

Candidate Starts for PitaDog_39:

(Start: 31 @26328 has 65 MA's), (49, 26460), (51, 26472), (52, 26475), (57, 26499), (73, 26595), (79, 26643), (81, 26658), (87, 26700), (90, 26724), (99, 26766), (101, 26772), (127, 26898), (129, 26922), (130, 26925), (132, 26934), (149, 27069), (161, 27129), (169, 27204), (174, 27234), (175, 27237),

Gene: Potatoes_41 Start: 27534, Stop: 28481, Start Num: 31

Candidate Starts for Potatoes_41:

(Start: 31 @27534 has 65 MA's), (41, 27603), (49, 27666), (51, 27678), (52, 27681), (57, 27705), (73, 27801), (79, 27849), (83, 27879), (87, 27906), (101, 27978), (130, 28128), (132, 28137), (145, 28224), (149, 28272), (161, 28332), (169, 28407), (170, 28410), (174, 28437), (175, 28440),

Gene: Preamble_39 Start: 26398, Stop: 27345, Start Num: 31

Candidate Starts for Preamble_39:

(Start: 31 @26398 has 65 MA's), (49, 26530), (51, 26542), (52, 26545), (57, 26569), (73, 26665), (79, 26713), (81, 26728), (87, 26770), (89, 26788), (97, 26830), (101, 26842), (149, 27136), (161, 27196), (169, 27271), (170, 27274), (174, 27301), (175, 27304),

Gene: Pterodactyl_39 Start: 26308, Stop: 27258, Start Num: 31

Candidate Starts for Pterodactyl_39:

(Start: 31 @26308 has 65 MA's), (49, 26440), (51, 26452), (52, 26455), (57, 26479), (73, 26575), (79, 26623), (81, 26638), (87, 26680), (90, 26704), (101, 26752), (127, 26878), (129, 26902), (130, 26905), (132, 26914), (149, 27049), (161, 27109), (169, 27184), (174, 27214), (175, 27217),

Gene: Pumancara_39 Start: 26532, Stop: 27482, Start Num: 32

Candidate Starts for Pumancara_39:

(Start: 32 @26532 has 15 MA's), (39, 26589), (52, 26679), (55, 26697), (70, 26787), (77, 26838), (83, 26877), (84, 26892), (88, 26910), (89, 26922), (99, 26970), (122, 27087), (132, 27138), (145, 27225), (149, 27273), (161, 27333), (169, 27408), (174, 27438), (175, 27441),

Gene: Pumpernickel_110 Start: 78248, Stop: 77310, Start Num: 28

Candidate Starts for Pumpernickel_110:

(Start: 28 @78248 has 6 MA's), (45, 78125), (53, 78077), (63, 78032), (73, 77990), (75, 77981), (76, 77963), (77, 77951), (89, 77867), (93, 77858), (95, 77846), (102, 77822), (118, 77735), (120, 77729), (124, 77705), (152, 77531), (154, 77519), (163, 77474), (174, 77381),

Gene: RAP15_42 Start: 27707, Stop: 28654, Start Num: 31

Candidate Starts for RAP15_42:

(Start: 31 @27707 has 65 MA's), (49, 27839), (51, 27851), (52, 27854), (57, 27878), (73, 27974), (79, 28022), (83, 28052), (87, 28079), (101, 28151), (130, 28301), (132, 28310), (145, 28397), (149, 28445), (161, 28505), (169, 28580), (174, 28610), (175, 28613),

Gene: Racecar_104 Start: 83495, Stop: 84466, Start Num: 22

Candidate Starts for Racecar_104:

(Start: 22 @83495 has 4 MA's), (29, 83519), (33, 83540), (46, 83639), (48, 83654), (52, 83678), (59, 83711), (77, 83828), (80, 83843), (95, 83939), (98, 83948), (120, 84053), (123, 84068), (124, 84077), (138, 84152), (145, 84194), (150, 84245), (154, 84266), (169, 84374), (174, 84404),

Gene: Rasovi_43 Start: 27973, Stop: 28986, Start Num: 16

Candidate Starts for Rasovi_43:

(Start: 16 @27973 has 14 MA's), (52, 28183), (65, 28252), (79, 28336), (88, 28399), (103, 28471), (104, 28474), (115, 28540), (116, 28543), (136, 28645), (137, 28651), (147, 28735), (148, 28750), (155, 28801), (164, 28849), (169, 28912),

Gene: RcigaStruga_41 Start: 27893, Stop: 28828, Start Num: 31

Candidate Starts for RcigaStruga_41:

(Start: 31 @27893 has 65 MA's), (52, 28040), (55, 28058), (60, 28082), (72, 28157), (79, 28208), (83, 28238), (84, 28253), (87, 28265), (115, 28415), (129, 28484), (130, 28487), (148, 28598), (169, 28754), (170, 28757), (174, 28784), (175, 28787),

Gene: Riovina_39 Start: 27504, Stop: 28451, Start Num: 32

Candidate Starts for Riovina_39:

(Start: 32 @27504 has 15 MA's), (40, 27570), (55, 27669), (60, 27693), (70, 27759), (77, 27807), (81, 27831), (84, 27861), (88, 27879), (89, 27891), (97, 27933), (127, 28071), (129, 28092), (130, 28095), (161, 28302), (169, 28377), (170, 28380), (174, 28407), (175, 28410),

Gene: Riverdale_42 Start: 27672, Stop: 28619, Start Num: 31

Candidate Starts for Riverdale_42:

(Start: 31 @27672 has 65 MA's), (41, 27741), (49, 27804), (51, 27816), (52, 27819), (57, 27843), (73, 27939), (79, 27987), (83, 28017), (87, 28044), (101, 28116), (130, 28266), (132, 28275), (145, 28362), (149, 28410), (161, 28470), (169, 28545), (170, 28548), (174, 28575), (175, 28578),

Gene: Rozby_41 Start: 27464, Stop: 28411, Start Num: 31

Candidate Starts for Rozby_41:

(Start: 31 @27464 has 65 MA's), (41, 27533), (49, 27596), (51, 27608), (52, 27611), (57, 27635), (73, 27731), (79, 27779), (83, 27809), (87, 27836), (101, 27908), (130, 28058), (132, 28067), (145, 28154), (149, 28202), (161, 28262), (169, 28337), (170, 28340), (174, 28367), (175, 28370),

Gene: SBlackberry_42 Start: 27445, Stop: 28458, Start Num: 16

Candidate Starts for SBlackberry_42:

(10, 27400), (Start: 16 @27445 has 14 MA's), (52, 27655), (65, 27724), (79, 27808), (87, 27865), (103, 27943), (115, 28012), (116, 28015), (131, 28090), (136, 28117), (148, 28222), (155, 28273), (164, 28321), (169, 28384),

Gene: SJReid_110 Start: 75794, Stop: 76723, Start Num: 33

Candidate Starts for SJReid_110:

(Start: 22 @75749 has 4 MA's), (29, 75773), (33, 75794), (42, 75869), (46, 75893), (47, 75902), (59, 75965), (77, 76082), (81, 76106), (85, 76139), (95, 76193), (98, 76202), (120, 76307), (123, 76322), (126, 76337), (150, 76499), (154, 76520), (169, 76628), (174, 76658),

Gene: Sapo_31 Start: 30227, Stop: 29166, Start Num: 11

Candidate Starts for Sapo_31:

(Start: 11 @30227 has 1 MA's), (45, 30014), (67, 29909), (83, 29801), (90, 29750), (92, 29744), (103, 29696), (108, 29663), (132, 29546), (140, 29507), (171, 29315), (179, 29234), (180, 29231), (182, 29222), (184, 29192),

Gene: Savage2526_42 Start: 27701, Stop: 28648, Start Num: 31

Candidate Starts for Savage2526_42:

(Start: 31 @27701 has 65 MA's), (49, 27833), (51, 27845), (52, 27848), (57, 27872), (73, 27968), (79, 28016), (83, 28046), (87, 28073), (101, 28145), (130, 28295), (132, 28304), (145, 28391), (149, 28439), (161, 28499), (169, 28574), (170, 28577), (174, 28604), (175, 28607),

Gene: Scuttle_41 Start: 27661, Stop: 28608, Start Num: 31

Candidate Starts for Scuttle_41:

(Start: 31 @27661 has 65 MA's), (49, 27793), (52, 27808), (57, 27832), (73, 27928), (79, 27976), (83, 28006), (87, 28033), (101, 28105), (130, 28255), (132, 28264), (145, 28351), (149, 28399), (161, 28459), (169, 28534), (170, 28537), (174, 28564), (175, 28567),

Gene: Sergei_39 Start: 27511, Stop: 28464, Start Num: 32

Candidate Starts for Sergei_39:

(Start: 32 @27511 has 15 MA's), (39, 27568), (52, 27658), (55, 27676), (70, 27766), (77, 27817), (83, 27856), (84, 27871), (88, 27889), (89, 27901), (99, 27949), (122, 28066), (129, 28105), (132, 28117), (161, 28315), (169, 28390), (174, 28420), (175, 28423),

Gene: Sixama_166 Start: 94053, Stop: 93025, Start Num: 15

Candidate Starts for Sixama_166:

(14, 94059), (Start: 15 @94053 has 1 MA's), (Start: 22 @94014 has 4 MA's), (26, 94002), (37, 93948), (61, 93786), (65, 93765), (77, 93690), (105, 93528), (107, 93522), (112, 93492), (124, 93441), (131, 93399), (132, 93396), (135, 93375), (149, 93273), (168, 93153), (169, 93144), (170, 93141), (174, 93114), (180, 93048), (183, 93036),

Gene: Spocter_42 Start: 29643, Stop: 30608, Start Num: 23

Candidate Starts for Spocter_42:

(Start: 23 @29643 has 1 MA's), (37, 29706), (49, 29805), (56, 29841), (67, 29880), (78, 29943), (79, 29949), (99, 30072), (104, 30090), (106, 30114), (112, 30147), (129, 30225), (144, 30342), (148, 30381), (158, 30444),

Gene: Stuff_50 Start: 36182, Stop: 37180, Start Num: 27

Candidate Starts for Stuff_50:

(2, 35945), (3, 35951), (7, 36023), (Start: 27 @36182 has 10 MA's), (52, 36347), (57, 36371), (74, 36479), (77, 36512), (81, 36536), (98, 36626), (100, 36632), (103, 36644), (104, 36647), (116, 36716), (132, 36806), (143, 36902), (158, 37013), (178, 37157),

Gene: Sucha_40 Start: 25225, Stop: 26232, Start Num: 16

Candidate Starts for Sucha_40:

(Start: 16 @25225 has 14 MA's), (52, 25435), (79, 25582), (88, 25645), (116, 25789), (119, 25801), (131, 25864), (136, 25891), (137, 25897), (147, 25981), (148, 25996), (159, 26071), (169, 26158),

Gene: Supakev_39 Start: 27504, Stop: 28451, Start Num: 32

Candidate Starts for Supakev_39:

(Start: 32 @27504 has 15 MA's), (40, 27570), (55, 27669), (60, 27693), (70, 27759), (77, 27807), (81, 27831), (84, 27861), (88, 27879), (89, 27891), (97, 27933), (127, 28071), (129, 28092), (130, 28095), (161, 28302), (169, 28377), (170, 28380), (174, 28407), (175, 28410),

Gene: Suppi_41 Start: 27580, Stop: 28527, Start Num: 31

Candidate Starts for Suppi_41:

(Start: 31 @27580 has 65 MA's), (51, 27724), (52, 27727), (54, 27742), (60, 27769), (69, 27832), (73, 27847), (79, 27895), (84, 27940), (87, 27952), (90, 27976), (115, 28102), (129, 28171), (130, 28174), (149, 28318), (161, 28378), (169, 28453), (170, 28456), (174, 28483), (175, 28486),

Gene: Talia1610_105 Start: 82860, Stop: 83831, Start Num: 22

Candidate Starts for Talia1610_105:

(Start: 22 @82860 has 4 MA's), (29, 82884), (33, 82905), (46, 83004), (48, 83019), (52, 83043), (59, 83076), (77, 83193), (80, 83208), (95, 83304), (98, 83313), (120, 83418), (123, 83433), (124, 83442), (138, 83517), (145, 83559), (150, 83610), (154, 83631), (169, 83739), (174, 83769),

Gene: TattModd_40 Start: 27321, Stop: 28268, Start Num: 31

Candidate Starts for TattModd_40:

(Start: 31 @27321 has 65 MA's), (41, 27390), (49, 27453), (51, 27465), (52, 27468), (57, 27492), (73, 27588), (79, 27636), (83, 27666), (87, 27693), (88, 27699), (101, 27765), (130, 27915), (132, 27924), (145, 28011), (149, 28059), (161, 28119), (169, 28194), (170, 28197), (174, 28224), (175, 28227),

Gene: Temper16_39 Start: 27511, Stop: 28464, Start Num: 32

Candidate Starts for Temper16_39:

(Start: 32 @27511 has 15 MA's), (39, 27568), (52, 27658), (55, 27676), (70, 27766), (77, 27817), (83, 27856), (84, 27871), (88, 27889), (89, 27901), (99, 27949), (122, 28066), (129, 28105), (132, 28117), (161, 28315), (169, 28390), (174, 28420), (175, 28423),

Gene: Theresita_43 Start: 26461, Stop: 27471, Start Num: 16

Candidate Starts for Theresita_43:

(Start: 16 @26461 has 14 MA's), (51, 26668), (52, 26671), (79, 26821), (108, 26989), (119, 27040), (129, 27094), (147, 27220), (151, 27265), (160, 27313), (166, 27355), (169, 27397), (174, 27427), (177, 27448),

Gene: TurboVicky_43 Start: 27685, Stop: 28698, Start Num: 16

Candidate Starts for TurboVicky_43:

(Start: 16 @27685 has 14 MA's), (40, 27814), (52, 27895), (65, 27964), (79, 28048), (91, 28132), (103, 28183), (115, 28252), (116, 28255), (136, 28357), (137, 28363), (147, 28447), (148, 28462), (155, 28513), (164, 28561), (169, 28624),

Gene: Typher_45 Start: 27803, Stop: 28816, Start Num: 16

Candidate Starts for Typher_45:

(Start: 16 @27803 has 14 MA's), (40, 27932), (52, 28013), (65, 28082), (79, 28166), (91, 28250), (103, 28301), (115, 28370), (116, 28373), (136, 28475), (137, 28481), (147, 28565), (148, 28580), (155, 28631), (164, 28679), (169, 28742),

Gene: UNTPL_52 Start: 36210, Stop: 37214, Start Num: 25

Candidate Starts for UNTPL_52:

(1, 35823), (2, 35979), (7, 36057), (Start: 25 @36210 has 1 MA's), (Start: 27 @36216 has 10 MA's), (52, 36381), (57, 36405), (74, 36513), (77, 36546), (81, 36570), (89, 36630), (98, 36660), (100, 36666), (103, 36678), (104, 36681), (106, 36705), (109, 36714), (116, 36750), (132, 36840), (143, 36936), (155, 37035), (156, 37038), (158, 37047), (178, 37191),

Gene: Urla_40 Start: 27482, Stop: 28432, Start Num: 31

Candidate Starts for Urla_40:

(Start: 31 @27482 has 65 MA's), (49, 27614), (51, 27626), (52, 27629), (54, 27644), (57, 27653), (73, 27749), (79, 27797), (81, 27812), (87, 27854), (90, 27878), (101, 27926), (103, 27935), (127, 28052), (130, 28079), (132, 28088), (161, 28283), (165, 28313), (169, 28358), (170, 28361), (174, 28388), (175, 28391),

Gene: Vallejo_42 Start: 27675, Stop: 28622, Start Num: 31

Candidate Starts for Vallejo_42:

(Start: 31 @27675 has 65 MA's), (41, 27744), (49, 27807), (51, 27819), (52, 27822), (57, 27846), (73, 27942), (79, 27990), (83, 28020), (87, 28047), (101, 28119), (130, 28269), (132, 28278), (145, 28365), (149, 28413), (161, 28473), (169, 28548), (170, 28551), (174, 28578), (175, 28581),

Gene: Vulture_39 Start: 27432, Stop: 28382, Start Num: 32

Candidate Starts for Vulture_39:

(18, 27378), (Start: 32 @27432 has 15 MA's), (52, 27579), (55, 27597), (70, 27687), (77, 27738), (83, 27777), (84, 27792), (88, 27810), (89, 27822), (99, 27870), (122, 27987), (129, 28026), (132, 28038), (145, 28125), (149, 28173), (161, 28233), (169, 28308), (170, 28311), (174, 28338), (175, 28341),

Gene: Wawa_41 Start: 27508, Stop: 28455, Start Num: 31

Candidate Starts for Wawa_41:

(Start: 31 @27508 has 65 MA's), (49, 27640), (51, 27652), (52, 27655), (57, 27679), (73, 27775), (79, 27823), (83, 27853), (87, 27880), (101, 27952), (130, 28102), (132, 28111), (145, 28198), (149, 28246), (161, 28306), (169, 28381), (170, 28384), (174, 28411), (175, 28414),

Gene: Wayne_41 Start: 27626, Stop: 28573, Start Num: 31

Candidate Starts for Wayne_41:

(Start: 31 @27626 has 65 MA's), (51, 27770), (52, 27773), (54, 27788), (60, 27815), (69, 27878), (73, 27893), (79, 27941), (84, 27986), (87, 27998), (90, 28022), (115, 28148), (129, 28217), (130, 28220), (149, 28364), (161, 28424), (169, 28499), (170, 28502), (174, 28529), (175, 28532),

Gene: WonderBoy_38 Start: 26303, Stop: 27253, Start Num: 31

Candidate Starts for WonderBoy_38:

(Start: 31 @26303 has 65 MA's), (49, 26435), (51, 26447), (52, 26450), (57, 26474), (73, 26570), (79, 26618), (81, 26633), (87, 26675), (90, 26699), (99, 26741), (101, 26747), (127, 26873), (129, 26897), (130, 26900), (132, 26909), (149, 27044), (161, 27104), (169, 27179), (174, 27209), (175, 27212),

Gene: Zanella_42 Start: 27511, Stop: 28524, Start Num: 16

Candidate Starts for Zanella_42:

(Start: 16 @27511 has 14 MA's), (52, 27721), (65, 27790), (79, 27874), (91, 27958), (103, 28009), (115, 28078), (116, 28081), (136, 28183), (137, 28189), (147, 28273), (148, 28288), (155, 28339), (164, 28387), (169, 28450),

Gene: Zooman_97 Start: 74278, Stop: 73343, Start Num: 28

Candidate Starts for Zooman_97:

(Start: 28 @74278 has 6 MA's), (42, 74176), (43, 74173), (44, 74161), (50, 74125), (61, 74071), (73, 74020), (76, 73993), (77, 73981), (89, 73897), (90, 73891), (95, 73876), (102, 73852), (118, 73765), (124, 73735), (153, 73552), (154, 73549), (163, 73504), (170, 73438), (174, 73411),

Gene: Zorro_42 Start: 27635, Stop: 28582, Start Num: 31

Candidate Starts for Zorro_42:

(Start: 31 @27635 has 65 MA's), (49, 27767), (51, 27779), (52, 27782), (57, 27806), (73, 27902), (79, 27950), (83, 27980), (87, 28007), (101, 28079), (130, 28229), (132, 28238), (145, 28325), (149, 28373), (161, 28433), (169, 28508), (174, 28538), (175, 28541),