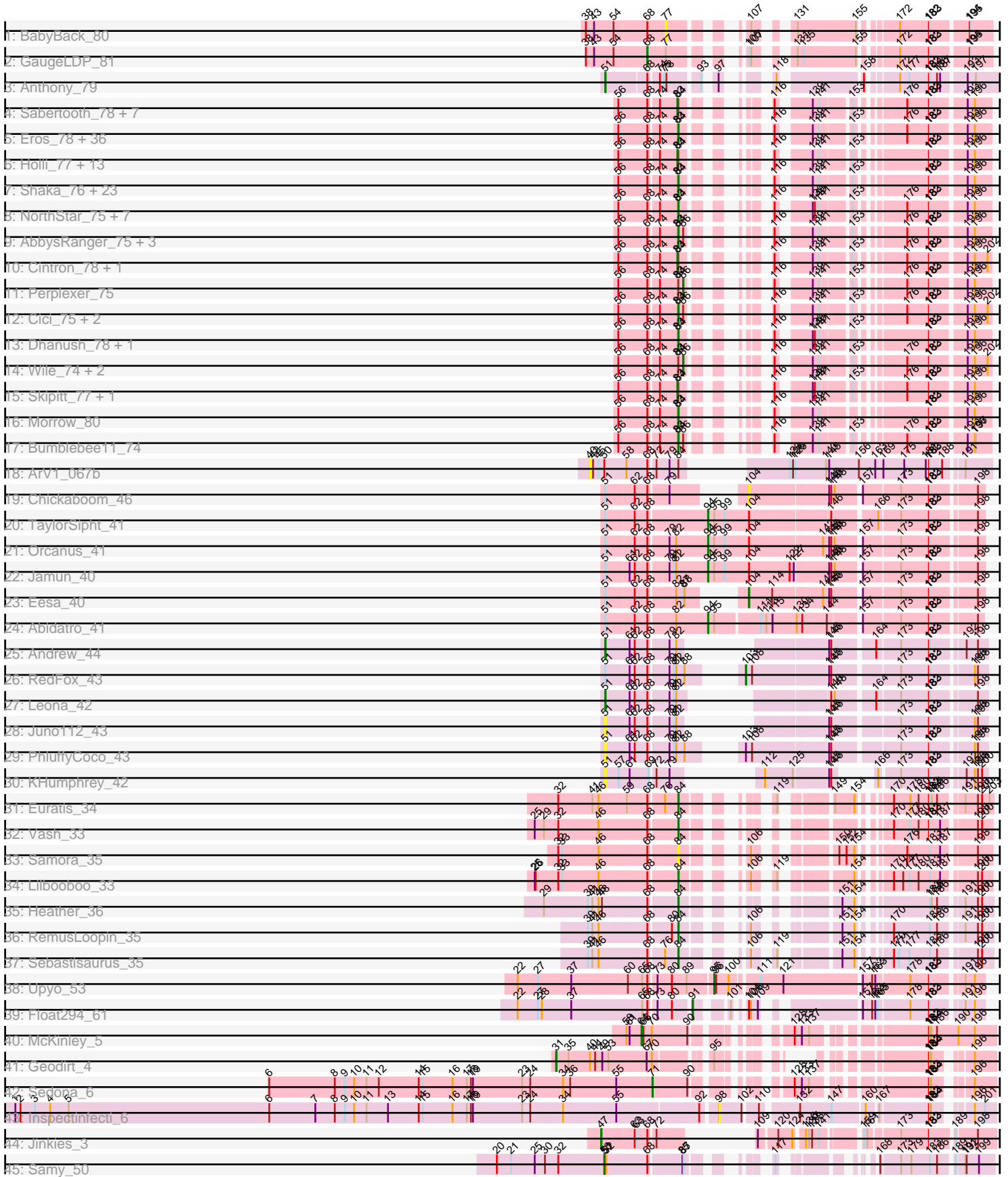


Pham 163414



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 163414 Report

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

Pham number 163414 has 141 members, 10 are drafts.

Phages represented in each track:

- Track 1 : BabyBack_80
- Track 2 : GaugeLDP_81
- Track 3 : Anthony_79
- Track 4 : Sabertooth_78, Mazhar510_78, Connomayer_78, Polymorphads_79, Koreni_77, LHTSCC_80, Tinybot_77, Pumbaa_78
- Track 5 : Eros_78, OKaNui_77, DirtyDunning_77, MeeZee_77, Obama12_79, Maverick_77, Iceman_76, Happiness_77, HamSlice_74, Peaches_76, Burger_76, Phacado_78, Millski_77, PeterPeter_78, Avle17_78, Broseidon_78, Datway_75, Lorenzo_78, Cocoaberry_78, ICleared_77, Alberto7_79, Wander_78, Relief_77, Kyee_78, Arturo_75, Commander_76, LittleGuy_78, Scamp_78, Nemo27_77, Gadost_78, LappelDuVide_74, Houdini22_77, NotAPhaseMom_77, Eapen_78, Annyong_77, Phighter1804_78, Xena_74
- Track 6 : Holli_77, Kingmustik0402_78, Sparxx_79, Blackmoor_77, Maxo_80, Ohfah_79, JetBlade_79, Nyxis_77, Bartimeaus_78, TroyPia_79, BangNhom_75, YoSam321_78, Baby16_78, Eurydice_79
- Track 7 : Shaka_76, TiroTheta9_77, Caelakin_76, LochMonster_79, Kampy_77, Eagle_77, Iracema64_78, ChampagnePapi_81, BellusTerra_79, Deano_75, Lunsford_78, Spino_77, Roosevelt_76, Felipe_79, Abdiel_77, SheldonCooper_78, Taquarus_77, Cerulean_80, CentreCat_78, Citius_78, Phontbonne_78, Nebs_79, Ulysses_77, Druantia_77
- Track 8 : NorthStar_75, Romney_77, Melvin_80, Wilbur_78, Pipcraft_74, Ruin_78, Lemur_78, Flux_79
- Track 9 : AbbysRanger_75, Badger_74, PetiteSangsue_75, Backyardigan_73
- Track 10 : Cintron_78, Kremtemulon_72
- Track 11 : Perplexer_75
- Track 12 : Cici_75, Morpher26_75, Shygu2_76
- Track 13 : Dhanush_78, Chaph_78
- Track 14 : Wile_74, Wizard007_75, Katalie136_75
- Track 15 : Skipitt_77, Bombshell_78
- Track 16 : Morrow_80
- Track 17 : Bumblebee11_74
- Track 18 : ArV1_067b
- Track 19 : Chickaboom_46
- Track 20 : TaylorSipht_41
- Track 21 : Orcanus_41
- Track 22 : Jamun_40
- Track 23 : Eesa_40

- Track 24 : Abidatro_41
- Track 25 : Andrew_44
- Track 26 : RedFox_43
- Track 27 : Leona_42
- Track 28 : Juno112_43
- Track 29 : PhluffyCoco_43
- Track 30 : KHumphrey_42
- Track 31 : Euratis_34
- Track 32 : Vash_33
- Track 33 : Samora_35
- Track 34 : Lilbooboo_33
- Track 35 : Heather_36
- Track 36 : RemusLoopin_35
- Track 37 : Sebastisaurus_35
- Track 38 : Upyo_53
- Track 39 : Float294_61
- Track 40 : McKinley_5
- Track 41 : Geodirt_4
- Track 42 : Sedona_6
- Track 43 : Inspectinfecti_6
- Track 44 : Jinkies_3
- Track 45 : Samy_50

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

The start number called the most often in the published annotations is 84, it was called in 85 of the 131 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_75, Abdiel_77, Alberto7_79, Annyong_77, Arturo_75, Avle17_78, Backyardigan_73, Badger_74, BellusTerra_79, Broseidon_78, Bumblebee11_74, Burger_76, Caelakin_76, CentreCat_78, Cerulean_80, ChampagnePapi_81, Chaph_78, Cici_75, Citius_78, Cocoaberry_78, Commander_76, Datway_75, Deano_75, Dhanush_78, DirtyDunning_77, Druantia_77, Eagle_77, Eapen_78, Eros_78, Euratis_34, Flux_79, Gadost_78, HamSlice_74, Happiness_77, Heather_36, Houdini22_77, ICleared_77, Iceman_76, Iracema64_78, Kampy_77, Kyee_78, LappelDuVide_74, Lemur_78, Lilbooboo_33, LittleGuy_78, LochMonster_79, Lorenzo_78, Lunsford_78, Maverick_77, MeeZee_77, Melvin_80, Millski_77, Morpher26_75, Morrow_80, Nebs_79, Nemo27_77, NorthStar_75, NotAPhaseMom_77, OKaNui_77, Obama12_79, Peaches_76, PeterPeter_78, PetiteSangsue_75, Phacado_78, Phelipe_79, Phighter1804_78, Phontbonne_78, Pipcraft_74, Relief_77, RemusLoopin_35, Romney_77, Roosevelt_76, Ruin_78, Samora_35, Scamp_78, Sebastisaurus_35, Shaka_76, SheldonCooper_78, Shygu2_76, Spino_77, Taquarus_77, TiroTheta9_77, Ulysses_77, Vash_33, Wander_78, Wilbur_78, Xena_74,

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

- ArV1_067b, Baby16_78, BangNhom_75, Bartimeaus_78, Blackmoor_77, Bombshell_78, Cintron_78, Connomayer_78, Eurydice_79, Holli_77, JetBlade_79, Katalie136_75, Kingmustik0402_78, Koreni_77, Kremtemulon_72, LHTSCC_80,

Maxo_80, Mazhar510_78, Nyxis_77, Ohfah_79, Perplexer_75, Polymorphads_79, Pumbaa_78, Sabertooth_78, Skipitt_77, Sparxx_79, Tinybot_77, TroyPia_79, Wile_74, Wizard007_75, YoSam321_78,

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

- Abidatro_41, Andrew_44, Anthony_79, BabyBack_80, Chickaboom_46, Eesa_40, Float294_61, GaugeLDP_81, Geodirt_4, Inspectinfecti_6, Jamun_40, Jinkies_3, Juno112_43, KHumphrey_42, Leona_42, McKinley_5, Orcanus_41, PhluffyCoco_43, RedFox_43, Samy_50, Sedona_6, TaylorSipht_41, Upyo_53,

Summary by start number:

Start 31:

- Found in 1 of 141 (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: Geodirt_4 (DE1),

Start 40:

- Found in 2 of 141 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ArV1_067b (AR),

Start 47:

- Found in 1 of 141 (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: Jinkies_3 (FL),

Start 50:

- Found in 2 of 141 (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: Samy_50 (singleton),

Start 51:

- Found in 14 of 141 (9.9%) of genes in pham
- Manual Annotations of this start: 3 of 131
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Andrew_44 (AS3), Anthony_79 (A20), Juno112_43 (AS3), KHumphrey_42 (AS3), Leona_42 (AS3), PhluffyCoco_43 (AS3),

Start 64:

- Found in 1 of 141 (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: McKinley_5 (DE1),

Start 68:

- Found in 136 of 141 (96.5%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 0.7% of time when present

- Phage (with cluster) where this start called: GaugeLDP_81 (A2),

Start 71:

- Found in 1 of 141 (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: Sedona_6 (DE1),

Start 77:

- Found in 2 of 141 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BabyBack_80 (A2),

Start 83:

- Found in 110 of 141 (78.0%) of genes in pham
- Manual Annotations of this start: 25 of 131
- Called 23.6% of time when present
- Phage (with cluster) where this start called: Baby16_78 (A4), BangNhom_75 (A4), Bartimeaus_78 (A4), Blackmoor_77 (A4), Bombshell_78 (A4), Cintron_78 (A4), Connomayer_78 (A4), Eurydice_79 (A4), Holli_77 (A4), JetBlade_79 (A4), Kingmustik0402_78 (A4), Koreni_77 (A4), Kremtemulon_72 (A4), LHTSCC_80 (A4), Maxo_80 (A4), Mazhar510_78 (A4), Nyxis_77 (A4), Ohfah_79 (A4), Polymorphads_79 (A4), Pumbaa_78 (A4), Sabertooth_78 (A4), Skipitt_77 (A4), Sparxx_79 (A4), Tinybot_77 (A4), TroyPia_79 (A4), YoSam321_78 (A4),

Start 84:

- Found in 118 of 141 (83.7%) of genes in pham
- Manual Annotations of this start: 85 of 131
- Called 73.7% of time when present
- Phage (with cluster) where this start called: AbbysRanger_75 (A4), Abdiel_77 (A4), Alberto7_79 (A4), Annyong_77 (A4), Arturo_75 (A4), Avie17_78 (A4), Backyardigan_73 (A4), Badger_74 (A4), BellusTerra_79 (A4), Broseidon_78 (A4), Bumblebee11_74 (A4), Burger_76 (A4), Caelakin_76 (A4), CentreCat_78 (A4), Cerulean_80 (A4), ChampagnePapi_81 (A4), Chaph_78 (A4), Cici_75 (A4), Citius_78 (A4), Cocoaberry_78 (A4), Commander_76 (A4), Datway_75 (A4), Deano_75 (A4), Dhanush_78 (A4), DirtyDunning_77 (A4), Druantia_77 (A4), Eagle_77 (A4), Eapen_78 (A4), Eros_78 (A4), Euratis_34 (BB1), Flux_79 (A4), Gadost_78 (A4), HamSlice_74 (A4), Happiness_77 (A4), Heather_36 (BB2), Houdini22_77 (A4), ICleared_77 (A4), Iceman_76 (A4), Iracema64_78 (A4), Kampy_77 (A4), Kyee_78 (A4), LappelDuVide_74 (A4), Lemur_78 (A4), Lilbooboo_33 (BB1), LittleGuy_78 (A4), LochMonster_79 (A4), Lorenzo_78 (A4), Lunsford_78 (A4), Maverick_77 (A4), MeeZee_77 (A4), Melvin_80 (A4), Millski_77 (A4), Morpher26_75 (A4), Morrow_80 (A4), Nebs_79 (A4), Nemo27_77 (A4), NorthStar_75 (A4), NotAPhaseMom_77 (A4), OKaNui_77 (A4), Obama12_79 (A4), Peaches_76 (A4), PeterPeter_78 (A4), PetiteSangsue_75 (A4), Phacado_78 (A4), Phelipe_79 (A4), Phighter1804_78 (A4), Phontbonne_78 (A4), Pipcraft_74 (A4), Relief_77 (A4), RemusLoopin_35 (BB2), Romney_77 (A4), Roosevelt_76 (A4), Ruin_78 (A4), Samora_35 (BB1), Scamp_78 (A4), Sebastisaurus_35 (BB2), Shaka_76 (A4), SheldonCooper_78 (A4), Shygu2_76 (A4), Spino_77 (A4), Taquarus_77 (A4), TiroTheta9_77 (A4), Ulysses_77 (A4), Vash_33 (BB1), Wander_78 (A4), Wilbur_78 (A4), Xena_74 (A4),

Start 86:

- Found in 12 of 141 (8.5%) of genes in pham
- Manual Annotations of this start: 4 of 131
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Katalie136_75 (A4), Perplexer_75 (A4), Wile_74 (A4), Wizard007_75 (A4),

Start 91:

- Found in 1 of 141 (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: Float294_61 (CR3),

Start 94:

- Found in 4 of 141 (2.8%) of genes in pham
- Manual Annotations of this start: 4 of 131
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_41 (AS1), Jamun_40 (AS1), Orcanus_41 (AS1), TaylorSipht_41 (AS1),

Start 95:

- Found in 6 of 141 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 131
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Upyo_53 (CD),

Start 98:

- Found in 1 of 141 (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 103:

- Found in 2 of 141 (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: RedFox_43 (AS3),

Start 104:

- Found in 6 of 141 (4.3%) 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: Chickaboom_46 (AS1), Eesa_40 (AS1),

Summary by clusters:

There are 14 clusters represented in this pham: AS3, A20, AS1, AR, CR3, DE1, DE2, singleton, CD, A2, A4, FL, BB2, BB1,

Info for manual annotations of cluster A2:

- Start number 68 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 51 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A4:

- Start number 83 was manually annotated 25 times for cluster A4.
- Start number 84 was manually annotated 79 times for cluster A4.
- Start number 86 was manually annotated 4 times for cluster A4.

Info for manual annotations of cluster AS1:

- Start number 94 was manually annotated 4 times for cluster AS1.
- Start number 104 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS3:

- Start number 51 was manually annotated 2 times for cluster AS3.
- Start number 103 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster BB1:

- Start number 84 was manually annotated 3 times for cluster BB1.

Info for manual annotations of cluster BB2:

- Start number 84 was manually annotated 3 times for cluster BB2.

Info for manual annotations of cluster CD:

- Start number 95 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CR3:

- Start number 91 was manually annotated 1 time for cluster CR3.

Info for manual annotations of cluster DE1:

- Start number 31 was manually annotated 1 time for cluster DE1.
- Start number 64 was manually annotated 1 time for cluster DE1.
- Start number 71 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster FL:

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

Gene Information:

Gene: AbbysRanger_75 Start: 46560, Stop: 45976, Start Num: 84

Candidate Starts for AbbysRanger_75:

(56, 46710), (Start: 68 @46632 has 1 MA's), (74, 46611), (Start: 83 @46563 has 25 MA's), (Start: 84 @46560 has 85 MA's), (Start: 86 @46548 has 4 MA's), (116, 46455), (139, 46383), (141, 46365), (153, 46299), (176, 46194), (182, 46134), (183, 46131), (193, 46044), (196, 46023),

Gene: Abdiel_77 Start: 46760, Stop: 46176, Start Num: 84

Candidate Starts for Abdiel_77:

(56, 46910), (Start: 68 @46832 has 1 MA's), (74, 46811), (Start: 83 @46763 has 25 MA's), (Start: 84 @46760 has 85 MA's), (116, 46655), (139, 46583), (141, 46565), (153, 46499), (182, 46334), (183, 46331), (193, 46244), (196, 46223),

Gene: Abidatro_41 Start: 27763, Stop: 28476, Start Num: 94

Candidate Starts for Abidatro_41:

(Start: 51 @27487 has 3 MA's), (62, 27568), (Start: 68 @27604 has 1 MA's), (82, 27670), (Start: 94 @27763 has 4 MA's), (Start: 95 @27781 has 1 MA's), (111, 27901), (113, 27916), (115, 27934), (130, 28000), (134, 28015), (144, 28087), (157, 28162), (173, 28264), (182, 28339), (183, 28342), (198, 28459),

Gene: Alberto7_79 Start: 47085, Stop: 46501, Start Num: 84

Candidate Starts for Alberto7_79:

(56, 47235), (Start: 68 @47157 has 1 MA's), (74, 47136), (Start: 83 @47088 has 25 MA's), (Start: 84 @47085 has 85 MA's), (116, 46980), (139, 46908), (141, 46890), (153, 46824), (176, 46719), (182, 46659), (183, 46656), (193, 46569), (196, 46548),

Gene: Andrew_44 Start: 27053, Stop: 27850, Start Num: 51

Candidate Starts for Andrew_44:

(Start: 51 @27053 has 3 MA's), (61, 27119), (62, 27134), (Start: 68 @27170 has 1 MA's), (79, 27218), (82, 27236), (145, 27452), (146, 27458), (164, 27563), (173, 27626), (182, 27701), (183, 27704), (192, 27788), (198, 27821),

Gene: Annyong_77 Start: 46793, Stop: 46209, Start Num: 84

Candidate Starts for Annyong_77:

(56, 46943), (Start: 68 @46865 has 1 MA's), (74, 46844), (Start: 83 @46796 has 25 MA's), (Start: 84 @46793 has 85 MA's), (116, 46688), (139, 46616), (141, 46598), (153, 46532), (176, 46427), (182, 46367), (183, 46364), (193, 46277), (196, 46256),

Gene: Anthony_79 Start: 47520, Stop: 46663, Start Num: 51

Candidate Starts for Anthony_79:

(Start: 51 @47520 has 3 MA's), (Start: 68 @47415 has 1 MA's), (74, 47394), (75, 47382), (78, 47376), (93, 47298), (97, 47280), (118, 47214), (158, 47034), (172, 46965), (177, 46941), (182, 46887), (183, 46884), (186, 46863), (187, 46854), (193, 46791), (197, 46767),

Gene: ArV1_067b Start: 51785, Stop: 52711, Start Num: 40

Candidate Starts for ArV1_067b:

(40, 51785), (42, 51794), (45, 51809), (Start: 50 @51827 has 1 MA's), (58, 51887), (Start: 68 @51944 has 1 MA's), (72, 51959), (79, 51992), (Start: 84 @52016 has 85 MA's), (123, 52154), (126, 52163), (129, 52169), (143, 52256), (145, 52265), (156, 52352), (163, 52400), (169, 52424), (175, 52484), (181, 52547), (182, 52556), (183, 52559), (188, 52589), (191, 52634),

Gene: Arturo_75 Start: 46876, Stop: 46292, Start Num: 84

Candidate Starts for Arturo_75:

(56, 47026), (Start: 68 @46948 has 1 MA's), (74, 46927), (Start: 83 @46879 has 25 MA's), (Start: 84 @46876 has 85 MA's), (116, 46771), (139, 46699), (141, 46681), (153, 46615), (176, 46510), (182, 46450), (183, 46447), (193, 46360), (196, 46339),

Gene: Avle17_78 Start: 46742, Stop: 46158, Start Num: 84

Candidate Starts for Avle17_78:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (141, 46547), (153, 46481), (176, 46376), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: Baby16_78 Start: 46762, Stop: 46175, Start Num: 83

Candidate Starts for Baby16_78:

(56, 46909), (Start: 68 @46831 has 1 MA's), (74, 46810), (Start: 83 @46762 has 25 MA's), (Start: 84 @46759 has 85 MA's), (116, 46654), (139, 46582), (141, 46564), (153, 46498), (182, 46333), (183,

46330), (193, 46243), (196, 46222),

Gene: BabyBack_80 Start: 48950, Stop: 48291, Start Num: 77

Candidate Starts for BabyBack_80:

(38, 49172), (43, 49148), (54, 49091), (Start: 68 @48998 has 1 MA's), (77, 48950), (107, 48821), (131, 48764), (155, 48611), (172, 48533), (182, 48455), (183, 48452), (194, 48356), (195, 48353),

Gene: Backyardigan_73 Start: 46576, Stop: 45992, Start Num: 84

Candidate Starts for Backyardigan_73:

(56, 46726), (Start: 68 @46648 has 1 MA's), (74, 46627), (Start: 83 @46579 has 25 MA's), (Start: 84 @46576 has 85 MA's), (Start: 86 @46564 has 4 MA's), (116, 46471), (139, 46399), (141, 46381), (153, 46315), (176, 46210), (182, 46150), (183, 46147), (193, 46060), (196, 46039),

Gene: Badger_74 Start: 46542, Stop: 45958, Start Num: 84

Candidate Starts for Badger_74:

(56, 46692), (Start: 68 @46614 has 1 MA's), (74, 46593), (Start: 83 @46545 has 25 MA's), (Start: 84 @46542 has 85 MA's), (Start: 86 @46530 has 4 MA's), (116, 46437), (139, 46365), (141, 46347), (153, 46281), (176, 46176), (182, 46116), (183, 46113), (193, 46026), (196, 46005),

Gene: BangNhom_75 Start: 47188, Stop: 46601, Start Num: 83

Candidate Starts for BangNhom_75:

(56, 47335), (Start: 68 @47257 has 1 MA's), (74, 47236), (Start: 83 @47188 has 25 MA's), (Start: 84 @47185 has 85 MA's), (116, 47080), (139, 47008), (141, 46990), (153, 46924), (182, 46759), (183, 46756), (193, 46669), (196, 46648),

Gene: Bartimeaus_78 Start: 46753, Stop: 46166, Start Num: 83

Candidate Starts for Bartimeaus_78:

(56, 46900), (Start: 68 @46822 has 1 MA's), (74, 46801), (Start: 83 @46753 has 25 MA's), (Start: 84 @46750 has 85 MA's), (116, 46645), (139, 46573), (141, 46555), (153, 46489), (182, 46324), (183, 46321), (193, 46234), (196, 46213),

Gene: BellusTerra_79 Start: 46789, Stop: 46205, Start Num: 84

Candidate Starts for BellusTerra_79:

(56, 46939), (Start: 68 @46861 has 1 MA's), (74, 46840), (Start: 83 @46792 has 25 MA's), (Start: 84 @46789 has 85 MA's), (116, 46684), (139, 46612), (141, 46594), (153, 46528), (182, 46363), (183, 46360), (193, 46273), (196, 46252),

Gene: Blackmoor_77 Start: 46753, Stop: 46166, Start Num: 83

Candidate Starts for Blackmoor_77:

(56, 46900), (Start: 68 @46822 has 1 MA's), (74, 46801), (Start: 83 @46753 has 25 MA's), (Start: 84 @46750 has 85 MA's), (116, 46645), (139, 46573), (141, 46555), (153, 46489), (182, 46324), (183, 46321), (193, 46234), (196, 46213),

Gene: Bombshell_78 Start: 46748, Stop: 46161, Start Num: 83

Candidate Starts for Bombshell_78:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (140, 46562), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: Broseidon_78 Start: 46751, Stop: 46167, Start Num: 84

Candidate Starts for Broseidon_78:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (141, 46556), (153, 46490), (176, 46385), (182,

46325), (183, 46322), (193, 46235), (196, 46214),

Gene: Bumblebee11_74 Start: 46542, Stop: 45958, Start Num: 84

Candidate Starts for Bumblebee11_74:

(56, 46692), (Start: 68 @46614 has 1 MA's), (74, 46593), (Start: 83 @46545 has 25 MA's), (Start: 84 @46542 has 85 MA's), (Start: 86 @46530 has 4 MA's), (116, 46437), (139, 46365), (141, 46347), (153, 46281), (176, 46176), (182, 46116), (183, 46113), (193, 46026), (196, 46005), (197, 46002),

Gene: Burger_76 Start: 46748, Stop: 46164, Start Num: 84

Candidate Starts for Burger_76:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (141, 46553), (153, 46487), (176, 46382), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: Caelakin_76 Start: 46748, Stop: 46164, Start Num: 84

Candidate Starts for Caelakin_76:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (141, 46553), (153, 46487), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: CentreCat_78 Start: 46788, Stop: 46204, Start Num: 84

Candidate Starts for CentreCat_78:

(56, 46938), (Start: 68 @46860 has 1 MA's), (74, 46839), (Start: 83 @46791 has 25 MA's), (Start: 84 @46788 has 85 MA's), (116, 46683), (139, 46611), (141, 46593), (153, 46527), (182, 46362), (183, 46359), (193, 46272), (196, 46251),

Gene: Cerulean_80 Start: 47186, Stop: 46602, Start Num: 84

Candidate Starts for Cerulean_80:

(56, 47336), (Start: 68 @47258 has 1 MA's), (74, 47237), (Start: 83 @47189 has 25 MA's), (Start: 84 @47186 has 85 MA's), (116, 47081), (139, 47009), (141, 46991), (153, 46925), (182, 46760), (183, 46757), (193, 46670), (196, 46649),

Gene: ChampagnePapi_81 Start: 47188, Stop: 46604, Start Num: 84

Candidate Starts for ChampagnePapi_81:

(56, 47338), (Start: 68 @47260 has 1 MA's), (74, 47239), (Start: 83 @47191 has 25 MA's), (Start: 84 @47188 has 85 MA's), (116, 47083), (139, 47011), (141, 46993), (153, 46927), (182, 46762), (183, 46759), (193, 46672), (196, 46651),

Gene: Chaph_78 Start: 46759, Stop: 46175, Start Num: 84

Candidate Starts for Chaph_78:

(56, 46909), (Start: 68 @46831 has 1 MA's), (74, 46810), (Start: 83 @46762 has 25 MA's), (Start: 84 @46759 has 85 MA's), (116, 46654), (139, 46582), (140, 46576), (141, 46564), (153, 46498), (182, 46333), (183, 46330), (193, 46243), (196, 46222),

Gene: Chickaboom_46 Start: 27783, Stop: 28385, Start Num: 104

Candidate Starts for Chickaboom_46:

(Start: 51 @27504 has 3 MA's), (62, 27585), (Start: 68 @27621 has 1 MA's), (79, 27669), (Start: 104 @27783 has 1 MA's), (145, 27996), (146, 28002), (148, 28005), (157, 28068), (173, 28170), (182, 28245), (183, 28248), (198, 28365),

Gene: Cici_75 Start: 46555, Stop: 45971, Start Num: 84

Candidate Starts for Cici_75:

(56, 46705), (Start: 68 @46627 has 1 MA's), (74, 46606), (Start: 83 @46558 has 25 MA's), (Start: 84 @46555 has 85 MA's), (Start: 86 @46543 has 4 MA's), (116, 46450), (139, 46378), (141, 46360), (153, 46294), (176, 46189), (182, 46129), (183, 46126), (193, 46039), (196, 46018), (202, 45982),

Gene: Cintron_78 Start: 46867, Stop: 46280, Start Num: 83

Candidate Starts for Cintron_78:

(56, 47014), (Start: 68 @46936 has 1 MA's), (74, 46915), (Start: 83 @46867 has 25 MA's), (Start: 84 @46864 has 85 MA's), (116, 46759), (139, 46687), (141, 46669), (153, 46603), (176, 46498), (182, 46438), (183, 46435), (193, 46348), (196, 46327), (202, 46291),

Gene: Citius_78 Start: 46769, Stop: 46185, Start Num: 84

Candidate Starts for Citius_78:

(56, 46919), (Start: 68 @46841 has 1 MA's), (74, 46820), (Start: 83 @46772 has 25 MA's), (Start: 84 @46769 has 85 MA's), (116, 46664), (139, 46592), (141, 46574), (153, 46508), (182, 46343), (183, 46340), (193, 46253), (196, 46232),

Gene: Cocoaberry_78 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for Cocoaberry_78:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (141, 46554), (153, 46488), (176, 46383), (182, 46323), (183, 46320), (193, 46233), (196, 46212),

Gene: Commander_76 Start: 46746, Stop: 46162, Start Num: 84

Candidate Starts for Commander_76:

(56, 46896), (Start: 68 @46818 has 1 MA's), (74, 46797), (Start: 83 @46749 has 25 MA's), (Start: 84 @46746 has 85 MA's), (116, 46641), (139, 46569), (141, 46551), (153, 46485), (176, 46380), (182, 46320), (183, 46317), (193, 46230), (196, 46209),

Gene: Connomayer_78 Start: 46751, Stop: 46164, Start Num: 83

Candidate Starts for Connomayer_78:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (141, 46553), (153, 46487), (176, 46382), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: Datway_75 Start: 46559, Stop: 45975, Start Num: 84

Candidate Starts for Datway_75:

(56, 46709), (Start: 68 @46631 has 1 MA's), (74, 46610), (Start: 83 @46562 has 25 MA's), (Start: 84 @46559 has 85 MA's), (116, 46454), (139, 46382), (141, 46364), (153, 46298), (176, 46193), (182, 46133), (183, 46130), (193, 46043), (196, 46022),

Gene: Deano_75 Start: 46756, Stop: 46172, Start Num: 84

Candidate Starts for Deano_75:

(56, 46906), (Start: 68 @46828 has 1 MA's), (74, 46807), (Start: 83 @46759 has 25 MA's), (Start: 84 @46756 has 85 MA's), (116, 46651), (139, 46579), (141, 46561), (153, 46495), (182, 46330), (183, 46327), (193, 46240), (196, 46219),

Gene: Dhanush_78 Start: 46751, Stop: 46167, Start Num: 84

Candidate Starts for Dhanush_78:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (140, 46568), (141, 46556), (153, 46490), (182, 46325), (183, 46322), (193, 46235), (196, 46214),

Gene: DirtyDunning_77 Start: 46760, Stop: 46176, Start Num: 84

Candidate Starts for DirtyDunning_77:

(56, 46910), (Start: 68 @46832 has 1 MA's), (74, 46811), (Start: 83 @46763 has 25 MA's), (Start: 84 @46760 has 85 MA's), (116, 46655), (139, 46583), (141, 46565), (153, 46499), (176, 46394), (182, 46334), (183, 46331), (193, 46244), (196, 46223),

Gene: Druantia_77 Start: 46751, Stop: 46167, Start Num: 84

Candidate Starts for Druantia_77:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (141, 46556), (153, 46490), (182, 46325), (183, 46322), (193, 46235), (196, 46214),

Gene: Eagle_77 Start: 46810, Stop: 46226, Start Num: 84

Candidate Starts for Eagle_77:

(56, 46960), (Start: 68 @46882 has 1 MA's), (74, 46861), (Start: 83 @46813 has 25 MA's), (Start: 84 @46810 has 85 MA's), (116, 46705), (139, 46633), (141, 46615), (153, 46549), (182, 46384), (183, 46381), (193, 46294), (196, 46273),

Gene: Eapen_78 Start: 46743, Stop: 46159, Start Num: 84

Candidate Starts for Eapen_78:

(56, 46893), (Start: 68 @46815 has 1 MA's), (74, 46794), (Start: 83 @46746 has 25 MA's), (Start: 84 @46743 has 85 MA's), (116, 46638), (139, 46566), (141, 46548), (153, 46482), (176, 46377), (182, 46317), (183, 46314), (193, 46227), (196, 46206),

Gene: Eesa_40 Start: 28668, Stop: 29270, Start Num: 104

Candidate Starts for Eesa_40:

(Start: 51 @28389 has 3 MA's), (62, 28470), (Start: 68 @28506 has 1 MA's), (82, 28572), (87, 28593), (88, 28596), (Start: 104 @28668 has 1 MA's), (114, 28734), (142, 28869), (145, 28881), (146, 28887), (157, 28953), (173, 29055), (182, 29130), (183, 29133), (198, 29250),

Gene: Eros_78 Start: 46750, Stop: 46166, Start Num: 84

Candidate Starts for Eros_78:

(56, 46900), (Start: 68 @46822 has 1 MA's), (74, 46801), (Start: 83 @46753 has 25 MA's), (Start: 84 @46750 has 85 MA's), (116, 46645), (139, 46573), (141, 46555), (153, 46489), (176, 46384), (182, 46324), (183, 46321), (193, 46234), (196, 46213),

Gene: Euratis_34 Start: 26257, Stop: 26847, Start Num: 84

Candidate Starts for Euratis_34:

(32, 25936), (41, 26032), (46, 26047), (59, 26125), (Start: 68 @26185 has 1 MA's), (76, 26221), (Start: 84 @26257 has 85 MA's), (119, 26392), (149, 26482), (154, 26530), (170, 26587), (178, 26635), (180, 26656), (182, 26686), (183, 26689), (185, 26695), (186, 26710), (191, 26767), (198, 26803), (200, 26815), (203, 26836),

Gene: Eurydice_79 Start: 46788, Stop: 46201, Start Num: 83

Candidate Starts for Eurydice_79:

(56, 46935), (Start: 68 @46857 has 1 MA's), (74, 46836), (Start: 83 @46788 has 25 MA's), (Start: 84 @46785 has 85 MA's), (116, 46680), (139, 46608), (141, 46590), (153, 46524), (182, 46359), (183, 46356), (193, 46269), (196, 46248),

Gene: Float294_61 Start: 49716, Stop: 49099, Start Num: 91

Candidate Starts for Float294_61:

(22, 50178), (27, 50121), (28, 50109), (37, 50025), (65, 49830), (Start: 68 @49815 has 1 MA's), (73, 49797), (80, 49761), (Start: 91 @49716 has 1 MA's), (101, 49653), (Start: 104 @49638 has 1 MA's), (106, 49632), (109, 49617), (157, 49413), (162, 49386), (163, 49377), (165, 49371), (178, 49287),

(182, 49236), (183, 49233), (191, 49155), (196, 49128),

Gene: Flux_79 Start: 46746, Stop: 46162, Start Num: 84

Candidate Starts for Flux_79:

(56, 46896), (Start: 68 @46818 has 1 MA's), (74, 46797), (Start: 83 @46749 has 25 MA's), (Start: 84 @46746 has 85 MA's), (116, 46641), (139, 46569), (140, 46563), (141, 46551), (153, 46485), (176, 46380), (182, 46320), (183, 46317), (193, 46230), (196, 46209),

Gene: Gadost_78 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for Gadost_78:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (141, 46554), (153, 46488), (176, 46383), (182, 46323), (183, 46320), (193, 46233), (196, 46212),

Gene: GaugeLDP_81 Start: 48551, Stop: 47844, Start Num: 68

Candidate Starts for GaugeLDP_81:

(38, 48725), (43, 48701), (54, 48644), (Start: 68 @48551 has 1 MA's), (77, 48503), (105, 48380), (107, 48374), (131, 48317), (135, 48302), (155, 48164), (172, 48086), (182, 48008), (183, 48005), (194, 47909), (195, 47906),

Gene: Geodirt_4 Start: 2785, Stop: 3651, Start Num: 31

Candidate Starts for Geodirt_4:

(Start: 31 @2785 has 1 MA's), (35, 2821), (40, 2884), (44, 2899), (49, 2920), (53, 2938), (67, 3049), (70, 3064), (Start: 95 @3181 has 1 MA's), (182, 3505), (183, 3508), (184, 3511), (196, 3589),

Gene: HamSlice_74 Start: 46747, Stop: 46163, Start Num: 84

Candidate Starts for HamSlice_74:

(56, 46897), (Start: 68 @46819 has 1 MA's), (74, 46798), (Start: 83 @46750 has 25 MA's), (Start: 84 @46747 has 85 MA's), (116, 46642), (139, 46570), (141, 46552), (153, 46486), (176, 46381), (182, 46321), (183, 46318), (193, 46231), (196, 46210),

Gene: Happiness_77 Start: 46771, Stop: 46187, Start Num: 84

Candidate Starts for Happiness_77:

(56, 46921), (Start: 68 @46843 has 1 MA's), (74, 46822), (Start: 83 @46774 has 25 MA's), (Start: 84 @46771 has 85 MA's), (116, 46666), (139, 46594), (141, 46576), (153, 46510), (176, 46405), (182, 46345), (183, 46342), (193, 46255), (196, 46234),

Gene: Heather_36 Start: 27272, Stop: 27856, Start Num: 84

Candidate Starts for Heather_36:

(29, 26909), (39, 27035), (41, 27047), (46, 27062), (48, 27071), (Start: 68 @27200 has 1 MA's), (Start: 84 @27272 has 85 MA's), (151, 27518), (154, 27545), (183, 27704), (185, 27710), (186, 27725), (191, 27782), (198, 27818), (200, 27830),

Gene: Holli_77 Start: 46541, Stop: 45954, Start Num: 83

Candidate Starts for Holli_77:

(56, 46688), (Start: 68 @46610 has 1 MA's), (74, 46589), (Start: 83 @46541 has 25 MA's), (Start: 84 @46538 has 85 MA's), (116, 46433), (139, 46361), (141, 46343), (153, 46277), (182, 46112), (183, 46109), (193, 46022), (196, 46001),

Gene: Houdini22_77 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for Houdini22_77:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (141, 46554), (153, 46488), (176, 46383), (182,

46323), (183, 46320), (193, 46233), (196, 46212),

Gene: ICleared_77 Start: 46816, Stop: 46232, Start Num: 84

Candidate Starts for ICleared_77:

(56, 46966), (Start: 68 @46888 has 1 MA's), (74, 46867), (Start: 83 @46819 has 25 MA's), (Start: 84 @46816 has 85 MA's), (116, 46711), (139, 46639), (141, 46621), (153, 46555), (176, 46450), (182, 46390), (183, 46387), (193, 46300), (196, 46279),

Gene: Iceman_76 Start: 47038, Stop: 46454, Start Num: 84

Candidate Starts for Iceman_76:

(56, 47188), (Start: 68 @47110 has 1 MA's), (74, 47089), (Start: 83 @47041 has 25 MA's), (Start: 84 @47038 has 85 MA's), (116, 46933), (139, 46861), (141, 46843), (153, 46777), (176, 46672), (182, 46612), (183, 46609), (193, 46522), (196, 46501),

Gene: Inspectinfecti_6 Start: 4075, Stop: 4749, Start Num: 98

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), (13, 3139), (14, 3229), (15, 3241), (16, 3328), (17, 3370), (18, 3382), (19, 3388), (23, 3532), (24, 3556), (34, 3652), (55, 3808), (92, 4033), (98, 4075), (102, 4138), (110, 4174), (132, 4270), (147, 4360), (160, 4444), (167, 4471), (182, 4603), (183, 4606), (184, 4609), (196, 4687), (201, 4717),

Gene: Iracema64_78 Start: 47012, Stop: 46428, Start Num: 84

Candidate Starts for Iracema64_78:

(56, 47162), (Start: 68 @47084 has 1 MA's), (74, 47063), (Start: 83 @47015 has 25 MA's), (Start: 84 @47012 has 85 MA's), (116, 46907), (139, 46835), (141, 46817), (153, 46751), (182, 46586), (183, 46583), (193, 46496), (196, 46475),

Gene: Jamun_40 Start: 27823, Stop: 28545, Start Num: 94

Candidate Starts for Jamun_40:

(Start: 51 @27547 has 3 MA's), (61, 27613), (62, 27628), (Start: 68 @27664 has 1 MA's), (79, 27712), (81, 27724), (82, 27730), (Start: 94 @27823 has 4 MA's), (Start: 95 @27841 has 1 MA's), (99, 27871), (Start: 104 @27943 has 1 MA's), (122, 28057), (127, 28069), (145, 28156), (146, 28162), (148, 28165), (157, 28228), (173, 28330), (182, 28405), (183, 28408), (198, 28525),

Gene: JetBlade_79 Start: 46779, Stop: 46192, Start Num: 83

Candidate Starts for JetBlade_79:

(56, 46926), (Start: 68 @46848 has 1 MA's), (74, 46827), (Start: 83 @46779 has 25 MA's), (Start: 84 @46776 has 85 MA's), (116, 46671), (139, 46599), (141, 46581), (153, 46515), (182, 46350), (183, 46347), (193, 46260), (196, 46239),

Gene: Jinkies_3 Start: 2349, Stop: 3125, Start Num: 47

Candidate Starts for Jinkies_3:

(Start: 47 @2349 has 1 MA's), (62, 2442), (63, 2448), (Start: 68 @2478 has 1 MA's), (72, 2493), (109, 2571), (120, 2616), (124, 2649), (136, 2670), (137, 2676), (138, 2685), (141, 2700), (159, 2784), (161, 2793), (173, 2871), (182, 2952), (183, 2955), (189, 3015), (198, 3072),

Gene: Juno112_43 Start: 27172, Stop: 27969, Start Num: 51

Candidate Starts for Juno112_43:

(Start: 51 @27172 has 3 MA's), (61, 27238), (62, 27253), (Start: 68 @27289 has 1 MA's), (79, 27337), (81, 27349), (82, 27355), (145, 27571), (146, 27577), (173, 27745), (182, 27820), (183, 27823), (196, 27931), (198, 27940),

Gene: KHumphrey_42 Start: 27171, Stop: 27866, Start Num: 51

Candidate Starts for KHumphrey_42:

(Start: 51 @27171 has 3 MA's), (57, 27210), (61, 27237), (69, 27291), (72, 27303), (79, 27336), (112, 27399), (125, 27474), (145, 27564), (146, 27570), (166, 27591), (173, 27642), (182, 27717), (183, 27720), (192, 27804), (196, 27828), (198, 27837), (200, 27849),

Gene: Kampy_77 Start: 46751, Stop: 46167, Start Num: 84

Candidate Starts for Kampy_77:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (141, 46556), (153, 46490), (182, 46325), (183, 46322), (193, 46235), (196, 46214),

Gene: Katalie136_75 Start: 46530, Stop: 45958, Start Num: 86

Candidate Starts for Katalie136_75:

(56, 46692), (Start: 68 @46614 has 1 MA's), (74, 46593), (Start: 83 @46545 has 25 MA's), (Start: 84 @46542 has 85 MA's), (Start: 86 @46530 has 4 MA's), (116, 46437), (139, 46365), (141, 46347), (153, 46281), (176, 46176), (182, 46116), (183, 46113), (193, 46026), (196, 46005), (202, 45969),

Gene: Kingmustik0402_78 Start: 46740, Stop: 46153, Start Num: 83

Candidate Starts for Kingmustik0402_78:

(56, 46887), (Start: 68 @46809 has 1 MA's), (74, 46788), (Start: 83 @46740 has 25 MA's), (Start: 84 @46737 has 85 MA's), (116, 46632), (139, 46560), (141, 46542), (153, 46476), (182, 46311), (183, 46308), (193, 46221), (196, 46200),

Gene: Koreni_77 Start: 46432, Stop: 45845, Start Num: 83

Candidate Starts for Koreni_77:

(56, 46579), (Start: 68 @46501 has 1 MA's), (74, 46480), (Start: 83 @46432 has 25 MA's), (Start: 84 @46429 has 85 MA's), (116, 46324), (139, 46252), (141, 46234), (153, 46168), (176, 46063), (182, 46003), (183, 46000), (193, 45913), (196, 45892),

Gene: Kremtemulon_72 Start: 46631, Stop: 46044, Start Num: 83

Candidate Starts for Kremtemulon_72:

(56, 46778), (Start: 68 @46700 has 1 MA's), (74, 46679), (Start: 83 @46631 has 25 MA's), (Start: 84 @46628 has 85 MA's), (116, 46523), (139, 46451), (141, 46433), (153, 46367), (176, 46262), (182, 46202), (183, 46199), (193, 46112), (196, 46091), (202, 46055),

Gene: Kyee_78 Start: 46743, Stop: 46159, Start Num: 84

Candidate Starts for Kyee_78:

(56, 46893), (Start: 68 @46815 has 1 MA's), (74, 46794), (Start: 83 @46746 has 25 MA's), (Start: 84 @46743 has 85 MA's), (116, 46638), (139, 46566), (141, 46548), (153, 46482), (176, 46377), (182, 46317), (183, 46314), (193, 46227), (196, 46206),

Gene: LHTSCC_80 Start: 47191, Stop: 46604, Start Num: 83

Candidate Starts for LHTSCC_80:

(56, 47338), (Start: 68 @47260 has 1 MA's), (74, 47239), (Start: 83 @47191 has 25 MA's), (Start: 84 @47188 has 85 MA's), (116, 47083), (139, 47011), (141, 46993), (153, 46927), (176, 46822), (182, 46762), (183, 46759), (193, 46672), (196, 46651),

Gene: LappelDuVide_74 Start: 46748, Stop: 46164, Start Num: 84

Candidate Starts for LappelDuVide_74:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (141, 46553), (153, 46487), (176, 46382), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: Lemur_78 Start: 46745, Stop: 46161, Start Num: 84

Candidate Starts for Lemur_78:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (140, 46562), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: Leona_42 Start: 27237, Stop: 28046, Start Num: 51

Candidate Starts for Leona_42:

(Start: 51 @27237 has 3 MA's), (61, 27303), (62, 27318), (Start: 68 @27354 has 1 MA's), (79, 27402), (81, 27414), (82, 27420), (146, 27654), (148, 27657), (164, 27759), (173, 27822), (182, 27897), (183, 27900), (198, 28017),

Gene: Lilbooboo_33 Start: 26272, Stop: 26859, Start Num: 84

Candidate Starts for Lilbooboo_33:

(25, 25882), (26, 25885), (32, 25951), (33, 25963), (46, 26062), (Start: 68 @26200 has 1 MA's), (Start: 84 @26272 has 85 MA's), (106, 26374), (119, 26407), (154, 26545), (170, 26602), (174, 26629), (177, 26647), (180, 26671), (183, 26704), (187, 26734), (198, 26818), (200, 26830),

Gene: LittleGuy_78 Start: 46633, Stop: 46049, Start Num: 84

Candidate Starts for LittleGuy_78:

(56, 46783), (Start: 68 @46705 has 1 MA's), (74, 46684), (Start: 83 @46636 has 25 MA's), (Start: 84 @46633 has 85 MA's), (116, 46528), (139, 46456), (141, 46438), (153, 46372), (176, 46267), (182, 46207), (183, 46204), (193, 46117), (196, 46096),

Gene: LochMonster_79 Start: 46985, Stop: 46401, Start Num: 84

Candidate Starts for LochMonster_79:

(56, 47135), (Start: 68 @47057 has 1 MA's), (74, 47036), (Start: 83 @46988 has 25 MA's), (Start: 84 @46985 has 85 MA's), (116, 46880), (139, 46808), (141, 46790), (153, 46724), (182, 46559), (183, 46556), (193, 46469), (196, 46448),

Gene: Lorenzo_78 Start: 46746, Stop: 46162, Start Num: 84

Candidate Starts for Lorenzo_78:

(56, 46896), (Start: 68 @46818 has 1 MA's), (74, 46797), (Start: 83 @46749 has 25 MA's), (Start: 84 @46746 has 85 MA's), (116, 46641), (139, 46569), (141, 46551), (153, 46485), (176, 46380), (182, 46320), (183, 46317), (193, 46230), (196, 46209),

Gene: Lunsford_78 Start: 46741, Stop: 46157, Start Num: 84

Candidate Starts for Lunsford_78:

(56, 46891), (Start: 68 @46813 has 1 MA's), (74, 46792), (Start: 83 @46744 has 25 MA's), (Start: 84 @46741 has 85 MA's), (116, 46636), (139, 46564), (141, 46546), (153, 46480), (182, 46315), (183, 46312), (193, 46225), (196, 46204),

Gene: Maverick_77 Start: 46745, Stop: 46161, Start Num: 84

Candidate Starts for Maverick_77:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: Maxo_80 Start: 46754, Stop: 46167, Start Num: 83

Candidate Starts for Maxo_80:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (141, 46556), (153, 46490), (182, 46325), (183,

46322), (193, 46235), (196, 46214),

Gene: Mazhar510_78 Start: 46749, Stop: 46162, Start Num: 83

Candidate Starts for Mazhar510_78:

(56, 46896), (Start: 68 @46818 has 1 MA's), (74, 46797), (Start: 83 @46749 has 25 MA's), (Start: 84 @46746 has 85 MA's), (116, 46641), (139, 46569), (141, 46551), (153, 46485), (176, 46380), (182, 46320), (183, 46317), (193, 46230), (196, 46209),

Gene: McKinley_5 Start: 3198, Stop: 3983, Start Num: 64

Candidate Starts for McKinley_5:

(58, 3156), (61, 3165), (Start: 64 @3198 has 1 MA's), (66, 3204), (70, 3228), (90, 3327), (128, 3495), (133, 3516), (137, 3537), (182, 3786), (183, 3789), (184, 3792), (186, 3810), (190, 3873), (196, 3921),

Gene: MeeZee_77 Start: 46742, Stop: 46158, Start Num: 84

Candidate Starts for MeeZee_77:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (141, 46547), (153, 46481), (176, 46376), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: Melvin_80 Start: 46743, Stop: 46159, Start Num: 84

Candidate Starts for Melvin_80:

(56, 46893), (Start: 68 @46815 has 1 MA's), (74, 46794), (Start: 83 @46746 has 25 MA's), (Start: 84 @46743 has 85 MA's), (116, 46638), (139, 46566), (140, 46560), (141, 46548), (153, 46482), (176, 46377), (182, 46317), (183, 46314), (193, 46227), (196, 46206),

Gene: Millski_77 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for Millski_77:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (141, 46554), (153, 46488), (176, 46383), (182, 46323), (183, 46320), (193, 46233), (196, 46212),

Gene: Morpher26_75 Start: 46563, Stop: 45979, Start Num: 84

Candidate Starts for Morpher26_75:

(56, 46713), (Start: 68 @46635 has 1 MA's), (74, 46614), (Start: 83 @46566 has 25 MA's), (Start: 84 @46563 has 85 MA's), (Start: 86 @46551 has 4 MA's), (116, 46458), (139, 46386), (141, 46368), (153, 46302), (176, 46197), (182, 46137), (183, 46134), (193, 46047), (196, 46026), (202, 45990),

Gene: Morrow_80 Start: 46788, Stop: 46204, Start Num: 84

Candidate Starts for Morrow_80:

(56, 46938), (Start: 68 @46860 has 1 MA's), (74, 46839), (Start: 83 @46791 has 25 MA's), (Start: 84 @46788 has 85 MA's), (116, 46683), (139, 46611), (141, 46593), (182, 46362), (183, 46359), (193, 46272), (196, 46251),

Gene: Nebs_79 Start: 46788, Stop: 46204, Start Num: 84

Candidate Starts for Nebs_79:

(56, 46938), (Start: 68 @46860 has 1 MA's), (74, 46839), (Start: 83 @46791 has 25 MA's), (Start: 84 @46788 has 85 MA's), (116, 46683), (139, 46611), (141, 46593), (153, 46527), (182, 46362), (183, 46359), (193, 46272), (196, 46251),

Gene: Nemo27_77 Start: 46744, Stop: 46160, Start Num: 84

Candidate Starts for Nemo27_77:

(56, 46894), (Start: 68 @46816 has 1 MA's), (74, 46795), (Start: 83 @46747 has 25 MA's), (Start: 84 @46744 has 85 MA's), (116, 46639), (139, 46567), (141, 46549), (153, 46483), (176, 46378), (182,

46318), (183, 46315), (193, 46228), (196, 46207),

Gene: NorthStar_75 Start: 46748, Stop: 46164, Start Num: 84

Candidate Starts for NorthStar_75:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (140, 46565), (141, 46553), (153, 46487), (176, 46382), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: NotAPhaseMom_77 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for NotAPhaseMom_77:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (141, 46554), (153, 46488), (176, 46383), (182, 46323), (183, 46320), (193, 46233), (196, 46212),

Gene: Nyxis_77 Start: 46630, Stop: 46043, Start Num: 83

Candidate Starts for Nyxis_77:

(56, 46777), (Start: 68 @46699 has 1 MA's), (74, 46678), (Start: 83 @46630 has 25 MA's), (Start: 84 @46627 has 85 MA's), (116, 46522), (139, 46450), (141, 46432), (153, 46366), (182, 46201), (183, 46198), (193, 46111), (196, 46090),

Gene: OKaNui_77 Start: 46799, Stop: 46215, Start Num: 84

Candidate Starts for OKaNui_77:

(56, 46949), (Start: 68 @46871 has 1 MA's), (74, 46850), (Start: 83 @46802 has 25 MA's), (Start: 84 @46799 has 85 MA's), (116, 46694), (139, 46622), (141, 46604), (153, 46538), (176, 46433), (182, 46373), (183, 46370), (193, 46283), (196, 46262),

Gene: Obama12_79 Start: 47172, Stop: 46588, Start Num: 84

Candidate Starts for Obama12_79:

(56, 47322), (Start: 68 @47244 has 1 MA's), (74, 47223), (Start: 83 @47175 has 25 MA's), (Start: 84 @47172 has 85 MA's), (116, 47067), (139, 46995), (141, 46977), (153, 46911), (176, 46806), (182, 46746), (183, 46743), (193, 46656), (196, 46635),

Gene: Ohfah_79 Start: 46791, Stop: 46204, Start Num: 83

Candidate Starts for Ohfah_79:

(56, 46938), (Start: 68 @46860 has 1 MA's), (74, 46839), (Start: 83 @46791 has 25 MA's), (Start: 84 @46788 has 85 MA's), (116, 46683), (139, 46611), (141, 46593), (153, 46527), (182, 46362), (183, 46359), (193, 46272), (196, 46251),

Gene: Orcanus_41 Start: 28182, Stop: 28904, Start Num: 94

Candidate Starts for Orcanus_41:

(Start: 51 @27906 has 3 MA's), (62, 27987), (Start: 68 @28023 has 1 MA's), (79, 28071), (82, 28089), (Start: 94 @28182 has 4 MA's), (Start: 95 @28200 has 1 MA's), (99, 28230), (Start: 104 @28302 has 1 MA's), (142, 28503), (145, 28515), (146, 28521), (148, 28524), (157, 28587), (173, 28689), (182, 28764), (183, 28767), (198, 28884),

Gene: Peaches_76 Start: 46747, Stop: 46163, Start Num: 84

Candidate Starts for Peaches_76:

(56, 46897), (Start: 68 @46819 has 1 MA's), (74, 46798), (Start: 83 @46750 has 25 MA's), (Start: 84 @46747 has 85 MA's), (116, 46642), (139, 46570), (141, 46552), (153, 46486), (176, 46381), (182, 46321), (183, 46318), (193, 46231), (196, 46210),

Gene: Perplexer_75 Start: 46531, Stop: 45959, Start Num: 86

Candidate Starts for Perplexer_75:

(56, 46693), (Start: 68 @46615 has 1 MA's), (74, 46594), (Start: 83 @46546 has 25 MA's), (Start: 84 @46543 has 85 MA's), (Start: 86 @46531 has 4 MA's), (116, 46438), (139, 46366), (141, 46348), (153, 46282), (176, 46177), (182, 46117), (183, 46114), (193, 46027), (196, 46006),

Gene: PeterPeter_78 Start: 46742, Stop: 46158, Start Num: 84

Candidate Starts for PeterPeter_78:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (141, 46547), (153, 46481), (176, 46376), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: PetiteSangsue_75 Start: 46546, Stop: 45962, Start Num: 84

Candidate Starts for PetiteSangsue_75:

(56, 46696), (Start: 68 @46618 has 1 MA's), (74, 46597), (Start: 83 @46549 has 25 MA's), (Start: 84 @46546 has 85 MA's), (Start: 86 @46534 has 4 MA's), (116, 46441), (139, 46369), (141, 46351), (153, 46285), (176, 46180), (182, 46120), (183, 46117), (193, 46030), (196, 46009),

Gene: Phacado_78 Start: 46744, Stop: 46160, Start Num: 84

Candidate Starts for Phacado_78:

(56, 46894), (Start: 68 @46816 has 1 MA's), (74, 46795), (Start: 83 @46747 has 25 MA's), (Start: 84 @46744 has 85 MA's), (116, 46639), (139, 46567), (141, 46549), (153, 46483), (176, 46378), (182, 46318), (183, 46315), (193, 46228), (196, 46207),

Gene: Phelipe_79 Start: 46788, Stop: 46204, Start Num: 84

Candidate Starts for Phelipe_79:

(56, 46938), (Start: 68 @46860 has 1 MA's), (74, 46839), (Start: 83 @46791 has 25 MA's), (Start: 84 @46788 has 85 MA's), (116, 46683), (139, 46611), (141, 46593), (153, 46527), (182, 46362), (183, 46359), (193, 46272), (196, 46251),

Gene: Phighter1804_78 Start: 46809, Stop: 46225, Start Num: 84

Candidate Starts for Phighter1804_78:

(56, 46959), (Start: 68 @46881 has 1 MA's), (74, 46860), (Start: 83 @46812 has 25 MA's), (Start: 84 @46809 has 85 MA's), (116, 46704), (139, 46632), (141, 46614), (153, 46548), (176, 46443), (182, 46383), (183, 46380), (193, 46293), (196, 46272),

Gene: PhluffyCoco_43 Start: 27168, Stop: 28064, Start Num: 51

Candidate Starts for PhluffyCoco_43:

(Start: 51 @27168 has 3 MA's), (61, 27234), (62, 27249), (Start: 68 @27285 has 1 MA's), (79, 27333), (81, 27345), (82, 27351), (88, 27375), (Start: 103 @27444 has 1 MA's), (108, 27462), (145, 27666), (146, 27672), (173, 27840), (182, 27915), (183, 27918), (196, 28026), (198, 28035),

Gene: Phontbonne_78 Start: 46643, Stop: 46059, Start Num: 84

Candidate Starts for Phontbonne_78:

(56, 46793), (Start: 68 @46715 has 1 MA's), (74, 46694), (Start: 83 @46646 has 25 MA's), (Start: 84 @46643 has 85 MA's), (116, 46538), (139, 46466), (141, 46448), (153, 46382), (182, 46217), (183, 46214), (193, 46127), (196, 46106),

Gene: Pipcraft_74 Start: 46749, Stop: 46165, Start Num: 84

Candidate Starts for Pipcraft_74:

(56, 46899), (Start: 68 @46821 has 1 MA's), (74, 46800), (Start: 83 @46752 has 25 MA's), (Start: 84 @46749 has 85 MA's), (116, 46644), (139, 46572), (140, 46566), (141, 46554), (153, 46488), (176, 46383), (182, 46323), (183, 46320), (193, 46233), (196, 46212),

Gene: Polymorphads_79 Start: 46772, Stop: 46185, Start Num: 83

Candidate Starts for Polymorphads_79:

(56, 46919), (Start: 68 @46841 has 1 MA's), (74, 46820), (Start: 83 @46772 has 25 MA's), (Start: 84 @46769 has 85 MA's), (116, 46664), (139, 46592), (141, 46574), (153, 46508), (176, 46403), (182, 46343), (183, 46340), (193, 46253), (196, 46232),

Gene: Pumbaa_78 Start: 46696, Stop: 46109, Start Num: 83

Candidate Starts for Pumbaa_78:

(56, 46843), (Start: 68 @46765 has 1 MA's), (74, 46744), (Start: 83 @46696 has 25 MA's), (Start: 84 @46693 has 85 MA's), (116, 46588), (139, 46516), (141, 46498), (153, 46432), (176, 46327), (182, 46267), (183, 46264), (193, 46177), (196, 46156),

Gene: RedFox_43 Start: 27443, Stop: 28063, Start Num: 103

Candidate Starts for RedFox_43:

(Start: 51 @27167 has 3 MA's), (61, 27233), (62, 27248), (Start: 68 @27284 has 1 MA's), (79, 27332), (81, 27344), (82, 27350), (88, 27374), (Start: 103 @27443 has 1 MA's), (108, 27461), (145, 27665), (146, 27671), (173, 27839), (182, 27914), (183, 27917), (196, 28025), (198, 28034),

Gene: Relief_77 Start: 46745, Stop: 46161, Start Num: 84

Candidate Starts for Relief_77:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: RemusLoopin_35 Start: 27467, Stop: 28051, Start Num: 84

Candidate Starts for RemusLoopin_35:

(39, 27230), (41, 27242), (46, 27257), (Start: 68 @27395 has 1 MA's), (80, 27449), (Start: 84 @27467 has 85 MA's), (106, 27569), (151, 27713), (154, 27740), (170, 27797), (183, 27899), (186, 27920), (191, 27977), (198, 28013), (200, 28025),

Gene: Romney_77 Start: 46745, Stop: 46161, Start Num: 84

Candidate Starts for Romney_77:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (140, 46562), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: Roosevelt_76 Start: 46750, Stop: 46166, Start Num: 84

Candidate Starts for Roosevelt_76:

(56, 46900), (Start: 68 @46822 has 1 MA's), (74, 46801), (Start: 83 @46753 has 25 MA's), (Start: 84 @46750 has 85 MA's), (116, 46645), (139, 46573), (141, 46555), (153, 46489), (182, 46324), (183, 46321), (193, 46234), (196, 46213),

Gene: Ruin_78 Start: 46741, Stop: 46157, Start Num: 84

Candidate Starts for Ruin_78:

(56, 46891), (Start: 68 @46813 has 1 MA's), (74, 46792), (Start: 83 @46744 has 25 MA's), (Start: 84 @46741 has 85 MA's), (116, 46636), (139, 46564), (140, 46558), (141, 46546), (153, 46480), (176, 46375), (182, 46315), (183, 46312), (193, 46225), (196, 46204),

Gene: Sabertooth_78 Start: 46756, Stop: 46169, Start Num: 83

Candidate Starts for Sabertooth_78:

(56, 46903), (Start: 68 @46825 has 1 MA's), (74, 46804), (Start: 83 @46756 has 25 MA's), (Start: 84 @46753 has 85 MA's), (116, 46648), (139, 46576), (141, 46558), (153, 46492), (176, 46387), (182, 46327), (183, 46324), (193, 46237), (196, 46216),

Gene: Samora_35 Start: 26872, Stop: 27459, Start Num: 84

Candidate Starts for Samora_35:

(32, 26551), (33, 26563), (46, 26662), (Start: 68 @26800 has 1 MA's), (Start: 84 @26872 has 85 MA's), (106, 26974), (150, 27109), (152, 27127), (154, 27145), (176, 27241), (183, 27304), (187, 27334), (198, 27418),

Gene: Samy_50 Start: 33615, Stop: 34364, Start Num: 50

Candidate Starts for Samy_50:

(20, 33303), (21, 33345), (25, 33414), (30, 33444), (32, 33483), (Start: 50 @33615 has 1 MA's), (Start: 51 @33618 has 3 MA's), (52, 33621), (Start: 68 @33735 has 1 MA's), (85, 33819), (87, 33822), (117, 33933), (168, 34071), (173, 34122), (179, 34152), (183, 34203), (186, 34224), (189, 34260), (191, 34281), (192, 34284), (199, 34320),

Gene: Scamp_78 Start: 46750, Stop: 46166, Start Num: 84

Candidate Starts for Scamp_78:

(56, 46900), (Start: 68 @46822 has 1 MA's), (74, 46801), (Start: 83 @46753 has 25 MA's), (Start: 84 @46750 has 85 MA's), (116, 46645), (139, 46573), (141, 46555), (153, 46489), (176, 46384), (182, 46324), (183, 46321), (193, 46234), (196, 46213),

Gene: Sebastisaurus_35 Start: 27189, Stop: 27773, Start Num: 84

Candidate Starts for Sebastisaurus_35:

(39, 26952), (41, 26964), (46, 26979), (Start: 68 @27117 has 1 MA's), (76, 27153), (Start: 84 @27189 has 85 MA's), (106, 27291), (119, 27324), (151, 27435), (154, 27462), (170, 27519), (171, 27534), (177, 27564), (183, 27621), (186, 27642), (198, 27735), (200, 27747),

Gene: Sedona_6 Start: 4350, Stop: 5051, Start Num: 71

Candidate Starts for Sedona_6:

(6, 3228), (8, 3420), (9, 3450), (10, 3477), (11, 3513), (12, 3549), (14, 3666), (15, 3678), (16, 3765), (17, 3807), (18, 3819), (19, 3825), (23, 3969), (24, 3993), (34, 4089), (36, 4110), (55, 4245), (Start: 71 @4350 has 1 MA's), (90, 4446), (128, 4614), (133, 4635), (137, 4656), (182, 4905), (183, 4908), (184, 4911), (196, 4989),

Gene: Shaka_76 Start: 46746, Stop: 46162, Start Num: 84

Candidate Starts for Shaka_76:

(56, 46896), (Start: 68 @46818 has 1 MA's), (74, 46797), (Start: 83 @46749 has 25 MA's), (Start: 84 @46746 has 85 MA's), (116, 46641), (139, 46569), (141, 46551), (153, 46485), (182, 46320), (183, 46317), (193, 46230), (196, 46209),

Gene: SheldonCooper_78 Start: 47186, Stop: 46602, Start Num: 84

Candidate Starts for SheldonCooper_78:

(56, 47336), (Start: 68 @47258 has 1 MA's), (74, 47237), (Start: 83 @47189 has 25 MA's), (Start: 84 @47186 has 85 MA's), (116, 47081), (139, 47009), (141, 46991), (153, 46925), (182, 46760), (183, 46757), (193, 46670), (196, 46649),

Gene: Shygu2_76 Start: 46692, Stop: 46108, Start Num: 84

Candidate Starts for Shygu2_76:

(56, 46842), (Start: 68 @46764 has 1 MA's), (74, 46743), (Start: 83 @46695 has 25 MA's), (Start: 84 @46692 has 85 MA's), (Start: 86 @46680 has 4 MA's), (116, 46587), (139, 46515), (141, 46497), (153, 46431), (176, 46326), (182, 46266), (183, 46263), (193, 46176), (196, 46155), (202, 46119),

Gene: Skipitt_77 Start: 46745, Stop: 46158, Start Num: 83

Candidate Starts for Skipitt_77:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (140, 46559), (141, 46547), (153, 46481), (176, 46376), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: Sparxx_79 Start: 46747, Stop: 46160, Start Num: 83

Candidate Starts for Sparxx_79:

(56, 46894), (Start: 68 @46816 has 1 MA's), (74, 46795), (Start: 83 @46747 has 25 MA's), (Start: 84 @46744 has 85 MA's), (116, 46639), (139, 46567), (141, 46549), (153, 46483), (182, 46318), (183, 46315), (193, 46228), (196, 46207),

Gene: Spino_77 Start: 46748, Stop: 46164, Start Num: 84

Candidate Starts for Spino_77:

(56, 46898), (Start: 68 @46820 has 1 MA's), (74, 46799), (Start: 83 @46751 has 25 MA's), (Start: 84 @46748 has 85 MA's), (116, 46643), (139, 46571), (141, 46553), (153, 46487), (182, 46322), (183, 46319), (193, 46232), (196, 46211),

Gene: Taquarus_77 Start: 46751, Stop: 46167, Start Num: 84

Candidate Starts for Taquarus_77:

(56, 46901), (Start: 68 @46823 has 1 MA's), (74, 46802), (Start: 83 @46754 has 25 MA's), (Start: 84 @46751 has 85 MA's), (116, 46646), (139, 46574), (141, 46556), (153, 46490), (182, 46325), (183, 46322), (193, 46235), (196, 46214),

Gene: TaylorSipht_41 Start: 27587, Stop: 28306, Start Num: 94

Candidate Starts for TaylorSipht_41:

(Start: 51 @27311 has 3 MA's), (62, 27392), (Start: 68 @27428 has 1 MA's), (Start: 94 @27587 has 4 MA's), (Start: 95 @27605 has 1 MA's), (99, 27635), (Start: 104 @27707 has 1 MA's), (146, 27923), (166, 28034), (173, 28091), (182, 28166), (183, 28169), (198, 28286),

Gene: Tinybot_77 Start: 46778, Stop: 46191, Start Num: 83

Candidate Starts for Tinybot_77:

(56, 46925), (Start: 68 @46847 has 1 MA's), (74, 46826), (Start: 83 @46778 has 25 MA's), (Start: 84 @46775 has 85 MA's), (116, 46670), (139, 46598), (141, 46580), (153, 46514), (176, 46409), (182, 46349), (183, 46346), (193, 46259), (196, 46238),

Gene: TiroTheta9_77 Start: 46742, Stop: 46158, Start Num: 84

Candidate Starts for TiroTheta9_77:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (141, 46547), (153, 46481), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: TroyPia_79 Start: 46786, Stop: 46199, Start Num: 83

Candidate Starts for TroyPia_79:

(56, 46933), (Start: 68 @46855 has 1 MA's), (74, 46834), (Start: 83 @46786 has 25 MA's), (Start: 84 @46783 has 85 MA's), (116, 46678), (139, 46606), (141, 46588), (153, 46522), (182, 46357), (183, 46354), (193, 46267), (196, 46246),

Gene: Ulysses_77 Start: 46431, Stop: 45847, Start Num: 84

Candidate Starts for Ulysses_77:

(56, 46581), (Start: 68 @46503 has 1 MA's), (74, 46482), (Start: 83 @46434 has 25 MA's), (Start: 84 @46431 has 85 MA's), (116, 46326), (139, 46254), (141, 46236), (153, 46170), (182, 46005), (183, 46002), (193, 45915), (196, 45894),

Gene: Upyo_53 Start: 39312, Stop: 38611, Start Num: 95

Candidate Starts for Upyo_53:

(22, 39840), (27, 39783), (37, 39687), (60, 39534), (65, 39492), (Start: 68 @39477 has 1 MA's), (73, 39459), (80, 39423), (89, 39381), (Start: 95 @39312 has 1 MA's), (96, 39306), (100, 39270), (111, 39198), (121, 39132), (157, 38925), (162, 38898), (163, 38889), (178, 38799), (182, 38748), (183, 38745), (191, 38667), (196, 38640),

Gene: Vash_33 Start: 26115, Stop: 26702, Start Num: 84

Candidate Starts for Vash_33:

(25, 25725), (29, 25752), (32, 25794), (46, 25905), (Start: 68 @26043 has 1 MA's), (Start: 84 @26115 has 85 MA's), (170, 26445), (177, 26490), (180, 26514), (182, 26544), (183, 26547), (187, 26577), (198, 26661), (200, 26673),

Gene: Wander_78 Start: 46742, Stop: 46158, Start Num: 84

Candidate Starts for Wander_78:

(56, 46892), (Start: 68 @46814 has 1 MA's), (74, 46793), (Start: 83 @46745 has 25 MA's), (Start: 84 @46742 has 85 MA's), (116, 46637), (139, 46565), (141, 46547), (153, 46481), (176, 46376), (182, 46316), (183, 46313), (193, 46226), (196, 46205),

Gene: Wilbur_78 Start: 46745, Stop: 46161, Start Num: 84

Candidate Starts for Wilbur_78:

(56, 46895), (Start: 68 @46817 has 1 MA's), (74, 46796), (Start: 83 @46748 has 25 MA's), (Start: 84 @46745 has 85 MA's), (116, 46640), (139, 46568), (140, 46562), (141, 46550), (153, 46484), (176, 46379), (182, 46319), (183, 46316), (193, 46229), (196, 46208),

Gene: Wile_74 Start: 46560, Stop: 45988, Start Num: 86

Candidate Starts for Wile_74:

(56, 46722), (Start: 68 @46644 has 1 MA's), (74, 46623), (Start: 83 @46575 has 25 MA's), (Start: 84 @46572 has 85 MA's), (Start: 86 @46560 has 4 MA's), (116, 46467), (139, 46395), (141, 46377), (153, 46311), (176, 46206), (182, 46146), (183, 46143), (193, 46056), (196, 46035), (202, 45999),

Gene: Wizard007_75 Start: 46286, Stop: 45714, Start Num: 86

Candidate Starts for Wizard007_75:

(56, 46448), (Start: 68 @46370 has 1 MA's), (74, 46349), (Start: 83 @46301 has 25 MA's), (Start: 84 @46298 has 85 MA's), (Start: 86 @46286 has 4 MA's), (116, 46193), (139, 46121), (141, 46103), (153, 46037), (176, 45932), (182, 45872), (183, 45869), (193, 45782), (196, 45761), (202, 45725),

Gene: Xena_74 Start: 46567, Stop: 45983, Start Num: 84

Candidate Starts for Xena_74:

(56, 46717), (Start: 68 @46639 has 1 MA's), (74, 46618), (Start: 83 @46570 has 25 MA's), (Start: 84 @46567 has 85 MA's), (116, 46462), (139, 46390), (141, 46372), (153, 46306), (176, 46201), (182, 46141), (183, 46138), (193, 46051), (196, 46030),

Gene: YoSam321_78 Start: 46746, Stop: 46159, Start Num: 83

Candidate Starts for YoSam321_78:

(56, 46893), (Start: 68 @46815 has 1 MA's), (74, 46794), (Start: 83 @46746 has 25 MA's), (Start: 84 @46743 has 85 MA's), (116, 46638), (139, 46566), (141, 46548), (153, 46482), (182, 46317), (183, 46314), (193, 46227), (196, 46206),