

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 294581 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294581 has 108 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Peterson_65
- Track 2 : KSSJEB_78, Puppet_75, Eyeball_79
- Track 3 : Gyzlar_56
- Track 4 : MaryBeth_59, MetalQZJ_58, Corvo_62
- Track 5 : Peterson_79
- Track 6 : Kenmech_82, Abbysshoes_80, Dussy_79
- Track 7 : Ajay_76, Teodoridan_77
- Track 8 : Zeeculate_77
- Track 9 : STLscum_69
- Track 10 : Thor_60, SarFire_60
- Track 11 : KBG_62
- Track 12 : Saskia_69
- Track 13 : ScottMcG_15
- Track 14 : Mangeria_6
- Track 15 : Eureka_44
- Track 16 : Simpliphy_43, Petruccio_60
- Track 17 : Goku_44
- Track 18 : Taotie_48
- Track 19 : Taotie_53
- Track 20 : PSonyx_48
- Track 21 : MicyPS_42
- Track 22 : PSonyx_54
- Track 23 : Gallop_65
- Track 24 : Gallop_66
- Track 25 : Kenuha5_75, Gandalph_77
- Track 26 : PhesterPhotato_83
- Track 27 : Hegedechwinu_80, Crumble_76
- Track 28 : Phanphagia_77, Shauna1_78, Kingsley_82
- Track 29 : Spartacus_85
- Track 30 : JalFarm20_87
- Track 31 : ArcusAngelus_83, Chevrolet_86
- Track 32 : FreddyB_88, Priscilla_76, BobaPhett_81, Koella_70, LastJedi_70, Brocalys_71, NormanBulbieJr_75, SwagPiggett_82, Cabrinians_78
- Track 33 : Cheesepuff_86
- Track 34 : SiSi_75, MisterCuddles_76, Girr_75, Ruby_73, Veteran_71
- Track 35 : Taj_85, Wee_84
- Track 36 : StAnnes_81

- Track 37 : Flathead_78, Saal_78, Lizziana_83, Donkeykong_83, Gorge_80
- Track 38 : Mantra_76, Emma_82
- Track 39 : Inventum_78, RedBird_81, Dorothy_81, SuperGrey_79, Sassafras_81
- Track 40 : DLane_80
- Track 41 : Tootsieroll_77
- Track 42 : Ramsey_83
- Track 43 : Filuzino_80
- Track 44 : Ogopogo_85
- Track 45 : Marker_82
- Track 46 : DaWorst_79
- Track 47 : DLane_79
- Track 48 : Firehouse51_75
- Track 49 : Phalconet_76
- Track 50 : Jabbawokkie_88, Blarby_87, Zapner_87
- Track 51 : Avani_86
- Track 52 : Che9d_91
- Track 53 : Superphikiman_77, Squint_80, Porcelain_79, MiaZeal_80, Lucky2013_77, Ariel_79
- Track 54 : BronnyJames_76, Nibley_69, Shaboozey_75
- Track 55 : Nekros_75
- Track 56 : LittleE_79
- Track 57 : Dylan_22, Zakhe101_23
- Track 58 : Smooch_23
- Track 59 : Raela_7
- Track 60 : GoongGoong_8, MosMoris_9, Gattaca_9

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

The start number called the most often in the published annotations is 34, it was called in 50 of the 96 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArcusAngelus_83, Avani_86, Blarby_87, BobaPhett_81, Brocalys_71, Cabrinians_78, CheesePuff_86, Chevrolet_86, Crumble_76, DLane_79, Donkeykong_83, Dorothy_81, Emma_82, Filuzino_80, Firehouse51_75, Flathead_78, FreddyB_88, Gattaca_9, Girr_75, GoongGoong_8, Gorge_80, Hegedechwinu_80, Inventum_78, Jabbawokkie_88, JalFarm20_87, Kingsley_82, Koella_70, LastJedi_70, Lizziana_83, Mantra_76, MisterCuddles_76, MosMoris_9, NormanBulbieJr_75, Phalconet_76, Phanphagia_77, Priscilla_76, Ramsey_83, RedBird_81, Ruby_73, Saal_78, Sassafras_81, ScottMcG_15, Shauna1_78, SiSi_75, SuperGrey_79, SwagPiggett_82, Taj_85, Tootsieroll_77, Veteran_71, Wee_84, Zapner_87,

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

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

- Abbyshoes_80, Ajay_76, Ariel_79, BronnyJames_76, Che9d_91, Corvo_62, DLane_80, DaWorst_79, Dussy_79, Dylan_22, Eureka_44, Eyeball_79, Gallop_65, Gallop_66, Gandolph_77, Goku_44, Gyzlar_56, KBG_62, KSSJEB_78, Kenmech_82, Kenuha5_75, LittleE_79, Lucky2013_77, Mangeria_6, Marker_82, MaryBeth_59,

MetalQZJ_58, MiaZeal_80, MicyPS_42, Nekros_75, Nibley_69, Ogopogo_85, PSonyx_48, PSonyx_54, Peterson_65, Peterson_79, Petruccio_60, PhesterPhotato_83, Porcelain_79, Puppet_75, Raela_7, STLscum_69, SarFire_60, Saskia_69, Shaboozey_75, Simpliphy_43, Smooch_23, Spartacus_85, Squint_80, StAnnes_81, Superphikiman_77, Taotie_48, Taotie_53, Teodoridan_77, Thor_60, Zakhe101_23, Zeeculate_77,

Summary by start number:

Start 19:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che9d_91 (F2),

Start 31:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Smooch_23 (O),

Start 33:

- Found in 2 of 108 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Eureka_44 (E),

Start 34:

- Found in 51 of 108 (47.2%) of genes in pham
- Manual Annotations of this start: 50 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_83 (F1), Avani_86 (F2), Blarby_87 (F), BobaPhett_81 (F1), Brocalys_71 (F1), Cabrinians_78 (F1), CheesePuff_86 (F1), Chevrolet_86 (F1), Crumble_76 (F1), DLane_79 (F1), Donkeykong_83 (F1), Dorothy_81 (F1), Emma_82 (F1), Filuzino_80 (F1), Firehouse51_75 (F1), Flathead_78 (F1), FreddyB_88 (F1), Gattaca_9 (S), Girr_75 (F1), GoongGoong_8 (S), Gorge_80 (F1), Hegedechwinu_80 (F1), Inventum_78 (F1), Jabbawokkie_88 (F2), JalFarm20_87 (F1), Kingsley_82 (F1), Koella_70 (F1), LastJedi_70 (F1), Lizziana_83 (F1), Mantra_76 (F1), MisterCuddles_76 (F1), MosMoris_9 (S), NormanBulbieJr_75 (F1), Phalconet_76 (F1), Phanphagia_77 (F1), Priscilla_76 (F1), Ramsey_83 (F1), RedBird_81 (F1), Ruby_73 (F1), Saal_78 (F1), Sassafras_81 (F1), ScottMcG_15 (C1), Shauna1_78 (F1), SiSi_75 (F1), SuperGrey_79 (F1), SwagPiggett_82 (F1), Taj_85 (F1), Tootsieroll_77 (F1), Veteran_71 (F1), Wee_84 (F1), Zapner_87 (F2),

Start 35:

- Found in 5 of 108 (4.6%) of genes in pham
- Manual Annotations of this start: 5 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DaWorst_79 (F1), Gandolph_77 (F1), Kenuha5_75 (F1), Raela_7 (S), StAnnes_81 (F1),

Start 36:

- Found in 14 of 108 (13.0%) of genes in pham
- Manual Annotations of this start: 8 of 96
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Ariel_79 (J), BronnyJames_76 (J), Lucky2013_77 (J), MiaZeal_80 (J), Nekros_75 (J), Nibley_69 (J), Ogotogo_85 (F1), Porcelain_79 (J), Saskia_69 (A11), Shaboozey_75 (J), Squint_80 (J), Superphikiman_77 (J), Zeeculate_77 (A1),

Start 37:

- Found in 30 of 108 (27.8%) of genes in pham
- Manual Annotations of this start: 26 of 96
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Abbysshoes_80 (A1), Ajay_76 (A1), Corvo_62 (A1), DLane_80 (F1), Dussy_79 (A1), Dylan_22 (O), Eyeball_79 (A1), Goku_44 (E), Gyzlar_56 (A1), KBG_62 (A1), KSSJEB_78 (A1), Kenmech_82 (A1), Mangeria_6 (C1), Marker_82 (F1), MaryBeth_59 (A1), MetalQZJ_58 (A1), Peterson_65 (A1), Peterson_79 (A1), Petruccio_60 (A1), PhesterPotato_83 (F1), Puppet_75 (A1), STLscum_69 (A1), SarFire_60 (A1), Simpliphy_43 (E), Spartacus_85 (F1), Teodoridan_77 (A1), Thor_60 (A1), Zakhe101_23 (O),

Start 38:

- Found in 6 of 108 (5.6%) of genes in pham
- Manual Annotations of this start: 3 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gallop_65 (ES), MicyPS_42 (EQ), PSonyx_48 (EQ), PSonyx_54 (EQ), Taotie_48 (EQ), Taotie_53 (EQ),

Start 39:

- Found in 91 of 108 (84.3%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 1.1% of time when present
- Phage (with cluster) where this start called: LittleE_79 (J),

Start 124:

- Found in 1 of 108 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gallop_66 (ES),

Summary by clusters:

There are 12 clusters represented in this pham: F1, F2, E, F, J, O, A1, S, A11, C1, EQ, ES,

Info for manual annotations of cluster A1:

- Start number 36 was manually annotated 1 time for cluster A1.
- Start number 37 was manually annotated 17 times for cluster A1.

Info for manual annotations of cluster C1:

- Start number 34 was manually annotated 1 time for cluster C1.
- Start number 37 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster E:

- Start number 33 was manually annotated 1 time for cluster E.
- Start number 37 was manually annotated 2 times for cluster E.

Info for manual annotations of cluster EQ:

- Start number 38 was manually annotated 3 times for cluster EQ.

Info for manual annotations of cluster F1:

- Start number 34 was manually annotated 43 times for cluster F1.
- Start number 35 was manually annotated 4 times for cluster F1.
- Start number 36 was manually annotated 1 time for cluster F1.
- Start number 37 was manually annotated 4 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 19 was manually annotated 1 time for cluster F2.
- Start number 34 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster J:

- Start number 36 was manually annotated 6 times for cluster J.
- Start number 39 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster O:

- Start number 31 was manually annotated 1 time for cluster O.
- Start number 37 was manually annotated 2 times for cluster O.

Info for manual annotations of cluster S:

- Start number 34 was manually annotated 3 times for cluster S.
- Start number 35 was manually annotated 1 time for cluster S.

Gene Information:

Gene: Abbyshoes_80 Start: 47965, Stop: 47543, Start Num: 37

Candidate Starts for Abbyshoes_80:

(Start: 37 @47965 has 26 MA's), (Start: 39 @47953 has 1 MA's), (63, 47797), (74, 47725), (83, 47701), (109, 47629), (121, 47566),

Gene: Ajay_76 Start: 46873, Stop: 46502, Start Num: 37

Candidate Starts for Ajay_76:

(Start: 37 @46873 has 26 MA's), (Start: 39 @46861 has 1 MA's), (43, 46825), (53, 46783), (57, 46759), (63, 46717), (82, 46627), (84, 46624), (111, 46561), (120, 46525),

Gene: ArcusAngelus_83 Start: 49676, Stop: 50101, Start Num: 34

Candidate Starts for ArcusAngelus_83:

(Start: 34 @49676 has 50 MA's), (48, 49751), (60, 49823), (63, 49856), (74, 49928), (83, 49952), (109, 50024), (121, 50087),

Gene: Ariel_79 Start: 48566, Stop: 48168, Start Num: 36

Candidate Starts for Ariel_79:

(Start: 36 @48566 has 8 MA's), (Start: 39 @48554 has 1 MA's), (63, 48398), (81, 48314), (85, 48308), (87, 48305), (113, 48221),

Gene: Avani_86 Start: 46087, Stop: 46437, Start Num: 34

Candidate Starts for Avani_86:

(Start: 34 @46087 has 50 MA's), (Start: 39 @46102 has 1 MA's), (63, 46237), (71, 46267), (90, 46303), (109, 46354),

Gene: Blarby_87 Start: 46989, Stop: 47345, Start Num: 34

Candidate Starts for Blarby_87:

(Start: 34 @46989 has 50 MA's), (Start: 39 @47004 has 1 MA's), (63, 47124), (114, 47295), (118, 47316),

Gene: BobaPhett_81 Start: 50730, Stop: 51155, Start Num: 34

Candidate Starts for BobaPhett_81:

(Start: 34 @50730 has 50 MA's), (Start: 39 @50745 has 1 MA's), (63, 50925), (81, 51009), (85, 51015), (87, 51018), (113, 51102),

Gene: Brocalys_71 Start: 46210, Stop: 46635, Start Num: 34

Candidate Starts for Brocalys_71:

(Start: 34 @46210 has 50 MA's), (Start: 39 @46225 has 1 MA's), (63, 46405), (81, 46489), (85, 46495), (87, 46498), (113, 46582),

Gene: BronnyJames_76 Start: 47637, Stop: 47275, Start Num: 36

Candidate Starts for BronnyJames_76:

(Start: 36 @47637 has 8 MA's), (Start: 39 @47625 has 1 MA's), (63, 47505), (81, 47421), (85, 47415), (87, 47412), (113, 47328),

Gene: Cabrinians_78 Start: 48130, Stop: 48555, Start Num: 34

Candidate Starts for Cabrinians_78:

(Start: 34 @48130 has 50 MA's), (Start: 39 @48145 has 1 MA's), (63, 48325), (81, 48409), (85, 48415), (87, 48418), (113, 48502),

Gene: Che9d_91 Start: 48600, Stop: 49028, Start Num: 19

Candidate Starts for Che9d_91:

(Start: 19 @48600 has 1 MA's), (21, 48612), (32, 48666), (63, 48810),

Gene: Cheesepuff_86 Start: 48067, Stop: 48468, Start Num: 34

Candidate Starts for Cheesepuff_86:

(Start: 34 @48067 has 50 MA's), (Start: 39 @48082 has 1 MA's), (63, 48217), (75, 48280), (118, 48415), (125, 48448),

Gene: Chevrolet_86 Start: 49677, Stop: 50102, Start Num: 34

Candidate Starts for Chevrolet_86:

(Start: 34 @49677 has 50 MA's), (48, 49752), (60, 49824), (63, 49857), (74, 49929), (83, 49953), (109, 50025), (121, 50088),

Gene: Corvo_62 Start: 41848, Stop: 41459, Start Num: 37

Candidate Starts for Corvo_62:

(6, 42049), (24, 41905), (25, 41902), (Start: 37 @41848 has 26 MA's), (Start: 39 @41836 has 1 MA's), (59, 41749), (63, 41716), (74, 41638), (83, 41614), (109, 41542),

Gene: Crumble_76 Start: 44855, Stop: 45280, Start Num: 34

Candidate Starts for Crumble_76:

(Start: 34 @44855 has 50 MA's), (Start: 39 @44870 has 1 MA's), (63, 45050), (81, 45134), (85, 45140), (87, 45143), (113, 45227),

Gene: DLane_80 Start: 49512, Stop: 49868, Start Num: 37

Candidate Starts for DLane_80:

(Start: 37 @49512 has 26 MA's), (Start: 39 @49524 has 1 MA's), (63, 49644), (71, 49686), (101, 49782), (120, 49839),

Gene: DLane_79 Start: 49141, Stop: 49515, Start Num: 34

Candidate Starts for DLane_79:

(Start: 34 @49141 has 50 MA's), (Start: 39 @49156 has 1 MA's), (63, 49291), (78, 49360), (109, 49441),

Gene: DaWorst_79 Start: 47793, Stop: 48188, Start Num: 35

Candidate Starts for DaWorst_79:

(Start: 35 @47793 has 5 MA's), (Start: 39 @47808 has 1 MA's), (63, 47928), (74, 48000), (83, 48024), (109, 48096), (123, 48168),

Gene: Donkeykong_83 Start: 49734, Stop: 50111, Start Num: 34

Candidate Starts for Donkeykong_83:

(Start: 34 @49734 has 50 MA's), (Start: 39 @49749 has 1 MA's), (63, 49884), (81, 49968), (85, 49974), (87, 49977), (113, 50061),

Gene: Dorothy_81 Start: 50224, Stop: 50574, Start Num: 34

Candidate Starts for Dorothy_81:

(Start: 34 @50224 has 50 MA's), (Start: 39 @50239 has 1 MA's), (63, 50374), (120, 50551),

Gene: Dussy_79 Start: 47985, Stop: 47563, Start Num: 37

Candidate Starts for Dussy_79:

(Start: 37 @47985 has 26 MA's), (Start: 39 @47973 has 1 MA's), (63, 47817), (74, 47745), (83, 47721), (109, 47649), (121, 47586),

Gene: Dylan_22 Start: 10677, Stop: 11069, Start Num: 37

Candidate Starts for Dylan_22:

(Start: 37 @10677 has 26 MA's), (63, 10809), (75, 10893), (97, 10947), (104, 10971), (107, 10983), (109, 10989), (113, 11013), (116, 11028), (120, 11046),

Gene: Emma_82 Start: 47609, Stop: 47959, Start Num: 34

Candidate Starts for Emma_82:

(16, 47513), (Start: 34 @47609 has 50 MA's), (Start: 39 @47624 has 1 MA's), (63, 47744),

Gene: Eureka_44 Start: 36100, Stop: 35735, Start Num: 33

Candidate Starts for Eureka_44:

(30, 36112), (Start: 33 @36100 has 1 MA's), (Start: 37 @36091 has 26 MA's), (Start: 39 @36079 has 1 MA's), (63, 35959), (71, 35917), (101, 35821), (120, 35764),

Gene: Eyeball_79 Start: 47899, Stop: 47528, Start Num: 37

Candidate Starts for Eyeball_79:

(Start: 37 @47899 has 26 MA's), (Start: 39 @47887 has 1 MA's), (43, 47851), (53, 47809), (57, 47785), (63, 47743), (82, 47653), (84, 47650), (111, 47587), (120, 47551),

Gene: Filuzino_80 Start: 50124, Stop: 50459, Start Num: 34

Candidate Starts for Filuzino_80:

(3, 49893), (4, 49920), (5, 49932), (7, 49938), (8, 49944), (11, 49980), (Start: 34 @50124 has 50 MA's), (Start: 39 @50139 has 1 MA's), (63, 50259), (98, 50361), (107, 50382), (113, 50406),

Gene: Firehouse51_75 Start: 49196, Stop: 49573, Start Num: 34

Candidate Starts for Firehouse51_75:

(16, 49100), (Start: 34 @49196 has 50 MA's), (Start: 39 @49211 has 1 MA's), (63, 49346), (70, 49379), (75, 49400), (102, 49466), (121, 49550),

Gene: Flathead_78 Start: 47777, Stop: 48157, Start Num: 34

Candidate Starts for Flathead_78:

(Start: 34 @47777 has 50 MA's), (Start: 39 @47792 has 1 MA's), (63, 47927), (81, 48011), (85, 48017), (87, 48020), (113, 48104),

Gene: FreddyB_88 Start: 49777, Stop: 50202, Start Num: 34

Candidate Starts for FreddyB_88:

(Start: 34 @49777 has 50 MA's), (Start: 39 @49792 has 1 MA's), (63, 49972), (81, 50056), (85, 50062), (87, 50065), (113, 50149),

Gene: Gallop_65 Start: 43534, Stop: 43866, Start Num: 38

Candidate Starts for Gallop_65:

(Start: 38 @43534 has 3 MA's), (40, 43558), (42, 43570), (46, 43582), (62, 43639), (68, 43666), (76, 43699), (80, 43717), (92, 43741), (94, 43747),

Gene: Gallop_66 Start: 43863, Stop: 44246, Start Num: 124

Candidate Starts for Gallop_66:

(73, 43689), (77, 43701), (124, 43863), (126, 43893), (127, 43920), (128, 43998), (129, 44010), (130, 44100),

Gene: Gandolph_77 Start: 45404, Stop: 45799, Start Num: 35

Candidate Starts for Gandolph_77:

(Start: 35 @45404 has 5 MA's), (Start: 39 @45419 has 1 MA's), (63, 45539), (74, 45617), (83, 45641), (109, 45713),

Gene: Gattaca_9 Start: 2524, Stop: 2901, Start Num: 34

Candidate Starts for Gattaca_9:

(Start: 34 @2524 has 50 MA's), (Start: 39 @2539 has 1 MA's), (63, 2674), (70, 2707), (75, 2728), (102, 2794), (121, 2878),

Gene: Girr_75 Start: 48247, Stop: 48597, Start Num: 34

Candidate Starts for Girr_75:

(Start: 34 @48247 has 50 MA's), (Start: 39 @48262 has 1 MA's), (63, 48382),

Gene: Goku_44 Start: 35820, Stop: 35464, Start Num: 37

Candidate Starts for Goku_44:

(30, 35841), (Start: 33 @35829 has 1 MA's), (Start: 37 @35820 has 26 MA's), (Start: 39 @35808 has 1 MA's), (63, 35688), (71, 35646), (101, 35550), (120, 35493),

Gene: GoongGoong_8 Start: 2533, Stop: 2910, Start Num: 34

Candidate Starts for GoongGoong_8:

(Start: 34 @2533 has 50 MA's), (Start: 39 @2548 has 1 MA's), (63, 2683), (70, 2716), (75, 2737), (102, 2803), (121, 2887),

Gene: Gorge_80 Start: 49405, Stop: 49830, Start Num: 34

Candidate Starts for Gorge_80:

(Start: 34 @49405 has 50 MA's), (Start: 39 @49420 has 1 MA's), (63, 49600), (81, 49684), (85, 49690), (87, 49693), (113, 49777),

Gene: Gyzlar_56 Start: 38713, Stop: 38327, Start Num: 37

Candidate Starts for Gyzlar_56:

(Start: 37 @38713 has 26 MA's), (Start: 39 @38701 has 1 MA's), (63, 38581), (74, 38509), (83, 38485), (109, 38413), (121, 38350),

Gene: Hegedechwinu_80 Start: 46978, Stop: 47358, Start Num: 34

Candidate Starts for Hegedechwinu_80:

(Start: 34 @46978 has 50 MA's), (Start: 39 @46993 has 1 MA's), (63, 47128), (81, 47212), (85, 47218), (87, 47221), (113, 47305),

Gene: Inventum_78 Start: 48409, Stop: 48759, Start Num: 34

Candidate Starts for Inventum_78:

(Start: 34 @48409 has 50 MA's), (Start: 39 @48424 has 1 MA's), (63, 48559), (120, 48736),

Gene: Jabbawokkie_88 Start: 46909, Stop: 47265, Start Num: 34

Candidate Starts for Jabbawokkie_88:

(Start: 34 @46909 has 50 MA's), (Start: 39 @46924 has 1 MA's), (63, 47044), (114, 47215), (118, 47236),

Gene: JalFarm20_87 Start: 48995, Stop: 49375, Start Num: 34

Candidate Starts for JalFarm20_87:

(17, 48899), (Start: 34 @48995 has 50 MA's), (Start: 39 @49010 has 1 MA's), (63, 49145), (81, 49229), (85, 49235), (87, 49238), (113, 49322),

Gene: KBG_62 Start: 42879, Stop: 42511, Start Num: 37

Candidate Starts for KBG_62:

(22, 42936), (23, 42933), (Start: 37 @42879 has 26 MA's), (Start: 39 @42867 has 1 MA's), (63, 42732), (75, 42672), (90, 42636), (108, 42588), (109, 42585), (121, 42522),

Gene: KSSJEB_78 Start: 46842, Stop: 46471, Start Num: 37

Candidate Starts for KSSJEB_78:

(Start: 37 @46842 has 26 MA's), (Start: 39 @46830 has 1 MA's), (43, 46794), (53, 46752), (57, 46728), (63, 46686), (82, 46596), (84, 46593), (111, 46530), (120, 46494),

Gene: Kenmech_82 Start: 49111, Stop: 48689, Start Num: 37

Candidate Starts for Kenmech_82:

(Start: 37 @49111 has 26 MA's), (Start: 39 @49099 has 1 MA's), (63, 48943), (74, 48871), (83, 48847), (109, 48775), (121, 48712),

Gene: Kenuha5_75 Start: 48762, Stop: 49157, Start Num: 35

Candidate Starts for Kenuha5_75:

(Start: 35 @48762 has 5 MA's), (Start: 39 @48777 has 1 MA's), (63, 48897), (74, 48975), (83, 48999), (109, 49071),

Gene: Kingsley_82 Start: 50469, Stop: 50837, Start Num: 34

Candidate Starts for Kingsley_82:

(Start: 34 @50469 has 50 MA's), (Start: 39 @50484 has 1 MA's), (63, 50604), (78, 50673), (87, 50694), (109, 50754), (120, 50811),

Gene: Koella_70 Start: 44029, Stop: 44454, Start Num: 34

Candidate Starts for Koella_70:

(Start: 34 @44029 has 50 MA's), (Start: 39 @44044 has 1 MA's), (63, 44224), (81, 44308), (85, 44314), (87, 44317), (113, 44401),

Gene: LastJedi_70 Start: 46604, Stop: 47029, Start Num: 34

Candidate Starts for LastJedi_70:

(Start: 34 @46604 has 50 MA's), (Start: 39 @46619 has 1 MA's), (63, 46799), (81, 46883), (85, 46889), (87, 46892), (113, 46976),

Gene: LittleE_79 Start: 51011, Stop: 50637, Start Num: 39

Candidate Starts for LittleE_79:

(Start: 37 @51023 has 26 MA's), (Start: 39 @51011 has 1 MA's), (63, 50891), (74, 50819), (83, 50795), (109, 50723),

Gene: Lizziana_83 Start: 49853, Stop: 50278, Start Num: 34

Candidate Starts for Lizziana_83:

(Start: 34 @49853 has 50 MA's), (Start: 39 @49868 has 1 MA's), (63, 50048), (81, 50132), (85, 50138), (87, 50141), (113, 50225),

Gene: Lucky2013_77 Start: 48582, Stop: 48184, Start Num: 36

Candidate Starts for Lucky2013_77:

(Start: 36 @48582 has 8 MA's), (Start: 39 @48570 has 1 MA's), (63, 48414), (81, 48330), (85, 48324), (87, 48321), (113, 48237),

Gene: Mangeria_6 Start: 1759, Stop: 2133, Start Num: 37

Candidate Starts for Mangeria_6:

(Start: 37 @1759 has 26 MA's), (44, 1798), (55, 1843), (63, 1906), (88, 2008),

Gene: Mantra_76 Start: 47820, Stop: 48170, Start Num: 34

Candidate Starts for Mantra_76:

(16, 47724), (Start: 34 @47820 has 50 MA's), (Start: 39 @47835 has 1 MA's), (63, 47955),

Gene: Marker_82 Start: 48016, Stop: 48423, Start Num: 37

Candidate Starts for Marker_82:

(13, 47893), (28, 47986), (29, 47995), (Start: 37 @48016 has 26 MA's), (44, 48055), (55, 48100), (63, 48163), (74, 48241), (83, 48265), (109, 48337),

Gene: MaryBeth_59 Start: 41225, Stop: 40836, Start Num: 37

Candidate Starts for MaryBeth_59:

(6, 41426), (24, 41282), (25, 41279), (Start: 37 @41225 has 26 MA's), (Start: 39 @41213 has 1 MA's), (59, 41126), (63, 41093), (74, 41015), (83, 40991), (109, 40919),

Gene: MetalQZJ_58 Start: 41225, Stop: 40836, Start Num: 37

Candidate Starts for MetalQZJ_58:

(6, 41426), (24, 41282), (25, 41279), (Start: 37 @41225 has 26 MA's), (Start: 39 @41213 has 1 MA's), (59, 41126), (63, 41093), (74, 41015), (83, 40991), (109, 40919),

Gene: MiaZeal_80 Start: 49238, Stop: 48840, Start Num: 36

Candidate Starts for MiaZeal_80:

(Start: 36 @49238 has 8 MA's), (Start: 39 @49226 has 1 MA's), (63, 49070), (81, 48986), (85, 48980), (87, 48977), (113, 48893),

Gene: MicyPS_42 Start: 33832, Stop: 33485, Start Num: 38

Candidate Starts for MicyPS_42:

(Start: 38 @33832 has 3 MA's), (56, 33757), (62, 33727), (63, 33718), (65, 33700), (66, 33694), (103, 33577), (115, 33529),

Gene: MisterCuddles_76 Start: 48247, Stop: 48597, Start Num: 34

Candidate Starts for MisterCuddles_76:

(Start: 34 @48247 has 50 MA's), (Start: 39 @48262 has 1 MA's), (63, 48382),

Gene: MosMoris_9 Start: 2524, Stop: 2901, Start Num: 34

Candidate Starts for MosMoris_9:

(Start: 34 @2524 has 50 MA's), (Start: 39 @2539 has 1 MA's), (63, 2674), (70, 2707), (75, 2728), (102, 2794), (121, 2878),

Gene: Nekros_75 Start: 49878, Stop: 49516, Start Num: 36

Candidate Starts for Nekros_75:

(Start: 36 @49878 has 8 MA's), (Start: 39 @49866 has 1 MA's), (81, 49662), (85, 49656), (87, 49653), (113, 49569),

Gene: Nibley_69 Start: 46726, Stop: 46364, Start Num: 36

Candidate Starts for Nibley_69:

(Start: 36 @46726 has 8 MA's), (Start: 39 @46714 has 1 MA's), (63, 46594), (81, 46510), (85, 46504), (87, 46501), (113, 46417),

Gene: NormanBulbieJr_75 Start: 48043, Stop: 48468, Start Num: 34

Candidate Starts for NormanBulbieJr_75:

(Start: 34 @48043 has 50 MA's), (Start: 39 @48058 has 1 MA's), (63, 48238), (81, 48322), (85, 48328), (87, 48331), (113, 48415),

Gene: Ogotogo_85 Start: 48076, Stop: 48471, Start Num: 36

Candidate Starts for Ogotogo_85:

(27, 48034), (Start: 36 @48076 has 8 MA's), (Start: 39 @48088 has 1 MA's), (63, 48244), (70, 48277), (75, 48298), (102, 48364), (121, 48448),

Gene: PSonyx_48 Start: 34648, Stop: 34265, Start Num: 38

Candidate Starts for PSonyx_48:

(Start: 38 @34648 has 3 MA's), (43, 34609), (62, 34540), (63, 34531), (92, 34420), (109, 34375), (115, 34339), (122, 34309),

Gene: PSonyx_54 Start: 36309, Stop: 35962, Start Num: 38

Candidate Starts for PSonyx_54:

(Start: 38 @36309 has 3 MA's), (54, 36219), (62, 36183), (63, 36174), (64, 36156), (89, 36075), (91, 36072), (92, 36069), (99, 36045), (109, 36030),

Gene: Peterson_65 Start: 43369, Stop: 42962, Start Num: 37

Candidate Starts for Peterson_65:

(6, 43570), (24, 43426), (25, 43423), (Start: 37 @43369 has 26 MA's), (Start: 39 @43357 has 1 MA's), (45, 43318), (61, 43216), (72, 43138), (95, 43084), (106, 43051), (110, 43042), (119, 42994),

Gene: Peterson_79 Start: 49024, Stop: 48623, Start Num: 37

Candidate Starts for Peterson_79:

(Start: 37 @49024 has 26 MA's), (Start: 39 @49012 has 1 MA's), (47, 48949), (49, 48940), (63, 48847), (71, 48805), (101, 48709), (120, 48652),

Gene: Petruccio_60 Start: 40166, Stop: 39780, Start Num: 37

Candidate Starts for Petruccio_60:

(Start: 37 @40166 has 26 MA's), (Start: 39 @40154 has 1 MA's), (63, 40034), (74, 39962), (83, 39938), (109, 39866), (121, 39803),

Gene: Phalconet_76 Start: 47337, Stop: 47762, Start Num: 34

Candidate Starts for Phalconet_76:

(Start: 34 @47337 has 50 MA's), (Start: 39 @47352 has 1 MA's), (51, 47436), (52, 47454), (63, 47532), (81, 47616), (85, 47622), (87, 47625), (113, 47709),

Gene: Phanphagia_77 Start: 48265, Stop: 48633, Start Num: 34

Candidate Starts for Phanphagia_77:

(Start: 34 @48265 has 50 MA's), (Start: 39 @48280 has 1 MA's), (63, 48400), (78, 48469), (87, 48490), (109, 48550), (120, 48607),

Gene: PhesterPhotato_83 Start: 48607, Stop: 48993, Start Num: 37

Candidate Starts for PhesterPhotato_83:

(Start: 37 @48607 has 26 MA's), (Start: 39 @48619 has 1 MA's), (63, 48739), (74, 48811), (83, 48835), (109, 48907),

Gene: Porcelain_79 Start: 49238, Stop: 48840, Start Num: 36

Candidate Starts for Porcelain_79:

(Start: 36 @49238 has 8 MA's), (Start: 39 @49226 has 1 MA's), (63, 49070), (81, 48986), (85, 48980), (87, 48977), (113, 48893),

Gene: Priscilla_76 Start: 48141, Stop: 48566, Start Num: 34

Candidate Starts for Priscilla_76:

(Start: 34 @48141 has 50 MA's), (Start: 39 @48156 has 1 MA's), (63, 48336), (81, 48420), (85, 48426), (87, 48429), (113, 48513),

Gene: Puppet_75 Start: 48323, Stop: 47952, Start Num: 37

Candidate Starts for Puppet_75:

(Start: 37 @48323 has 26 MA's), (Start: 39 @48311 has 1 MA's), (43, 48275), (53, 48233), (57, 48209), (63, 48167), (82, 48077), (84, 48074), (111, 48011), (120, 47975),

Gene: Raela_7 Start: 2533, Stop: 2922, Start Num: 35

Candidate Starts for Raela_7:

(Start: 35 @2533 has 5 MA's), (Start: 39 @2548 has 1 MA's), (63, 2668), (74, 2740), (83, 2764), (109, 2836), (121, 2899),

Gene: Ramsey_83 Start: 50333, Stop: 50683, Start Num: 34

Candidate Starts for Ramsey_83:

(Start: 34 @50333 has 50 MA's), (Start: 39 @50348 has 1 MA's), (63, 50483), (120, 50660),

Gene: RedBird_81 Start: 50091, Stop: 50441, Start Num: 34

Candidate Starts for RedBird_81:

(Start: 34 @50091 has 50 MA's), (Start: 39 @50106 has 1 MA's), (63, 50241), (120, 50418),

Gene: Ruby_73 Start: 48248, Stop: 48598, Start Num: 34

Candidate Starts for Ruby_73:

(Start: 34 @48248 has 50 MA's), (Start: 39 @48263 has 1 MA's), (63, 48383),

Gene: STLscum_69 Start: 42972, Stop: 42544, Start Num: 37

Candidate Starts for STLscum_69:

(6, 43173), (24, 43029), (25, 43026), (Start: 37 @42972 has 26 MA's), (Start: 39 @42960 has 1 MA's), (63, 42804), (74, 42726), (83, 42702), (109, 42630),

Gene: Saal_78 Start: 49224, Stop: 49649, Start Num: 34

Candidate Starts for Saal_78:

(Start: 34 @49224 has 50 MA's), (Start: 39 @49239 has 1 MA's), (63, 49419), (81, 49503), (85, 49509), (87, 49512), (113, 49596),

Gene: SarFire_60 Start: 40901, Stop: 40488, Start Num: 37

Candidate Starts for SarFire_60:

(6, 41102), (24, 40958), (25, 40955), (Start: 37 @40901 has 26 MA's), (41, 40862), (54, 40817), (63, 40754), (74, 40676), (83, 40652), (109, 40580),

Gene: Saskia_69 Start: 41717, Stop: 41358, Start Num: 36

Candidate Starts for Saskia_69:

(20, 41786), (26, 41762), (Start: 36 @41717 has 8 MA's), (Start: 39 @41705 has 1 MA's), (63, 41585), (81, 41501), (85, 41495), (87, 41492), (113, 41408),

Gene: Sassafras_81 Start: 48408, Stop: 48758, Start Num: 34

Candidate Starts for Sassafras_81:

(Start: 34 @48408 has 50 MA's), (Start: 39 @48423 has 1 MA's), (63, 48558), (120, 48735),

Gene: ScottMcG_15 Start: 5206, Stop: 5562, Start Num: 34

Candidate Starts for ScottMcG_15:

(Start: 34 @5206 has 50 MA's), (Start: 39 @5221 has 1 MA's), (63, 5341), (114, 5512), (118, 5533),

Gene: Shaboozey_75 Start: 47658, Stop: 47296, Start Num: 36

Candidate Starts for Shaboozey_75:

(Start: 36 @47658 has 8 MA's), (Start: 39 @47646 has 1 MA's), (63, 47526), (81, 47442), (85, 47436), (87, 47433), (113, 47349),

Gene: Shauna1_78 Start: 48515, Stop: 48883, Start Num: 34

Candidate Starts for Shauna1_78:

(Start: 34 @48515 has 50 MA's), (Start: 39 @48530 has 1 MA's), (63, 48650), (78, 48719), (87, 48740), (109, 48800), (120, 48857),

Gene: SiSi_75 Start: 47345, Stop: 47695, Start Num: 34

Candidate Starts for SiSi_75:

(Start: 34 @47345 has 50 MA's), (Start: 39 @47360 has 1 MA's), (63, 47480),

Gene: Simpliphy_43 Start: 34882, Stop: 34496, Start Num: 37

Candidate Starts for Simpliphy_43:

(Start: 37 @34882 has 26 MA's), (Start: 39 @34870 has 1 MA's), (63, 34750), (74, 34678), (83, 34654), (109, 34582), (121, 34519),

Gene: Smooch_23 Start: 10621, Stop: 10995, Start Num: 31

Candidate Starts for Smooch_23:

(15, 10534), (26, 10591), (Start: 31 @10621 has 1 MA's), (Start: 36 @10633 has 8 MA's), (Start: 39 @10645 has 1 MA's), (63, 10765), (81, 10849), (85, 10855), (87, 10858), (113, 10942),

Gene: Spartacus_85 Start: 51000, Stop: 51356, Start Num: 37

Candidate Starts for Spartacus_85:

(1, 50706), (2, 50739), (9, 50826), (10, 50835), (12, 50859), (13, 50877), (28, 50970), (29, 50979), (Start: 37 @51000 has 26 MA's), (44, 51039), (55, 51084), (63, 51147), (67, 51180), (69, 51183), (83, 51234), (86, 51240), (100, 51276), (105, 51285),

Gene: Squint_80 Start: 49357, Stop: 48959, Start Num: 36

Candidate Starts for Squint_80:

(Start: 36 @49357 has 8 MA's), (Start: 39 @49345 has 1 MA's), (63, 49189), (81, 49105), (85, 49099), (87, 49096), (113, 49012),

Gene: StAnnes_81 Start: 49578, Stop: 49967, Start Num: 35

Candidate Starts for StAnnes_81:

(Start: 35 @49578 has 5 MA's), (Start: 39 @49593 has 1 MA's), (63, 49713), (74, 49785), (83, 49809), (109, 49881), (121, 49944),

Gene: SuperGrey_79 Start: 50245, Stop: 50601, Start Num: 34

Candidate Starts for SuperGrey_79:

(Start: 34 @50245 has 50 MA's), (Start: 39 @50260 has 1 MA's), (63, 50395), (120, 50572),

Gene: Superphikiman_77 Start: 48448, Stop: 48050, Start Num: 36

Candidate Starts for Superphikiman_77:

(Start: 36 @48448 has 8 MA's), (Start: 39 @48436 has 1 MA's), (63, 48280), (81, 48196), (85, 48190), (87, 48187), (113, 48103),

Gene: SwagPigglett_82 Start: 50360, Stop: 50785, Start Num: 34

Candidate Starts for SwagPigglett_82:

(Start: 34 @50360 has 50 MA's), (Start: 39 @50375 has 1 MA's), (63, 50555), (81, 50639), (85, 50645), (87, 50648), (113, 50732),

Gene: Taj_85 Start: 49957, Stop: 50334, Start Num: 34

Candidate Starts for Taj_85:

(Start: 34 @49957 has 50 MA's), (Start: 39 @49972 has 1 MA's), (52, 50050), (63, 50107), (81, 50191), (85, 50197), (87, 50200), (113, 50284),

Gene: Taotie_48 Start: 32717, Stop: 32328, Start Num: 38

Candidate Starts for Taotie_48:

(Start: 38 @32717 has 3 MA's), (56, 32642), (92, 32492), (115, 32411), (117, 32405), (122, 32381),

Gene: Taotie_53 Start: 33869, Stop: 33528, Start Num: 38

Candidate Starts for Taotie_53:

(14, 33992), (18, 33959), (Start: 38 @33869 has 3 MA's), (62, 33749), (63, 33740), (89, 33641), (91, 33638), (92, 33635), (99, 33611), (109, 33596),

Gene: Teodoridan_77 Start: 45969, Stop: 45598, Start Num: 37

Candidate Starts for Teodoridan_77:

(Start: 37 @45969 has 26 MA's), (Start: 39 @45957 has 1 MA's), (43, 45921), (53, 45879), (57, 45855), (63, 45813), (82, 45723), (84, 45720), (111, 45657), (120, 45621),

Gene: Thor_60 Start: 40259, Stop: 39846, Start Num: 37

Candidate Starts for Thor_60:

(6, 40460), (24, 40316), (25, 40313), (Start: 37 @40259 has 26 MA's), (41, 40220), (54, 40175), (63, 40112), (74, 40034), (83, 40010), (109, 39938),

Gene: Tootsieroll_77 Start: 49368, Stop: 49754, Start Num: 34

Candidate Starts for Tootsieroll_77:

(Start: 34 @49368 has 50 MA's), (Start: 39 @49383 has 1 MA's), (63, 49518), (79, 49584), (93, 49617), (96, 49623), (108, 49659), (112, 49668), (123, 49734),

Gene: Veteran_71 Start: 47213, Stop: 47563, Start Num: 34

Candidate Starts for Veteran_71:

(Start: 34 @47213 has 50 MA's), (Start: 39 @47228 has 1 MA's), (63, 47348),

Gene: Wee_84 Start: 50033, Stop: 50410, Start Num: 34

Candidate Starts for Wee_84:

(Start: 34 @50033 has 50 MA's), (Start: 39 @50048 has 1 MA's), (52, 50126), (63, 50183), (81, 50267), (85, 50273), (87, 50276), (113, 50360),

Gene: Zakhe101_23 Start: 10681, Stop: 11073, Start Num: 37

Candidate Starts for Zakhe101_23:

(Start: 37 @10681 has 26 MA's), (63, 10813), (75, 10897), (97, 10951), (104, 10975), (107, 10987), (109, 10993), (113, 11017), (116, 11032), (120, 11050),

Gene: Zapner_87 Start: 47003, Stop: 47359, Start Num: 34

Candidate Starts for Zapner_87:

(Start: 34 @47003 has 50 MA's), (Start: 39 @47018 has 1 MA's), (63, 47138), (114, 47309), (118, 47330),

Gene: Zeeculate_77 Start: 48542, Stop: 48138, Start Num: 36

Candidate Starts for Zeeculate_77:

(Start: 36 @48542 has 8 MA's), (Start: 39 @48530 has 1 MA's), (50, 48467), (58, 48410), (63, 48368), (81, 48284), (85, 48278), (87, 48275), (113, 48191),