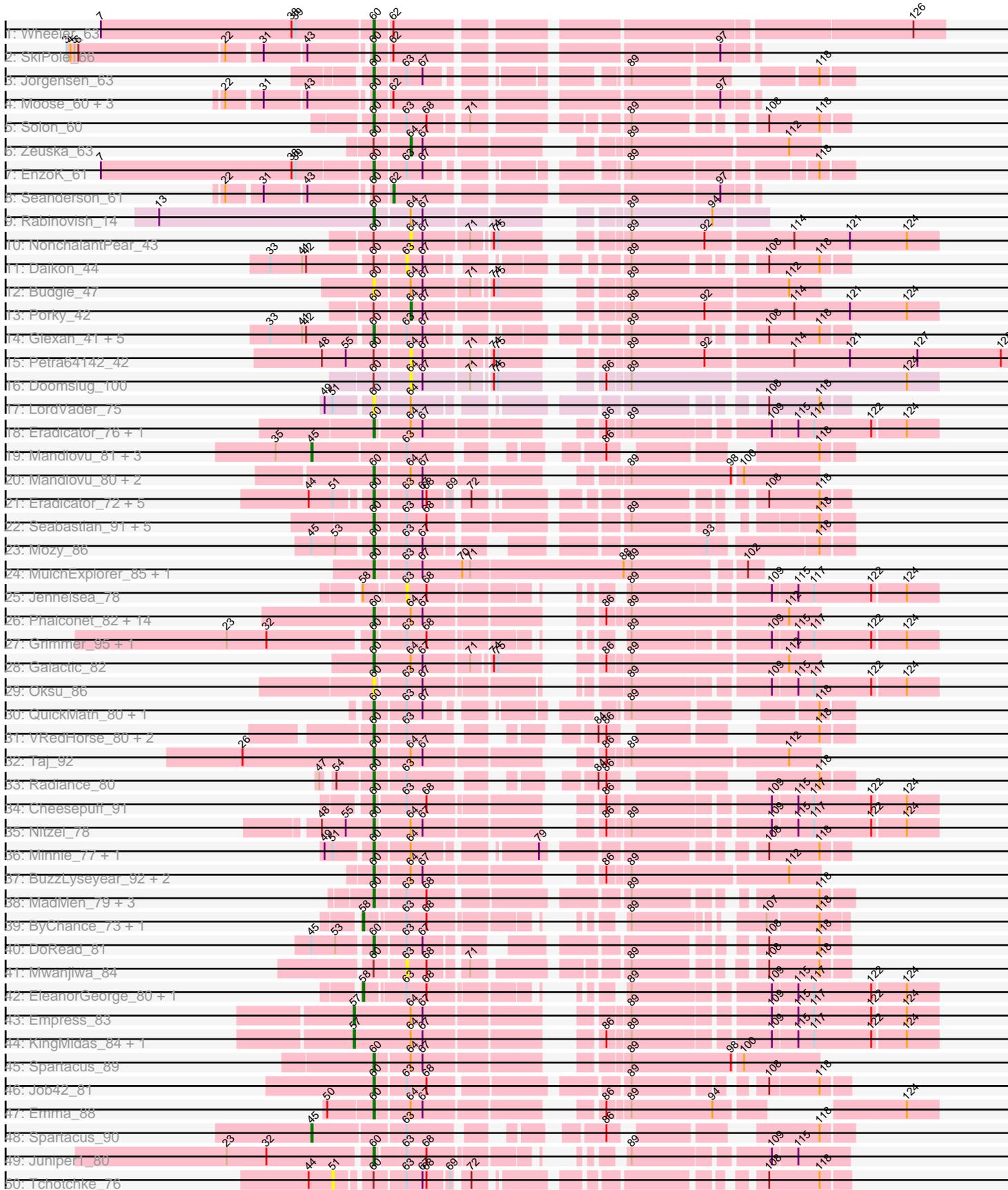
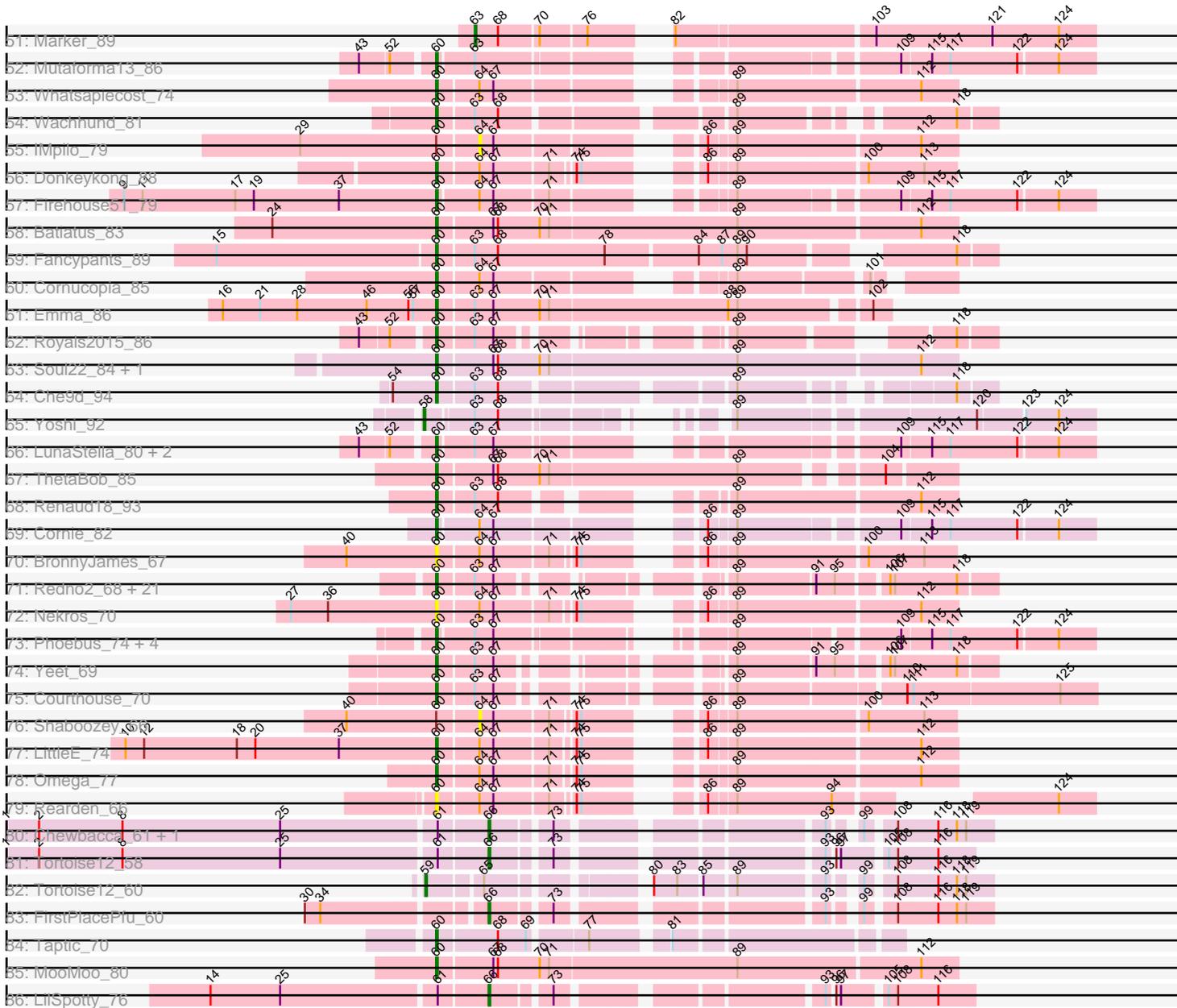


Pham 283542



Pham 283542



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 283542 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283542 has 167 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Wheeler_63
- Track 2 : SkiPole_66
- Track 3 : Jorgensen_63
- Track 4 : Moose_60, SwissCheese_62, Forsytheast_60, Bruns_60
- Track 5 : Solon_60
- Track 6 : Zeuska_63
- Track 7 : EnzoK_61
- Track 8 : Seanderson_61
- Track 9 : Rabinovish_14
- Track 10 : NonchalantPear_43
- Track 11 : Daikon_44
- Track 12 : Budgie_47
- Track 13 : Porky_42
- Track 14 : Glexan_41, Traaww1_40, Balomoji_42, Gator_41, Flypotenuse_38, Harella_43
- Track 15 : Petra64142_42
- Track 16 : Doomslug_100
- Track 17 : LordVader_75
- Track 18 : Eradicator_76, Violac_87
- Track 19 : Mandlovu_81, Hlubikazi_81, Hades_81, Strokeseat_81
- Track 20 : Mandlovu_80, Hlubikazi_80, Strokeseat_80
- Track 21 : Eradicator_72, KashFlow_68, Cali_17, Sprinklers_16, BadAgartude_17, SuperGrey_82
- Track 22 : Seabastian_91, Ochi17_89, OfUltron_91, Llama_90, Jinglebell_90, Modragons_88
- Track 23 : Mozy_86
- Track 24 : MulchExplorer_85, Kimberlium_83
- Track 25 : Jennelsea_78
- Track 26 : Phalconet_82, Byougenkin_82, Royals2015_90, Tweety_86, PhesterPhotato_89, Quico_91, Wee_91, PopTart_77, Eish_88, Medindi_89, SassyB_77, Girafales_91, Florinda_94, DeadP_86, Blexus_80
- Track 27 : Grimmer_95, Mahavrat_81
- Track 28 : Galactic_82
- Track 29 : Oksu_86
- Track 30 : QuickMath_80, Juice456_78
- Track 31 : VRedHorse_80, Pacc40_73, Cornucopia_81
- Track 32 : Taj_92

- Track 33 : Radiance_80
- Track 34 : Cheesepuff_91
- Track 35 : Nitzel_78
- Track 36 : Minnie_77, Sandalphon_75
- Track 37 : BuzzLyseyear_92, Krakatau_77, Job42_84
- Track 38 : MadMen_79, Sabbb_83, Karhdo_80, Kersh_83
- Track 39 : ByChance_73, ShowerHandel_82
- Track 40 : DoRead_81
- Track 41 : Mwanjiwa_84
- Track 42 : EleanorGeorge_80, Zizzle_86
- Track 43 : Empress_83
- Track 44 : KingMidas_84, Scottish_83
- Track 45 : Spartacus_89
- Track 46 : Job42_81
- Track 47 : Emma_88
- Track 48 : Spartacus_90
- Track 49 : Juniper1_80
- Track 50 : Tchotchke_76
- Track 51 : Marker_89
- Track 52 : Mutaforma13_86
- Track 53 : Whatsapiecost_74
- Track 54 : Wachhund_81
- Track 55 : IMpilo_79
- Track 56 : Donkeykong_88
- Track 57 : Firehouse51_79
- Track 58 : Batiatus_83
- Track 59 : Fancypants_89
- Track 60 : Cornucopia_85
- Track 61 : Emma_86
- Track 62 : Royals2015_86
- Track 63 : Soul22_84, Llij_80
- Track 64 : Che9d_94
- Track 65 : Yoshi_92
- Track 66 : LunaStella_80, ShroomBoi_82, TChen_82
- Track 67 : ThetaBob_85
- Track 68 : Renaud18_93
- Track 69 : Cornie_82
- Track 70 : BronnyJames_67
- Track 71 : Redno2_68, Schatzie_66, Zelink_69, Kalah2_66, DmpstrDiver_71, Superphikiman_69, Beem_71, JuicyJay_70, NihilNomen_72, Ejimix_71, Marleymoo_65, ThreeRngTarjay_69, Halley_73, Dallas_70, Odette_70, Minerva_77, HokkenD_64, Klein_71, Lucky2013_69, Pound_75, Wanda_75, Hughesyang_70
- Track 72 : Nekros_70
- Track 73 : Phoebus_74, Porcelain_71, MiaZeal_72, Squint_72, Ariel_71
- Track 74 : Yeet_69
- Track 75 : Courthouse_70
- Track 76 : Shaboozey_66
- Track 77 : LittleE_74
- Track 78 : Omega_77
- Track 79 : Rearden_66
- Track 80 : Chewbacca_61, ZenTime222_56
- Track 81 : Tortoise12_58
- Track 82 : Tortoise12_60

- Track 83 : FirstPlacePfu_60
- Track 84 : Taptic_70
- Track 85 : MooMoo_80
- Track 86 : LilSpotty_76

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

The start number called the most often in the published annotations is 60, it was called in 124 of the 147 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_71, BadAgartude_17, Balomoji_42, Batiatus_83, Beem_71, Blexus_80, BronnyJames_67, Bruns_60, Budgie_47, BuzzLyseyear_92, Byougenkin_82, Cali_17, Che9d_94, CheesePuff_91, Cornie_82, Cornucopia_81, Cornucopia_85, Courthouse_70, Dallas_70, DeadP_86, DmpstrDiver_71, DoRead_81, Donkeykong_88, Eish_88, Ejimix_71, Emma_86, Emma_88, EnzoK_61, Eradicator_72, Eradicator_76, Fancypants_89, Firehouse51_79, Florinda_94, Flypotenuse_38, Forsytheast_60, Galactic_82, Gator_41, Girafales_91, Glexan_41, Grimmer_95, Halley_73, Harella_43, Hlubikazi_80, HokkenD_64, Hughesyang_70, Jinglebell_90, Job42_81, Job42_84, Jorgensen_63, Juice456_78, JuicyJay_70, Juniper1_80, Kalah2_66, Karhdo_80, KashFlow_68, Kersh_83, Kimberlium_83, Klein_71, Krakatau_77, LittleE_74, Llama_90, Llij_80, LordVader_75, Lucky2013_69, LunaStella_80, MadMen_79, Mahavrat_81, Mandlovu_80, Marleymoo_65, Medindi_89, MiaZeal_72, Minerva_77, Minnie_77, Modragons_88, MooMoo_80, Moose_60, Mozy_86, MulchExplorer_85, Mutaforma13_86, Nekros_70, NihilNomen_72, Nitzel_78, Ochi17_89, Odette_70, OfUltron_91, Oksu_86, Omega_77, Pacc40_73, Phalconet_82, PhesterPhotato_89, Phoebus_74, PopTart_77, Porcelain_71, Pound_75, QuickMath_80, Quico_91, Rabinovish_14, Radiance_80, Rearden_66, Redno2_68, Renaud18_93, Royals2015_86, Royals2015_90, Sabbb_83, Sandalphon_75, SassyB_77, Schatzie_66, Sebastian_91, ShroomBoi_82, SkiPole_66, Solon_60, Soul22_84, Spartacus_89, Sprinklers_16, Squint_72, Strokeseat_80, SuperGrey_82, Superphikiman_69, SwissCheese_62, TChen_82, Taj_92, Taptic_70, ThetaBob_85, ThreeRngTarjay_69, Traaww1_40, Tweety_86, VRedHorse_80, Violac_87, Wachhund_81, Wanda_75, Wee_91, Whatsapiecost_74, Wheeler_63, Yeet_69, Zelink_69,

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

- Daikon_44, Doomslug_100, IMpilo_79, Mwanjiwa_84, NonchalantPear_43, Petra64142_42, Porky_42, Seanderson_61, Shaboozey_66, Tchotchke_76, Zeuska_63,

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

- ByChance_73, Chewbacca_61, EleanorGeorge_80, Empress_83, FirstPlacePfu_60, Hades_81, Hlubikazi_81, Jennelsea_78, KingMidas_84, LilSpotty_76, Mandlovu_81, Marker_89, Scottish_83, ShowerHandel_82, Spartacus_90, Strokeseat_81, Tortoise12_58, Tortoise12_60, Yoshi_92, ZenTime222_56, Zizzle_86,

Summary by start number:

Start 45:

- Found in 7 of 167 (4.2%) of genes in pham
- Manual Annotations of this start: 5 of 147
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Hades_81 (F1), Hlubikazi_81 (F1), Mandlovu_81 (F1), Spartacus_90 (F1), Strokeseat_81 (F1),

Start 51:

- Found in 10 of 167 (6.0%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Tchotchke_76 (F1),

Start 57:

- Found in 4 of 167 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 147
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Empress_83 (F1), KingMidas_84 (F1), Scottish_83 (F1),

Start 58:

- Found in 6 of 167 (3.6%) of genes in pham
- Manual Annotations of this start: 5 of 147
- Called 83.3% of time when present
- Phage (with cluster) where this start called: ByChance_73 (F1), EleanorGeorge_80 (F1), ShowerHandel_82 (F1), Yoshi_92 (F2), Zizzle_86 (F1),

Start 59:

- Found in 1 of 167 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 147
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tortoise12_60 (N),

Start 60:

- Found in 146 of 167 (87.4%) of genes in pham
- Manual Annotations of this start: 124 of 147
- Called 92.5% of time when present
- Phage (with cluster) where this start called: Ariel_71 (J), BadAgartude_17 (C1), Balomoji_42 (E), Batiatus_83 (F1), Beem_71 (J), Blexus_80 (F1), BronnyJames_67 (J), Bruns_60 (A1), Budgie_47 (E), BuzzLyseyear_92 (F1), Byougenkin_82 (F1), Cali_17 (C1), Che9d_94 (F2), Cheesepuff_91 (F1), Cornie_82 (F5), Cornucopia_81 (F1), Cornucopia_85 (F1), Courthouse_70 (J), Dallas_70 (J), DeadP_86 (F1), DmpstrDiver_71 (J), DoRead_81 (F1), Donkeykong_88 (F1), Eish_88 (F1), Ejimix_71 (J), Emma_86 (F1), Emma_88 (F1), EnzoK_61 (A1), Eradicator_72 (F1), Eradicator_76 (F1), Fancypants_89 (F1), Firehouse51_79 (F1), Florinda_94 (F1), Flypotenuse_38 (E), Forsytheast_60 (A1), Galactic_82 (F1), Gator_41 (E), Girafales_91 (F1), Glexan_41 (E), Grimmer_95 (F1), Halley_73 (J), Harella_43 (E), Hlubikazi_80 (F1), HokkenD_64 (J), Hughesyang_70 (J), Jinglebell_90 (F1), Job42_81 (F1), Job42_84 (F1), Jorgensen_63 (A1), Juice456_78 (F1), JuicyJay_70 (J), Juniper1_80 (F1), Kalah2_66 (J), Karhdo_80 (F1), KashFlow_68 (J), Kersh_83 (F1), Kimberlium_83 (F1), Klein_71 (J), Krakatau_77 (F1), LittleE_74 (J), Llama_90 (F1), Llij_80 (F1), LordVader_75 (F), Lucky2013_69 (J), LunaStella_80 (F4), MadMen_79 (F1), Mahavrat_81 (F1), Mandlovu_80 (F1), Marleymoo_65 (J), Medindi_89 (F1), MiaZeal_72 (J), Minerva_77 (J), Minnie_77 (F1), Modragons_88

(F1), MooMoo_80 (singleton), Moose_60 (A1), Mozy_86 (F1), MulchExplorer_85 (F1), Mutaforma13_86 (F1), Nekros_70 (J), NihilNomen_72 (J), Nitzel_78 (F1), Ochi17_89 (F1), Odette_70 (J), OfUltron_91 (F1), Oksu_86 (F1), Omega_77 (J), Pacc40_73 (F1), Phalconet_82 (F1), PhesterPotato_89 (F1), Phoebus_74 (J), PopTart_77 (F1), Porcelain_71 (J), Pound_75 (J), QuickMath_80 (F1), Quico_91 (F1), Rabinovich_14 (C1), Radiance_80 (F1), Rearden_66 (J), Redno2_68 (J), Renaud18_93 (F4), Royals2015_86 (F1), Royals2015_90 (F1), Sabb_83 (F1), Sandalphon_75 (F1), SassyB_77 (F1), Schatzie_66 (J), Seabastian_91 (F1), ShroomBoi_82 (F1), SkiPole_66 (A1), Solon_60 (A1), Soul22_84 (F2), Spartacus_89 (F1), Sprinklers_16 (C1), Squint_72 (J), Strokeseat_80 (F1), SuperGrey_82 (F1), Superphikiman_69 (J), SwissCheese_62 (A1), TChen_82 (F4), Taj_92 (F1), Taptic_70 (W), ThetaBob_85 (F4), ThreeRngTarjay_69 (J), Traaww1_40 (E), Tweety_86 (F1), VRedHorse_80 (F1), Violac_87 (F1), Wachhund_81 (F1), Wanda_75 (J), Wee_91 (F1), Whatsapiecost_74 (F1), Wheeler_63 (A1), Yeet_69 (J), Zelink_69 (J),

Start 62:

- Found in 7 of 167 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 147
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Seanderson_61 (A1),

Start 63:

- Found in 95 of 167 (56.9%) of genes in pham
- Manual Annotations of this start: 1 of 147
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Daikon_44 (E), Jennelsea_78 (F1), Marker_89 (F1), Mwanjiwa_84 (F1),

Start 64:

- Found in 53 of 167 (31.7%) of genes in pham
- Manual Annotations of this start: 2 of 147
- Called 13.2% of time when present
- Phage (with cluster) where this start called: Doomslug_100 (F), IMpilo_79 (F1), NonchalantPear_43 (E), Petra64142_42 (E), Porky_42 (E), Shaboozey_66 (J), Zeuska_63 (A1),

Start 66:

- Found in 5 of 167 (3.0%) of genes in pham
- Manual Annotations of this start: 5 of 147
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chewbacca_61 (N), FirstPlacePfu_60 (P1), LilSpotty_76 (singleton), Tortoise12_58 (N), ZenTime222_56 (T),

Summary by clusters:

There are 14 clusters represented in this pham: F1, F2, P1, F4, F5, F, J, singleton, N, A1, T, W, E, C1,

Info for manual annotations of cluster A1:

- Start number 60 was manually annotated 9 times for cluster A1.
- Start number 62 was manually annotated 1 time for cluster A1.
- Start number 64 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster C1:

- Start number 60 was manually annotated 4 times for cluster C1.

Info for manual annotations of cluster E:

- Start number 60 was manually annotated 6 times for cluster E.
- Start number 64 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster F1:

- Start number 45 was manually annotated 5 times for cluster F1.
- Start number 57 was manually annotated 3 times for cluster F1.
- Start number 58 was manually annotated 4 times for cluster F1.
- Start number 60 was manually annotated 66 times for cluster F1.
- Start number 63 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 58 was manually annotated 1 time for cluster F2.
- Start number 60 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 60 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 60 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster J:

- Start number 60 was manually annotated 30 times for cluster J.

Info for manual annotations of cluster N:

- Start number 59 was manually annotated 1 time for cluster N.
- Start number 66 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 66 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster T:

- Start number 66 was manually annotated 1 time for cluster T.

Info for manual annotations of cluster W:

- Start number 60 was manually annotated 1 time for cluster W.

Gene Information:

Gene: Ariel_71 Start: 45936, Stop: 45583, Start Num: 60

Candidate Starts for Ariel_71:

(Start: 60 @45936 has 124 MA's), (Start: 63 @45915 has 1 MA's), (67, 45903), (89, 45795), (109, 45702), (115, 45684), (117, 45672), (122, 45630), (124, 45606),

Gene: BadAgartude_17 Start: 5514, Stop: 5792, Start Num: 60

Candidate Starts for BadAgartude_17:

(44, 5475), (51, 5493), (Start: 60 @5514 has 124 MA's), (Start: 63 @5535 has 1 MA's), (67, 5547), (68, 5550), (69, 5565), (72, 5574), (108, 5736), (118, 5772),

Gene: Balomoji_42 Start: 35703, Stop: 35428, Start Num: 60

Candidate Starts for Balomoji_42:

(33, 35775), (41, 35751), (42, 35748), (Start: 60 @35703 has 124 MA's), (Start: 63 @35682 has 1 MA's), (67, 35670), (89, 35562), (108, 35484), (118, 35448),

Gene: Batiatus_83 Start: 49708, Stop: 50034, Start Num: 60

Candidate Starts for Batiatus_83:

(24, 49603), (Start: 60 @49708 has 124 MA's), (67, 49741), (68, 49744), (70, 49771), (71, 49777), (89, 49897), (112, 50011),

Gene: Beem_71 Start: 50213, Stop: 49920, Start Num: 60

Candidate Starts for Beem_71:

(Start: 60 @50213 has 124 MA's), (Start: 63 @50192 has 1 MA's), (67, 50180), (89, 50072), (91, 50024), (95, 50012), (106, 49985), (107, 49982), (118, 49943),

Gene: Blexus_80 Start: 49926, Stop: 50210, Start Num: 60

Candidate Starts for Blexus_80:

(Start: 60 @49926 has 124 MA's), (Start: 64 @49950 has 2 MA's), (67, 49959), (86, 50058), (89, 50073), (112, 50187),

Gene: BronnyJames_67 Start: 44925, Stop: 44647, Start Num: 60

Candidate Starts for BronnyJames_67:

(40, 44982), (Start: 60 @44925 has 124 MA's), (Start: 64 @44901 has 2 MA's), (67, 44892), (71, 44859), (74, 44847), (75, 44844), (86, 44796), (89, 44781), (100, 44703), (113, 44667),

Gene: Bruns_60 Start: 39755, Stop: 39507, Start Num: 60

Candidate Starts for Bruns_60:

(22, 39851), (31, 39827), (43, 39797), (Start: 60 @39755 has 124 MA's), (Start: 62 @39743 has 1 MA's), (97, 39530),

Gene: Budgie_47 Start: 35211, Stop: 34930, Start Num: 60

Candidate Starts for Budgie_47:

(Start: 60 @35211 has 124 MA's), (Start: 64 @35187 has 2 MA's), (67, 35178), (71, 35145), (74, 35133), (75, 35130), (89, 35067), (112, 34953),

Gene: BuzzLyseyear_92 Start: 52666, Stop: 52950, Start Num: 60

Candidate Starts for BuzzLyseyear_92:

(Start: 60 @52666 has 124 MA's), (Start: 64 @52690 has 2 MA's), (67, 52699), (86, 52798), (89, 52813), (112, 52927),

Gene: ByChance_73 Start: 44779, Stop: 45045, Start Num: 58

Candidate Starts for ByChance_73:

(Start: 58 @44779 has 5 MA's), (Start: 63 @44806 has 1 MA's), (68, 44821), (89, 44911), (107, 44989), (118, 45025),

Gene: Byougenkin_82 Start: 47350, Stop: 47634, Start Num: 60

Candidate Starts for Byougenkin_82:

(Start: 60 @47350 has 124 MA's), (Start: 64 @47374 has 2 MA's), (67, 47383), (86, 47482), (89, 47497), (112, 47611),

Gene: Cali_17 Start: 6490, Stop: 6768, Start Num: 60

Candidate Starts for Cali_17:

(44, 6451), (51, 6469), (Start: 60 @6490 has 124 MA's), (Start: 63 @6511 has 1 MA's), (67, 6523), (68, 6526), (69, 6541), (72, 6550), (108, 6712), (118, 6748),

Gene: Che9d_94 Start: 49583, Stop: 49876, Start Num: 60

Candidate Starts for Che9d_94:

(54, 49556), (Start: 60 @49583 has 124 MA's), (Start: 63 @49604 has 1 MA's), (68, 49619), (89, 49745), (118, 49853),

Gene: Cheesepuff_91 Start: 49733, Stop: 50089, Start Num: 60

Candidate Starts for Cheesepuff_91:

(Start: 60 @49733 has 124 MA's), (Start: 63 @49754 has 1 MA's), (68, 49769), (86, 49862), (109, 49970), (115, 49988), (117, 50000), (122, 50042), (124, 50066),

Gene: Chewbacca_61 Start: 37859, Stop: 38119, Start Num: 66

Candidate Starts for Chewbacca_61:

(1, 37556), (2, 37577), (8, 37631), (25, 37733), (61, 37829), (Start: 66 @37859 has 5 MA's), (73, 37892), (93, 38033), (99, 38045), (108, 38060), (116, 38084), (118, 38096), (119, 38102),

Gene: Cornie_82 Start: 48423, Stop: 48782, Start Num: 60

Candidate Starts for Cornie_82:

(Start: 60 @48423 has 124 MA's), (Start: 64 @48447 has 2 MA's), (67, 48456), (86, 48555), (89, 48570), (109, 48663), (115, 48681), (117, 48693), (122, 48735), (124, 48759),

Gene: Cornucopia_81 Start: 47550, Stop: 47819, Start Num: 60

Candidate Starts for Cornucopia_81:

(Start: 60 @47550 has 124 MA's), (Start: 63 @47571 has 1 MA's), (84, 47670), (86, 47676), (118, 47796),

Gene: Cornucopia_85 Start: 48642, Stop: 48905, Start Num: 60

Candidate Starts for Cornucopia_85:

(Start: 60 @48642 has 124 MA's), (Start: 64 @48666 has 2 MA's), (67, 48675), (89, 48789), (101, 48864),

Gene: Courthouse_70 Start: 46345, Stop: 45986, Start Num: 60

Candidate Starts for Courthouse_70:

(Start: 60 @46345 has 124 MA's), (Start: 63 @46324 has 1 MA's), (67, 46312), (89, 46204), (110, 46105), (111, 46102), (125, 46009),

Gene: Daikon_44 Start: 35703, Stop: 35449, Start Num: 63

Candidate Starts for Daikon_44:

(33, 35796), (41, 35772), (42, 35769), (Start: 60 @35724 has 124 MA's), (Start: 63 @35703 has 1 MA's), (67, 35691), (89, 35583), (108, 35505), (118, 35469),

Gene: Dallas_70 Start: 49134, Stop: 48841, Start Num: 60

Candidate Starts for Dallas_70:

(Start: 60 @49134 has 124 MA's), (Start: 63 @49113 has 1 MA's), (67, 49101), (89, 48993), (91, 48945), (95, 48933), (106, 48906), (107, 48903), (118, 48864),

Gene: DeadP_86 Start: 49174, Stop: 49458, Start Num: 60

Candidate Starts for DeadP_86:

(Start: 60 @49174 has 124 MA's), (Start: 64 @49198 has 2 MA's), (67, 49207), (86, 49306), (89, 49321), (112, 49435),

Gene: DmpstrDiver_71 Start: 49561, Stop: 49268, Start Num: 60

Candidate Starts for DmpstrDiver_71:

(Start: 60 @49561 has 124 MA's), (Start: 63 @49540 has 1 MA's), (67, 49528), (89, 49420), (91, 49372), (95, 49360), (106, 49333), (107, 49330), (118, 49291),

Gene: DoRead_81 Start: 46952, Stop: 47230, Start Num: 60

Candidate Starts for DoRead_81:

(Start: 45 @46910 has 5 MA's), (53, 46928), (Start: 60 @46952 has 124 MA's), (Start: 63 @46973 has 1 MA's), (67, 46985), (108, 47174), (118, 47210),

Gene: Donkeykong_88 Start: 51342, Stop: 51620, Start Num: 60

Candidate Starts for Donkeykong_88:

(Start: 60 @51342 has 124 MA's), (Start: 64 @51366 has 2 MA's), (67, 51375), (71, 51408), (74, 51420), (75, 51423), (86, 51471), (89, 51486), (100, 51564), (113, 51600),

Gene: Doomslug_100 Start: 52230, Stop: 52574, Start Num: 64

Candidate Starts for Doomslug_100:

(Start: 60 @52206 has 124 MA's), (Start: 64 @52230 has 2 MA's), (67, 52239), (71, 52272), (74, 52284), (75, 52287), (86, 52335), (89, 52350), (124, 52551),

Gene: Eish_88 Start: 51057, Stop: 51341, Start Num: 60

Candidate Starts for Eish_88:

(Start: 60 @51057 has 124 MA's), (Start: 64 @51081 has 2 MA's), (67, 51090), (86, 51189), (89, 51204), (112, 51318),

Gene: Ejimix_71 Start: 50999, Stop: 50706, Start Num: 60

Candidate Starts for Ejimix_71:

(Start: 60 @50999 has 124 MA's), (Start: 63 @50978 has 1 MA's), (67, 50966), (89, 50858), (91, 50810), (95, 50798), (106, 50771), (107, 50768), (118, 50729),

Gene: EleanorGeorge_80 Start: 48792, Stop: 49136, Start Num: 58

Candidate Starts for EleanorGeorge_80:

(Start: 58 @48792 has 5 MA's), (Start: 63 @48819 has 1 MA's), (68, 48834), (89, 48924), (109, 49017), (115, 49035), (117, 49047), (122, 49089), (124, 49113),

Gene: Emma_88 Start: 49160, Stop: 49480, Start Num: 60

Candidate Starts for Emma_88:

(50, 49127), (Start: 60 @49160 has 124 MA's), (Start: 64 @49184 has 2 MA's), (67, 49193), (86, 49292), (89, 49307), (94, 49367), (124, 49457),

Gene: Emma_86 Start: 48537, Stop: 48812, Start Num: 60

Candidate Starts for Emma_86:

(16, 48399), (21, 48423), (28, 48447), (46, 48492), (56, 48519), (Start: 57 @48522 has 3 MA's), (Start: 60 @48537 has 124 MA's), (Start: 63 @48558 has 1 MA's), (67, 48570), (70, 48600), (71, 48606), (88, 48720), (89, 48726), (102, 48801),

Gene: Empress_83 Start: 49521, Stop: 49898, Start Num: 57

Candidate Starts for Empress_83:

(Start: 57 @49521 has 3 MA's), (Start: 64 @49563 has 2 MA's), (67, 49572), (89, 49686), (109, 49779), (115, 49797), (117, 49809), (122, 49851), (124, 49875),

Gene: EnzoK_61 Start: 38364, Stop: 38077, Start Num: 60

Candidate Starts for EnzoK_61:

(7, 38565), (38, 38421), (39, 38418), (Start: 60 @38364 has 124 MA's), (Start: 63 @38343 has 1 MA's), (67, 38331), (89, 38223), (118, 38100),

Gene: Eradicator_76 Start: 47953, Stop: 48312, Start Num: 60

Candidate Starts for Eradicator_76:

(Start: 60 @47953 has 124 MA's), (Start: 64 @47977 has 2 MA's), (67, 47986), (86, 48085), (89, 48100), (109, 48193), (115, 48211), (117, 48223), (122, 48265), (124, 48289),

Gene: Eradicator_72 Start: 46896, Stop: 47174, Start Num: 60

Candidate Starts for Eradicator_72:

(44, 46857), (51, 46875), (Start: 60 @46896 has 124 MA's), (Start: 63 @46917 has 1 MA's), (67, 46929), (68, 46932), (69, 46947), (72, 46956), (108, 47118), (118, 47154),

Gene: Fancypants_89 Start: 51307, Stop: 51630, Start Num: 60

Candidate Starts for Fancypants_89:

(15, 51169), (Start: 60 @51307 has 124 MA's), (Start: 63 @51328 has 1 MA's), (68, 51343), (78, 51412), (84, 51469), (87, 51484), (89, 51493), (90, 51499), (118, 51607),

Gene: Firehouse51_79 Start: 50692, Stop: 51051, Start Num: 60

Candidate Starts for Firehouse51_79:

(9, 50491), (11, 50503), (17, 50563), (19, 50575), (37, 50629), (Start: 60 @50692 has 124 MA's), (Start: 64 @50716 has 2 MA's), (67, 50725), (71, 50758), (89, 50839), (109, 50932), (115, 50950), (117, 50962), (122, 51004), (124, 51028),

Gene: FirstPlacePfu_60 Start: 37764, Stop: 38024, Start Num: 66

Candidate Starts for FirstPlacePfu_60:

(30, 37662), (34, 37671), (Start: 66 @37764 has 5 MA's), (73, 37797), (93, 37938), (99, 37950), (108, 37965), (116, 37989), (118, 38001), (119, 38007),

Gene: Florinda_94 Start: 51591, Stop: 51875, Start Num: 60

Candidate Starts for Florinda_94:

(Start: 60 @51591 has 124 MA's), (Start: 64 @51615 has 2 MA's), (67, 51624), (86, 51723), (89, 51738), (112, 51852),

Gene: Flypotenuse_38 Start: 34455, Stop: 34180, Start Num: 60

Candidate Starts for Flypotenuse_38:

(33, 34527), (41, 34503), (42, 34500), (Start: 60 @34455 has 124 MA's), (Start: 63 @34434 has 1 MA's), (67, 34422), (89, 34314), (108, 34236), (118, 34200),

Gene: Forsytheast_60 Start: 39923, Stop: 39675, Start Num: 60

Candidate Starts for Forsytheast_60:

(22, 40019), (31, 39995), (43, 39965), (Start: 60 @39923 has 124 MA's), (Start: 62 @39911 has 1 MA's), (97, 39698),

Gene: Galactic_82 Start: 48872, Stop: 49156, Start Num: 60

Candidate Starts for Galactic_82:

(Start: 60 @48872 has 124 MA's), (Start: 64 @48899 has 2 MA's), (67, 48908), (71, 48941), (74, 48953), (75, 48956), (86, 49004), (89, 49019), (112, 49133),

Gene: Gator_41 Start: 35594, Stop: 35319, Start Num: 60

Candidate Starts for Gator_41:

(33, 35666), (41, 35642), (42, 35639), (Start: 60 @35594 has 124 MA's), (Start: 63 @35573 has 1 MA's), (67, 35561), (89, 35453), (108, 35375), (118, 35339),

Gene: Girafales_91 Start: 51196, Stop: 51480, Start Num: 60

Candidate Starts for Girafales_91:

(Start: 60 @51196 has 124 MA's), (Start: 64 @51220 has 2 MA's), (67, 51229), (86, 51328), (89, 51343), (112, 51457),

Gene: Glexan_41 Start: 35582, Stop: 35307, Start Num: 60

Candidate Starts for Glexan_41:

(33, 35654), (41, 35630), (42, 35627), (Start: 60 @35582 has 124 MA's), (Start: 63 @35561 has 1 MA's), (67, 35549), (89, 35441), (108, 35363), (118, 35327),

Gene: Grimmer_95 Start: 50263, Stop: 50601, Start Num: 60

Candidate Starts for Grimmer_95:

(23, 50158), (32, 50188), (Start: 60 @50263 has 124 MA's), (Start: 63 @50284 has 1 MA's), (68, 50299), (89, 50389), (109, 50482), (115, 50500), (117, 50512), (122, 50554), (124, 50578),

Gene: Hades_81 Start: 47173, Stop: 47484, Start Num: 45

Candidate Starts for Hades_81:

(35, 47146), (Start: 45 @47173 has 5 MA's), (Start: 63 @47236 has 1 MA's), (86, 47341), (118, 47461),

Gene: Halley_73 Start: 50213, Stop: 49920, Start Num: 60

Candidate Starts for Halley_73:

(Start: 60 @50213 has 124 MA's), (Start: 63 @50192 has 1 MA's), (67, 50180), (89, 50072), (91, 50024), (95, 50012), (106, 49985), (107, 49982), (118, 49943),

Gene: Harella_43 Start: 36098, Stop: 35823, Start Num: 60

Candidate Starts for Harella_43:

(33, 36170), (41, 36146), (42, 36143), (Start: 60 @36098 has 124 MA's), (Start: 63 @36077 has 1 MA's), (67, 36065), (89, 35957), (108, 35879), (118, 35843),

Gene: Hlubikazi_81 Start: 47588, Stop: 47899, Start Num: 45

Candidate Starts for Hlubikazi_81:

(35, 47561), (Start: 45 @47588 has 5 MA's), (Start: 63 @47651 has 1 MA's), (86, 47756), (118, 47876),

Gene: Hlubikazi_80 Start: 47314, Stop: 47595, Start Num: 60

Candidate Starts for Hlubikazi_80:

(Start: 60 @47314 has 124 MA's), (Start: 64 @47338 has 2 MA's), (67, 47347), (89, 47461), (98, 47533), (100, 47539),

Gene: HokkenD_64 Start: 48482, Stop: 48189, Start Num: 60

Candidate Starts for HokkenD_64:

(Start: 60 @48482 has 124 MA's), (Start: 63 @48461 has 1 MA's), (67, 48449), (89, 48341), (91, 48293), (95, 48281), (106, 48254), (107, 48251), (118, 48212),

Gene: Hughesyang_70 Start: 50142, Stop: 49849, Start Num: 60

Candidate Starts for Hughesyang_70:

(Start: 60 @50142 has 124 MA's), (Start: 63 @50121 has 1 MA's), (67, 50109), (89, 50001), (91, 49953), (95, 49941), (106, 49914), (107, 49911), (118, 49872),

Gene: IMpilo_79 Start: 47727, Stop: 47987, Start Num: 64

Candidate Starts for IMpilo_79:

(29, 47616), (Start: 60 @47703 has 124 MA's), (Start: 64 @47727 has 2 MA's), (67, 47736), (86, 47835), (89, 47850), (112, 47964),

Gene: Jennelsea_78 Start: 48296, Stop: 48613, Start Num: 63

Candidate Starts for Jennelsea_78:

(Start: 58 @48269 has 5 MA's), (Start: 63 @48296 has 1 MA's), (68, 48311), (89, 48401), (109, 48494), (115, 48512), (117, 48524), (122, 48566), (124, 48590),

Gene: Jinglebell_90 Start: 50298, Stop: 50591, Start Num: 60

Candidate Starts for Jinglebell_90:

(Start: 60 @50298 has 124 MA's), (Start: 63 @50319 has 1 MA's), (68, 50334), (89, 50460), (118, 50568),

Gene: Job42_84 Start: 52418, Stop: 52702, Start Num: 60

Candidate Starts for Job42_84:

(Start: 60 @52418 has 124 MA's), (Start: 64 @52442 has 2 MA's), (67, 52451), (86, 52550), (89, 52565), (112, 52679),

Gene: Job42_81 Start: 51522, Stop: 51818, Start Num: 60

Candidate Starts for Job42_81:

(Start: 60 @51522 has 124 MA's), (Start: 63 @51543 has 1 MA's), (68, 51558), (89, 51684), (108, 51762), (118, 51798),

Gene: Jorgensen_63 Start: 40720, Stop: 40448, Start Num: 60

Candidate Starts for Jorgensen_63:

(Start: 60 @40720 has 124 MA's), (Start: 63 @40699 has 1 MA's), (67, 40687), (89, 40579), (118, 40471),

Gene: Juice456_78 Start: 48213, Stop: 48485, Start Num: 60

Candidate Starts for Juice456_78:

(Start: 60 @48213 has 124 MA's), (Start: 63 @48234 has 1 MA's), (67, 48246), (89, 48354), (118, 48462),

Gene: JuicyJay_70 Start: 51347, Stop: 51054, Start Num: 60

Candidate Starts for JuicyJay_70:

(Start: 60 @51347 has 124 MA's), (Start: 63 @51326 has 1 MA's), (67, 51314), (89, 51206), (91, 51158), (95, 51146), (106, 51119), (107, 51116), (118, 51077),

Gene: Juniper1_80 Start: 48708, Stop: 48983, Start Num: 60

Candidate Starts for Juniper1_80:

(23, 48603), (32, 48633), (Start: 60 @48708 has 124 MA's), (Start: 63 @48729 has 1 MA's), (68, 48744), (89, 48834), (109, 48927), (115, 48945),

Gene: Kalah2_66 Start: 49506, Stop: 49213, Start Num: 60

Candidate Starts for Kalah2_66:

(Start: 60 @49506 has 124 MA's), (Start: 63 @49485 has 1 MA's), (67, 49473), (89, 49365), (91, 49317), (95, 49305), (106, 49278), (107, 49275), (118, 49236),

Gene: Karhdo_80 Start: 47607, Stop: 47906, Start Num: 60

Candidate Starts for Karhdo_80:

(Start: 60 @47607 has 124 MA's), (Start: 63 @47628 has 1 MA's), (68, 47643), (89, 47769), (118, 47883),

Gene: KashFlow_68 Start: 45901, Stop: 45623, Start Num: 60

Candidate Starts for KashFlow_68:

(44, 45940), (51, 45922), (Start: 60 @45901 has 124 MA's), (Start: 63 @45880 has 1 MA's), (67, 45868), (68, 45865), (69, 45850), (72, 45841), (108, 45679), (118, 45643),

Gene: Kersh_83 Start: 50793, Stop: 51092, Start Num: 60

Candidate Starts for Kersh_83:

(Start: 60 @50793 has 124 MA's), (Start: 63 @50814 has 1 MA's), (68, 50829), (89, 50955), (118, 51069),

Gene: Kimberlium_83 Start: 48559, Stop: 48834, Start Num: 60

Candidate Starts for Kimberlium_83:

(Start: 60 @48559 has 124 MA's), (Start: 63 @48580 has 1 MA's), (67, 48592), (70, 48622), (71, 48628), (88, 48742), (89, 48748), (102, 48823),

Gene: KingMidas_84 Start: 49936, Stop: 50313, Start Num: 57

Candidate Starts for KingMidas_84:

(Start: 57 @49936 has 3 MA's), (Start: 64 @49978 has 2 MA's), (67, 49987), (86, 50086), (89, 50101), (109, 50194), (115, 50212), (117, 50224), (122, 50266), (124, 50290),

Gene: Klein_71 Start: 49529, Stop: 49236, Start Num: 60

Candidate Starts for Klein_71:

(Start: 60 @49529 has 124 MA's), (Start: 63 @49508 has 1 MA's), (67, 49496), (89, 49388), (91, 49340), (95, 49328), (106, 49301), (107, 49298), (118, 49259),

Gene: Krakatau_77 Start: 45727, Stop: 46011, Start Num: 60

Candidate Starts for Krakatau_77:

(Start: 60 @45727 has 124 MA's), (Start: 64 @45751 has 2 MA's), (67, 45760), (86, 45859), (89, 45874), (112, 45988),

Gene: LilSpotty_76 Start: 44396, Stop: 44653, Start Num: 66

Candidate Starts for LilSpotty_76:

(14, 44225), (25, 44270), (61, 44366), (Start: 66 @44396 has 5 MA's), (73, 44429), (93, 44570), (96, 44573), (97, 44576), (105, 44600), (108, 44606), (116, 44630),

Gene: LittleE_74 Start: 49484, Stop: 49203, Start Num: 60

Candidate Starts for LittleE_74:

(10, 49685), (12, 49673), (18, 49613), (20, 49601), (37, 49547), (Start: 60 @49484 has 124 MA's), (Start: 64 @49460 has 2 MA's), (67, 49451), (71, 49418), (74, 49406), (75, 49403), (86, 49355), (89, 49340), (112, 49226),

Gene: Llama_90 Start: 50154, Stop: 50447, Start Num: 60

Candidate Starts for Llama_90:

(Start: 60 @50154 has 124 MA's), (Start: 63 @50175 has 1 MA's), (68, 50190), (89, 50316), (118, 50424),

Gene: Llij_80 Start: 47508, Stop: 47834, Start Num: 60

Candidate Starts for Llij_80:

(Start: 60 @47508 has 124 MA's), (67, 47541), (68, 47544), (70, 47571), (71, 47577), (89, 47697), (112, 47811),

Gene: LordVader_75 Start: 44278, Stop: 44562, Start Num: 60

Candidate Starts for LordVader_75:

(49, 44248), (51, 44254), (Start: 60 @44278 has 124 MA's), (Start: 64 @44302 has 2 MA's), (108, 44506), (118, 44542),

Gene: Lucky2013_69 Start: 45952, Stop: 45659, Start Num: 60

Candidate Starts for Lucky2013_69:

(Start: 60 @45952 has 124 MA's), (Start: 63 @45931 has 1 MA's), (67, 45919), (89, 45811), (91, 45763), (95, 45751), (106, 45724), (107, 45721), (118, 45682),

Gene: LunaStella_80 Start: 48469, Stop: 48825, Start Num: 60

Candidate Starts for LunaStella_80:

(43, 48427), (52, 48445), (Start: 60 @48469 has 124 MA's), (Start: 63 @48490 has 1 MA's), (67, 48502), (109, 48706), (115, 48724), (117, 48736), (122, 48778), (124, 48802),

Gene: MadMen_79 Start: 47451, Stop: 47750, Start Num: 60

Candidate Starts for MadMen_79:

(Start: 60 @47451 has 124 MA's), (Start: 63 @47472 has 1 MA's), (68, 47487), (89, 47613), (118, 47727),

Gene: Mahavrat_81 Start: 47831, Stop: 48169, Start Num: 60

Candidate Starts for Mahavrat_81:

(23, 47726), (32, 47756), (Start: 60 @47831 has 124 MA's), (Start: 63 @47852 has 1 MA's), (68, 47867), (89, 47957), (109, 48050), (115, 48068), (117, 48080), (122, 48122), (124, 48146),

Gene: Mandlovu_81 Start: 47530, Stop: 47841, Start Num: 45

Candidate Starts for Mandlovu_81:

(35, 47503), (Start: 45 @47530 has 5 MA's), (Start: 63 @47593 has 1 MA's), (86, 47698), (118, 47818),

Gene: Mandlovu_80 Start: 47256, Stop: 47537, Start Num: 60

Candidate Starts for Mandlovu_80:

(Start: 60 @47256 has 124 MA's), (Start: 64 @47280 has 2 MA's), (67, 47289), (89, 47403), (98, 47475), (100, 47481),

Gene: Marker_89 Start: 50064, Stop: 50420, Start Num: 63

Candidate Starts for Marker_89:

(Start: 63 @50064 has 1 MA's), (68, 50079), (70, 50103), (76, 50130), (82, 50160), (103, 50280), (121, 50355), (124, 50397),

Gene: Marleymoo_65 Start: 48325, Stop: 48032, Start Num: 60

Candidate Starts for Marleymoo_65:

(Start: 60 @48325 has 124 MA's), (Start: 63 @48304 has 1 MA's), (67, 48292), (89, 48184), (91, 48136), (95, 48124), (106, 48097), (107, 48094), (118, 48055),

Gene: Medindi_89 Start: 51260, Stop: 51544, Start Num: 60

Candidate Starts for Medindi_89:

(Start: 60 @51260 has 124 MA's), (Start: 64 @51284 has 2 MA's), (67, 51293), (86, 51392), (89, 51407), (112, 51521),

Gene: MiaZeal_72 Start: 46608, Stop: 46255, Start Num: 60

Candidate Starts for MiaZeal_72:

(Start: 60 @46608 has 124 MA's), (Start: 63 @46587 has 1 MA's), (67, 46575), (89, 46467), (109, 46374), (115, 46356), (117, 46344), (122, 46302), (124, 46278),

Gene: Minerva_77 Start: 51629, Stop: 51336, Start Num: 60

Candidate Starts for Minerva_77:

(Start: 60 @51629 has 124 MA's), (Start: 63 @51608 has 1 MA's), (67, 51596), (89, 51488), (91, 51440), (95, 51428), (106, 51401), (107, 51398), (118, 51359),

Gene: Minnie_77 Start: 50537, Stop: 50821, Start Num: 60

Candidate Starts for Minnie_77:

(49, 50507), (51, 50513), (Start: 60 @50537 has 124 MA's), (Start: 64 @50561 has 2 MA's), (79, 50636), (108, 50765), (118, 50801),

Gene: Modragons_88 Start: 50142, Stop: 50435, Start Num: 60

Candidate Starts for Modragons_88:

(Start: 60 @50142 has 124 MA's), (Start: 63 @50163 has 1 MA's), (68, 50178), (89, 50304), (118, 50412),

Gene: MooMoo_80 Start: 48107, Stop: 48433, Start Num: 60

Candidate Starts for MooMoo_80:

(Start: 60 @48107 has 124 MA's), (67, 48140), (68, 48143), (70, 48170), (71, 48176), (89, 48296), (112, 48410),

Gene: Moose_60 Start: 39923, Stop: 39675, Start Num: 60

Candidate Starts for Moose_60:

(22, 40019), (31, 39995), (43, 39965), (Start: 60 @39923 has 124 MA's), (Start: 62 @39911 has 1 MA's), (97, 39698),

Gene: Mozy_86 Start: 47832, Stop: 48131, Start Num: 60

Candidate Starts for Mozy_86:

(Start: 45 @47790 has 5 MA's), (53, 47808), (Start: 60 @47832 has 124 MA's), (Start: 63 @47853 has 1 MA's), (67, 47865), (93, 48033), (118, 48108),

Gene: MulchExplorer_85 Start: 48230, Stop: 48505, Start Num: 60

Candidate Starts for MulchExplorer_85:

(Start: 60 @48230 has 124 MA's), (Start: 63 @48251 has 1 MA's), (67, 48263), (70, 48293), (71, 48299), (88, 48413), (89, 48419), (102, 48494),

Gene: Mutaforma13_86 Start: 49538, Stop: 49894, Start Num: 60

Candidate Starts for Mutaforma13_86:

(43, 49496), (52, 49514), (Start: 60 @49538 has 124 MA's), (Start: 63 @49559 has 1 MA's), (109, 49775), (115, 49793), (117, 49805), (122, 49847), (124, 49871),

Gene: Mwanjiwa_84 Start: 49794, Stop: 50060, Start Num: 63

Candidate Starts for Mwanjiwa_84:

(Start: 60 @49773 has 124 MA's), (Start: 63 @49794 has 1 MA's), (68, 49809), (71, 49833), (89, 49926), (108, 50004), (118, 50040),

Gene: Nekros_70 Start: 48461, Stop: 48180, Start Num: 60

Candidate Starts for Nekros_70:

(27, 48554), (36, 48530), (Start: 60 @48461 has 124 MA's), (Start: 64 @48437 has 2 MA's), (67, 48428), (71, 48395), (74, 48383), (75, 48380), (86, 48332), (89, 48317), (112, 48203),

Gene: NihilNomen_72 Start: 50300, Stop: 50007, Start Num: 60

Candidate Starts for NihilNomen_72:

(Start: 60 @50300 has 124 MA's), (Start: 63 @50279 has 1 MA's), (67, 50267), (89, 50159), (91, 50111), (95, 50099), (106, 50072), (107, 50069), (118, 50030),

Gene: Nitzel_78 Start: 46831, Stop: 47190, Start Num: 60

Candidate Starts for Nitzel_78:

(48, 46792), (55, 46810), (Start: 60 @46831 has 124 MA's), (Start: 64 @46855 has 2 MA's), (67, 46864), (86, 46963), (89, 46978), (109, 47071), (115, 47089), (117, 47101), (122, 47143), (124, 47167),

Gene: NonchalantPear_43 Start: 34888, Stop: 34544, Start Num: 64

Candidate Starts for NonchalantPear_43:

(Start: 60 @34915 has 124 MA's), (Start: 64 @34888 has 2 MA's), (67, 34879), (71, 34846), (74, 34834), (75, 34831), (89, 34768), (92, 34714), (114, 34651), (121, 34609), (124, 34567),

Gene: Ochi17_89 Start: 49749, Stop: 50042, Start Num: 60

Candidate Starts for Ochi17_89:

(Start: 60 @49749 has 124 MA's), (Start: 63 @49770 has 1 MA's), (68, 49785), (89, 49911), (118, 50019),

Gene: Odette_70 Start: 49343, Stop: 49050, Start Num: 60

Candidate Starts for Odette_70:

(Start: 60 @49343 has 124 MA's), (Start: 63 @49322 has 1 MA's), (67, 49310), (89, 49202), (91, 49154), (95, 49142), (106, 49115), (107, 49112), (118, 49073),

Gene: OfUltron_91 Start: 50298, Stop: 50591, Start Num: 60

Candidate Starts for OfUltron_91:

(Start: 60 @50298 has 124 MA's), (Start: 63 @50319 has 1 MA's), (68, 50334), (89, 50460), (118, 50568),

Gene: Oksu_86 Start: 50903, Stop: 51256, Start Num: 60

Candidate Starts for Oksu_86:

(Start: 60 @50903 has 124 MA's), (Start: 63 @50924 has 1 MA's), (67, 50936), (89, 51044), (109, 51137), (115, 51155), (117, 51167), (122, 51209), (124, 51233),

Gene: Omega_77 Start: 51219, Stop: 50938, Start Num: 60

Candidate Starts for Omega_77:

(Start: 60 @51219 has 124 MA's), (Start: 64 @51195 has 2 MA's), (67, 51186), (71, 51153), (74, 51141), (75, 51138), (89, 51075), (112, 50961),

Gene: Pacc40_73 Start: 48569, Stop: 48838, Start Num: 60

Candidate Starts for Pacc40_73:

(Start: 60 @48569 has 124 MA's), (Start: 63 @48590 has 1 MA's), (84, 48689), (86, 48695), (118, 48815),

Gene: Petra64142_42 Start: 35106, Stop: 34705, Start Num: 64

Candidate Starts for Petra64142_42:

(48, 35169), (55, 35151), (Start: 60 @35130 has 124 MA's), (Start: 64 @35106 has 2 MA's), (67, 35097), (71, 35064), (74, 35052), (75, 35049), (89, 34986), (92, 34932), (114, 34869), (121, 34827), (127, 34776), (128, 34713),

Gene: Phalconet_82 Start: 49094, Stop: 49378, Start Num: 60

Candidate Starts for Phalconet_82:

(Start: 60 @49094 has 124 MA's), (Start: 64 @49118 has 2 MA's), (67, 49127), (86, 49226), (89, 49241), (112, 49355),

Gene: PhesterPhotato_89 Start: 50262, Stop: 50546, Start Num: 60

Candidate Starts for PhesterPhotato_89:

(Start: 60 @50262 has 124 MA's), (Start: 64 @50286 has 2 MA's), (67, 50295), (86, 50394), (89, 50409), (112, 50523),

Gene: Phoebus_74 Start: 51482, Stop: 51129, Start Num: 60

Candidate Starts for Phoebus_74:

(Start: 60 @51482 has 124 MA's), (Start: 63 @51461 has 1 MA's), (67, 51449), (89, 51341), (109, 51248), (115, 51230), (117, 51218), (122, 51176), (124, 51152),

Gene: PopTart_77 Start: 47157, Stop: 47441, Start Num: 60

Candidate Starts for PopTart_77:

(Start: 60 @47157 has 124 MA's), (Start: 64 @47181 has 2 MA's), (67, 47190), (86, 47289), (89, 47304), (112, 47418),

Gene: Porcelain_71 Start: 46608, Stop: 46255, Start Num: 60

Candidate Starts for Porcelain_71:

(Start: 60 @46608 has 124 MA's), (Start: 63 @46587 has 1 MA's), (67, 46575), (89, 46467), (109, 46374), (115, 46356), (117, 46344), (122, 46302), (124, 46278),

Gene: Porky_42 Start: 34896, Stop: 34549, Start Num: 64

Candidate Starts for Porky_42:

(Start: 60 @34920 has 124 MA's), (Start: 64 @34896 has 2 MA's), (67, 34887), (89, 34773), (92, 34719), (114, 34656), (121, 34614), (124, 34572),

Gene: Pound_75 Start: 52901, Stop: 52608, Start Num: 60

Candidate Starts for Pound_75:

(Start: 60 @52901 has 124 MA's), (Start: 63 @52880 has 1 MA's), (67, 52868), (89, 52760), (91, 52712), (95, 52700), (106, 52673), (107, 52670), (118, 52631),

Gene: QuickMath_80 Start: 48565, Stop: 48837, Start Num: 60

Candidate Starts for QuickMath_80:

(Start: 60 @48565 has 124 MA's), (Start: 63 @48586 has 1 MA's), (67, 48598), (89, 48706), (118, 48814),

Gene: Quico_91 Start: 51411, Stop: 51695, Start Num: 60

Candidate Starts for Quico_91:

(Start: 60 @51411 has 124 MA's), (Start: 64 @51435 has 2 MA's), (67, 51444), (86, 51543), (89, 51558), (112, 51672),

Gene: Rabinovish_14 Start: 5789, Stop: 6034, Start Num: 60

Candidate Starts for Rabinovish_14:

(13, 5627), (Start: 60 @5789 has 124 MA's), (Start: 64 @5813 has 2 MA's), (67, 5822), (89, 5936), (94, 5996),

Gene: Radiance_80 Start: 49352, Stop: 49621, Start Num: 60

Candidate Starts for Radiance_80:

(47, 49322), (54, 49328), (Start: 60 @49352 has 124 MA's), (Start: 63 @49373 has 1 MA's), (84, 49472), (86, 49478), (118, 49598),

Gene: Rearden_66 Start: 46135, Stop: 45818, Start Num: 60

Candidate Starts for Rearden_66:

(Start: 60 @46135 has 124 MA's), (Start: 64 @46111 has 2 MA's), (67, 46102), (71, 46069), (74, 46057), (75, 46054), (86, 46006), (89, 45991), (94, 45931), (124, 45841),

Gene: Redno2_68 Start: 47096, Stop: 46803, Start Num: 60

Candidate Starts for Redno2_68:

(Start: 60 @47096 has 124 MA's), (Start: 63 @47075 has 1 MA's), (67, 47063), (89, 46955), (91, 46907), (95, 46895), (106, 46868), (107, 46865), (118, 46826),

Gene: Renaud18_93 Start: 50655, Stop: 50924, Start Num: 60

Candidate Starts for Renaud18_93:

(Start: 60 @50655 has 124 MA's), (Start: 63 @50676 has 1 MA's), (68, 50691), (89, 50787), (112, 50901),

Gene: Royals2015_90 Start: 49759, Stop: 50043, Start Num: 60

Candidate Starts for Royals2015_90:

(Start: 60 @49759 has 124 MA's), (Start: 64 @49783 has 2 MA's), (67, 49792), (86, 49891), (89, 49906), (112, 50020),

Gene: Royals2015_86 Start: 48664, Stop: 48936, Start Num: 60

Candidate Starts for Royals2015_86:

(43, 48622), (52, 48640), (Start: 60 @48664 has 124 MA's), (Start: 63 @48685 has 1 MA's), (67, 48697), (89, 48805), (118, 48913),

Gene: Sabbb_83 Start: 46768, Stop: 47067, Start Num: 60

Candidate Starts for Sabbb_83:

(Start: 60 @46768 has 124 MA's), (Start: 63 @46789 has 1 MA's), (68, 46804), (89, 46930), (118, 47044),

Gene: Sandalphon_75 Start: 48522, Stop: 48806, Start Num: 60

Candidate Starts for Sandalphon_75:

(49, 48492), (51, 48498), (Start: 60 @48522 has 124 MA's), (Start: 64 @48546 has 2 MA's), (79, 48621), (108, 48750), (118, 48786),

Gene: SassyB_77 Start: 47157, Stop: 47441, Start Num: 60

Candidate Starts for SassyB_77:

(Start: 60 @47157 has 124 MA's), (Start: 64 @47181 has 2 MA's), (67, 47190), (86, 47289), (89, 47304), (112, 47418),

Gene: Schatzie_66 Start: 49090, Stop: 48797, Start Num: 60

Candidate Starts for Schatzie_66:

(Start: 60 @49090 has 124 MA's), (Start: 63 @49069 has 1 MA's), (67, 49057), (89, 48949), (91, 48901), (95, 48889), (106, 48862), (107, 48859), (118, 48820),

Gene: Scottish_83 Start: 49191, Stop: 49568, Start Num: 57

Candidate Starts for Scottish_83:

(Start: 57 @49191 has 3 MA's), (Start: 64 @49233 has 2 MA's), (67, 49242), (86, 49341), (89, 49356), (109, 49449), (115, 49467), (117, 49479), (122, 49521), (124, 49545),

Gene: Seabastian_91 Start: 50299, Stop: 50592, Start Num: 60

Candidate Starts for Seabastian_91:

(Start: 60 @50299 has 124 MA's), (Start: 63 @50320 has 1 MA's), (68, 50335), (89, 50461), (118, 50569),

Gene: Seanderson_61 Start: 42123, Stop: 41887, Start Num: 62

Candidate Starts for Seanderson_61:

(22, 42231), (31, 42207), (43, 42177), (Start: 60 @42135 has 124 MA's), (Start: 62 @42123 has 1 MA's), (97, 41910),

Gene: Shaboozey_66 Start: 44922, Stop: 44668, Start Num: 64

Candidate Starts for Shaboozey_66:

(40, 45003), (Start: 60 @44946 has 124 MA's), (Start: 64 @44922 has 2 MA's), (67, 44913), (71, 44880), (74, 44868), (75, 44865), (86, 44817), (89, 44802), (100, 44724), (113, 44688),

Gene: ShowerHandel_82 Start: 48717, Stop: 48983, Start Num: 58

Candidate Starts for ShowerHandel_82:

(Start: 58 @48717 has 5 MA's), (Start: 63 @48744 has 1 MA's), (68, 48759), (89, 48849), (107, 48927), (118, 48963),

Gene: ShroomBoi_82 Start: 49425, Stop: 49781, Start Num: 60

Candidate Starts for ShroomBoi_82:

(43, 49383), (52, 49401), (Start: 60 @49425 has 124 MA's), (Start: 63 @49446 has 1 MA's), (67, 49458), (109, 49662), (115, 49680), (117, 49692), (122, 49734), (124, 49758),

Gene: SkiPole_66 Start: 41398, Stop: 41150, Start Num: 60

Candidate Starts for SkiPole_66:

(3, 41611), (4, 41608), (5, 41605), (6, 41602), (22, 41494), (31, 41470), (43, 41440), (Start: 60 @41398 has 124 MA's), (Start: 62 @41386 has 1 MA's), (97, 41173),

Gene: Solon_60 Start: 40387, Stop: 40100, Start Num: 60

Candidate Starts for Solon_60:

(Start: 60 @40387 has 124 MA's), (Start: 63 @40366 has 1 MA's), (68, 40351), (71, 40327), (89, 40234), (108, 40156), (118, 40120),

Gene: Soul22_84 Start: 47805, Stop: 48131, Start Num: 60

Candidate Starts for Soul22_84:

(Start: 60 @47805 has 124 MA's), (67, 47838), (68, 47841), (70, 47868), (71, 47874), (89, 47994), (112, 48108),

Gene: Spartacus_89 Start: 52261, Stop: 52542, Start Num: 60

Candidate Starts for Spartacus_89:

(Start: 60 @52261 has 124 MA's), (Start: 64 @52285 has 2 MA's), (67, 52294), (89, 52408), (98, 52480), (100, 52486),

Gene: Spartacus_90 Start: 52535, Stop: 52846, Start Num: 45

Candidate Starts for Spartacus_90:

(Start: 45 @52535 has 5 MA's), (Start: 63 @52598 has 1 MA's), (86, 52703), (118, 52823),

Gene: Sprinklers_16 Start: 4916, Stop: 5194, Start Num: 60

Candidate Starts for Sprinklers_16:

(44, 4877), (51, 4895), (Start: 60 @4916 has 124 MA's), (Start: 63 @4937 has 1 MA's), (67, 4949), (68, 4952), (69, 4967), (72, 4976), (108, 5138), (118, 5174),

Gene: Squint_72 Start: 46727, Stop: 46374, Start Num: 60

Candidate Starts for Squint_72:

(Start: 60 @46727 has 124 MA's), (Start: 63 @46706 has 1 MA's), (67, 46694), (89, 46586), (109, 46493), (115, 46475), (117, 46463), (122, 46421), (124, 46397),

Gene: Strokeseat_81 Start: 47587, Stop: 47898, Start Num: 45

Candidate Starts for Strokeseat_81:

(35, 47560), (Start: 45 @47587 has 5 MA's), (Start: 63 @47650 has 1 MA's), (86, 47755), (118, 47875),

Gene: Strokeseat_80 Start: 47313, Stop: 47594, Start Num: 60

Candidate Starts for Strokeseat_80:

(Start: 60 @47313 has 124 MA's), (Start: 64 @47337 has 2 MA's), (67, 47346), (89, 47460), (98, 47532), (100, 47538),

Gene: SuperGrey_82 Start: 51027, Stop: 51305, Start Num: 60

Candidate Starts for SuperGrey_82:

(44, 50988), (51, 51006), (Start: 60 @51027 has 124 MA's), (Start: 63 @51048 has 1 MA's), (67, 51060), (68, 51063), (69, 51078), (72, 51087), (108, 51249), (118, 51285),

Gene: Superphikiman_69 Start: 45818, Stop: 45525, Start Num: 60

Candidate Starts for Superphikiman_69:

(Start: 60 @45818 has 124 MA's), (Start: 63 @45797 has 1 MA's), (67, 45785), (89, 45677), (91, 45629), (95, 45617), (106, 45590), (107, 45587), (118, 45548),

Gene: SwissCheese_62 Start: 40423, Stop: 40175, Start Num: 60

Candidate Starts for SwissCheese_62:

(22, 40519), (31, 40495), (43, 40465), (Start: 60 @40423 has 124 MA's), (Start: 62 @40411 has 1 MA's), (97, 40198),

Gene: TChen_82 Start: 50420, Stop: 50776, Start Num: 60

Candidate Starts for TChen_82:

(43, 50378), (52, 50396), (Start: 60 @50420 has 124 MA's), (Start: 63 @50441 has 1 MA's), (67, 50453), (109, 50657), (115, 50675), (117, 50687), (122, 50729), (124, 50753),

Gene: Taj_92 Start: 52011, Stop: 52295, Start Num: 60

Candidate Starts for Taj_92:

(26, 51912), (Start: 60 @52011 has 124 MA's), (Start: 64 @52035 has 2 MA's), (67, 52044), (86, 52143), (89, 52158), (112, 52272),

Gene: Taptic_70 Start: 50486, Stop: 50746, Start Num: 60

Candidate Starts for Taptic_70:

(Start: 60 @50486 has 124 MA's), (68, 50522), (69, 50540), (77, 50573), (81, 50615),

Gene: Tchotchke_76 Start: 47691, Stop: 47990, Start Num: 51

Candidate Starts for Tchotchke_76:

(44, 47673), (51, 47691), (Start: 60 @47712 has 124 MA's), (Start: 63 @47733 has 1 MA's), (67, 47745), (68, 47748), (69, 47763), (72, 47772), (108, 47934), (118, 47970),

Gene: ThetaBob_85 Start: 48938, Stop: 49243, Start Num: 60

Candidate Starts for ThetaBob_85:

(Start: 60 @48938 has 124 MA's), (67, 48971), (68, 48974), (70, 49001), (71, 49007), (89, 49127), (104, 49202),

Gene: ThreeRngTarjay_69 Start: 50376, Stop: 50083, Start Num: 60

Candidate Starts for ThreeRngTarjay_69:

(Start: 60 @50376 has 124 MA's), (Start: 63 @50355 has 1 MA's), (67, 50343), (89, 50235), (91, 50187), (95, 50175), (106, 50148), (107, 50145), (118, 50106),

Gene: Tortoise12_58 Start: 37074, Stop: 37331, Start Num: 66

Candidate Starts for Tortoise12_58:

(1, 36771), (2, 36792), (8, 36846), (25, 36948), (61, 37044), (Start: 66 @37074 has 5 MA's), (73, 37107), (93, 37248), (96, 37251), (97, 37254), (105, 37278), (108, 37284), (116, 37308),

Gene: Tortoise12_60 Start: 37645, Stop: 37935, Start Num: 59

Candidate Starts for Tortoise12_60:

(Start: 59 @37645 has 1 MA's), (65, 37675), (80, 37753), (83, 37768), (85, 37780), (89, 37798), (93, 37849), (99, 37861), (108, 37876), (116, 37900), (118, 37912), (119, 37918),

Gene: Traaww1_40 Start: 34923, Stop: 34648, Start Num: 60

Candidate Starts for Traaww1_40:

(33, 34995), (41, 34971), (42, 34968), (Start: 60 @34923 has 124 MA's), (Start: 63 @34902 has 1 MA's), (67, 34890), (89, 34782), (108, 34704), (118, 34668),

Gene: Tweety_86 Start: 51088, Stop: 51372, Start Num: 60

Candidate Starts for Tweety_86:

(Start: 60 @51088 has 124 MA's), (Start: 64 @51112 has 2 MA's), (67, 51121), (86, 51220), (89, 51235), (112, 51349),

Gene: VRedHorse_80 Start: 46368, Stop: 46637, Start Num: 60

Candidate Starts for VRedHorse_80:

(Start: 60 @46368 has 124 MA's), (Start: 63 @46389 has 1 MA's), (84, 46488), (86, 46494), (118, 46614),

Gene: Violac_87 Start: 51567, Stop: 51926, Start Num: 60

Candidate Starts for Violac_87:

(Start: 60 @51567 has 124 MA's), (Start: 64 @51591 has 2 MA's), (67, 51600), (86, 51699), (89, 51714), (109, 51807), (115, 51825), (117, 51837), (122, 51879), (124, 51903),

Gene: Wachhund_81 Start: 46941, Stop: 47240, Start Num: 60

Candidate Starts for Wachhund_81:

(Start: 60 @46941 has 124 MA's), (Start: 63 @46962 has 1 MA's), (68, 46977), (89, 47103), (118, 47217),

Gene: Wanda_75 Start: 49838, Stop: 49545, Start Num: 60

Candidate Starts for Wanda_75:

(Start: 60 @49838 has 124 MA's), (Start: 63 @49817 has 1 MA's), (67, 49805), (89, 49697), (91, 49649), (95, 49637), (106, 49610), (107, 49607), (118, 49568),

Gene: Wee_91 Start: 52087, Stop: 52371, Start Num: 60

Candidate Starts for Wee_91:

(Start: 60 @52087 has 124 MA's), (Start: 64 @52111 has 2 MA's), (67, 52120), (86, 52219), (89, 52234), (112, 52348),

Gene: Whatsapiecost_74 Start: 44329, Stop: 44613, Start Num: 60

Candidate Starts for Whatsapiecost_74:

(Start: 60 @44329 has 124 MA's), (Start: 64 @44353 has 2 MA's), (67, 44362), (89, 44476), (112, 44590),

Gene: Wheeler_63 Start: 41547, Stop: 41161, Start Num: 60

Candidate Starts for Wheeler_63:

(7, 41748), (38, 41604), (39, 41601), (Start: 60 @41547 has 124 MA's), (Start: 62 @41535 has 1 MA's), (126, 41184),

Gene: Yeet_69 Start: 49362, Stop: 49069, Start Num: 60

Candidate Starts for Yeet_69:

(Start: 60 @49362 has 124 MA's), (Start: 63 @49341 has 1 MA's), (67, 49329), (89, 49221), (91, 49173), (95, 49161), (106, 49134), (107, 49131), (118, 49092),

Gene: Yoshi_92 Start: 49392, Stop: 49736, Start Num: 58

Candidate Starts for Yoshi_92:

(Start: 58 @49392 has 5 MA's), (Start: 63 @49419 has 1 MA's), (68, 49434), (89, 49524), (120, 49665), (123, 49692), (124, 49713),

Gene: Zelink_69 Start: 50689, Stop: 50396, Start Num: 60

Candidate Starts for Zelink_69:

(Start: 60 @50689 has 124 MA's), (Start: 63 @50668 has 1 MA's), (67, 50656), (89, 50548), (91, 50500), (95, 50488), (106, 50461), (107, 50458), (118, 50419),

Gene: ZenTime222_56 Start: 39238, Stop: 39498, Start Num: 66

Candidate Starts for ZenTime222_56:

(1, 38935), (2, 38956), (8, 39010), (25, 39112), (61, 39208), (Start: 66 @39238 has 5 MA's), (73, 39271), (93, 39412), (99, 39424), (108, 39439), (116, 39463), (118, 39475), (119, 39481),

Gene: Zeuska_63 Start: 42656, Stop: 42396, Start Num: 64

Candidate Starts for Zeuska_63:

(Start: 60 @42680 has 124 MA's), (Start: 64 @42656 has 2 MA's), (67, 42647), (89, 42533), (112, 42419),

Gene: Zizzle_86 Start: 51134, Stop: 51478, Start Num: 58

Candidate Starts for Zizzle_86:

(Start: 58 @51134 has 5 MA's), (Start: 63 @51161 has 1 MA's), (68, 51176), (89, 51266), (109, 51359), (115, 51377), (117, 51389), (122, 51431), (124, 51455),