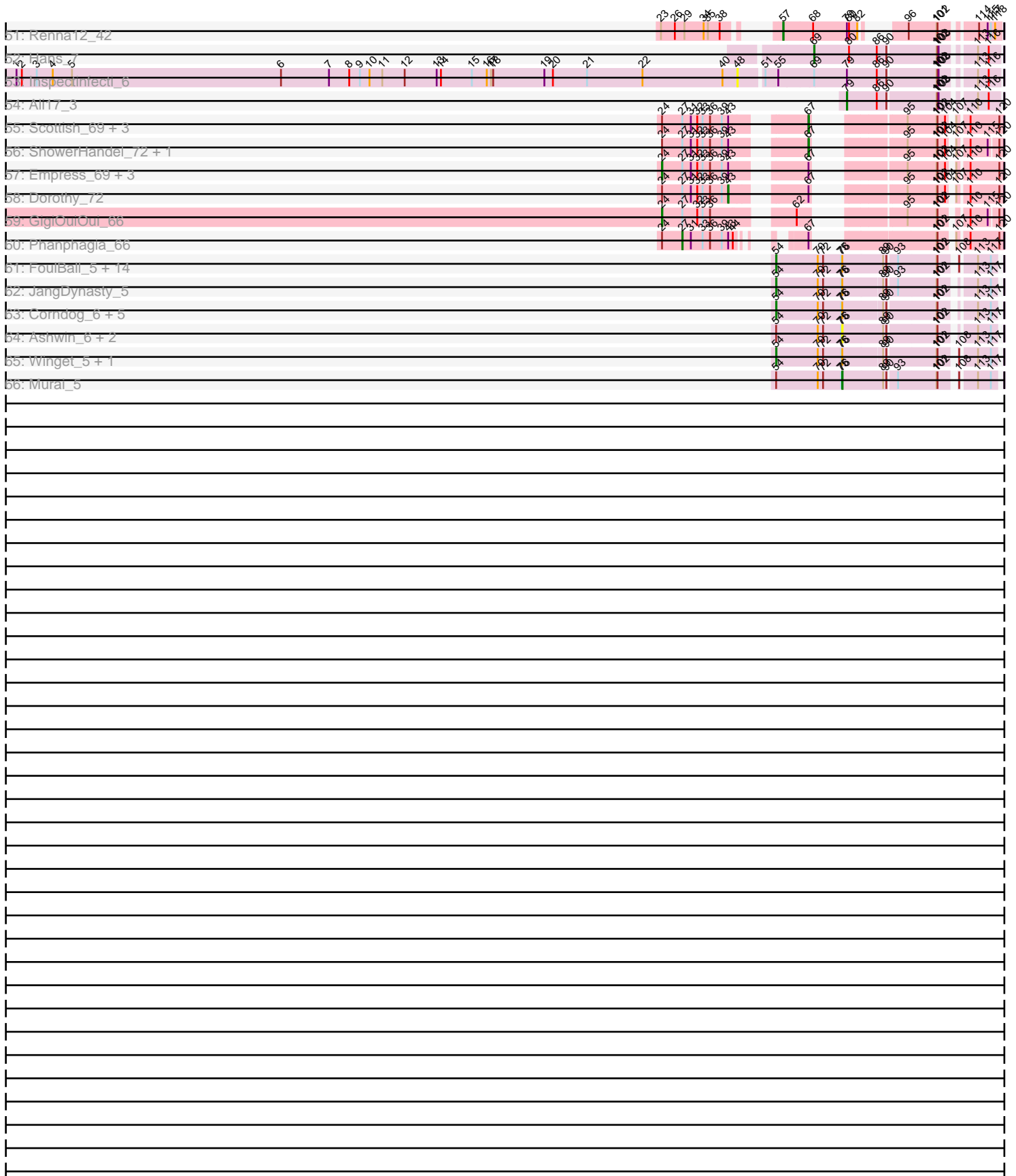


Pham 156186



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 156186 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156186 has 146 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Severus_76, PeaceMeal1_75, Poompha_75
- Track 2 : Twister_78, Rebeuca_79
- Track 3 : Eaglepride_81
- Track 4 : OKCentral2016_77
- Track 5 : KittenMittens_74, Drake94_75
- Track 6 : Kristoff_76
- Track 7 : Chupacabra_75
- Track 8 : WalterMcMickey_77
- Track 9 : Goose_79
- Track 10 : DARTHPhader_79, Refuge_81
- Track 11 : Zimmer_80
- Track 12 : Pharaoh_78
- Track 13 : Steamy_76
- Track 14 : Phlei_63
- Track 15 : PainterBoy_86, Lucyedi_87, EagleEye_88
- Track 16 : 40AC_83
- Track 17 : BabyBack_80
- Track 18 : GaugeLDP_81
- Track 19 : Kratak_77
- Track 20 : Jaykayelowell_75, Florean_78, Bruiser_77, TinaFeyge_76
- Track 21 : JoongJeon_77, Clarenza_77, BubbleTrouble_77, KFPoly_77, Palestino_77, Albee_78, Thanksgivukkah_77, LittleB_78, Eris_77, Funston_77
- Track 22 : Noelle_76
- Track 23 : Cindaradix_73
- Track 24 : Stink_74
- Track 25 : Camperdownii_75
- Track 26 : Mundrea_77
- Track 27 : Achebe_74
- Track 28 : CloudWang3_90, Roksolana_90, Hexamo_89, Rifter_90, Artemis2UCLA_89
- Track 29 : Hammer_90, ToneTone_87, Tucker_90
- Track 30 : Yokurt_89, Koko_91
- Track 31 : Kazan_89, SmellyB_88, Cookiedough_88
- Track 32 : Zaka_90, Wiks_89
- Track 33 : Hoot_83, Jordennis_86, Isiphiwo_84, BABullseye_81, JewelBug_80
- Track 34 : Gruunaga_89, Gladiator_86
- Track 35 : Blue7_91

- Track 36 : LoneWolf_84, Vanisoa_79, Arissanae_79
- Track 37 : HortumSL17_85, Scherzo_82, Phonnegut_84, Fayely_82, Tubs_84, Pioneer_84, Catalina_86, Beemo_84, Myxus_84, Phaeder_84
- Track 38 : Qobbit_82, Spouty_79, Conquerage_82, Eidsmoe_82, Alma_82, EmyBug_78
- Track 39 : Elephantoon_84
- Track 40 : Yecey3_85
- Track 41 : Darrell_82
- Track 42 : Keziacharles14_81
- Track 43 : Maminiaina_83, BogosyJay_83
- Track 44 : Charm_79
- Track 45 : Rahalelujah_83
- Track 46 : Priya_82
- Track 47 : SheaKeira_79
- Track 48 : Toaka_82
- Track 49 : PackMan_83
- Track 50 : Eesa_40
- Track 51 : Renna12_42
- Track 52 : Hans_7
- Track 53 : Inspectinfecti_6
- Track 54 : Ali17_3
- Track 55 : Scottish_69, KingMidas_70, Inventum_69, Sassafras_72
- Track 56 : ShowerHandel_72, ByChance_64
- Track 57 : Empress_69, Doomphist_74, Poenanya_74, RedBird_72
- Track 58 : Dorothy_72
- Track 59 : GigiOuiOui_66
- Track 60 : Phanphagia_66
- Track 61 : FoulBall_5, Mori_5, Familton_6, Vorrrps_5, Schuy_5, Ryadel_7, Idergollasper_5, Shida_5, TelAviv_5, Blessica_5, Krili_5, MadKillah_5, NiebruSaylor_5, Catdawg_5, SchoolBus_5
- Track 62 : JangDynasty_5
- Track 63 : Corndog_6, Dylan_6, YungJamal_6, Firecracker_5, Smooch_6, Zakhe101_6
- Track 64 : Ashwin_6, Bora_5, Wildflower_5
- Track 65 : Winget_5, Alkhayr_5
- Track 66 : Murai_5

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

The start number called the most often in the published annotations is 25, it was called in 43 of the 131 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Achebe_74, Albee_78, Artemis2UCLA_89, BABullseye_81, Bruiser_77, BubbleTrouble_77, Camperdownii_75, Charm_79, Clarenza_77, CloudWang3_90, Drake94_75, Elephantoon_84, Eris_77, Florean_78, Funston_77, Gladiator_86, Goose_79, Gruunaga_89, Hexamo_89, Hoot_83, Isiphiwo_84, Jaykayelowell_75, JewelBug_80, JoongJeon_77, Jordennis_86, KFPoly_77, KittenMittens_74, Kratak_77, Kristoff_76, LittleB_78, Noelle_76, Palestino_77, Pharaoh_78, Priya_82, Rahalelujah_83, Rifter_90, Roksolana_90, Steamy_76, Thanksgivukkah_77,

TinaFeyge_76, Wiks_89, Zaka_90, Zimmer_80,

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

- 40AC_83, Alma_82, Arissanae_79, BabyBack_80, Beemo_84, Blue7_91, BogosyJay_83, Catalina_86, Chupacabra_75, Cindaradix_73, Conquerage_82, Cookiedough_88, Darrell_82, DARTHPhader_79, EagleEye_88, Eaglepride_81, Eidsmoe_82, EmyBug_78, Fayely_82, GaugeLDP_81, Hammer_90, HortumSL17_85, Kazan_89, Keziacharles14_81, Koko_91, LoneWolf_84, Lucyedi_87, Maminaiaina_83, Mundrea_77, Myxus_84, OKCentral2016_77, PainterBoy_86, PeaceMeal1_75, Phaeder_84, Phlei_63, Phonnegut_84, Pioneer_84, Poompha_75, Qobbit_82, Rebeuca_79, Refuge_81, Scherzo_82, Severus_76, SheaKeira_79, SmellyB_88, Spouty_79, Stink_74, Toaka_82, ToneTone_87, Tubs_84, Tucker_90, Twister_78, Vanisoa_79, WalterMcMickey_77, Yecey3_85, Yokurt_89,

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

- Ali17_3, Alkhayr_5, Ashwin_6, Blessica_5, Bora_5, ByChance_64, Catdawg_5, Corndog_6, Doomphist_74, Dorothy_72, Dylan_6, Eesa_40, Empress_69, Familton_6, Firecracker_5, FoulBall_5, GigiOuiOui_66, Hans_7, Idergollasper_5, Inspectinfecti_6, Inventum_69, JangDynasty_5, KingMidas_70, Krili_5, MadKillah_5, Mori_5, Murai_5, NiebruSaylor_5, PackMan_83, Phanphagia_66, Poenanya_74, RedBird_72, Renna12_42, Ryadel_7, Sassafras_72, SchoolBus_5, Schuy_5, Scottish_69, Shida_5, ShowerHandel_72, Smooch_6, TelAviv_5, Vorrps_5, Wildflower_5, Winget_5, YungJamal_6, Zakhe101_6,

Summary by start number:

Start 24:

- Found in 13 of 146 (8.9%) of genes in pham
- Manual Annotations of this start: 5 of 131
- Called 38.5% of time when present
- Phage (with cluster) where this start called: Doomphist_74 (F1), Empress_69 (F1), GigiOuiOui_66 (F1), Poenanya_74 (F1), RedBird_72 (F1),

Start 25:

- Found in 99 of 146 (67.8%) of genes in pham
- Manual Annotations of this start: 43 of 131
- Called 43.4% of time when present
- Phage (with cluster) where this start called: Achebe_74 (A4), Albee_78 (A4), Artemis2UCLA_89 (A6), BABullseye_81 (A6), Bruiser_77 (A4), BubbleTrouble_77 (A4), Camperdownii_75 (A4), Charm_79 (A9), Clarenza_77 (A4), CloudWang3_90 (A6), Drake94_75 (A10), Elephantoon_84 (A9), Eris_77 (A4), Florean_78 (A4), Funston_77 (A4), Gladiator_86 (A6), Goose_79 (A10), Gruunaga_89 (A6), Hexamo_89 (A6), Hoot_83 (A6), Isiphiwo_84 (A6), Jaykayelowell_75 (A4), JewelBug_80 (A6), JoongJeon_77 (A4), Jordennis_86 (A6), KFPoly_77 (A4), KittenMittens_74 (A10), Kratark_77 (A4), Kristoff_76 (A10), LittleB_78 (A4), Noelle_76 (A4), Palestino_77 (A4), Pharaoh_78 (A12), Priya_82 (A9), Rahalelujah_83 (A9), Rifter_90 (A6), Roksolana_90 (A6), Steamy_76 (A12), Thanksgivukkah_77 (A4), TinaFeyge_76 (A4), Wiks_89 (A6), Zaka_90 (A6), Zimmer_80 (A12),

Start 27:

- Found in 15 of 146 (10.3%) of genes in pham

- Manual Annotations of this start: 1 of 131
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Phanphagia_66 (F1),

Start 28:

- Found in 80 of 146 (54.8%) of genes in pham
- Manual Annotations of this start: 5 of 131
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Blue7_91 (A6), Cookiedough_88 (A6), Kazan_89 (A6), OKCentral2016_77 (A10), SmellyB_88 (A6),

Start 34:

- Found in 80 of 146 (54.8%) of genes in pham
- Manual Annotations of this start: 12 of 131
- Called 15.0% of time when present
- Phage (with cluster) where this start called: Arissanae_79 (A9), BogosyJay_83 (A9), DarthPhader_79 (A12), Keziacharles14_81 (A9), LoneWolf_84 (A9), Maminiaiina_83 (A9), Refuge_81 (A12), SheaKeira_79 (A9), Toaka_82 (A9), Vanisoa_79 (A9), WalterMcMickey_77 (A10), Yecy3_85 (A9),

Start 36:

- Found in 47 of 146 (32.2%) of genes in pham
- Manual Annotations of this start: 3 of 131
- Called 6.4% of time when present
- Phage (with cluster) where this start called: Koko_91 (A6), Mundrea_77 (A4), Yokurt_89 (A6),

Start 37:

- Found in 11 of 146 (7.5%) of genes in pham
- Manual Annotations of this start: 3 of 131
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Hammer_90 (A6), ToneTone_87 (A6), Tucker_90 (A6),

Start 39:

- Found in 37 of 146 (25.3%) of genes in pham
- Manual Annotations of this start: 16 of 131
- Called 48.6% of time when present
- Phage (with cluster) where this start called: Alma_82 (A9), Beemo_84 (A9), Catalina_86 (A9), Conquerage_82 (A9), Eidsmoe_82 (A9), EmyBug_78 (A9), Fayely_82 (A9), HortumSL17_85 (A9), Myxus_84 (A9), Phaeder_84 (A9), Phonnegut_84 (A9), Pioneer_84 (A9), Qobbit_82 (A9), Rebeuca_79 (A10), Scherzo_82 (A9), Spouty_79 (A9), Tubs_84 (A9), Twister_78 (A10),

Start 43:

- Found in 30 of 146 (20.5%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Dorothy_72 (F1), Phlei_63 (A13),

Start 47:

- Found in 3 of 146 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 131

- Called 33.3% of time when present
- Phage (with cluster) where this start called: GaugeLDP_81 (A2),

Start 48:

- Found in 1 of 146 (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: Inspectinfecti_6 (DE2),

Start 49:

- Found in 3 of 146 (2.1%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: 40AC_83 (A17), BabyBack_80 (A2),

Start 52:

- Found in 1 of 146 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eesa_40 (AS1),

Start 54:

- Found in 28 of 146 (19.2%) of genes in pham
- Manual Annotations of this start: 21 of 131
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Alkhayr_5 (O), Blessica_5 (O), Catdawg_5 (O), Corndog_6 (O), Dylan_6 (O), Familton_6 (O), Firecracker_5 (O), FoulBall_5 (O), Idergollasper_5 (O), JangDynasty_5 (O), Krili_5 (O), MadKillah_5 (O), Mori_5 (O), NiebruSaylor_5 (O), Ryadel_7 (O), SchoolBus_5 (O), Schuy_5 (O), Shida_5 (O), Smooch_6 (O), TelAviv_5 (O), Vorrps_5 (O), Winget_5 (O), YungJamal_6 (O), Zakhe101_6 (O),

Start 56:

- Found in 1 of 146 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PackMan_83 (A9),

Start 57:

- Found in 1 of 146 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Renna12_42 (AS3),

Start 59:

- Found in 16 of 146 (11.0%) of genes in pham
- Manual Annotations of this start: 8 of 131
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chupacabra_75 (A10), EagleEye_88 (A16), Eaglepride_81 (A10), Lucyedi_87 (A16), PainterBoy_86 (A16), PeaceMeal1_75 (A10), Poompha_75 (A10), Severus_76 (A10),

Start 61:

- Found in 1 of 146 (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: Stink_74 (A4),

Start 63:

- Found in 6 of 146 (4.1%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Cindaradix_73 (A4), Darrell_82 (A9),

Start 67:

- Found in 12 of 146 (8.2%) of genes in pham
- Manual Annotations of this start: 5 of 131
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ByChance_64 (F1), Inventum_69 (F1), KingMidas_70 (F1), Sassafras_72 (F1), Scottish_69 (F1), ShowerHandel_72 (F1),

Start 69:

- Found in 2 of 146 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hans_7 (DE2),

Start 76:

- Found in 28 of 146 (19.2%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Ashwin_6 (O), Bora_5 (O), Murai_5 (O), Wildflower_5 (O),

Start 79:

- Found in 4 of 146 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Ali17_3 (DE2),

Summary by clusters:

There are 14 clusters represented in this pham: AS3, F1, A17, A16, A10, A13, A12, DE2, AS1, O, A2, A4, A6, A9,

Info for manual annotations of cluster A10:

- Start number 25 was manually annotated 4 times for cluster A10.
- Start number 28 was manually annotated 1 time for cluster A10.
- Start number 34 was manually annotated 1 time for cluster A10.
- Start number 39 was manually annotated 2 times for cluster A10.
- Start number 59 was manually annotated 5 times for cluster A10.

Info for manual annotations of cluster A12:

- Start number 25 was manually annotated 3 times for cluster A12.
- Start number 34 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A16:

- Start number 59 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 47 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A4:

- Start number 25 was manually annotated 18 times for cluster A4.
- Start number 36 was manually annotated 1 time for cluster A4.
- Start number 63 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A6:

- Start number 25 was manually annotated 14 times for cluster A6.
- Start number 28 was manually annotated 4 times for cluster A6.
- Start number 36 was manually annotated 2 times for cluster A6.
- Start number 37 was manually annotated 3 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 25 was manually annotated 4 times for cluster A9.
- Start number 34 was manually annotated 9 times for cluster A9.
- Start number 39 was manually annotated 14 times for cluster A9.
- Start number 56 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AS1:

- Start number 52 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS3:

- Start number 57 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster DE2:

- Start number 69 was manually annotated 1 time for cluster DE2.
- Start number 79 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster F1:

- Start number 24 was manually annotated 5 times for cluster F1.
- Start number 27 was manually annotated 1 time for cluster F1.
- Start number 43 was manually annotated 1 time for cluster F1.
- Start number 67 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster O:

- Start number 54 was manually annotated 21 times for cluster O.
- Start number 76 was manually annotated 1 time for cluster O.

Gene Information:

Gene: 40AC_83 Start: 49035, Stop: 48499, Start Num: 49

Candidate Starts for 40AC_83:

(Start: 25 @49257 has 43 MA's), (Start: 28 @49233 has 5 MA's), (Start: 34 @49176 has 12 MA's), (Start: 47 @49083 has 1 MA's), (49, 49035), (50, 49005), (53, 48996), (88, 48810), (92, 48786), (101,

48663), (102, 48660), (111, 48564), (112, 48561), (115, 48522),

Gene: Achebe_74 Start: 46689, Stop: 45955, Start Num: 25

Candidate Starts for Achebe_74:

(Start: 25 @46689 has 43 MA's), (33, 46611), (Start: 36 @46590 has 3 MA's), (42, 46542), (Start: 43 @46539 has 1 MA's), (44, 46527), (66, 46434), (74, 46362), (81, 46344), (85, 46278), (98, 46173), (101, 46113), (102, 46110), (110, 46023), (113, 46002), (117, 45966),

Gene: Albee_78 Start: 46898, Stop: 46164, Start Num: 25

Candidate Starts for Albee_78:

(Start: 25 @46898 has 43 MA's), (33, 46820), (Start: 36 @46799 has 3 MA's), (42, 46751), (Start: 43 @46748 has 1 MA's), (66, 46643), (74, 46571), (81, 46553), (85, 46487), (98, 46382), (101, 46322), (102, 46319), (110, 46232), (113, 46211),

Gene: Ali17_3 Start: 3303, Stop: 3692, Start Num: 79

Candidate Starts for Ali17_3:

(Start: 79 @3303 has 1 MA's), (86, 3387), (90, 3414), (101, 3546), (102, 3549), (103, 3552), (113, 3630), (116, 3660),

Gene: Alkhayr_5 Start: 1855, Stop: 1286, Start Num: 54

Candidate Starts for Alkhayr_5:

(Start: 54 @1855 has 21 MA's), (70, 1738), (72, 1723), (75, 1672), (Start: 76 @1669 has 1 MA's), (89, 1555), (90, 1546), (101, 1417), (102, 1414), (108, 1378), (113, 1339), (117, 1303),

Gene: Alma_82 Start: 46797, Stop: 46282, Start Num: 39

Candidate Starts for Alma_82:

(Start: 25 @46929 has 43 MA's), (Start: 28 @46905 has 5 MA's), (33, 46851), (Start: 34 @46848 has 12 MA's), (Start: 39 @46797 has 16 MA's), (88, 46590), (91, 46569), (95, 46521), (101, 46443), (102, 46440), (110, 46353),

Gene: Arissanae_79 Start: 46740, Stop: 46174, Start Num: 34

Candidate Starts for Arissanae_79:

(Start: 25 @46821 has 43 MA's), (Start: 28 @46797 has 5 MA's), (33, 46743), (Start: 34 @46740 has 12 MA's), (88, 46482), (91, 46461), (101, 46335), (102, 46332), (110, 46245),

Gene: Artemis2UCLA_89 Start: 47205, Stop: 46558, Start Num: 25

Candidate Starts for Artemis2UCLA_89:

(Start: 25 @47205 has 43 MA's), (Start: 28 @47181 has 5 MA's), (33, 47127), (Start: 34 @47124 has 12 MA's), (Start: 37 @47094 has 3 MA's), (94, 46800), (101, 46719), (102, 46716), (111, 46623), (112, 46620),

Gene: Ashwin_6 Start: 1973, Stop: 1590, Start Num: 76

Candidate Starts for Ashwin_6:

(Start: 54 @2159 has 21 MA's), (70, 2042), (72, 2027), (75, 1976), (Start: 76 @1973 has 1 MA's), (89, 1859), (90, 1850), (101, 1721), (102, 1718), (113, 1643), (117, 1607),

Gene: BABullseye_81 Start: 45537, Stop: 44887, Start Num: 25

Candidate Starts for BABullseye_81:

(Start: 25 @45537 has 43 MA's), (Start: 28 @45513 has 5 MA's), (33, 45459), (Start: 34 @45456 has 12 MA's), (Start: 36 @45438 has 3 MA's), (88, 45198), (92, 45174), (95, 45129), (101, 45051), (102, 45048), (104, 45027), (111, 44952), (112, 44949),

Gene: BabyBack_80 Start: 48950, Stop: 48291, Start Num: 49

Candidate Starts for BabyBack_80:

(Start: 25 @49172 has 43 MA's), (Start: 28 @49148 has 5 MA's), (Start: 34 @49091 has 12 MA's), (Start: 47 @48998 has 1 MA's), (49, 48950), (65, 48821), (71, 48764), (87, 48611), (95, 48533), (101, 48455), (102, 48452), (111, 48356), (112, 48353),

Gene: Beemo_84 Start: 46790, Stop: 46275, Start Num: 39

Candidate Starts for Beemo_84:

(Start: 25 @46922 has 43 MA's), (Start: 28 @46898 has 5 MA's), (Start: 34 @46841 has 12 MA's), (Start: 39 @46790 has 16 MA's), (88, 46583), (91, 46562), (95, 46514), (101, 46436), (102, 46433), (110, 46346),

Gene: Blessica_5 Start: 1714, Stop: 1145, Start Num: 54

Candidate Starts for Blessica_5:

(Start: 54 @1714 has 21 MA's), (70, 1597), (72, 1582), (75, 1531), (Start: 76 @1528 has 1 MA's), (89, 1414), (90, 1405), (93, 1381), (101, 1276), (102, 1273), (108, 1237), (113, 1198), (117, 1162),

Gene: Blue7_91 Start: 47412, Stop: 46786, Start Num: 28

Candidate Starts for Blue7_91:

(Start: 25 @47436 has 43 MA's), (Start: 28 @47412 has 5 MA's), (33, 47358), (Start: 34 @47355 has 12 MA's), (Start: 36 @47337 has 3 MA's), (94, 47031), (101, 46950), (102, 46947), (104, 46926), (111, 46851), (112, 46848),

Gene: BogosyJay_83 Start: 46896, Stop: 46318, Start Num: 34

Candidate Starts for BogosyJay_83:

(Start: 25 @46977 has 43 MA's), (Start: 27 @46956 has 1 MA's), (Start: 28 @46953 has 5 MA's), (Start: 34 @46896 has 12 MA's), (Start: 39 @46845 has 16 MA's), (88, 46638), (91, 46617), (101, 46491), (102, 46488), (110, 46401), (113, 46380), (119, 46335),

Gene: Bora_5 Start: 1663, Stop: 1286, Start Num: 76

Candidate Starts for Bora_5:

(Start: 54 @1849 has 21 MA's), (70, 1732), (72, 1717), (75, 1666), (Start: 76 @1663 has 1 MA's), (89, 1555), (90, 1546), (101, 1417), (102, 1414), (113, 1339), (117, 1303),

Gene: Bruiser_77 Start: 46898, Stop: 46164, Start Num: 25

Candidate Starts for Bruiser_77:

(Start: 25 @46898 has 43 MA's), (33, 46820), (Start: 36 @46799 has 3 MA's), (42, 46751), (Start: 43 @46748 has 1 MA's), (66, 46643), (74, 46571), (81, 46553), (85, 46487), (101, 46322), (102, 46319), (110, 46232), (113, 46211),

Gene: BubbleTrouble_77 Start: 46925, Stop: 46191, Start Num: 25

Candidate Starts for BubbleTrouble_77:

(Start: 25 @46925 has 43 MA's), (33, 46847), (Start: 36 @46826 has 3 MA's), (42, 46778), (Start: 43 @46775 has 1 MA's), (66, 46670), (74, 46598), (81, 46580), (85, 46514), (98, 46409), (101, 46349), (102, 46346), (110, 46259), (113, 46238),

Gene: ByChance_64 Start: 42129, Stop: 42512, Start Num: 67

Candidate Starts for ByChance_64:

(Start: 24 @41784 has 5 MA's), (Start: 27 @41841 has 1 MA's), (31, 41865), (32, 41883), (33, 41898), (Start: 36 @41919 has 3 MA's), (Start: 39 @41952 has 16 MA's), (Start: 43 @41970 has 1 MA's), (Start: 67 @42129 has 5 MA's), (95, 42291), (101, 42369), (102, 42372), (104, 42393), (107, 42402), (110, 42429), (115, 42477), (120, 42501),

Gene: Camperdownii_75 Start: 46323, Stop: 45583, Start Num: 25

Candidate Starts for Camperdownii_75:

(Start: 25 @46323 has 43 MA's), (Start: 28 @46299 has 5 MA's), (Start: 34 @46242 has 12 MA's), (89, 45870), (95, 45807), (101, 45729), (102, 45726), (111, 45645), (113, 45630),

Gene: Catalina_86 Start: 46900, Stop: 46385, Start Num: 39

Candidate Starts for Catalina_86:

(Start: 25 @47032 has 43 MA's), (Start: 28 @47008 has 5 MA's), (Start: 34 @46951 has 12 MA's), (Start: 39 @46900 has 16 MA's), (88, 46693), (91, 46672), (95, 46624), (101, 46546), (102, 46543), (110, 46456),

Gene: Catdawg_5 Start: 1764, Stop: 1195, Start Num: 54

Candidate Starts for Catdawg_5:

(Start: 54 @1764 has 21 MA's), (70, 1647), (72, 1632), (75, 1581), (Start: 76 @1578 has 1 MA's), (89, 1464), (90, 1455), (93, 1431), (101, 1326), (102, 1323), (108, 1287), (113, 1248), (117, 1212),

Gene: Charm_79 Start: 46368, Stop: 45709, Start Num: 25

Candidate Starts for Charm_79:

(Start: 25 @46368 has 43 MA's), (Start: 28 @46344 has 5 MA's), (33, 46290), (Start: 34 @46287 has 12 MA's), (88, 46029), (91, 46008), (100, 45921), (101, 45882), (102, 45879), (109, 45813), (110, 45792), (113, 45771), (119, 45726),

Gene: Chupacabra_75 Start: 46471, Stop: 46052, Start Num: 59

Candidate Starts for Chupacabra_75:

(Start: 25 @46687 has 43 MA's), (Start: 28 @46663 has 5 MA's), (Start: 34 @46606 has 12 MA's), (Start: 59 @46471 has 8 MA's), (95, 46282), (101, 46204), (102, 46201), (106, 46168), (111, 46114),

Gene: Cindaradix_73 Start: 46788, Stop: 46300, Start Num: 63

Candidate Starts for Cindaradix_73:

(Start: 25 @47025 has 43 MA's), (33, 46947), (Start: 36 @46926 has 3 MA's), (60, 46806), (Start: 63 @46788 has 1 MA's), (85, 46623), (89, 46602), (101, 46458), (102, 46455), (110, 46368), (113, 46347),

Gene: Clarenza_77 Start: 46895, Stop: 46161, Start Num: 25

Candidate Starts for Clarenza_77:

(Start: 25 @46895 has 43 MA's), (33, 46817), (Start: 36 @46796 has 3 MA's), (42, 46748), (Start: 43 @46745 has 1 MA's), (66, 46640), (74, 46568), (81, 46550), (85, 46484), (98, 46379), (101, 46319), (102, 46316), (110, 46229), (113, 46208),

Gene: CloudWang3_90 Start: 47734, Stop: 47087, Start Num: 25

Candidate Starts for CloudWang3_90:

(Start: 25 @47734 has 43 MA's), (Start: 28 @47710 has 5 MA's), (33, 47656), (Start: 34 @47653 has 12 MA's), (Start: 37 @47623 has 3 MA's), (94, 47329), (101, 47248), (102, 47245), (111, 47152), (112, 47149),

Gene: Conquerage_82 Start: 46566, Stop: 46051, Start Num: 39

Candidate Starts for Conquerage_82:

(Start: 25 @46698 has 43 MA's), (Start: 28 @46674 has 5 MA's), (33, 46620), (Start: 34 @46617 has 12 MA's), (Start: 39 @46566 has 16 MA's), (88, 46359), (91, 46338), (95, 46290), (101, 46212), (102, 46209), (110, 46122),

Gene: Cookiedough_88 Start: 47826, Stop: 47200, Start Num: 28

Candidate Starts for Cookiedough_88:

(Start: 25 @47850 has 43 MA's), (Start: 28 @47826 has 5 MA's), (33, 47772), (Start: 34 @47769 has 12 MA's), (Start: 36 @47751 has 3 MA's), (88, 47511), (92, 47487), (95, 47442), (101, 47364), (102, 47361), (104, 47340), (111, 47265), (112, 47262),

Gene: Corndog_6 Start: 2141, Stop: 1578, Start Num: 54

Candidate Starts for Corndog_6:

(Start: 54 @2141 has 21 MA's), (70, 2024), (72, 2009), (75, 1958), (Start: 76 @1955 has 1 MA's), (89, 1847), (90, 1838), (101, 1709), (102, 1706), (113, 1631), (117, 1595),

Gene: Darrell_82 Start: 45898, Stop: 45485, Start Num: 63

Candidate Starts for Darrell_82:

(Start: 25 @46132 has 43 MA's), (Start: 28 @46108 has 5 MA's), (Start: 34 @46051 has 12 MA's), (Start: 63 @45898 has 1 MA's), (88, 45793), (91, 45772), (101, 45646), (102, 45643), (110, 45556),

Gene: DARTHPhader_79 Start: 47620, Stop: 47048, Start Num: 34

Candidate Starts for DARTHPhader_79:

(Start: 25 @47701 has 43 MA's), (Start: 28 @47677 has 5 MA's), (Start: 34 @47620 has 12 MA's), (Start: 63 @47464 has 1 MA's), (91, 47338), (101, 47212), (102, 47209), (111, 47116), (112, 47113), (115, 47074),

Gene: Doomphist_74 Start: 45998, Stop: 46735, Start Num: 24

Candidate Starts for Doomphist_74:

(Start: 24 @45998 has 5 MA's), (Start: 27 @46055 has 1 MA's), (31, 46079), (32, 46097), (33, 46112), (Start: 36 @46133 has 3 MA's), (Start: 39 @46166 has 16 MA's), (Start: 43 @46184 has 1 MA's), (Start: 67 @46343 has 5 MA's), (95, 46505), (101, 46583), (102, 46586), (104, 46607), (107, 46616), (110, 46643), (120, 46724),

Gene: Dorothy_72 Start: 44809, Stop: 45360, Start Num: 43

Candidate Starts for Dorothy_72:

(Start: 24 @44623 has 5 MA's), (Start: 27 @44680 has 1 MA's), (31, 44704), (32, 44722), (33, 44737), (Start: 36 @44758 has 3 MA's), (Start: 39 @44791 has 16 MA's), (Start: 43 @44809 has 1 MA's), (Start: 67 @44968 has 5 MA's), (95, 45130), (101, 45208), (102, 45211), (104, 45232), (107, 45241), (110, 45268), (120, 45349),

Gene: Drake94_75 Start: 45844, Stop: 45209, Start Num: 25

Candidate Starts for Drake94_75:

(Start: 25 @45844 has 43 MA's), (Start: 28 @45820 has 5 MA's), (Start: 34 @45763 has 12 MA's), (Start: 59 @45628 has 8 MA's), (95, 45439), (101, 45361), (102, 45358), (104, 45337), (106, 45325), (111, 45271),

Gene: Dylan_6 Start: 2163, Stop: 1594, Start Num: 54

Candidate Starts for Dylan_6:

(Start: 54 @2163 has 21 MA's), (70, 2046), (72, 2031), (75, 1980), (Start: 76 @1977 has 1 MA's), (89, 1863), (90, 1854), (101, 1725), (102, 1722), (113, 1647), (117, 1611),

Gene: EagleEye_88 Start: 48605, Stop: 48168, Start Num: 59

Candidate Starts for EagleEye_88:

(Start: 25 @48824 has 43 MA's), (Start: 28 @48800 has 5 MA's), (33, 48746), (Start: 34 @48743 has 12 MA's), (Start: 59 @48605 has 8 MA's), (88, 48482), (91, 48461), (101, 48335), (105, 48302), (111, 48233), (112, 48230), (115, 48191),

Gene: Eaglepride_81 Start: 46551, Stop: 46135, Start Num: 59

Candidate Starts for Eaglepride_81:

(Start: 25 @46767 has 43 MA's), (Start: 28 @46743 has 5 MA's), (Start: 34 @46686 has 12 MA's),
(Start: 59 @46551 has 8 MA's), (95, 46362), (101, 46284), (102, 46281), (105, 46251), (111, 46197),

Gene: Eesa_40 Start: 28668, Stop: 29270, Start Num: 52

Candidate Starts for Eesa_40:

(23, 28389), (30, 28470), (33, 28506), (41, 28572), (45, 28593), (46, 28596), (Start: 52 @28668 has 1
MA's), (58, 28734), (77, 28869), (Start: 79 @28881 has 1 MA's), (80, 28887), (84, 28953), (96, 29055),
(101, 29130), (102, 29133), (117, 29250),

Gene: Eidsmoe_82 Start: 46558, Stop: 46043, Start Num: 39

Candidate Starts for Eidsmoe_82:

(Start: 25 @46690 has 43 MA's), (Start: 28 @46666 has 5 MA's), (33, 46612), (Start: 34 @46609 has
12 MA's), (Start: 39 @46558 has 16 MA's), (88, 46351), (91, 46330), (95, 46282), (101, 46204), (102,
46201), (110, 46114),

Gene: Elephantoon_84 Start: 46848, Stop: 46192, Start Num: 25

Candidate Starts for Elephantoon_84:

(Start: 25 @46848 has 43 MA's), (Start: 28 @46824 has 5 MA's), (33, 46770), (Start: 34 @46767 has
12 MA's), (Start: 63 @46614 has 1 MA's), (88, 46509), (91, 46488), (101, 46362), (102, 46359), (110,
46272), (113, 46251), (119, 46206),

Gene: Empress_69 Start: 44809, Stop: 45546, Start Num: 24

Candidate Starts for Empress_69:

(Start: 24 @44809 has 5 MA's), (Start: 27 @44866 has 1 MA's), (31, 44890), (32, 44908), (33, 44923),
(Start: 36 @44944 has 3 MA's), (Start: 39 @44977 has 16 MA's), (Start: 43 @44995 has 1 MA's),
(Start: 67 @45154 has 5 MA's), (95, 45316), (101, 45394), (102, 45397), (104, 45418), (107, 45427),
(110, 45454), (120, 45535),

Gene: EmyBug_78 Start: 46560, Stop: 46045, Start Num: 39

Candidate Starts for EmyBug_78:

(Start: 25 @46692 has 43 MA's), (Start: 28 @46668 has 5 MA's), (33, 46614), (Start: 34 @46611 has
12 MA's), (Start: 39 @46560 has 16 MA's), (88, 46353), (91, 46332), (95, 46284), (101, 46206), (102,
46203), (110, 46116),

Gene: Eris_77 Start: 46910, Stop: 46176, Start Num: 25

Candidate Starts for Eris_77:

(Start: 25 @46910 has 43 MA's), (33, 46832), (Start: 36 @46811 has 3 MA's), (42, 46763), (Start: 43
@46760 has 1 MA's), (66, 46655), (74, 46583), (81, 46565), (85, 46499), (98, 46394), (101, 46334),
(102, 46331), (110, 46244), (113, 46223),

Gene: Familton_6 Start: 1765, Stop: 1196, Start Num: 54

Candidate Starts for Familton_6:

(Start: 54 @1765 has 21 MA's), (70, 1648), (72, 1633), (75, 1582), (Start: 76 @1579 has 1 MA's), (89,
1465), (90, 1456), (93, 1432), (101, 1327), (102, 1324), (108, 1288), (113, 1249), (117, 1213),

Gene: Fayely_82 Start: 46533, Stop: 46018, Start Num: 39

Candidate Starts for Fayely_82:

(Start: 25 @46665 has 43 MA's), (Start: 28 @46641 has 5 MA's), (Start: 34 @46584 has 12 MA's),
(Start: 39 @46533 has 16 MA's), (88, 46326), (91, 46305), (95, 46257), (101, 46179), (102, 46176),
(110, 46089),

Gene: Firecracker_5 Start: 1850, Stop: 1287, Start Num: 54

Candidate Starts for Firecracker_5:

(Start: 54 @1850 has 21 MA's), (70, 1733), (72, 1718), (75, 1667), (Start: 76 @1664 has 1 MA's), (89, 1556), (90, 1547), (101, 1418), (102, 1415), (113, 1340), (117, 1304),

Gene: Florean_78 Start: 46897, Stop: 46163, Start Num: 25

Candidate Starts for Florean_78:

(Start: 25 @46897 has 43 MA's), (33, 46819), (Start: 36 @46798 has 3 MA's), (42, 46750), (Start: 43 @46747 has 1 MA's), (66, 46642), (74, 46570), (81, 46552), (85, 46486), (101, 46321), (102, 46318), (110, 46231), (113, 46210),

Gene: FoulBall_5 Start: 1765, Stop: 1196, Start Num: 54

Candidate Starts for FoulBall_5:

(Start: 54 @1765 has 21 MA's), (70, 1648), (72, 1633), (75, 1582), (Start: 76 @1579 has 1 MA's), (89, 1465), (90, 1456), (93, 1432), (101, 1327), (102, 1324), (108, 1288), (113, 1249), (117, 1213),

Gene: Funston_77 Start: 46895, Stop: 46161, Start Num: 25

Candidate Starts for Funston_77:

(Start: 25 @46895 has 43 MA's), (33, 46817), (Start: 36 @46796 has 3 MA's), (42, 46748), (Start: 43 @46745 has 1 MA's), (66, 46640), (74, 46568), (81, 46550), (85, 46484), (98, 46379), (101, 46319), (102, 46316), (110, 46229), (113, 46208),

Gene: GaugeLDP_81 Start: 48551, Stop: 47844, Start Num: 47

Candidate Starts for GaugeLDP_81:

(Start: 25 @48725 has 43 MA's), (Start: 28 @48701 has 5 MA's), (Start: 34 @48644 has 12 MA's), (Start: 47 @48551 has 1 MA's), (49, 48503), (64, 48380), (65, 48374), (71, 48317), (73, 48302), (87, 48164), (95, 48086), (101, 48008), (102, 48005), (111, 47909), (112, 47906),

Gene: GigiOuiOui_66 Start: 44414, Stop: 45145, Start Num: 24

Candidate Starts for GigiOuiOui_66:

(Start: 24 @44414 has 5 MA's), (Start: 27 @44471 has 1 MA's), (32, 44513), (33, 44528), (Start: 36 @44549 has 3 MA's), (62, 44729), (95, 44921), (101, 45002), (102, 45005), (110, 45062), (115, 45110), (120, 45134),

Gene: Gladiator_86 Start: 47390, Stop: 46743, Start Num: 25

Candidate Starts for Gladiator_86:

(Start: 25 @47390 has 43 MA's), (Start: 28 @47366 has 5 MA's), (33, 47312), (Start: 34 @47309 has 12 MA's), (Start: 36 @47291 has 3 MA's), (Start: 37 @47279 has 3 MA's), (94, 46985), (101, 46904), (102, 46901), (111, 46808), (112, 46805),

Gene: Goose_79 Start: 46498, Stop: 45863, Start Num: 25

Candidate Starts for Goose_79:

(Start: 25 @46498 has 43 MA's), (Start: 28 @46474 has 5 MA's), (Start: 34 @46417 has 12 MA's), (Start: 59 @46282 has 8 MA's), (95, 46093), (101, 46015), (102, 46012), (106, 45979), (111, 45925),

Gene: Gruunaga_89 Start: 47345, Stop: 46698, Start Num: 25

Candidate Starts for Gruunaga_89:

(Start: 25 @47345 has 43 MA's), (Start: 28 @47321 has 5 MA's), (33, 47267), (Start: 34 @47264 has 12 MA's), (Start: 36 @47246 has 3 MA's), (Start: 37 @47234 has 3 MA's), (94, 46940), (101, 46859), (102, 46856), (111, 46763), (112, 46760),

Gene: Hammer_90 Start: 46941, Stop: 46405, Start Num: 37

Candidate Starts for Hammer_90:

(Start: 25 @47052 has 43 MA's), (Start: 28 @47028 has 5 MA's), (33, 46974), (Start: 34 @46971 has 12 MA's), (Start: 37 @46941 has 3 MA's), (94, 46647), (101, 46566), (102, 46563), (111, 46470), (112,

46467),

Gene: Hans_7 Start: 4390, Stop: 4869, Start Num: 69

Candidate Starts for Hans_7:

(Start: 69 @4390 has 1 MA's), (80, 4486), (86, 4564), (90, 4591), (101, 4723), (102, 4726), (103, 4729), (113, 4807), (116, 4837),

Gene: Hexamo_89 Start: 47220, Stop: 46573, Start Num: 25

Candidate Starts for Hexamo_89:

(Start: 25 @47220 has 43 MA's), (Start: 28 @47196 has 5 MA's), (33, 47142), (Start: 34 @47139 has 12 MA's), (Start: 37 @47109 has 3 MA's), (94, 46815), (101, 46734), (102, 46731), (111, 46638), (112, 46635),

Gene: Hoot_83 Start: 45056, Stop: 44406, Start Num: 25

Candidate Starts for Hoot_83:

(Start: 25 @45056 has 43 MA's), (Start: 28 @45032 has 5 MA's), (33, 44978), (Start: 34 @44975 has 12 MA's), (Start: 36 @44957 has 3 MA's), (88, 44717), (92, 44693), (95, 44648), (101, 44570), (102, 44567), (104, 44546), (111, 44471), (112, 44468),

Gene: HortumSL17_85 Start: 46898, Stop: 46383, Start Num: 39

Candidate Starts for HortumSL17_85:

(Start: 25 @47030 has 43 MA's), (Start: 28 @47006 has 5 MA's), (Start: 34 @46949 has 12 MA's), (Start: 39 @46898 has 16 MA's), (88, 46691), (91, 46670), (95, 46622), (101, 46544), (102, 46541), (110, 46454),

Gene: Idergollasper_5 Start: 1765, Stop: 1196, Start Num: 54

Candidate Starts for Idergollasper_5:

(Start: 54 @1765 has 21 MA's), (70, 1648), (72, 1633), (75, 1582), (Start: 76 @1579 has 1 MA's), (89, 1465), (90, 1456), (93, 1432), (101, 1327), (102, 1324), (108, 1288), (113, 1249), (117, 1213),

Gene: Inspectinfecti_6 Start: 4075, Stop: 4749, Start Num: 48

Candidate Starts for Inspectinfecti_6:

(1, 2047), (2, 2062), (3, 2104), (4, 2149), (5, 2203), (6, 2791), (7, 2926), (8, 2983), (9, 3013), (10, 3040), (11, 3076), (12, 3139), (13, 3229), (14, 3241), (15, 3328), (16, 3370), (17, 3382), (18, 3388), (19, 3532), (20, 3556), (21, 3652), (22, 3808), (40, 4033), (48, 4075), (51, 4138), (55, 4174), (Start: 69 @4270 has 1 MA's), (Start: 79 @4360 has 1 MA's), (86, 4444), (90, 4471), (101, 4603), (102, 4606), (103, 4609), (113, 4687), (116, 4717),

Gene: Inventum_69 Start: 45166, Stop: 45558, Start Num: 67

Candidate Starts for Inventum_69:

(Start: 24 @44821 has 5 MA's), (Start: 27 @44878 has 1 MA's), (31, 44902), (32, 44920), (33, 44935), (Start: 36 @44956 has 3 MA's), (Start: 39 @44989 has 16 MA's), (Start: 43 @45007 has 1 MA's), (Start: 67 @45166 has 5 MA's), (95, 45328), (101, 45406), (102, 45409), (104, 45430), (107, 45439), (110, 45466), (120, 45547),

Gene: Isiphiwo_84 Start: 46767, Stop: 46117, Start Num: 25

Candidate Starts for Isiphiwo_84:

(Start: 25 @46767 has 43 MA's), (Start: 28 @46743 has 5 MA's), (33, 46689), (Start: 34 @46686 has 12 MA's), (Start: 36 @46668 has 3 MA's), (88, 46428), (92, 46404), (95, 46359), (101, 46281), (102, 46278), (104, 46257), (111, 46182), (112, 46179),

Gene: JangDynasty_5 Start: 1854, Stop: 1291, Start Num: 54

Candidate Starts for JangDynasty_5:

(Start: 54 @1854 has 21 MA's), (70, 1737), (72, 1722), (75, 1671), (Start: 76 @1668 has 1 MA's), (89, 1560), (90, 1551), (93, 1527), (101, 1422), (102, 1419), (113, 1344), (117, 1308),

Gene: Jaykayelowell_75 Start: 46891, Stop: 46157, Start Num: 25

Candidate Starts for Jaykayelowell_75:

(Start: 25 @46891 has 43 MA's), (33, 46813), (Start: 36 @46792 has 3 MA's), (42, 46744), (Start: 43 @46741 has 1 MA's), (66, 46636), (74, 46564), (81, 46546), (85, 46480), (101, 46315), (102, 46312), (110, 46225), (113, 46204),

Gene: JewelBug_80 Start: 45535, Stop: 44885, Start Num: 25

Candidate Starts for JewelBug_80:

(Start: 25 @45535 has 43 MA's), (Start: 28 @45511 has 5 MA's), (33, 45457), (Start: 34 @45454 has 12 MA's), (Start: 36 @45436 has 3 MA's), (88, 45196), (92, 45172), (95, 45127), (101, 45049), (102, 45046), (104, 45025), (111, 44950), (112, 44947),

Gene: JoongJeon_77 Start: 46892, Stop: 46158, Start Num: 25

Candidate Starts for JoongJeon_77:

(Start: 25 @46892 has 43 MA's), (33, 46814), (Start: 36 @46793 has 3 MA's), (42, 46745), (Start: 43 @46742 has 1 MA's), (66, 46637), (74, 46565), (81, 46547), (85, 46481), (98, 46376), (101, 46316), (102, 46313), (110, 46226), (113, 46205),

Gene: Jordennis_86 Start: 47439, Stop: 46789, Start Num: 25

Candidate Starts for Jordennis_86:

(Start: 25 @47439 has 43 MA's), (Start: 28 @47415 has 5 MA's), (33, 47361), (Start: 34 @47358 has 12 MA's), (Start: 36 @47340 has 3 MA's), (88, 47100), (92, 47076), (95, 47031), (101, 46953), (102, 46950), (104, 46929), (111, 46854), (112, 46851),

Gene: KFPoly_77 Start: 46892, Stop: 46158, Start Num: 25

Candidate Starts for KFPoly_77:

(Start: 25 @46892 has 43 MA's), (33, 46814), (Start: 36 @46793 has 3 MA's), (42, 46745), (Start: 43 @46742 has 1 MA's), (66, 46637), (74, 46565), (81, 46547), (85, 46481), (98, 46376), (101, 46316), (102, 46313), (110, 46226), (113, 46205),

Gene: Kazan_89 Start: 47187, Stop: 46561, Start Num: 28

Candidate Starts for Kazan_89:

(Start: 25 @47211 has 43 MA's), (Start: 28 @47187 has 5 MA's), (33, 47133), (Start: 34 @47130 has 12 MA's), (Start: 36 @47112 has 3 MA's), (88, 46872), (92, 46848), (95, 46803), (101, 46725), (102, 46722), (104, 46701), (111, 46626), (112, 46623),

Gene: Keziacharles14_81 Start: 47447, Stop: 46881, Start Num: 34

Candidate Starts for Keziacharles14_81:

(Start: 25 @47528 has 43 MA's), (Start: 28 @47504 has 5 MA's), (33, 47450), (Start: 34 @47447 has 12 MA's), (Start: 39 @47396 has 16 MA's), (88, 47189), (91, 47168), (95, 47120), (101, 47042), (102, 47039), (110, 46952),

Gene: KingMidas_70 Start: 45569, Stop: 45961, Start Num: 67

Candidate Starts for KingMidas_70:

(Start: 24 @45224 has 5 MA's), (Start: 27 @45281 has 1 MA's), (31, 45305), (32, 45323), (33, 45338), (Start: 36 @45359 has 3 MA's), (Start: 39 @45392 has 16 MA's), (Start: 43 @45410 has 1 MA's), (Start: 67 @45569 has 5 MA's), (95, 45731), (101, 45809), (102, 45812), (104, 45833), (107, 45842), (110, 45869), (120, 45950),

Gene: KittenMittens_74 Start: 45854, Stop: 45219, Start Num: 25

Candidate Starts for KittenMittens_74:

(Start: 25 @45854 has 43 MA's), (Start: 28 @45830 has 5 MA's), (Start: 34 @45773 has 12 MA's), (Start: 59 @45638 has 8 MA's), (95, 45449), (101, 45371), (102, 45368), (104, 45347), (106, 45335), (111, 45281),

Gene: Koko_91 Start: 47970, Stop: 47419, Start Num: 36

Candidate Starts for Koko_91:

(Start: 25 @48069 has 43 MA's), (Start: 28 @48045 has 5 MA's), (33, 47991), (Start: 34 @47988 has 12 MA's), (Start: 36 @47970 has 3 MA's), (94, 47664), (101, 47583), (102, 47580), (104, 47559), (111, 47484), (112, 47481),

Gene: Kratark_77 Start: 46932, Stop: 46198, Start Num: 25

Candidate Starts for Kratark_77:

(Start: 25 @46932 has 43 MA's), (33, 46854), (Start: 36 @46833 has 3 MA's), (42, 46785), (Start: 43 @46782 has 1 MA's), (66, 46677), (74, 46605), (81, 46587), (83, 46566), (85, 46521), (98, 46416), (101, 46356), (102, 46353), (110, 46266), (113, 46245),

Gene: Krili_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for Krili_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Kristoff_76 Start: 47122, Stop: 46487, Start Num: 25

Candidate Starts for Kristoff_76:

(Start: 25 @47122 has 43 MA's), (Start: 28 @47098 has 5 MA's), (Start: 34 @47041 has 12 MA's), (Start: 39 @46990 has 16 MA's), (Start: 59 @46906 has 8 MA's), (95, 46717), (101, 46639), (102, 46636), (106, 46603), (111, 46549),

Gene: LittleB_78 Start: 46899, Stop: 46165, Start Num: 25

Candidate Starts for LittleB_78:

(Start: 25 @46899 has 43 MA's), (33, 46821), (Start: 36 @46800 has 3 MA's), (42, 46752), (Start: 43 @46749 has 1 MA's), (66, 46644), (74, 46572), (81, 46554), (85, 46488), (98, 46383), (101, 46323), (102, 46320), (110, 46233), (113, 46212),

Gene: LoneWolf_84 Start: 46963, Stop: 46397, Start Num: 34

Candidate Starts for LoneWolf_84:

(Start: 25 @47044 has 43 MA's), (Start: 28 @47020 has 5 MA's), (33, 46966), (Start: 34 @46963 has 12 MA's), (88, 46705), (91, 46684), (101, 46558), (102, 46555), (110, 46468),

Gene: Lucyedi_87 Start: 48804, Stop: 48367, Start Num: 59

Candidate Starts for Lucyedi_87:

(Start: 25 @49023 has 43 MA's), (Start: 28 @48999 has 5 MA's), (33, 48945), (Start: 34 @48942 has 12 MA's), (Start: 59 @48804 has 8 MA's), (88, 48681), (91, 48660), (101, 48534), (105, 48501), (111, 48432), (112, 48429), (115, 48390),

Gene: MadKillah_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for MadKillah_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Maminiaina_83 Start: 46878, Stop: 46300, Start Num: 34

Candidate Starts for Maminiaina_83:

(Start: 25 @46959 has 43 MA's), (Start: 27 @46938 has 1 MA's), (Start: 28 @46935 has 5 MA's), (Start: 34 @46878 has 12 MA's), (Start: 39 @46827 has 16 MA's), (88, 46620), (91, 46599), (101, 46473), (102, 46470), (110, 46383), (113, 46362), (119, 46317),

Gene: Mori_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for Mori_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Mundrea_77 Start: 46850, Stop: 46224, Start Num: 36

Candidate Starts for Mundrea_77:

(Start: 25 @46949 has 43 MA's), (33, 46871), (Start: 36 @46850 has 3 MA's), (60, 46730), (85, 46547), (89, 46526), (101, 46382), (102, 46379), (110, 46292), (113, 46271),

Gene: Murai_5 Start: 1530, Stop: 1147, Start Num: 76

Candidate Starts for Murai_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Myxus_84 Start: 46898, Stop: 46383, Start Num: 39

Candidate Starts for Myxus_84:

(Start: 25 @47030 has 43 MA's), (Start: 28 @47006 has 5 MA's), (Start: 34 @46949 has 12 MA's), (Start: 39 @46898 has 16 MA's), (88, 46691), (91, 46670), (95, 46622), (101, 46544), (102, 46541), (110, 46454),

Gene: NiebruSaylor_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for NiebruSaylor_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Noelle_76 Start: 46925, Stop: 46305, Start Num: 25

Candidate Starts for Noelle_76:

(Start: 25 @46925 has 43 MA's), (Start: 28 @46901 has 5 MA's), (Start: 34 @46844 has 12 MA's), (89, 46592), (95, 46529), (101, 46451), (102, 46448), (111, 46367), (113, 46352), (117, 46316),

Gene: OKCentral2016_77 Start: 45901, Stop: 45290, Start Num: 28

Candidate Starts for OKCentral2016_77:

(Start: 25 @45925 has 43 MA's), (Start: 28 @45901 has 5 MA's), (Start: 34 @45844 has 12 MA's), (Start: 59 @45709 has 8 MA's), (95, 45520), (101, 45442), (102, 45439), (106, 45406), (111, 45352),

Gene: PackMan_83 Start: 46722, Stop: 46258, Start Num: 56

Candidate Starts for PackMan_83:

(Start: 56 @46722 has 1 MA's), (78, 46662), (88, 46566), (91, 46545), (95, 46497), (101, 46419), (102, 46416), (110, 46329),

Gene: PainterBoy_86 Start: 48515, Stop: 48078, Start Num: 59

Candidate Starts for PainterBoy_86:

(Start: 25 @48734 has 43 MA's), (Start: 28 @48710 has 5 MA's), (33, 48656), (Start: 34 @48653 has 12 MA's), (Start: 59 @48515 has 8 MA's), (88, 48392), (91, 48371), (101, 48245), (105, 48212), (111, 48143), (112, 48140), (115, 48101),

Gene: Palestino_77 Start: 46895, Stop: 46161, Start Num: 25

Candidate Starts for Palestino_77:

(Start: 25 @46895 has 43 MA's), (33, 46817), (Start: 36 @46796 has 3 MA's), (42, 46748), (Start: 43 @46745 has 1 MA's), (66, 46640), (74, 46568), (81, 46550), (85, 46484), (98, 46379), (101, 46319), (102, 46316), (110, 46229), (113, 46208),

Gene: PeaceMeal1_75 Start: 45639, Stop: 45220, Start Num: 59

Candidate Starts for PeaceMeal1_75:

(Start: 25 @45855 has 43 MA's), (Start: 28 @45831 has 5 MA's), (Start: 34 @45774 has 12 MA's), (Start: 59 @45639 has 8 MA's), (95, 45450), (101, 45372), (102, 45369), (104, 45348), (106, 45336), (111, 45282),

Gene: Phaeder_84 Start: 46773, Stop: 46258, Start Num: 39

Candidate Starts for Phaeder_84:

(Start: 25 @46905 has 43 MA's), (Start: 28 @46881 has 5 MA's), (Start: 34 @46824 has 12 MA's), (Start: 39 @46773 has 16 MA's), (88, 46566), (91, 46545), (95, 46497), (101, 46419), (102, 46416), (110, 46329),

Gene: Phanphagia_66 Start: 43660, Stop: 44277, Start Num: 27

Candidate Starts for Phanphagia_66:

(Start: 24 @43603 has 5 MA's), (Start: 27 @43660 has 1 MA's), (31, 43684), (33, 43717), (Start: 36 @43738 has 3 MA's), (Start: 39 @43771 has 16 MA's), (Start: 43 @43789 has 1 MA's), (44, 43798), (Start: 67 @43876 has 5 MA's), (101, 44125), (102, 44128), (107, 44158), (110, 44185), (120, 44266),

Gene: Pharaoh_78 Start: 47942, Stop: 47292, Start Num: 25

Candidate Starts for Pharaoh_78:

(Start: 25 @47942 has 43 MA's), (Start: 28 @47918 has 5 MA's), (Start: 34 @47861 has 12 MA's), (88, 47600), (91, 47579), (101, 47456), (102, 47453), (104, 47432), (111, 47360), (112, 47357),

Gene: Phlei_63 Start: 43732, Stop: 43292, Start Num: 43

Candidate Starts for Phlei_63:

(Start: 25 @43876 has 43 MA's), (Start: 28 @43858 has 5 MA's), (33, 43804), (Start: 37 @43771 has 3 MA's), (Start: 43 @43732 has 1 MA's), (91, 43588), (95, 43540), (97, 43534), (101, 43462), (102, 43459), (110, 43378), (111, 43372), (119, 43312),

Gene: Phonnegut_84 Start: 46789, Stop: 46274, Start Num: 39

Candidate Starts for Phonnegut_84:

(Start: 25 @46921 has 43 MA's), (Start: 28 @46897 has 5 MA's), (Start: 34 @46840 has 12 MA's), (Start: 39 @46789 has 16 MA's), (88, 46582), (91, 46561), (95, 46513), (101, 46435), (102, 46432), (110, 46345),

Gene: Pioneer_84 Start: 46789, Stop: 46274, Start Num: 39

Candidate Starts for Pioneer_84:

(Start: 25 @46921 has 43 MA's), (Start: 28 @46897 has 5 MA's), (Start: 34 @46840 has 12 MA's), (Start: 39 @46789 has 16 MA's), (88, 46582), (91, 46561), (95, 46513), (101, 46435), (102, 46432), (110, 46345),

Gene: Poenanya_74 Start: 45998, Stop: 46735, Start Num: 24

Candidate Starts for Poenanya_74:

(Start: 24 @45998 has 5 MA's), (Start: 27 @46055 has 1 MA's), (31, 46079), (32, 46097), (33, 46112), (Start: 36 @46133 has 3 MA's), (Start: 39 @46166 has 16 MA's), (Start: 43 @46184 has 1 MA's), (Start: 67 @46343 has 5 MA's), (95, 46505), (101, 46583), (102, 46586), (104, 46607), (107, 46616), (110, 46643), (120, 46724),

Gene: Poompha_75 Start: 45637, Stop: 45218, Start Num: 59

Candidate Starts for Poompha_75:

(Start: 25 @45853 has 43 MA's), (Start: 28 @45829 has 5 MA's), (Start: 34 @45772 has 12 MA's), (Start: 59 @45637 has 8 MA's), (95, 45448), (101, 45370), (102, 45367), (104, 45346), (106, 45334), (111, 45280),

Gene: Priya_82 Start: 46693, Stop: 46046, Start Num: 25

Candidate Starts for Priya_82:

(Start: 25 @46693 has 43 MA's), (Start: 28 @46669 has 5 MA's), (33, 46615), (Start: 34 @46612 has 12 MA's), (Start: 39 @46561 has 16 MA's), (88, 46354), (91, 46333), (95, 46285), (101, 46207), (102, 46204), (110, 46117),

Gene: Qobbit_82 Start: 46523, Stop: 46008, Start Num: 39

Candidate Starts for Qobbit_82:

(Start: 25 @46655 has 43 MA's), (Start: 28 @46631 has 5 MA's), (33, 46577), (Start: 34 @46574 has 12 MA's), (Start: 39 @46523 has 16 MA's), (88, 46316), (91, 46295), (95, 46247), (101, 46169), (102, 46166), (110, 46079),

Gene: Rahalelujah_83 Start: 46456, Stop: 45809, Start Num: 25

Candidate Starts for Rahalelujah_83:

(Start: 25 @46456 has 43 MA's), (Start: 28 @46432 has 5 MA's), (33, 46378), (Start: 34 @46375 has 12 MA's), (88, 46117), (91, 46096), (96, 46045), (99, 46024), (101, 45970), (102, 45967), (110, 45880),

Gene: Rebeuca_79 Start: 46991, Stop: 46488, Start Num: 39

Candidate Starts for Rebeuca_79:

(Start: 25 @47123 has 43 MA's), (Start: 28 @47099 has 5 MA's), (Start: 34 @47042 has 12 MA's), (Start: 39 @46991 has 16 MA's), (Start: 59 @46907 has 8 MA's), (95, 46718), (101, 46640), (102, 46637), (106, 46604), (111, 46550),

Gene: RedBird_72 Start: 44502, Stop: 45227, Start Num: 24

Candidate Starts for RedBird_72:

(Start: 24 @44502 has 5 MA's), (Start: 27 @44559 has 1 MA's), (31, 44583), (32, 44589), (33, 44604), (Start: 36 @44625 has 3 MA's), (Start: 39 @44658 has 16 MA's), (Start: 43 @44676 has 1 MA's), (Start: 67 @44835 has 5 MA's), (95, 44997), (101, 45075), (102, 45078), (104, 45099), (107, 45108), (110, 45135), (120, 45216),

Gene: Refuge_81 Start: 48475, Stop: 47903, Start Num: 34

Candidate Starts for Refuge_81:

(Start: 25 @48556 has 43 MA's), (Start: 28 @48532 has 5 MA's), (Start: 34 @48475 has 12 MA's), (Start: 63 @48319 has 1 MA's), (91, 48193), (101, 48067), (102, 48064), (111, 47971), (112, 47968), (115, 47929),

Gene: Renna12_42 Start: 27456, Stop: 27923, Start Num: 57

Candidate Starts for Renna12_42:

(23, 27228), (26, 27267), (29, 27294), (Start: 34 @27348 has 12 MA's), (35, 27360), (38, 27393), (Start: 57 @27456 has 1 MA's), (68, 27531), (Start: 79 @27621 has 1 MA's), (80, 27627), (82, 27648), (96, 27699), (101, 27774), (102, 27777), (114, 27861), (115, 27885), (117, 27894), (118, 27906),

Gene: Rifter_90 Start: 46847, Stop: 46200, Start Num: 25

Candidate Starts for Rifter_90:

(Start: 25 @46847 has 43 MA's), (Start: 28 @46823 has 5 MA's), (33, 46769), (Start: 34 @46766 has 12 MA's), (Start: 37 @46736 has 3 MA's), (94, 46442), (101, 46361), (102, 46358), (111, 46265), (112, 46262),

Gene: Roksolana_90 Start: 47563, Stop: 46916, Start Num: 25

Candidate Starts for Roksolana_90:

(Start: 25 @47563 has 43 MA's), (Start: 28 @47539 has 5 MA's), (33, 47485), (Start: 34 @47482 has 12 MA's), (Start: 37 @47452 has 3 MA's), (94, 47158), (101, 47077), (102, 47074), (111, 46981), (112, 46978),

Gene: Ryadel_7 Start: 2296, Stop: 1727, Start Num: 54

Candidate Starts for Ryadel_7:

(Start: 54 @2296 has 21 MA's), (70, 2179), (72, 2164), (75, 2113), (Start: 76 @2110 has 1 MA's), (89, 1996), (90, 1987), (93, 1963), (101, 1858), (102, 1855), (108, 1819), (113, 1780), (117, 1744),

Gene: Sassafras_72 Start: 45165, Stop: 45557, Start Num: 67

Candidate Starts for Sassafras_72:

(Start: 24 @44820 has 5 MA's), (Start: 27 @44877 has 1 MA's), (31, 44901), (32, 44919), (33, 44934), (Start: 36 @44955 has 3 MA's), (Start: 39 @44988 has 16 MA's), (Start: 43 @45006 has 1 MA's), (Start: 67 @45165 has 5 MA's), (95, 45327), (101, 45405), (102, 45408), (104, 45429), (107, 45438), (110, 45465), (120, 45546),

Gene: Scherzo_82 Start: 46821, Stop: 46306, Start Num: 39

Candidate Starts for Scherzo_82:

(Start: 25 @46953 has 43 MA's), (Start: 28 @46929 has 5 MA's), (Start: 34 @46872 has 12 MA's), (Start: 39 @46821 has 16 MA's), (88, 46614), (91, 46593), (95, 46545), (101, 46467), (102, 46464), (110, 46377),

Gene: SchoolBus_5 Start: 1765, Stop: 1196, Start Num: 54

Candidate Starts for SchoolBus_5:

(Start: 54 @1765 has 21 MA's), (70, 1648), (72, 1633), (75, 1582), (Start: 76 @1579 has 1 MA's), (89, 1465), (90, 1456), (93, 1432), (101, 1327), (102, 1324), (108, 1288), (113, 1249), (117, 1213),

Gene: Schuy_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for Schuy_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: Scottish_69 Start: 44824, Stop: 45216, Start Num: 67

Candidate Starts for Scottish_69:

(Start: 24 @44479 has 5 MA's), (Start: 27 @44536 has 1 MA's), (31, 44560), (32, 44578), (33, 44593), (Start: 36 @44614 has 3 MA's), (Start: 39 @44647 has 16 MA's), (Start: 43 @44665 has 1 MA's), (Start: 67 @44824 has 5 MA's), (95, 44986), (101, 45064), (102, 45067), (104, 45088), (107, 45097), (110, 45124), (120, 45205),

Gene: Severus_76 Start: 45637, Stop: 45218, Start Num: 59

Candidate Starts for Severus_76:

(Start: 25 @45853 has 43 MA's), (Start: 28 @45829 has 5 MA's), (Start: 34 @45772 has 12 MA's), (Start: 59 @45637 has 8 MA's), (95, 45448), (101, 45370), (102, 45367), (104, 45346), (106, 45334), (111, 45280),

Gene: SheaKeira_79 Start: 46163, Stop: 45585, Start Num: 34

Candidate Starts for SheaKeira_79:

(Start: 25 @46244 has 43 MA's), (Start: 28 @46220 has 5 MA's), (33, 46166), (Start: 34 @46163 has 12 MA's), (88, 45905), (91, 45884), (95, 45836), (100, 45797), (101, 45758), (102, 45755), (109, 45689), (110, 45668), (113, 45647), (119, 45602),

Gene: Shida_5 Start: 1765, Stop: 1196, Start Num: 54

Candidate Starts for Shida_5:

(Start: 54 @1765 has 21 MA's), (70, 1648), (72, 1633), (75, 1582), (Start: 76 @1579 has 1 MA's), (89, 1465), (90, 1456), (93, 1432), (101, 1327), (102, 1324), (108, 1288), (113, 1249), (117, 1213),

Gene: ShowerHandel_72 Start: 46069, Stop: 46452, Start Num: 67

Candidate Starts for ShowerHandel_72:

(Start: 24 @45724 has 5 MA's), (Start: 27 @45781 has 1 MA's), (31, 45805), (32, 45823), (33, 45838), (Start: 36 @45859 has 3 MA's), (Start: 39 @45892 has 16 MA's), (Start: 43 @45910 has 1 MA's), (Start: 67 @46069 has 5 MA's), (95, 46231), (101, 46309), (102, 46312), (104, 46333), (107, 46342), (110, 46369), (115, 46417), (120, 46441),

Gene: SmellyB_88 Start: 47181, Stop: 46555, Start Num: 28

Candidate Starts for SmellyB_88:

(Start: 25 @47205 has 43 MA's), (Start: 28 @47181 has 5 MA's), (33, 47127), (Start: 34 @47124 has 12 MA's), (Start: 36 @47106 has 3 MA's), (88, 46866), (92, 46842), (95, 46797), (101, 46719), (102, 46716), (104, 46695), (111, 46620), (112, 46617),

Gene: Smooch_6 Start: 2139, Stop: 1576, Start Num: 54

Candidate Starts for Smooch_6:

(Start: 54 @2139 has 21 MA's), (70, 2022), (72, 2007), (75, 1956), (Start: 76 @1953 has 1 MA's), (89, 1845), (90, 1836), (101, 1707), (102, 1704), (113, 1629), (117, 1593),

Gene: Spouty_79 Start: 46560, Stop: 46045, Start Num: 39

Candidate Starts for Spouty_79:

(Start: 25 @46692 has 43 MA's), (Start: 28 @46668 has 5 MA's), (33, 46614), (Start: 34 @46611 has 12 MA's), (Start: 39 @46560 has 16 MA's), (88, 46353), (91, 46332), (95, 46284), (101, 46206), (102, 46203), (110, 46116),

Gene: Steamy_76 Start: 47037, Stop: 46378, Start Num: 25

Candidate Starts for Steamy_76:

(Start: 25 @47037 has 43 MA's), (Start: 28 @47013 has 5 MA's), (Start: 34 @46956 has 12 MA's), (91, 46674), (101, 46548), (102, 46545), (104, 46524), (111, 46452), (115, 46410),

Gene: Stink_74 Start: 46805, Stop: 46299, Start Num: 61

Candidate Starts for Stink_74:

(Start: 25 @47030 has 43 MA's), (33, 46952), (Start: 36 @46931 has 3 MA's), (Start: 39 @46898 has 16 MA's), (Start: 43 @46880 has 1 MA's), (60, 46811), (61, 46805), (Start: 63 @46793 has 1 MA's), (85, 46622), (101, 46457), (102, 46454), (110, 46367), (113, 46346), (117, 46310),

Gene: TelAviv_5 Start: 1762, Stop: 1193, Start Num: 54

Candidate Starts for TelAviv_5:

(Start: 54 @1762 has 21 MA's), (70, 1645), (72, 1630), (75, 1579), (Start: 76 @1576 has 1 MA's), (89, 1462), (90, 1453), (93, 1429), (101, 1324), (102, 1321), (108, 1285), (113, 1246), (117, 1210),

Gene: Thanksgivukkah_77 Start: 46896, Stop: 46162, Start Num: 25

Candidate Starts for Thanksgivukkah_77:

(Start: 25 @46896 has 43 MA's), (33, 46818), (Start: 36 @46797 has 3 MA's), (42, 46749), (Start: 43 @46746 has 1 MA's), (66, 46641), (74, 46569), (81, 46551), (85, 46485), (98, 46380), (101, 46320), (102, 46317), (110, 46230), (113, 46209),

Gene: TinaFeyge_76 Start: 46893, Stop: 46159, Start Num: 25

Candidate Starts for TinaFeyge_76:

(Start: 25 @46893 has 43 MA's), (33, 46815), (Start: 36 @46794 has 3 MA's), (42, 46746), (Start: 43 @46743 has 1 MA's), (66, 46638), (74, 46566), (81, 46548), (85, 46482), (101, 46317), (102, 46314), (110, 46227), (113, 46206),

Gene: Toaka_82 Start: 46732, Stop: 46166, Start Num: 34

Candidate Starts for Toaka_82:

(Start: 25 @46813 has 43 MA's), (Start: 28 @46789 has 5 MA's), (Start: 34 @46732 has 12 MA's), (88, 46474), (91, 46453), (95, 46405), (101, 46327), (102, 46324), (110, 46237),

Gene: ToneTone_87 Start: 47116, Stop: 46580, Start Num: 37

Candidate Starts for ToneTone_87:

(Start: 25 @47227 has 43 MA's), (Start: 28 @47203 has 5 MA's), (33, 47149), (Start: 34 @47146 has 12 MA's), (Start: 37 @47116 has 3 MA's), (94, 46822), (101, 46741), (102, 46738), (111, 46645), (112, 46642),

Gene: Tubs_84 Start: 46773, Stop: 46258, Start Num: 39

Candidate Starts for Tubs_84:

(Start: 25 @46905 has 43 MA's), (Start: 28 @46881 has 5 MA's), (Start: 34 @46824 has 12 MA's), (Start: 39 @46773 has 16 MA's), (88, 46566), (91, 46545), (95, 46497), (101, 46419), (102, 46416), (110, 46329),

Gene: Tucker_90 Start: 47319, Stop: 46783, Start Num: 37

Candidate Starts for Tucker_90:

(Start: 25 @47430 has 43 MA's), (Start: 28 @47406 has 5 MA's), (33, 47352), (Start: 34 @47349 has 12 MA's), (Start: 37 @47319 has 3 MA's), (94, 47025), (101, 46944), (102, 46941), (111, 46848), (112, 46845),

Gene: Twister_78 Start: 46549, Stop: 46046, Start Num: 39

Candidate Starts for Twister_78:

(Start: 25 @46681 has 43 MA's), (Start: 28 @46657 has 5 MA's), (Start: 34 @46600 has 12 MA's), (Start: 39 @46549 has 16 MA's), (Start: 59 @46465 has 8 MA's), (95, 46276), (101, 46198), (102, 46195), (106, 46162), (111, 46108),

Gene: Vanisoa_79 Start: 47062, Stop: 46496, Start Num: 34

Candidate Starts for Vanisoa_79:

(Start: 25 @47143 has 43 MA's), (Start: 28 @47119 has 5 MA's), (33, 47065), (Start: 34 @47062 has 12 MA's), (88, 46804), (91, 46783), (101, 46657), (102, 46654), (110, 46567),

Gene: Vorrps_5 Start: 1716, Stop: 1147, Start Num: 54

Candidate Starts for Vorrps_5:

(Start: 54 @1716 has 21 MA's), (70, 1599), (72, 1584), (75, 1533), (Start: 76 @1530 has 1 MA's), (89, 1416), (90, 1407), (93, 1383), (101, 1278), (102, 1275), (108, 1239), (113, 1200), (117, 1164),

Gene: WalterMcMickey_77 Start: 46600, Stop: 46046, Start Num: 34

Candidate Starts for WalterMcMickey_77:

(Start: 25 @46681 has 43 MA's), (Start: 28 @46657 has 5 MA's), (Start: 34 @46600 has 12 MA's), (Start: 39 @46549 has 16 MA's), (Start: 59 @46465 has 8 MA's), (95, 46276), (101, 46198), (102, 46195), (106, 46162), (111, 46108),

Gene: Wiks_89 Start: 47310, Stop: 46660, Start Num: 25

Candidate Starts for Wiks_89:

(Start: 25 @47310 has 43 MA's), (Start: 28 @47286 has 5 MA's), (33, 47232), (Start: 34 @47229 has 12 MA's), (Start: 36 @47211 has 3 MA's), (94, 46905), (101, 46824), (102, 46821), (104, 46800), (111,

46725), (112, 46722),

Gene: Wildflower_5 Start: 1625, Stop: 1242, Start Num: 76

Candidate Starts for Wildflower_5:

(Start: 54 @1811 has 21 MA's), (70, 1694), (72, 1679), (75, 1628), (Start: 76 @1625 has 1 MA's), (89, 1511), (90, 1502), (101, 1373), (102, 1370), (113, 1295), (117, 1259),

Gene: Winget_5 Start: 1850, Stop: 1287, Start Num: 54

Candidate Starts for Winget_5:

(Start: 54 @1850 has 21 MA's), (70, 1733), (72, 1718), (75, 1667), (Start: 76 @1664 has 1 MA's), (89, 1556), (90, 1547), (101, 1418), (102, 1415), (108, 1379), (113, 1340), (117, 1304),

Gene: Yecey3_85 Start: 46628, Stop: 46062, Start Num: 34

Candidate Starts for Yecey3_85:

(Start: 25 @46709 has 43 MA's), (Start: 28 @46685 has 5 MA's), (Start: 34 @46628 has 12 MA's), (91, 46349), (101, 46223), (102, 46220), (117, 46076),

Gene: Yokurt_89 Start: 47211, Stop: 46660, Start Num: 36

Candidate Starts for Yokurt_89:

(Start: 25 @47310 has 43 MA's), (Start: 28 @47286 has 5 MA's), (33, 47232), (Start: 34 @47229 has 12 MA's), (Start: 36 @47211 has 3 MA's), (94, 46905), (101, 46824), (102, 46821), (104, 46800), (111, 46725), (112, 46722),

Gene: YungJamal_6 Start: 2139, Stop: 1576, Start Num: 54

Candidate Starts for YungJamal_6:

(Start: 54 @2139 has 21 MA's), (70, 2022), (72, 2007), (75, 1956), (Start: 76 @1953 has 1 MA's), (89, 1845), (90, 1836), (101, 1707), (102, 1704), (113, 1629), (117, 1593),

Gene: Zaka_90 Start: 47310, Stop: 46660, Start Num: 25

Candidate Starts for Zaka_90:

(Start: 25 @47310 has 43 MA's), (Start: 28 @47286 has 5 MA's), (33, 47232), (Start: 34 @47229 has 12 MA's), (Start: 36 @47211 has 3 MA's), (94, 46905), (101, 46824), (102, 46821), (104, 46800), (111, 46725), (112, 46722),

Gene: Zakhe101_6 Start: 2163, Stop: 1594, Start Num: 54

Candidate Starts for Zakhe101_6:

(Start: 54 @2163 has 21 MA's), (70, 2046), (72, 2031), (75, 1980), (Start: 76 @1977 has 1 MA's), (89, 1863), (90, 1854), (101, 1725), (102, 1722), (113, 1647), (117, 1611),

Gene: Zimmer_80 Start: 47793, Stop: 47140, Start Num: 25

Candidate Starts for Zimmer_80:

(Start: 25 @47793 has 43 MA's), (Start: 28 @47769 has 5 MA's), (Start: 34 @47712 has 12 MA's), (88, 47451), (92, 47427), (101, 47304), (102, 47301), (111, 47208), (112, 47205), (115, 47166),