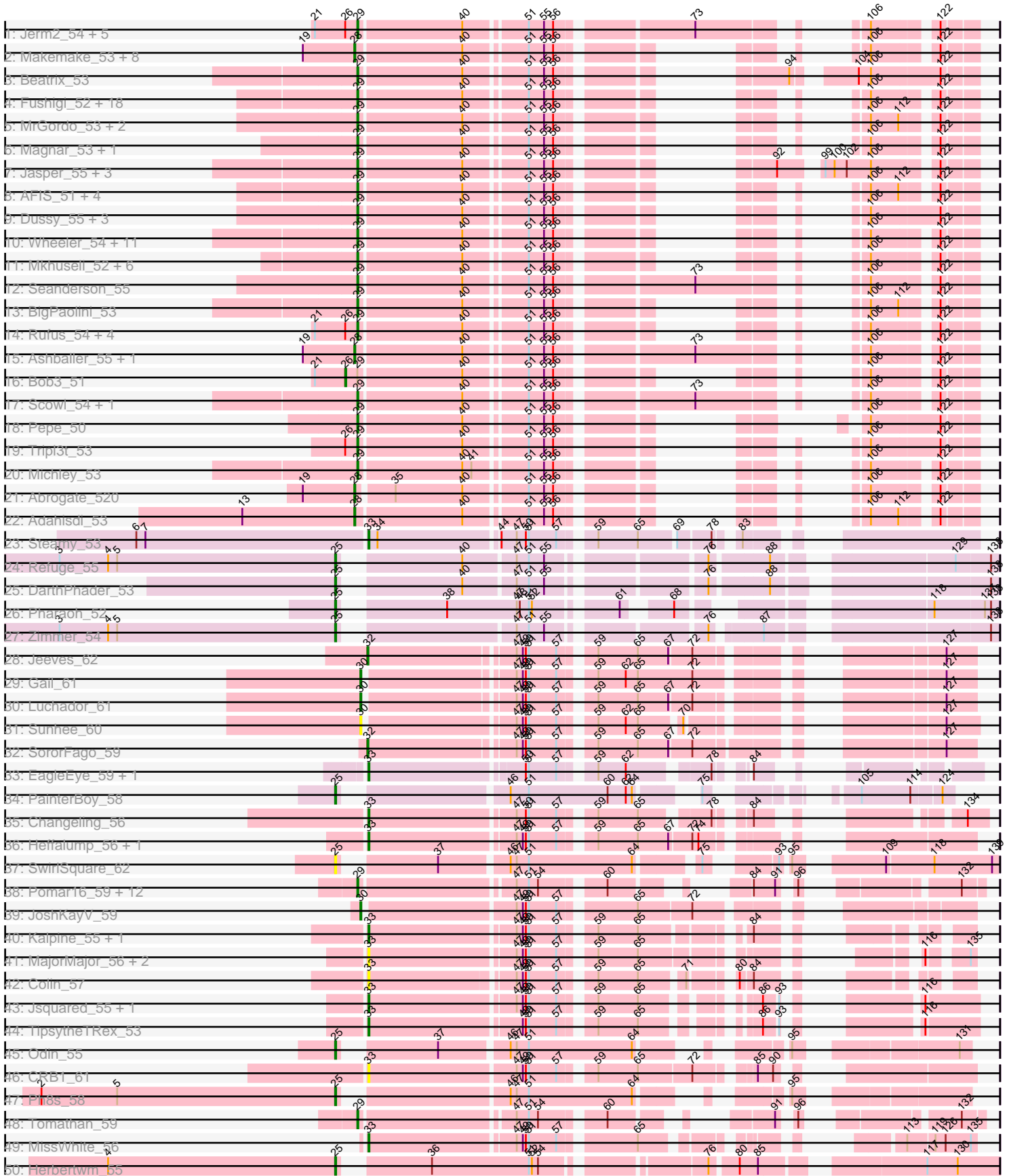
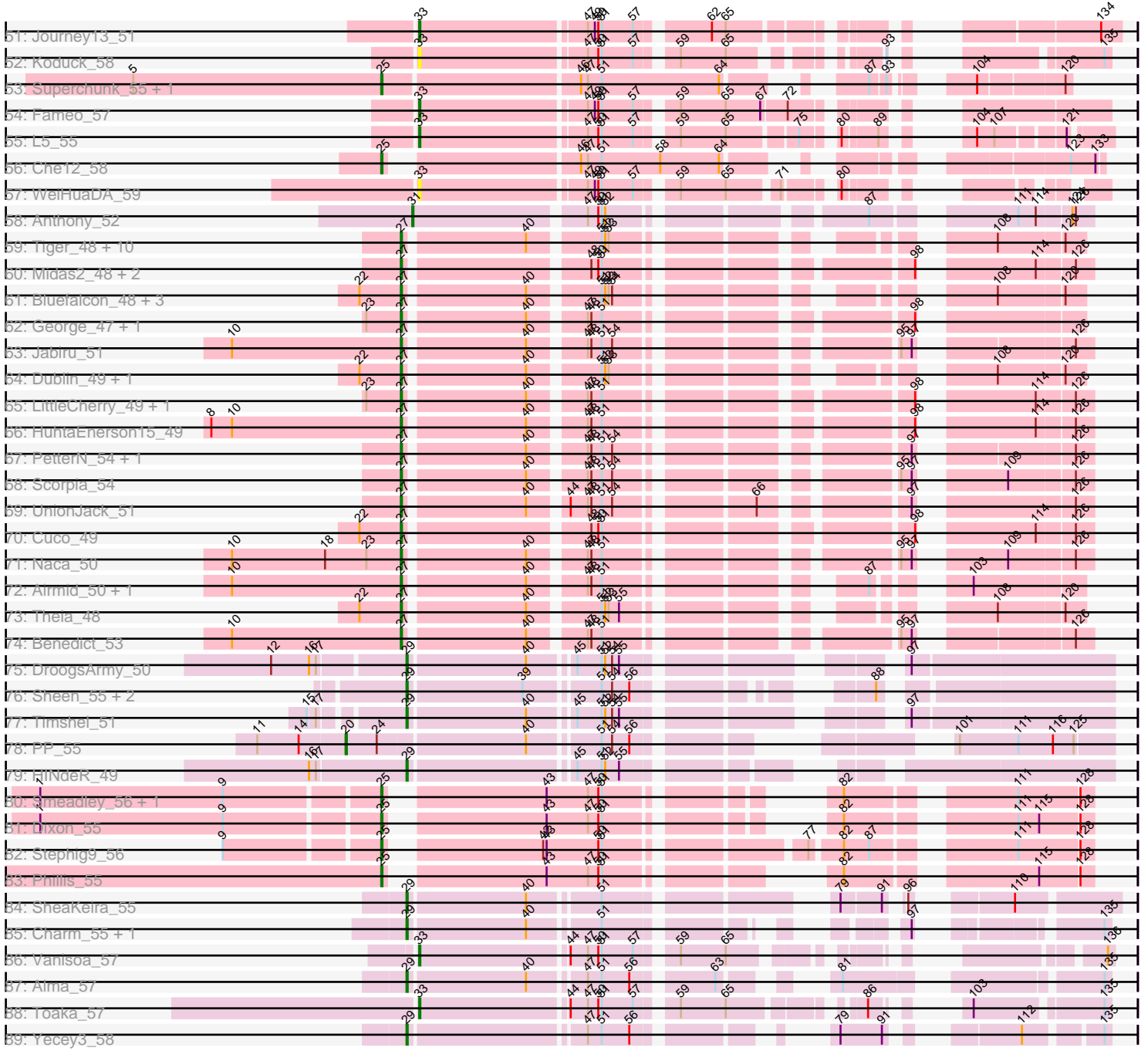


Pham 190975



Pham 190975



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 190975 Report

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

Pham number 190975 has 199 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Jerm2_54, PSullivan_53, Rohr_54, BigMau_54, Pita2_56, HermioneGrange_53
- Track 2 : Makemake_53, Smairt_55, Perseus_53, Violet_51, Zeeculate_51, Aeneas_55, Pelly_53, Mule_50, PhrostyMug_52
- Track 3 : Beatrix_53
- Track 4 : Fushigi_52, Inyanga_50, BluSpix_52, Froghopper_51, PacerPaul_53, IgnatiusPatJac_54, Ajay_55, Francis47_52, MPlant7149_52, Trouble_56, Gompeii16_52, DrFeelGood_51, Applejack_48, Alvin_53, Bones_54, Agaliana_49, Hami1_47, Bircsak_52, Acme_55
- Track 5 : MrGordo_53, Rutherferd_55, Big3_53
- Track 6 : Magnar_53, Blue_53
- Track 7 : Jasper_55, PherrisBueller_53, Dreamboat_55, Petruchio_53
- Track 8 : AFIS_51, Lesedi_50, SpikeBT_53, Crispicous1_51, GageAP_54
- Track 9 : Dussy_55, Abbyshoes_56, Espresso_53, Kenmech_57
- Track 10 : Wheeler_54, Rhynn_52, Manatee_55, Carlyle_52, Chanagan_50, Anglerfish_55, Payneful_53, Marchy_48, Teodoridan_52, Zeuska_52, Niza_56, Euphoria_51
- Track 11 : Mkhuseli_52, Monet_56, Graduation_57, Eyeball_55, Treddle_54, Edtherson_53, Cueyllyss_55
- Track 12 : Seanderson_55
- Track 13 : BigPaolini_53
- Track 14 : Rufus_54, Arlo_51, Bruns_52, Sibs6_55, TwoPeat_54
- Track 15 : Ashballer_55, JC27_55
- Track 16 : Bob3_51
- Track 17 : Scowl_54, Barriga_54
- Track 18 : Pepe_50
- Track 19 : Tripl3t_53
- Track 20 : Michley_53
- Track 21 : Abrogate_520
- Track 22 : Adahisdi_53
- Track 23 : Steamy_53
- Track 24 : Refuge_55
- Track 25 : DARTHPhader_53
- Track 26 : Pharaoh_52
- Track 27 : Zimmer_54
- Track 28 : Jeeves_62
- Track 29 : Gail_61

- Track 30 : Luchador_61
- Track 31 : Sunhee_60
- Track 32 : SororFago_59
- Track 33 : EagleEye_59, Lucyedi_58
- Track 34 : PainterBoy_58
- Track 35 : Changeling_56
- Track 36 : Heffalump_56, QueenB2_56
- Track 37 : SwirlSquare_62
- Track 38 : Pomar16_59, C3_55, AN9_60, D29_55, D32_58, DBQu4n_59, Travvers_59, Naji_59, Kerberos_59, Duplo_59, ANI8_60, VC3_60, StarStuff_59
- Track 39 : JoshKayV_59
- Track 40 : Kalpine_55, Trixie_55
- Track 41 : MajorMajor_56, Bradman_56, Quokka_55
- Track 42 : Colin_57
- Track 43 : Jsquared_55, Serenity_57
- Track 44 : TipsytheTRex_53
- Track 45 : Odin_55
- Track 46 : CRB1_61
- Track 47 : Ph8s_58
- Track 48 : Tomathan_59
- Track 49 : MissWhite_56
- Track 50 : Herbertwm_55
- Track 51 : Journey13_51
- Track 52 : Koduck_58
- Track 53 : Superchunk_55, Caraxes_57
- Track 54 : Fameo_57
- Track 55 : L5_55
- Track 56 : Che12_58
- Track 57 : WeiHuaDA_59
- Track 58 : Anthony_52
- Track 59 : Tiger_48, Jovo_49, Aragog_48, Phlorence_47, Conspiracy_49, AgentM_48, PickleBack_49, Lev2_49, Archetta_48, ForGetIt_49, Discoknowium_47
- Track 60 : Midas2_48, Coog_48, Micasa_50
- Track 61 : Bluefalcon_48, SydNat_52, Ghoulboy_52, Zolita_51
- Track 62 : George_47, Milcery_49
- Track 63 : Jabiru_51
- Track 64 : Dublin_49, MarysWell_49
- Track 65 : LittleCherry_49, Bonamassa_49
- Track 66 : HuhtaEnerson15_49
- Track 67 : PetterN_54, Chadwick_53
- Track 68 : Scorpia_54
- Track 69 : UnionJack_51
- Track 70 : Cuco_49
- Track 71 : Naca_50
- Track 72 : Airmid_50, EITiger69_52
- Track 73 : Theia_48
- Track 74 : Benedict_53
- Track 75 : DroogsArmy_50
- Track 76 : Sheen_55, Toro_57, FlyCatcher_59
- Track 77 : Timshel_51
- Track 78 : PP_55
- Track 79 : HINdeR_49
- Track 80 : Smeadley_56, Expelliarmus_54

- Track 81 : Dixon_55
- Track 82 : Stephig9_56
- Track 83 : Phillis_55
- Track 84 : SheaKeira_55
- Track 85 : Charm_55, DreamTeam1_55
- Track 86 : Vanisoa_57
- Track 87 : Alma_57
- Track 88 : Toaka_57
- Track 89 : Yecey3_58

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

The start number called the most often in the published annotations is 29, it was called in 93 of the 182 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AFIS_51, AN9_60, ANI8_60, Abbyshoes_56, Acme_55, Agaliana_49, Ajay_55, Alma_57, Alvin_53, Anglerfish_55, Applejack_48, Arlo_51, Barriga_54, Beatrix_53, Big3_53, BigMau_54, BigPaolini_53, Bircsak_52, BluSpix_52, Blue_53, Bones_54, Bruns_52, C3_55, Carlyle_52, Chanagan_50, Charm_55, Crispicous1_51, Cueyllyss_55, D29_55, D32_58, DBQu4n_59, DrFeelGood_51, DreamTeam1_55, Dreamboat_55, DroogsArmy_50, Duplo_59, Dussy_55, Edtherson_53, Espresso_53, Euphoria_51, Eyeball_55, FlyCatcher_59, Francis47_52, Froghopper_51, Fushigi_52, GageAP_54, Gompeii16_52, Graduation_57, HINdeR_49, Hami1_47, HermioneGrange_53, IgnatiusPatJac_54, Inyanga_50, Jasper_55, Jerm2_54, Kenmech_57, Kerberos_59, Lesedi_50, MPlant7149_52, Magnar_53, Manatee_55, Marchy_48, Michley_53, Mkhuseleli_52, Monet_56, MrGordo_53, Naji_59, Niza_56, PSullivan_53, PacerPaul_53, Payneful_53, Pepe_50, Petruchio_53, PherrisBueller_53, Pita2_56, Pomar16_59, Rhyynn_52, Rohr_54, Rufus_54, Rutherford_55, Scowl_54, Seanderson_55, SheaKeira_55, Sheen_55, Sibs6_55, SpikeBT_53, StarStuff_59, Teodoridan_52, Timshel_51, Tomathan_59, Toro_57, Travvers_59, Treddle_54, Tripl3t_53, Trouble_56, TwoPeat_54, VC3_60, Wheeler_54, Yecey3_58, Zeuska_52,

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

- Bob3_51,

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

- Abrogate_520, Adahisdi_53, Aeneas_55, AgentM_48, Airmid_50, Anthony_52, Aragog_48, Archetta_48, Ashballer_55, Benedict_53, Bluefalcon_48, Bonamassa_49, Bradman_56, CRB1_61, Caraxes_57, Chadwick_53, Changeling_56, Che12_58, Colin_57, Conspiracy_49, Coog_48, Cuco_49, DarthPhader_53, Discoknowium_47, Dixon_55, Dublin_49, EagleEye_59, EITiger69_52, Expelliarmus_54, Fameo_57, ForGetIt_49, Gail_61, George_47, Ghouboy_52, Heffalump_56, Herbertwm_55, HuhtaEnerson15_49, JC27_55, Jabiru_51, Jeeves_62, JoshKayV_59, Journey13_51, Jovo_49, Jsquared_55, Kalpine_55, Koduck_58, L5_55, Lev2_49, LittleCherry_49, Luchador_61, Lucyedi_58, MajorMajor_56, Makemake_53, MarysWell_49, Micasa_50, Midas2_48, Milcery_49, MissWhite_56, Mule_50, Naca_50, Odin_55, PP_55, PainterBoy_58, Pelly_53, Perseus_53, PetterN_54, Ph8s_58, Pharaoh_52, Phillis_55, Phlorence_47,

PhrostyMug_52, PickleBack_49, QueenB2_56, Quokka_55, Refuge_55, Scorpia_54, Serenity_57, Smairt_55, Smeadley_56, SororFago_59, Steamy_53, Stephig9_56, Sunhee_60, Superchunk_55, SwirlSquare_62, SydNat_52, Theia_48, Tiger_48, TipsytheTRex_53, Toaka_57, Trixie_55, UnionJack_51, Vanisoa_57, Violet_51, WeiHuaDA_59, Zeeculate_51, Zimmer_54, Zolita_51,

Summary by start number:

Start 20:

- Found in 1 of 199 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_55 (A7),

Start 25:

- Found in 17 of 199 (8.5%) of genes in pham
- Manual Annotations of this start: 15 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caraxes_57 (A2), Che12_58 (A2), DarthPhader_53 (A12), Dixon_55 (A8), Expelliarmus_54 (A8), Herbertwm_55 (A2), Odin_55 (A2), PainterBoy_58 (A16), Ph8s_58 (A2), Pharaoh_52 (A12), Phillis_55 (A8), Refuge_55 (A12), Smeadley_56 (A8), Stephig9_56 (A8), Superchunk_55 (A2), SwirlSquare_62 (A2), Zimmer_54 (A12),

Start 26:

- Found in 13 of 199 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Bob3_51 (A1),

Start 27:

- Found in 36 of 199 (18.1%) of genes in pham
- Manual Annotations of this start: 36 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AgentM_48 (A5), Airmid_50 (A5), Aragog_48 (A5), Archetta_48 (A5), Benedict_53 (A5), Bluefalcon_48 (A5), Bonamassa_49 (A5), Chadwick_53 (A5), Conspiracy_49 (A5), Coog_48 (A5), Cuco_49 (A5), Discoknowium_47 (A5), Dublin_49 (A5), ElTiger69_52 (A5), ForGetIt_49 (A5), George_47 (A5), Ghoulboy_52 (A5), HuhtaEnerson15_49 (A5), Jabiru_51 (A5), Jovo_49 (A5), Lev2_49 (A5), LittleCherry_49 (A5), MarysWell_49 (A5), Micasa_50 (A5), Midas2_48 (A5), Milcery_49 (A5), Naca_50 (A5), PetterN_54 (A5), Phlorence_47 (A5), PickleBack_49 (A5), Scorpia_54 (A5), SydNat_52 (A5), Theia_48 (A5), Tiger_48 (A5), UnionJack_51 (A5), Zolita_51 (A5),

Start 28:

- Found in 13 of 199 (6.5%) of genes in pham
- Manual Annotations of this start: 13 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abrogate_520 (A1), Adahisdi_53 (A1), Aeneas_55 (A1), Ashballer_55 (A1), JC27_55 (A1), Makemake_53 (A1), Mule_50 (A1), Pelly_53 (A1), Perseus_53 (A1), PhrostyMug_52 (A1), Smairt_55 (A1), Violet_51 (A1), Zeeculate_51 (A1),

Start 29:

- Found in 101 of 199 (50.8%) of genes in pham
- Manual Annotations of this start: 93 of 182
- Called 99.0% of time when present
- Phage (with cluster) where this start called: AFIS_51 (A1), AN9_60 (A2), ANI8_60 (A2), Abbyshoes_56 (A1), Acme_55 (A1), Agaliana_49 (A1), Ajay_55 (A1), Alma_57 (A9), Alvin_53 (A1), Anglerfish_55 (A1), Applejack_48 (A1), Arlo_51 (A1), Barriga_54 (A1), Beatrix_53 (A1), Big3_53 (A1), BigMau_54 (A1), BigPaolini_53 (A1), Bircsak_52 (A1), BluSpix_52 (A1), Blue_53 (A1), Bones_54 (A1), Bruns_52 (A1), C3_55 (A2), Carlyle_52 (A1), Chanagan_50 (A1), Charm_55 (A9), Crispicious1_51 (A1), Cueyllyss_55 (A1), D29_55 (A2), D32_58 (A2), DBQu4n_59 (A2), DrFeelGood_51 (A1), DreamTeam1_55 (A9), Dreamboat_55 (A1), DroogsArmy_50 (A7), Duplo_59 (A2), Dussy_55 (A1), Edtherson_53 (A1), Espresso_53 (A1), Euphoria_51 (A1), Eyeball_55 (A1), FlyCatcher_59 (A7), Francis47_52 (A1), Froghopper_51 (A1), Fushigi_52 (A1), GageAP_54 (A1), Gompeii16_52 (A1), Graduation_57 (A1), HINdeR_49 (A7), Hami1_47 (A1), HermioneGrange_53 (A1), IgnatiusPatJac_54 (A1), Inyanga_50 (A1), Jasper_55 (A1), Jerm2_54 (A1), Kenmech_57 (A1), Kerberos_59 (A2), Lesedi_50 (A1), MPlant7149_52 (A1), Magnar_53 (A1), Manatee_55 (A1), Marchy_48 (A1), Michley_53 (A1), Mkhusei_52 (A1), Monet_56 (A1), MrGordo_53 (A1), Naji_59 (A2), Niza_56 (A1), PSullivan_53 (A1), PacerPaul_53 (A1), Payneful_53 (A1), Pepe_50 (A1), Petruccio_53 (A1), PherrisBueller_53 (A1), Pita2_56 (A1), Pomar16_59 (A2), Rhynn_52 (A1), Rohr_54 (A1), Rufus_54 (A1), Rutherford_55 (A1), Scowl_54 (A1), Seanderson_55 (A1), SheaKeira_55 (A9), Sheen_55 (A7), Sibs6_55 (A1), SpikeBT_53 (A1), StarStuff_59 (A2), Teodoridan_52 (A1), Timshel_51 (A7), Tomathan_59 (A2), Toro_57 (A7), Travvers_59 (A2), Treddle_54 (A1), Tripl3t_53 (A1), Trouble_56 (A1), TwoPeat_54 (A1), VC3_60 (A2), Wheeler_54 (A1), Yecey3_58 (A9), Zeuska_52 (A1),

Start 30:

- Found in 4 of 199 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gail_61 (A14), JoshKayV_59 (A2), Luchador_61 (A14), Sunhee_60 (A14),

Start 31:

- Found in 1 of 199 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony_52 (A20),

Start 32:

- Found in 2 of 199 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeeves_62 (A14), SororFago_59 (A14),

Start 33:

- Found in 24 of 199 (12.1%) of genes in pham
- Manual Annotations of this start: 17 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bradman_56 (A2), CRB1_61 (A2), Changeling_56 (A2), Colin_57 (A2), EagleEye_59 (A16), Fameo_57 (A2),

Heffalump_56 (A2), Journey13_51 (A2), Jsquared_55 (A2), Kalpine_55 (A2), Koduck_58 (A2), L5_55 (A2), Lucyedi_58 (A16), MajorMajor_56 (A2), MissWhite_56 (A2), QueenB2_56 (A2), Quokka_55 (A2), Serenity_57 (A2), Steamy_53 (A12), TopsytheTRex_53 (A2), Toaka_57 (A9), Trixie_55 (A2), Vanisoa_57 (A9), WeiHuaDA_59 (A2),

Summary by clusters:

There are 10 clusters represented in this pham: A20, A14, A16, A12, A1, A2, A5, A7, A9, A8,

Info for manual annotations of cluster A1:

- Start number 26 was manually annotated 1 time for cluster A1.
- Start number 28 was manually annotated 13 times for cluster A1.
- Start number 29 was manually annotated 71 times for cluster A1.

Info for manual annotations of cluster A12:

- Start number 25 was manually annotated 4 times for cluster A12.
- Start number 33 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- Start number 30 was manually annotated 2 times for cluster A14.
- Start number 32 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A16:

- Start number 25 was manually annotated 1 time for cluster A16.
- Start number 33 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 25 was manually annotated 5 times for cluster A2.
- Start number 29 was manually annotated 13 times for cluster A2.
- Start number 30 was manually annotated 1 time for cluster A2.
- Start number 33 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 31 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 27 was manually annotated 36 times for cluster A5.

Info for manual annotations of cluster A7:

- Start number 20 was manually annotated 1 time for cluster A7.
- Start number 29 was manually annotated 4 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 25 was manually annotated 5 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 29 was manually annotated 5 times for cluster A9.
- Start number 33 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: AFIS_51 Start: 37581, Stop: 37183, Start Num: 29

Candidate Starts for AFIS_51:

(Start: 29 @37581 has 93 MA's), (40, 37482), (51, 37428), (55, 37413), (56, 37404), (106, 37269), (112, 37242), (122, 37215),

Gene: AN9_60 Start: 38397, Stop: 37942, Start Num: 29

Candidate Starts for AN9_60:

(Start: 29 @38397 has 93 MA's), (47, 38256), (51, 38244), (54, 38235), (60, 38181), (84, 38106), (91, 38085), (96, 38076), (132, 37962),

Gene: ANI8_60 Start: 38397, Stop: 37942, Start Num: 29

Candidate Starts for ANI8_60:

(Start: 29 @38397 has 93 MA's), (47, 38256), (51, 38244), (54, 38235), (60, 38181), (84, 38106), (91, 38085), (96, 38076), (132, 37962),

Gene: Abbyshoes_56 Start: 39189, Stop: 38779, Start Num: 29

Candidate Starts for Abbyshoes_56:

(Start: 29 @39189 has 93 MA's), (40, 39090), (51, 39036), (55, 39021), (56, 39012), (106, 38877), (122, 38811),

Gene: Abrogate_520 Start: 39189, Stop: 38791, Start Num: 28

Candidate Starts for Abrogate_520:

(19, 39240), (Start: 28 @39189 has 13 MA's), (35, 39156), (40, 39090), (51, 39036), (55, 39021), (56, 39012), (106, 38877), (122, 38823),

Gene: Acme_55 Start: 38115, Stop: 37717, Start Num: 29

Candidate Starts for Acme_55:

(Start: 29 @38115 has 93 MA's), (40, 38016), (51, 37962), (55, 37947), (56, 37938), (106, 37803), (122, 37749),

Gene: Adahisdi_53 Start: 38922, Stop: 38521, Start Num: 28

Candidate Starts for Adahisdi_53:

(13, 39033), (Start: 28 @38922 has 13 MA's), (40, 38820), (51, 38766), (55, 38751), (56, 38742), (106, 38607), (112, 38580), (122, 38553),

Gene: Aeneas_55 Start: 39139, Stop: 38738, Start Num: 28

Candidate Starts for Aeneas_55:

(19, 39190), (Start: 28 @39139 has 13 MA's), (40, 39037), (51, 38983), (55, 38968), (56, 38959), (106, 38824), (122, 38770),

Gene: Agaliana_49 Start: 35783, Stop: 35385, Start Num: 29

Candidate Starts for Agaliana_49:

(Start: 29 @35783 has 93 MA's), (40, 35684), (51, 35630), (55, 35615), (56, 35606), (106, 35471), (122, 35417),

Gene: AgentM_48 Start: 36508, Stop: 36041, Start Num: 27

Candidate Starts for AgentM_48:

(Start: 27 @36508 has 36 MA's), (40, 36409), (51, 36355), (52, 36352), (53, 36349), (108, 36112), (120, 36058),

Gene: Airmid_50 Start: 36667, Stop: 36200, Start Num: 27

Candidate Starts for Airmid_50:

(10, 36814), (Start: 27 @36667 has 36 MA's), (40, 36568), (47, 36526), (48, 36523), (51, 36514), (87, 36343), (103, 36292),

Gene: Ajay_55 Start: 39243, Stop: 38845, Start Num: 29

Candidate Starts for Ajay_55:

(Start: 29 @39243 has 93 MA's), (40, 39144), (51, 39090), (55, 39075), (56, 39066), (106, 38931), (122, 38877),

Gene: Alma_57 Start: 38259, Stop: 37786, Start Num: 29

Candidate Starts for Alma_57:

(Start: 29 @38259 has 93 MA's), (40, 38160), (47, 38118), (51, 38106), (56, 38082), (63, 38022), (81, 37971), (135, 37791),

Gene: Alvin_53 Start: 38568, Stop: 38170, Start Num: 29

Candidate Starts for Alvin_53:

(Start: 29 @38568 has 93 MA's), (40, 38469), (51, 38415), (55, 38400), (56, 38391), (106, 38256), (122, 38202),

Gene: Anglerfish_55 Start: 39478, Stop: 38999, Start Num: 29

Candidate Starts for Anglerfish_55:

(Start: 29 @39478 has 93 MA's), (40, 39379), (51, 39325), (55, 39310), (56, 39301), (106, 39085), (122, 39031),

Gene: Anthony_52 Start: 35777, Stop: 35280, Start Num: 31

Candidate Starts for Anthony_52:

(Start: 31 @35777 has 1 MA's), (47, 35636), (50, 35627), (51, 35624), (52, 35621), (87, 35435), (111, 35339), (114, 35324), (124, 35297), (126, 35294),

Gene: Applejack_48 Start: 35405, Stop: 35007, Start Num: 29

Candidate Starts for Applejack_48:

(Start: 29 @35405 has 93 MA's), (40, 35306), (51, 35252), (55, 35237), (56, 35228), (106, 35093), (122, 35039),

Gene: Aragog_48 Start: 36528, Stop: 36061, Start Num: 27

Candidate Starts for Aragog_48:

(Start: 27 @36528 has 36 MA's), (40, 36429), (51, 36375), (52, 36372), (53, 36369), (108, 36132), (120, 36078),

Gene: Archetta_48 Start: 36938, Stop: 36471, Start Num: 27

Candidate Starts for Archetta_48:

(Start: 27 @36938 has 36 MA's), (40, 36839), (51, 36785), (52, 36782), (53, 36779), (108, 36542), (120, 36488),

Gene: Arlo_51 Start: 37427, Stop: 37029, Start Num: 29

Candidate Starts for Arlo_51:

(21, 37469), (Start: 26 @37439 has 1 MA's), (Start: 29 @37427 has 93 MA's), (40, 37328), (51, 37274), (55, 37259), (56, 37250), (106, 37115), (122, 37061),

Gene: Ashballer_55 Start: 39002, Stop: 38520, Start Num: 28

Candidate Starts for Ashballer_55:

(19, 39053), (Start: 28 @39002 has 13 MA's), (40, 38900), (51, 38846), (55, 38831), (56, 38822), (73, 38702), (106, 38606), (122, 38552),

Gene: Barriga_54 Start: 37755, Stop: 37276, Start Num: 29

Candidate Starts for Barriga_54:

(Start: 29 @37755 has 93 MA's), (40, 37656), (51, 37602), (55, 37587), (56, 37578), (73, 37458), (106, 37362), (122, 37308),

Gene: Beatrix_53 Start: 39461, Stop: 39000, Start Num: 29

Candidate Starts for Beatrix_53:

(Start: 29 @39461 has 93 MA's), (40, 39362), (51, 39308), (55, 39293), (56, 39284), (94, 39155), (104, 39110), (106, 39098), (122, 39032),

Gene: Benedict_53 Start: 36915, Stop: 36427, Start Num: 27

Candidate Starts for Benedict_53:

(10, 37062), (Start: 27 @36915 has 36 MA's), (40, 36816), (47, 36774), (48, 36771), (51, 36762), (95, 36558), (97, 36549), (126, 36441),

Gene: Big3_53 Start: 39260, Stop: 38862, Start Num: 29

Candidate Starts for Big3_53:

(Start: 29 @39260 has 93 MA's), (40, 39161), (51, 39107), (55, 39092), (56, 39083), (106, 38948), (112, 38921), (122, 38894),

Gene: BigMau_54 Start: 37762, Stop: 37283, Start Num: 29

Candidate Starts for BigMau_54:

(21, 37804), (Start: 26 @37774 has 1 MA's), (Start: 29 @37762 has 93 MA's), (40, 37663), (51, 37609), (55, 37594), (56, 37585), (73, 37465), (106, 37369), (122, 37315),

Gene: BigPaolini_53 Start: 36840, Stop: 36442, Start Num: 29

Candidate Starts for BigPaolini_53:

(Start: 29 @36840 has 93 MA's), (40, 36741), (51, 36687), (55, 36672), (56, 36663), (106, 36528), (112, 36501), (122, 36474),

Gene: Bircsak_52 Start: 39359, Stop: 38961, Start Num: 29

Candidate Starts for Bircsak_52:

(Start: 29 @39359 has 93 MA's), (40, 39260), (51, 39206), (55, 39191), (56, 39182), (106, 39047), (122, 38993),

Gene: BluSpix_52 Start: 34621, Stop: 34223, Start Num: 29

Candidate Starts for BluSpix_52:

(Start: 29 @34621 has 93 MA's), (40, 34522), (51, 34468), (55, 34453), (56, 34444), (106, 34309), (122, 34255),

Gene: Blue_53 Start: 39272, Stop: 38880, Start Num: 29

Candidate Starts for Blue_53:

(Start: 29 @39272 has 93 MA's), (40, 39173), (51, 39119), (55, 39104), (56, 39095), (106, 38960), (122, 38912),

Gene: Bluefalcon_48 Start: 37083, Stop: 36616, Start Num: 27

Candidate Starts for Bluefalcon_48:

(22, 37119), (Start: 27 @37083 has 36 MA's), (40, 36984), (51, 36930), (52, 36927), (53, 36924), (54, 36921), (108, 36687), (120, 36633),

Gene: Bob3_51 Start: 37043, Stop: 36633, Start Num: 26

Candidate Starts for Bob3_51:

(21, 37073), (Start: 26 @37043 has 1 MA's), (Start: 29 @37031 has 93 MA's), (40, 36932), (51, 36878), (55, 36863), (56, 36854), (106, 36719), (122, 36665),

Gene: Bonamassa_49 Start: 36951, Stop: 36457, Start Num: 27

Candidate Starts for Bonamassa_49:

(23, 36981), (Start: 27 @36951 has 36 MA's), (40, 36852), (47, 36810), (48, 36807), (51, 36798), (98, 36579), (114, 36501), (126, 36471),

Gene: Bones_54 Start: 38722, Stop: 38324, Start Num: 29

Candidate Starts for Bones_54:

(Start: 29 @38722 has 93 MA's), (40, 38623), (51, 38569), (55, 38554), (56, 38545), (106, 38410), (122, 38356),

Gene: Bradman_56 Start: 37152, Stop: 36703, Start Num: 33

Candidate Starts for Bradman_56:

(Start: 33 @37152 has 17 MA's), (47, 37014), (49, 37008), (50, 37005), (51, 37002), (57, 36975), (59, 36948), (65, 36909), (116, 36738), (135, 36708),

Gene: Bruns_52 Start: 37599, Stop: 37201, Start Num: 29

Candidate Starts for Bruns_52:

(21, 37641), (Start: 26 @37611 has 1 MA's), (Start: 29 @37599 has 93 MA's), (40, 37500), (51, 37446), (55, 37431), (56, 37422), (106, 37287), (122, 37233),

Gene: C3_55 Start: 38397, Stop: 37942, Start Num: 29

Candidate Starts for C3_55:

(Start: 29 @38397 has 93 MA's), (47, 38256), (51, 38244), (54, 38235), (60, 38181), (84, 38106), (91, 38085), (96, 38076), (132, 37962),

Gene: CRB1_61 Start: 39164, Stop: 38667, Start Num: 33

Candidate Starts for CRB1_61:

(Start: 33 @39164 has 17 MA's), (47, 39023), (49, 39017), (50, 39014), (51, 39011), (57, 38984), (59, 38957), (65, 38918), (72, 38867), (85, 38822), (90, 38807),

Gene: Caraxes_57 Start: 36675, Stop: 36196, Start Num: 25

Candidate Starts for Caraxes_57:

(5, 36891), (Start: 25 @36675 has 15 MA's), (46, 36513), (47, 36507), (51, 36495), (64, 36393), (87, 36324), (93, 36312), (104, 36270), (120, 36201),

Gene: Carlyle_52 Start: 36053, Stop: 35655, Start Num: 29

Candidate Starts for Carlyle_52:

(Start: 29 @36053 has 93 MA's), (40, 35954), (51, 35900), (55, 35885), (56, 35876), (106, 35741), (122, 35687),

Gene: Chadwick_53 Start: 36756, Stop: 36268, Start Num: 27

Candidate Starts for Chadwick_53:

(Start: 27 @36756 has 36 MA's), (40, 36657), (47, 36615), (48, 36612), (51, 36603), (54, 36594), (97, 36390), (126, 36282),

Gene: Chanagan_50 Start: 36851, Stop: 36453, Start Num: 29

Candidate Starts for Chanagan_50:

(Start: 29 @36851 has 93 MA's), (40, 36752), (51, 36698), (55, 36683), (56, 36674), (106, 36539), (122, 36485),

Gene: Changeling_56 Start: 38803, Stop: 38336, Start Num: 33

Candidate Starts for Changeling_56:

(Start: 33 @38803 has 17 MA's), (47, 38665), (50, 38656), (51, 38653), (57, 38626), (59, 38599), (65, 38560), (78, 38503), (84, 38482), (134, 38356),

Gene: Charm_55 Start: 37821, Stop: 37384, Start Num: 29

Candidate Starts for Charm_55:

(Start: 29 @37821 has 93 MA's), (40, 37722), (51, 37668), (97, 37500), (135, 37389),

Gene: Che12_58 Start: 37116, Stop: 36628, Start Num: 25

Candidate Starts for Che12_58:

(Start: 25 @37116 has 15 MA's), (46, 36975), (47, 36969), (51, 36957), (58, 36906), (64, 36855), (123, 36654), (133, 36633),

Gene: Colin_57 Start: 38509, Stop: 38060, Start Num: 33

Candidate Starts for Colin_57:

(Start: 33 @38509 has 17 MA's), (47, 38374), (49, 38368), (50, 38365), (51, 38362), (57, 38335), (59, 38308), (65, 38269), (71, 38230), (80, 38197), (84, 38188),

Gene: Conspiracy_49 Start: 36750, Stop: 36283, Start Num: 27

Candidate Starts for Conspiracy_49:

(Start: 27 @36750 has 36 MA's), (40, 36651), (51, 36597), (52, 36594), (53, 36591), (108, 36354), (120, 36300),

Gene: Coog_48 Start: 36935, Stop: 36441, Start Num: 27

Candidate Starts for Coog_48:

(Start: 27 @36935 has 36 MA's), (48, 36791), (50, 36785), (51, 36782), (98, 36563), (114, 36485), (126, 36455),

Gene: Crispicious1_51 Start: 37176, Stop: 36778, Start Num: 29

Candidate Starts for Crispicious1_51:

(Start: 29 @37176 has 93 MA's), (40, 37077), (51, 37023), (55, 37008), (56, 36999), (106, 36864), (112, 36837), (122, 36810),

Gene: Cuco_49 Start: 36807, Stop: 36313, Start Num: 27

Candidate Starts for Cuco_49:

(22, 36843), (Start: 27 @36807 has 36 MA's), (48, 36663), (50, 36657), (51, 36654), (98, 36435), (114, 36357), (126, 36327),

Gene: Cueyllyss_55 Start: 39855, Stop: 39457, Start Num: 29

Candidate Starts for Cueyllyss_55:

(Start: 29 @39855 has 93 MA's), (40, 39756), (51, 39702), (55, 39687), (56, 39678), (106, 39543), (122, 39489),

Gene: D29_55 Start: 38000, Stop: 37545, Start Num: 29

Candidate Starts for D29_55:

(Start: 29 @38000 has 93 MA's), (47, 37859), (51, 37847), (54, 37838), (60, 37784), (84, 37709), (91, 37688), (96, 37679), (132, 37565),

Gene: D32_58 Start: 38000, Stop: 37545, Start Num: 29

Candidate Starts for D32_58:

(Start: 29 @38000 has 93 MA's), (47, 37859), (51, 37847), (54, 37838), (60, 37784), (84, 37709), (91, 37688), (96, 37679), (132, 37565),

Gene: DBQu4n_59 Start: 37981, Stop: 37526, Start Num: 29

Candidate Starts for DBQu4n_59:

(Start: 29 @37981 has 93 MA's), (47, 37840), (51, 37828), (54, 37819), (60, 37765), (84, 37690), (91, 37669), (96, 37660), (132, 37546),

Gene: DarthPhader_53 Start: 38914, Stop: 38369, Start Num: 25

Candidate Starts for DarthPhader_53:

(Start: 25 @38914 has 15 MA's), (40, 38815), (47, 38767), (51, 38755), (55, 38740), (76, 38608), (88, 38557), (138, 38374),

Gene: Discoknowium_47 Start: 36417, Stop: 35950, Start Num: 27

Candidate Starts for Discoknowium_47:

(Start: 27 @36417 has 36 MA's), (40, 36318), (51, 36264), (52, 36261), (53, 36258), (108, 36021), (120, 35967),

Gene: Dixon_55 Start: 36492, Stop: 36022, Start Num: 25

Candidate Starts for Dixon_55:

(1, 36777), (9, 36618), (Start: 25 @36492 has 15 MA's), (43, 36375), (47, 36339), (50, 36330), (51, 36327), (82, 36201), (111, 36084), (115, 36066), (128, 36033),

Gene: DrFeelGood_51 Start: 38016, Stop: 37618, Start Num: 29

Candidate Starts for DrFeelGood_51:

(Start: 29 @38016 has 93 MA's), (40, 37917), (51, 37863), (55, 37848), (56, 37839), (106, 37704), (122, 37650),

Gene: DreamTeam1_55 Start: 37653, Stop: 37216, Start Num: 29

Candidate Starts for DreamTeam1_55:

(Start: 29 @37653 has 93 MA's), (40, 37554), (51, 37500), (97, 37332), (135, 37221),

Gene: Dreamboat_55 Start: 37826, Stop: 37371, Start Num: 29

Candidate Starts for Dreamboat_55:

(Start: 29 @37826 has 93 MA's), (40, 37727), (51, 37673), (55, 37658), (56, 37649), (92, 37532), (99, 37502), (100, 37493), (102, 37481), (106, 37457), (122, 37403),

Gene: DroogsArmy_50 Start: 38758, Stop: 38237, Start Num: 29

Candidate Starts for DroogsArmy_50:

(12, 38866), (16, 38833), (17, 38827), (Start: 29 @38758 has 93 MA's), (40, 38659), (45, 38626), (51, 38605), (52, 38602), (54, 38596), (55, 38590), (97, 38407),

Gene: Dublin_49 Start: 36919, Stop: 36452, Start Num: 27

Candidate Starts for Dublin_49:

(22, 36955), (Start: 27 @36919 has 36 MA's), (40, 36820), (51, 36766), (52, 36763), (53, 36760), (108, 36523), (120, 36469),

Gene: Duplo_59 Start: 38037, Stop: 37582, Start Num: 29

Candidate Starts for Duplo_59:

(Start: 29 @38037 has 93 MA's), (47, 37896), (51, 37884), (54, 37875), (60, 37821), (84, 37746), (91, 37725), (96, 37716), (132, 37602),

Gene: Dussy_55 Start: 39209, Stop: 38799, Start Num: 29

Candidate Starts for Dussy_55:

(Start: 29 @39209 has 93 MA's), (40, 39110), (51, 39056), (55, 39041), (56, 39032), (106, 38897), (122, 38831),

Gene: EagleEye_59 Start: 37874, Stop: 37425, Start Num: 33

Candidate Starts for EagleEye_59:

(Start: 33 @37874 has 17 MA's), (50, 37730), (51, 37727), (57, 37700), (59, 37673), (62, 37646), (78, 37577), (84, 37559),

Gene: Edtherson_53 Start: 38507, Stop: 38109, Start Num: 29

Candidate Starts for Edtherson_53:

(Start: 29 @38507 has 93 MA's), (40, 38408), (51, 38354), (55, 38339), (56, 38330), (106, 38195), (122, 38141),

Gene: EITiger69_52 Start: 36876, Stop: 36409, Start Num: 27

Candidate Starts for EITiger69_52:

(10, 37023), (Start: 27 @36876 has 36 MA's), (40, 36777), (47, 36735), (48, 36732), (51, 36723), (87, 36552), (103, 36501),

Gene: Espresso_53 Start: 39063, Stop: 38665, Start Num: 29

Candidate Starts for Espresso_53:

(Start: 29 @39063 has 93 MA's), (40, 38964), (51, 38910), (55, 38895), (56, 38886), (106, 38751), (122, 38697),

Gene: Euphoria_51 Start: 38314, Stop: 37916, Start Num: 29

Candidate Starts for Euphoria_51:

(Start: 29 @38314 has 93 MA's), (40, 38215), (51, 38161), (55, 38146), (56, 38137), (106, 38002), (122, 37948),

Gene: Expelliarmus_54 Start: 36696, Stop: 36226, Start Num: 25

Candidate Starts for Expelliarmus_54:

(1, 36981), (9, 36822), (Start: 25 @36696 has 15 MA's), (43, 36579), (47, 36543), (50, 36534), (51, 36531), (82, 36405), (111, 36288), (128, 36237),

Gene: Eyeball_55 Start: 38602, Stop: 38204, Start Num: 29

Candidate Starts for Eyeball_55:

(Start: 29 @38602 has 93 MA's), (40, 38503), (51, 38449), (55, 38434), (56, 38425), (106, 38290), (122, 38236),

Gene: Fameo_57 Start: 38505, Stop: 38011, Start Num: 33

Candidate Starts for Fameo_57:

(Start: 33 @38505 has 17 MA's), (47, 38367), (49, 38361), (50, 38358), (51, 38355), (57, 38328), (59, 38301), (65, 38262), (67, 38232), (72, 38211),

Gene: FlyCatcher_59 Start: 40134, Stop: 39640, Start Num: 29

Candidate Starts for FlyCatcher_59:

(Start: 29 @40134 has 93 MA's), (39, 40038), (51, 39981), (54, 39972), (56, 39957), (88, 39819),

Gene: ForGetIt_49 Start: 36775, Stop: 36308, Start Num: 27

Candidate Starts for ForGetIt_49:

(Start: 27 @36775 has 36 MA's), (40, 36676), (51, 36622), (52, 36619), (53, 36616), (108, 36379), (120, 36325),

Gene: Francis47_52 Start: 39627, Stop: 39229, Start Num: 29

Candidate Starts for Francis47_52:

(Start: 29 @39627 has 93 MA's), (40, 39528), (51, 39474), (55, 39459), (56, 39450), (106, 39315), (122, 39261),

Gene: Froghopper_51 Start: 37352, Stop: 36957, Start Num: 29

Candidate Starts for Froghopper_51:

(Start: 29 @37352 has 93 MA's), (40, 37253), (51, 37199), (55, 37184), (56, 37175), (106, 37040), (122, 36986),

Gene: Fushigi_52 Start: 36313, Stop: 35915, Start Num: 29

Candidate Starts for Fushigi_52:

(Start: 29 @36313 has 93 MA's), (40, 36214), (51, 36160), (55, 36145), (56, 36136), (106, 36001), (122, 35947),

Gene: GageAP_54 Start: 39103, Stop: 38705, Start Num: 29

Candidate Starts for GageAP_54:

(Start: 29 @39103 has 93 MA's), (40, 39004), (51, 38950), (55, 38935), (56, 38926), (106, 38791), (112, 38764), (122, 38737),

Gene: Gail_61 Start: 39377, Stop: 38874, Start Num: 30

Candidate Starts for Gail_61:

(Start: 30 @39377 has 3 MA's), (47, 39242), (49, 39236), (50, 39233), (51, 39230), (57, 39203), (59, 39176), (62, 39149), (65, 39137), (72, 39083), (127, 38903),

Gene: George_47 Start: 36848, Stop: 36360, Start Num: 27

Candidate Starts for George_47:

(23, 36878), (Start: 27 @36848 has 36 MA's), (40, 36749), (47, 36707), (48, 36704), (51, 36695), (98, 36476),

Gene: Ghoulboy_52 Start: 37654, Stop: 37187, Start Num: 27

Candidate Starts for Ghoulboy_52:

(22, 37690), (Start: 27 @37654 has 36 MA's), (40, 37555), (51, 37501), (52, 37498), (53, 37495), (54, 37492), (108, 37258), (120, 37204),

Gene: Gompeii16_52 Start: 39360, Stop: 38962, Start Num: 29

Candidate Starts for Gompeii16_52:

(Start: 29 @39360 has 93 MA's), (40, 39261), (51, 39207), (55, 39192), (56, 39183), (106, 39048), (122, 38994),

Gene: Graduation_57 Start: 39927, Stop: 39529, Start Num: 29

Candidate Starts for Graduation_57:

(Start: 29 @39927 has 93 MA's), (40, 39828), (51, 39774), (55, 39759), (56, 39750), (106, 39615), (122, 39561),

Gene: HINdeR_49 Start: 38405, Stop: 37899, Start Num: 29

Candidate Starts for HINdeR_49:

(16, 38486), (17, 38480), (Start: 29 @38405 has 93 MA's), (45, 38273), (51, 38252), (52, 38249), (55, 38237),

Gene: Hami1_47 Start: 33410, Stop: 33012, Start Num: 29

Candidate Starts for Hami1_47:

(Start: 29 @33410 has 93 MA's), (40, 33311), (51, 33257), (55, 33242), (56, 33233), (106, 33098), (122, 33044),

Gene: Heffalump_56 Start: 38973, Stop: 38479, Start Num: 33

Candidate Starts for Heffalump_56:

(Start: 33 @38973 has 17 MA's), (47, 38835), (49, 38829), (50, 38826), (51, 38823), (57, 38796), (59, 38769), (65, 38730), (67, 38700), (72, 38679), (74, 38673),

Gene: Herbertwm_55 Start: 37937, Stop: 37377, Start Num: 25

Candidate Starts for Herbertwm_55:

(4, 38162), (Start: 25 @37937 has 15 MA's), (36, 37868), (51, 37772), (52, 37769), (54, 37763), (76, 37625), (80, 37601), (85, 37583), (117, 37448), (130, 37418),

Gene: HermioneGrange_53 Start: 38256, Stop: 37777, Start Num: 29

Candidate Starts for HermioneGrange_53:

(21, 38298), (Start: 26 @38268 has 1 MA's), (Start: 29 @38256 has 93 MA's), (40, 38157), (51, 38103), (55, 38088), (56, 38079), (73, 37959), (106, 37863), (122, 37809),

Gene: HuhtaEnerson15_49 Start: 36845, Stop: 36351, Start Num: 27

Candidate Starts for HuhtaEnerson15_49:

(8, 37010), (10, 36992), (Start: 27 @36845 has 36 MA's), (40, 36746), (47, 36704), (48, 36701), (51, 36692), (98, 36473), (114, 36395), (126, 36365),

Gene: IgnatiusPatJac_54 Start: 38566, Stop: 38168, Start Num: 29

Candidate Starts for IgnatiusPatJac_54:

(Start: 29 @38566 has 93 MA's), (40, 38467), (51, 38413), (55, 38398), (56, 38389), (106, 38254), (122, 38200),

Gene: Inyanga_50 Start: 36800, Stop: 36402, Start Num: 29

Candidate Starts for Inyanga_50:

(Start: 29 @36800 has 93 MA's), (40, 36701), (51, 36647), (55, 36632), (56, 36623), (106, 36488), (122, 36434),

Gene: JC27_55 Start: 38691, Stop: 38209, Start Num: 28

Candidate Starts for JC27_55:

(19, 38742), (Start: 28 @38691 has 13 MA's), (40, 38589), (51, 38535), (55, 38520), (56, 38511), (73, 38391), (106, 38295), (122, 38241),

Gene: Jabiru_51 Start: 36770, Stop: 36282, Start Num: 27

Candidate Starts for Jabiru_51:

(10, 36917), (Start: 27 @36770 has 36 MA's), (40, 36671), (47, 36629), (48, 36626), (51, 36617), (54, 36608), (95, 36413), (97, 36404), (126, 36296),

Gene: Jasper_55 Start: 37712, Stop: 37257, Start Num: 29

Candidate Starts for Jasper_55:

(Start: 29 @37712 has 93 MA's), (40, 37613), (51, 37559), (55, 37544), (56, 37535), (92, 37418), (99, 37388), (100, 37379), (102, 37367), (106, 37343), (122, 37289),

Gene: Jeeves_62 Start: 38354, Stop: 37857, Start Num: 32

Candidate Starts for Jeeves_62:

(Start: 32 @38354 has 2 MA's), (47, 38219), (49, 38213), (50, 38210), (51, 38207), (57, 38180), (59, 38153), (65, 38114), (67, 38084), (72, 38063), (127, 37886),

Gene: Jerm2_54 Start: 38511, Stop: 38032, Start Num: 29

Candidate Starts for Jerm2_54:

(21, 38553), (Start: 26 @38523 has 1 MA's), (Start: 29 @38511 has 93 MA's), (40, 38412), (51, 38358), (55, 38343), (56, 38334), (73, 38214), (106, 38118), (122, 38064),

Gene: JoshKayV_59 Start: 38828, Stop: 38325, Start Num: 30

Candidate Starts for JoshKayV_59:

(Start: 30 @38828 has 3 MA's), (47, 38687), (49, 38681), (50, 38678), (51, 38675), (57, 38648), (65, 38582), (72, 38531),

Gene: Journey13_51 Start: 36542, Stop: 36054, Start Num: 33

Candidate Starts for Journey13_51:

(Start: 33 @36542 has 17 MA's), (47, 36404), (49, 36398), (50, 36395), (51, 36392), (57, 36365), (62, 36311), (65, 36299), (134, 36071),

Gene: Jovo_49 Start: 37031, Stop: 36564, Start Num: 27

Candidate Starts for Jovo_49:

(Start: 27 @37031 has 36 MA's), (40, 36932), (51, 36878), (52, 36875), (53, 36872), (108, 36635), (120, 36581),

Gene: Jsquared_55 Start: 37136, Stop: 36672, Start Num: 33

Candidate Starts for Jsquared_55:

(Start: 33 @37136 has 17 MA's), (47, 36998), (49, 36992), (50, 36989), (51, 36986), (57, 36959), (59, 36932), (65, 36893), (86, 36812), (93, 36800), (116, 36722),

Gene: Kalpine_55 Start: 38383, Stop: 37931, Start Num: 33

Candidate Starts for Kalpine_55:

(Start: 33 @38383 has 17 MA's), (47, 38245), (49, 38239), (50, 38236), (51, 38233), (57, 38206), (59, 38179), (65, 38140), (84, 38059),

Gene: Kenmech_57 Start: 40335, Stop: 39925, Start Num: 29

Candidate Starts for Kenmech_57:

(Start: 29 @40335 has 93 MA's), (40, 40236), (51, 40182), (55, 40167), (56, 40158), (106, 40023), (122, 39957),

Gene: Kerberos_59 Start: 37999, Stop: 37544, Start Num: 29

Candidate Starts for Kerberos_59:

(Start: 29 @37999 has 93 MA's), (47, 37858), (51, 37846), (54, 37837), (60, 37783), (84, 37708), (91, 37687), (96, 37678), (132, 37564),

Gene: Koduck_58 Start: 37415, Stop: 36957, Start Num: 33

Candidate Starts for Koduck_58:

(Start: 33 @37415 has 17 MA's), (47, 37277), (50, 37268), (51, 37265), (57, 37238), (59, 37211), (65, 37172), (93, 37082), (135, 36962),

Gene: L5_55 Start: 37502, Stop: 37032, Start Num: 33

Candidate Starts for L5_55:

(Start: 33 @37502 has 17 MA's), (47, 37364), (50, 37355), (51, 37352), (57, 37325), (59, 37298), (65, 37259), (75, 37205), (80, 37184), (89, 37157), (104, 37130), (107, 37115), (121, 37064),

Gene: Lesedi_50 Start: 37197, Stop: 36799, Start Num: 29

Candidate Starts for Lesedi_50:

(Start: 29 @37197 has 93 MA's), (40, 37098), (51, 37044), (55, 37029), (56, 37020), (106, 36885), (112, 36858), (122, 36831),

Gene: Lev2_49 Start: 36663, Stop: 36196, Start Num: 27

Candidate Starts for Lev2_49:

(Start: 27 @36663 has 36 MA's), (40, 36564), (51, 36510), (52, 36507), (53, 36504), (108, 36267), (120, 36213),

Gene: LittleCherry_49 Start: 36865, Stop: 36371, Start Num: 27

Candidate Starts for LittleCherry_49:

(23, 36895), (Start: 27 @36865 has 36 MA's), (40, 36766), (47, 36724), (48, 36721), (51, 36712), (98, 36493), (114, 36415), (126, 36385),

Gene: Luchador_61 Start: 39939, Stop: 39442, Start Num: 30

Candidate Starts for Luchador_61:

(Start: 30 @39939 has 3 MA's), (47, 39804), (49, 39798), (50, 39795), (51, 39792), (57, 39765), (59, 39738), (65, 39699), (67, 39669), (72, 39648), (127, 39471),

Gene: Lucyedi_58 Start: 38070, Stop: 37621, Start Num: 33

Candidate Starts for Lucyedi_58:

(Start: 33 @38070 has 17 MA's), (50, 37926), (51, 37923), (57, 37896), (59, 37869), (62, 37842), (78, 37773), (84, 37755),

Gene: MPlant7149_52 Start: 37293, Stop: 36895, Start Num: 29

Candidate Starts for MPlant7149_52:

(Start: 29 @37293 has 93 MA's), (40, 37194), (51, 37140), (55, 37125), (56, 37116), (106, 36981), (122, 36927),

Gene: Magnar_53 Start: 38738, Stop: 38340, Start Num: 29

Candidate Starts for Magnar_53:

(Start: 29 @38738 has 93 MA's), (40, 38639), (51, 38585), (55, 38570), (56, 38561), (106, 38426), (122, 38372),

Gene: MajorMajor_56 Start: 37152, Stop: 36703, Start Num: 33

Candidate Starts for MajorMajor_56:

(Start: 33 @37152 has 17 MA's), (47, 37014), (49, 37008), (50, 37005), (51, 37002), (57, 36975), (59, 36948), (65, 36909), (116, 36738), (135, 36708),

Gene: Makemake_53 Start: 38800, Stop: 38399, Start Num: 28

Candidate Starts for Makemake_53:

(19, 38851), (Start: 28 @38800 has 13 MA's), (40, 38698), (51, 38644), (55, 38629), (56, 38620), (106, 38485), (122, 38431),

Gene: Manatee_55 Start: 38824, Stop: 38426, Start Num: 29

Candidate Starts for Manatee_55:

(Start: 29 @38824 has 93 MA's), (40, 38725), (51, 38671), (55, 38656), (56, 38647), (106, 38512), (122, 38458),

Gene: Marchy_48 Start: 35728, Stop: 35330, Start Num: 29

Candidate Starts for Marchy_48:

(Start: 29 @35728 has 93 MA's), (40, 35629), (51, 35575), (55, 35560), (56, 35551), (106, 35416), (122, 35362),

Gene: MarysWell_49 Start: 37162, Stop: 36695, Start Num: 27

Candidate Starts for MarysWell_49:

(22, 37198), (Start: 27 @37162 has 36 MA's), (40, 37063), (51, 37009), (52, 37006), (53, 37003), (108, 36766), (120, 36712),

Gene: Micasa_50 Start: 37033, Stop: 36539, Start Num: 27

Candidate Starts for Micasa_50:

(Start: 27 @37033 has 36 MA's), (48, 36889), (50, 36883), (51, 36880), (98, 36661), (114, 36583), (126, 36553),

Gene: Michley_53 Start: 37767, Stop: 37369, Start Num: 29

Candidate Starts for Michley_53:

(Start: 29 @37767 has 93 MA's), (40, 37668), (41, 37659), (51, 37614), (55, 37599), (56, 37590), (106, 37455), (122, 37401),

Gene: Midas2_48 Start: 36935, Stop: 36441, Start Num: 27

Candidate Starts for Midas2_48:

(Start: 27 @36935 has 36 MA's), (48, 36791), (50, 36785), (51, 36782), (98, 36563), (114, 36485), (126, 36455),

Gene: Milcery_49 Start: 36816, Stop: 36328, Start Num: 27

Candidate Starts for Milcery_49:

(23, 36846), (Start: 27 @36816 has 36 MA's), (40, 36717), (47, 36675), (48, 36672), (51, 36663), (98, 36444),

Gene: MissWhite_56 Start: 36656, Stop: 36198, Start Num: 33

Candidate Starts for MissWhite_56:

(Start: 33 @36656 has 17 MA's), (47, 36518), (49, 36512), (50, 36509), (51, 36506), (57, 36479), (65, 36413), (113, 36260), (119, 36236), (126, 36227), (135, 36203),

Gene: Mkhuseleli_52 Start: 37334, Stop: 36936, Start Num: 29

Candidate Starts for Mkhuseleli_52:

(Start: 29 @37334 has 93 MA's), (40, 37235), (51, 37181), (55, 37166), (56, 37157), (106, 37022), (122, 36968),

Gene: Monet_56 Start: 39466, Stop: 39068, Start Num: 29

Candidate Starts for Monet_56:

(Start: 29 @39466 has 93 MA's), (40, 39367), (51, 39313), (55, 39298), (56, 39289), (106, 39154), (122, 39100),

Gene: MrGordo_53 Start: 38500, Stop: 38102, Start Num: 29

Candidate Starts for MrGordo_53:

(Start: 29 @38500 has 93 MA's), (40, 38401), (51, 38347), (55, 38332), (56, 38323), (106, 38188), (112, 38161), (122, 38134),

Gene: Mule_50 Start: 36434, Stop: 36033, Start Num: 28

Candidate Starts for Mule_50:

(19, 36485), (Start: 28 @36434 has 13 MA's), (40, 36332), (51, 36278), (55, 36263), (56, 36254), (106, 36119), (122, 36065),

Gene: Naca_50 Start: 37309, Stop: 36818, Start Num: 27

Candidate Starts for Naca_50:

(10, 37456), (18, 37375), (23, 37339), (Start: 27 @37309 has 36 MA's), (40, 37210), (47, 37168), (48, 37165), (51, 37156), (95, 36952), (97, 36943), (109, 36886), (126, 36832),

Gene: Naji_59 Start: 38000, Stop: 37545, Start Num: 29

Candidate Starts for Naji_59:

(Start: 29 @38000 has 93 MA's), (47, 37859), (51, 37847), (54, 37838), (60, 37784), (84, 37709), (91, 37688), (96, 37679), (132, 37565),

Gene: Niza_56 Start: 40289, Stop: 39891, Start Num: 29

Candidate Starts for Niza_56:

(Start: 29 @40289 has 93 MA's), (40, 40190), (51, 40136), (55, 40121), (56, 40112), (106, 39977), (122, 39923),

Gene: Odin_55 Start: 37059, Stop: 36571, Start Num: 25

Candidate Starts for Odin_55:

(Start: 25 @37059 has 15 MA's), (37, 36984), (46, 36921), (47, 36915), (51, 36903), (64, 36801), (95, 36714), (131, 36582),

Gene: PP_55 Start: 41225, Stop: 40698, Start Num: 20

Candidate Starts for PP_55:

(11, 41300), (14, 41264), (Start: 20 @41225 has 1 MA's), (24, 41198), (40, 41075), (51, 41021), (54, 41012), (56, 40997), (101, 40829), (111, 40778), (116, 40748), (125, 40730),

Gene: PSullivan_53 Start: 37380, Stop: 36901, Start Num: 29

Candidate Starts for PSullivan_53:

(21, 37422), (Start: 26 @37392 has 1 MA's), (Start: 29 @37380 has 93 MA's), (40, 37281), (51, 37227), (55, 37212), (56, 37203), (73, 37083), (106, 36987), (122, 36933),

Gene: PacerPaul_53 Start: 38994, Stop: 38596, Start Num: 29

Candidate Starts for PacerPaul_53:

(Start: 29 @38994 has 93 MA's), (40, 38895), (51, 38841), (55, 38826), (56, 38817), (106, 38682), (122, 38628),

Gene: PainterBoy_58 Start: 38029, Stop: 37562, Start Num: 25

Candidate Starts for PainterBoy_58:

(Start: 25 @38029 has 15 MA's), (46, 37891), (51, 37873), (60, 37795), (62, 37777), (64, 37771), (75, 37735), (105, 37648), (114, 37600), (124, 37573),

Gene: Payneful_53 Start: 38445, Stop: 38047, Start Num: 29

Candidate Starts for Payneful_53:

(Start: 29 @38445 has 93 MA's), (40, 38346), (51, 38292), (55, 38277), (56, 38268), (106, 38133), (122, 38079),

Gene: Pelly_53 Start: 38399, Stop: 37998, Start Num: 28

Candidate Starts for Pelly_53:

(19, 38450), (Start: 28 @38399 has 13 MA's), (40, 38297), (51, 38243), (55, 38228), (56, 38219), (106, 38084), (122, 38030),

Gene: Pepe_50 Start: 37214, Stop: 36804, Start Num: 29

Candidate Starts for Pepe_50:

(Start: 29 @37214 has 93 MA's), (40, 37115), (51, 37061), (55, 37046), (56, 37037), (106, 36902), (122, 36836),

Gene: Perseus_53 Start: 39320, Stop: 38919, Start Num: 28

Candidate Starts for Perseus_53:

(19, 39371), (Start: 28 @39320 has 13 MA's), (40, 39218), (51, 39164), (55, 39149), (56, 39140), (106, 39005), (122, 38951),

Gene: Petruccio_53 Start: 38090, Stop: 37635, Start Num: 29

Candidate Starts for Petruccio_53:

(Start: 29 @38090 has 93 MA's), (40, 37991), (51, 37937), (55, 37922), (56, 37913), (92, 37796), (99, 37766), (100, 37757), (102, 37745), (106, 37721), (122, 37667),

Gene: PetterN_54 Start: 36924, Stop: 36436, Start Num: 27

Candidate Starts for PetterN_54:

(Start: 27 @36924 has 36 MA's), (40, 36825), (47, 36783), (48, 36780), (51, 36771), (54, 36762), (97, 36558), (126, 36450),

Gene: Ph8s_58 Start: 37416, Stop: 36925, Start Num: 25

Candidate Starts for Ph8s_58:

(2, 37707), (5, 37632), (Start: 25 @37416 has 15 MA's), (46, 37275), (47, 37269), (51, 37257), (64, 37155), (95, 37068),

Gene: Pharaoh_52 Start: 38002, Stop: 37490, Start Num: 25

Candidate Starts for Pharaoh_52:

(Start: 25 @38002 has 15 MA's), (38, 37918), (47, 37849), (48, 37846), (51, 37837), (52, 37834), (61, 37765), (68, 37732), (118, 37549), (137, 37501), (138, 37495),

Gene: PherrisBueller_53 Start: 37363, Stop: 36890, Start Num: 29

Candidate Starts for PherrisBueller_53:

(Start: 29 @37363 has 93 MA's), (40, 37264), (51, 37210), (55, 37195), (56, 37186), (92, 37069), (99, 37021), (100, 37012), (102, 37000), (106, 36976), (122, 36922),

Gene: Phillis_55 Start: 36641, Stop: 36165, Start Num: 25

Candidate Starts for Phillis_55:

(Start: 25 @36641 has 15 MA's), (43, 36524), (47, 36488), (50, 36479), (51, 36476), (82, 36344), (115, 36209), (128, 36176),

Gene: Phlorence_47 Start: 36408, Stop: 35941, Start Num: 27

Candidate Starts for Phlorence_47:

(Start: 27 @36408 has 36 MA's), (40, 36309), (51, 36255), (52, 36252), (53, 36249), (108, 36012), (120, 35958),

Gene: PhrostyMug_52 Start: 38599, Stop: 38198, Start Num: 28

Candidate Starts for PhrostyMug_52:

(19, 38650), (Start: 28 @38599 has 13 MA's), (40, 38497), (51, 38443), (55, 38428), (56, 38419), (106, 38284), (122, 38230),

Gene: PickleBack_49 Start: 36655, Stop: 36188, Start Num: 27

Candidate Starts for PickleBack_49:

(Start: 27 @36655 has 36 MA's), (40, 36556), (51, 36502), (52, 36499), (53, 36496), (108, 36259), (120, 36205),

Gene: Pita2_56 Start: 38877, Stop: 38398, Start Num: 29

Candidate Starts for Pita2_56:

(21, 38919), (Start: 26 @38889 has 1 MA's), (Start: 29 @38877 has 93 MA's), (40, 38778), (51, 38724), (55, 38709), (56, 38700), (73, 38580), (106, 38484), (122, 38430),

Gene: Pomar16_59 Start: 38040, Stop: 37585, Start Num: 29

Candidate Starts for Pomar16_59:

(Start: 29 @38040 has 93 MA's), (47, 37899), (51, 37887), (54, 37878), (60, 37824), (84, 37749), (91, 37728), (96, 37719), (132, 37605),

Gene: QueenB2_56 Start: 38186, Stop: 37692, Start Num: 33

Candidate Starts for QueenB2_56:

(Start: 33 @38186 has 17 MA's), (47, 38048), (49, 38042), (50, 38039), (51, 38036), (57, 38009), (59, 37982), (65, 37943), (67, 37913), (72, 37892), (74, 37886),

Gene: Quokka_55 Start: 37152, Stop: 36703, Start Num: 33

Candidate Starts for Quokka_55:

(Start: 33 @37152 has 17 MA's), (47, 37014), (49, 37008), (50, 37005), (51, 37002), (57, 36975), (59, 36948), (65, 36909), (116, 36738), (135, 36708),

Gene: Refuge_55 Start: 39270, Stop: 38728, Start Num: 25

Candidate Starts for Refuge_55:

(3, 39543), (4, 39495), (5, 39486), (Start: 25 @39270 has 15 MA's), (40, 39171), (47, 39123), (51, 39111), (55, 39096), (76, 38964), (88, 38913), (129, 38766), (138, 38733),

Gene: Rhynn_52 Start: 37733, Stop: 37335, Start Num: 29

Candidate Starts for Rhynn_52:

(Start: 29 @37733 has 93 MA's), (40, 37634), (51, 37580), (55, 37565), (56, 37556), (106, 37421), (122, 37367),

Gene: Rohr_54 Start: 38557, Stop: 38078, Start Num: 29

Candidate Starts for Rohr_54:

(21, 38599), (Start: 26 @38569 has 1 MA's), (Start: 29 @38557 has 93 MA's), (40, 38458), (51, 38404), (55, 38389), (56, 38380), (73, 38260), (106, 38164), (122, 38110),

Gene: Rufus_54 Start: 38103, Stop: 37705, Start Num: 29

Candidate Starts for Rufus_54:

(21, 38145), (Start: 26 @38115 has 1 MA's), (Start: 29 @38103 has 93 MA's), (40, 38004), (51, 37950), (55, 37935), (56, 37926), (106, 37791), (122, 37737),

Gene: Rutherferd_55 Start: 38949, Stop: 38551, Start Num: 29

Candidate Starts for Rutherferd_55:

(Start: 29 @38949 has 93 MA's), (40, 38850), (51, 38796), (55, 38781), (56, 38772), (106, 38637), (112, 38610), (122, 38583),

Gene: Scorpia_54 Start: 36983, Stop: 36492, Start Num: 27

Candidate Starts for Scorpia_54:

(Start: 27 @36983 has 36 MA's), (40, 36884), (47, 36842), (48, 36839), (51, 36830), (54, 36821), (95, 36626), (97, 36617), (109, 36560), (126, 36506),

Gene: Scowl_54 Start: 38673, Stop: 38194, Start Num: 29

Candidate Starts for Scowl_54:

(Start: 29 @38673 has 93 MA's), (40, 38574), (51, 38520), (55, 38505), (56, 38496), (73, 38376), (106, 38280), (122, 38226),

Gene: Seanderson_55 Start: 40050, Stop: 39571, Start Num: 29

Candidate Starts for Seanderson_55:

(Start: 29 @40050 has 93 MA's), (40, 39951), (51, 39897), (55, 39882), (56, 39873), (73, 39753), (106, 39657), (122, 39603),

Gene: Serenity_57 Start: 37359, Stop: 36895, Start Num: 33

Candidate Starts for Serenity_57:

(Start: 33 @37359 has 17 MA's), (47, 37221), (49, 37215), (50, 37212), (51, 37209), (57, 37182), (59, 37155), (65, 37116), (86, 37035), (93, 37023), (116, 36945),

Gene: SheaKeira_55 Start: 37666, Stop: 37181, Start Num: 29

Candidate Starts for SheaKeira_55:

(Start: 29 @37666 has 93 MA's), (40, 37567), (51, 37513), (79, 37360), (91, 37327), (96, 37321), (110, 37264),

Gene: Sheen_55 Start: 40022, Stop: 39528, Start Num: 29

Candidate Starts for Sheen_55:

(Start: 29 @40022 has 93 MA's), (39, 39926), (51, 39869), (54, 39860), (56, 39845), (88, 39707),

Gene: Sibs6_55 Start: 37137, Stop: 36739, Start Num: 29

Candidate Starts for Sibs6_55:

(21, 37179), (Start: 26 @37149 has 1 MA's), (Start: 29 @37137 has 93 MA's), (40, 37038), (51, 36984), (55, 36969), (56, 36960), (106, 36825), (122, 36771),

Gene: Smairt_55 Start: 39592, Stop: 39191, Start Num: 28

Candidate Starts for Smairt_55:

(19, 39643), (Start: 28 @39592 has 13 MA's), (40, 39490), (51, 39436), (55, 39421), (56, 39412), (106, 39277), (122, 39223),

Gene: Smeadley_56 Start: 36818, Stop: 36348, Start Num: 25

Candidate Starts for Smeadley_56:

(1, 37103), (9, 36944), (Start: 25 @36818 has 15 MA's), (43, 36701), (47, 36665), (50, 36656), (51, 36653), (82, 36527), (111, 36410), (128, 36359),

Gene: SororFago_59 Start: 39270, Stop: 38767, Start Num: 32

Candidate Starts for SororFago_59:

(Start: 32 @39270 has 2 MA's), (47, 39135), (49, 39129), (50, 39126), (51, 39123), (57, 39096), (59, 39069), (65, 39030), (67, 39000), (72, 38979), (127, 38796),

Gene: SpikeBT_53 Start: 38361, Stop: 37963, Start Num: 29

Candidate Starts for SpikeBT_53:

(Start: 29 @38361 has 93 MA's), (40, 38262), (51, 38208), (55, 38193), (56, 38184), (106, 38049), (112, 38022), (122, 37995),

Gene: StarStuff_59 Start: 38002, Stop: 37547, Start Num: 29

Candidate Starts for StarStuff_59:

(Start: 29 @38002 has 93 MA's), (47, 37861), (51, 37849), (54, 37840), (60, 37786), (84, 37711), (91, 37690), (96, 37681), (132, 37567),

Gene: Steamy_53 Start: 37734, Stop: 37234, Start Num: 33

Candidate Starts for Steamy_53:

(6, 37959), (7, 37950), (Start: 33 @37734 has 17 MA's), (34, 37725), (44, 37611), (47, 37596), (50, 37587), (51, 37584), (57, 37557), (59, 37530), (65, 37491), (69, 37458), (78, 37428), (83, 37413),

Gene: Stephig9_56 Start: 36929, Stop: 36414, Start Num: 25

Candidate Starts for Stephig9_56:

(9, 37055), (Start: 25 @36929 has 15 MA's), (42, 36815), (43, 36812), (50, 36767), (51, 36764), (77, 36617), (82, 36593), (87, 36572), (111, 36476), (128, 36425),

Gene: Sunhee_60 Start: 37715, Stop: 37224, Start Num: 30

Candidate Starts for Sunhee_60:

(Start: 30 @37715 has 3 MA's), (47, 37577), (49, 37571), (50, 37568), (51, 37565), (57, 37538), (59, 37511), (62, 37484), (65, 37472), (70, 37436), (127, 37256),

Gene: Superchunk_55 Start: 36675, Stop: 36196, Start Num: 25

Candidate Starts for Superchunk_55:

(5, 36891), (Start: 25 @36675 has 15 MA's), (46, 36513), (47, 36507), (51, 36495), (64, 36393), (87, 36324), (93, 36312), (104, 36270), (120, 36201),

Gene: SwirlSquare_62 Start: 37597, Stop: 37061, Start Num: 25

Candidate Starts for SwirlSquare_62:

(Start: 25 @37597 has 15 MA's), (37, 37522), (46, 37459), (47, 37453), (51, 37441), (64, 37339), (75, 37288), (93, 37240), (95, 37234), (109, 37168), (118, 37123), (139, 37066),

Gene: SydNat_52 Start: 37663, Stop: 37196, Start Num: 27

Candidate Starts for SydNat_52:

(22, 37699), (Start: 27 @37663 has 36 MA's), (40, 37564), (51, 37510), (52, 37507), (53, 37504), (54, 37501), (108, 37267), (120, 37213),

Gene: Teodoridan_52 Start: 37810, Stop: 37400, Start Num: 29

Candidate Starts for Teodoridan_52:

(Start: 29 @37810 has 93 MA's), (40, 37711), (51, 37657), (55, 37642), (56, 37633), (106, 37498), (122, 37432),

Gene: Theia_48 Start: 37140, Stop: 36673, Start Num: 27

Candidate Starts for Theia_48:

(22, 37176), (Start: 27 @37140 has 36 MA's), (40, 37041), (51, 36987), (52, 36984), (53, 36981), (55, 36972), (108, 36744), (120, 36690),

Gene: Tiger_48 Start: 36329, Stop: 35862, Start Num: 27

Candidate Starts for Tiger_48:

(Start: 27 @36329 has 36 MA's), (40, 36230), (51, 36176), (52, 36173), (53, 36170), (108, 35933), (120, 35879),

Gene: Timshel_51 Start: 38839, Stop: 38318, Start Num: 29

Candidate Starts for Timshel_51:

(15, 38905), (17, 38899), (Start: 29 @38839 has 93 MA's), (40, 38740), (45, 38707), (51, 38686), (52, 38683), (54, 38677), (55, 38671), (97, 38488),

Gene: TipsytheTRex_53 Start: 37429, Stop: 36965, Start Num: 33

Candidate Starts for TipsytheTRex_53:

(Start: 33 @37429 has 17 MA's), (49, 37285), (50, 37282), (51, 37279), (57, 37252), (59, 37225), (65, 37186), (86, 37105), (93, 37093), (116, 37015),

Gene: Toaka_57 Start: 37937, Stop: 37467, Start Num: 33

Candidate Starts for Toaka_57:

(Start: 33 @37937 has 17 MA's), (44, 37814), (47, 37799), (50, 37790), (51, 37787), (57, 37760), (59, 37733), (65, 37694), (86, 37604), (103, 37574), (135, 37472),

Gene: Tomathan_59 Start: 38049, Stop: 37594, Start Num: 29

Candidate Starts for Tomathan_59:

(Start: 29 @38049 has 93 MA's), (47, 37908), (51, 37896), (54, 37887), (60, 37833), (91, 37737), (96, 37728), (132, 37614),

Gene: Toro_57 Start: 40134, Stop: 39640, Start Num: 29

Candidate Starts for Toro_57:

(Start: 29 @40134 has 93 MA's), (39, 40038), (51, 39981), (54, 39972), (56, 39957), (88, 39819),

Gene: Travvers_59 Start: 37999, Stop: 37544, Start Num: 29

Candidate Starts for Travvers_59:

(Start: 29 @37999 has 93 MA's), (47, 37858), (51, 37846), (54, 37837), (60, 37783), (84, 37708), (91, 37687), (96, 37678), (132, 37564),

Gene: Treddle_54 Start: 38978, Stop: 38580, Start Num: 29

Candidate Starts for Treddle_54:

(Start: 29 @38978 has 93 MA's), (40, 38879), (51, 38825), (55, 38810), (56, 38801), (106, 38666), (122, 38612),

Gene: Tripl3t_53 Start: 39615, Stop: 39205, Start Num: 29

Candidate Starts for Tripl3t_53:

(Start: 26 @39627 has 1 MA's), (Start: 29 @39615 has 93 MA's), (40, 39516), (51, 39462), (55, 39447), (56, 39438), (106, 39303), (122, 39237),

Gene: Trixie_55 Start: 38251, Stop: 37799, Start Num: 33

Candidate Starts for Trixie_55:

(Start: 33 @38251 has 17 MA's), (47, 38113), (49, 38107), (50, 38104), (51, 38101), (57, 38074), (59, 38047), (65, 38008), (84, 37927),

Gene: Trouble_56 Start: 39709, Stop: 39311, Start Num: 29

Candidate Starts for Trouble_56:

(Start: 29 @39709 has 93 MA's), (40, 39610), (51, 39556), (55, 39541), (56, 39532), (106, 39397), (122, 39343),

Gene: TwoPeat_54 Start: 38091, Stop: 37693, Start Num: 29

Candidate Starts for TwoPeat_54:

(21, 38133), (Start: 26 @38103 has 1 MA's), (Start: 29 @38091 has 93 MA's), (40, 37992), (51, 37938), (55, 37923), (56, 37914), (106, 37779), (122, 37725),

Gene: UnionJack_51 Start: 36473, Stop: 35982, Start Num: 27

Candidate Starts for UnionJack_51:

(Start: 27 @36473 has 36 MA's), (40, 36374), (44, 36347), (47, 36332), (48, 36329), (51, 36320), (54, 36311), (66, 36209), (97, 36107), (126, 35996),

Gene: VC3_60 Start: 38397, Stop: 37942, Start Num: 29

Candidate Starts for VC3_60:

(Start: 29 @38397 has 93 MA's), (47, 38256), (51, 38244), (54, 38235), (60, 38181), (84, 38106), (91, 38085), (96, 38076), (132, 37962),

Gene: Vanisoa_57 Start: 39057, Stop: 38596, Start Num: 33

Candidate Starts for Vanisoa_57:

(Start: 33 @39057 has 17 MA's), (44, 38934), (47, 38919), (50, 38910), (51, 38907), (57, 38880), (59, 38853), (65, 38814), (136, 38601),

Gene: Violet_51 Start: 38989, Stop: 38588, Start Num: 28

Candidate Starts for Violet_51:

(19, 39040), (Start: 28 @38989 has 13 MA's), (40, 38887), (51, 38833), (55, 38818), (56, 38809), (106, 38674), (122, 38620),

Gene: WeiHuaDA_59 Start: 39056, Stop: 38604, Start Num: 33

Candidate Starts for WeiHuaDA_59:

(Start: 33 @39056 has 17 MA's), (47, 38918), (49, 38912), (50, 38909), (51, 38906), (57, 38879), (59, 38852), (65, 38813), (71, 38774), (80, 38741),

Gene: Wheeler_54 Start: 38471, Stop: 38073, Start Num: 29

Candidate Starts for Wheeler_54:

(Start: 29 @38471 has 93 MA's), (40, 38372), (51, 38318), (55, 38303), (56, 38294), (106, 38159), (122, 38105),

Gene: Yecey3_58 Start: 37824, Stop: 37375, Start Num: 29

Candidate Starts for Yecey3_58:

(Start: 29 @37824 has 93 MA's), (47, 37683), (51, 37671), (56, 37647), (79, 37545), (91, 37509), (112, 37437), (135, 37380),

Gene: Zeeculate_51 Start: 39028, Stop: 38627, Start Num: 28

Candidate Starts for Zeeculate_51:

(19, 39079), (Start: 28 @39028 has 13 MA's), (40, 38926), (51, 38872), (55, 38857), (56, 38848), (106, 38713), (122, 38659),

Gene: Zeuska_52 Start: 38962, Stop: 38564, Start Num: 29

Candidate Starts for Zeuska_52:

(Start: 29 @38962 has 93 MA's), (40, 38863), (51, 38809), (55, 38794), (56, 38785), (106, 38650), (122, 38596),

Gene: Zimmer_54 Start: 38954, Stop: 38418, Start Num: 25

Candidate Starts for Zimmer_54:

(3, 39227), (4, 39179), (5, 39170), (Start: 25 @38954 has 15 MA's), (47, 38807), (51, 38795), (55, 38780), (76, 38648), (87, 38609), (138, 38423),

Gene: Zolita_51 Start: 37667, Stop: 37200, Start Num: 27

Candidate Starts for Zolita_51:

(22, 37703), (Start: 27 @37667 has 36 MA's), (40, 37568), (51, 37514), (52, 37511), (53, 37508), (54, 37505), (108, 37271), (120, 37217),