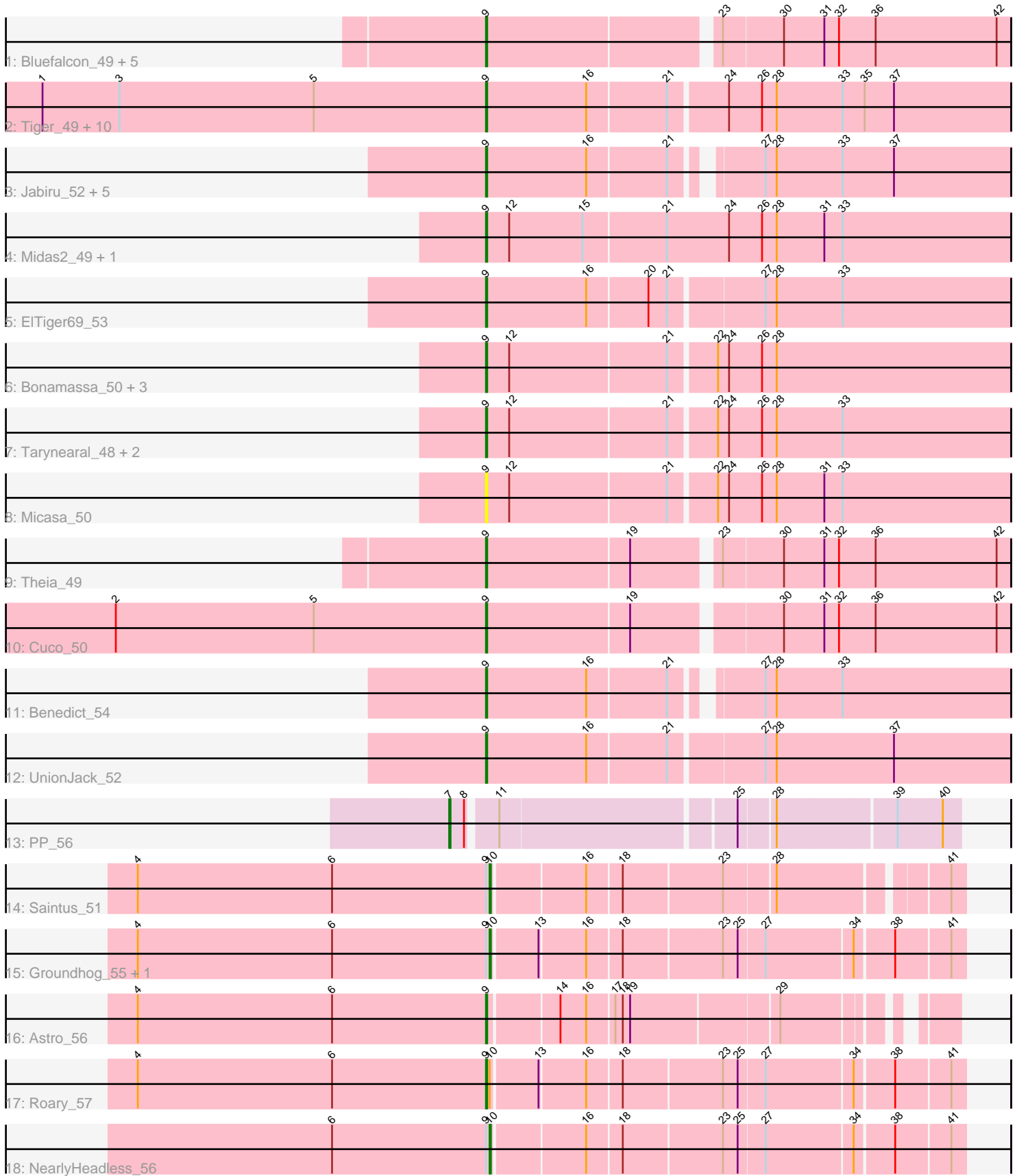


Pham 135623



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 135623 Report

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

Pham number 135623 has 45 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Bluefalcon_49, MarysWell_50, Ghoulboy_53, SydNat_53, Zolita_52, Dublin_50
- Track 2 : Tiger_49, AgentM_49, Aragog_49, Phlorence_48, ForGetIt_50, Discoknowium_48, PickleBack_50, Jovo_50, Lev2_50, Conspiracy_50, Archetta_49
- Track 3 : Jabiru_52, PetterN_55, Naca_51, Chadwick_54, Scorpia_55, Airmid_51
- Track 4 : Midas2_49, Coog_49
- Track 5 : ElTiger69_53
- Track 6 : Bonamassa_50, George_48, LittleCherry_50, HuhtaEnerson15_50
- Track 7 : Tarynearal_48, Milcery_50, Swirley_52
- Track 8 : Micasa_50
- Track 9 : Theia_49
- Track 10 : Cuco_50
- Track 11 : Benedict_54
- Track 12 : UnionJack_52
- Track 13 : PP_56
- Track 14 : Saintus_51
- Track 15 : Groundhog_55, Danforth_56
- Track 16 : Astro_56
- Track 17 : Roary_57
- Track 18 : NearlyHeadless_56

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

The start number called the most often in the published annotations is 9, it was called in 39 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_49, Airmid_51, Aragog_49, Archetta_49, Astro_56, Benedict_54, Bluefalcon_49, Bonamassa_50, Chadwick_54, Conspiracy_50, Coog_49, Cuco_50, Discoknowium_48, Dublin_50, ElTiger69_53, ForGetIt_50, George_48, Ghoulboy_53, HuhtaEnerson15_50, Jabiru_52, Jovo_50, Lev2_50, LittleCherry_50, MarysWell_50, Micasa_50, Midas2_49, Milcery_50, Naca_51, PetterN_55, Phlorence_48, PickleBack_50, Roary_57, Scorpia_55, Swirley_52, SydNat_53, Tarynearal_48, Theia_49, Tiger_49, UnionJack_52, Zolita_52,

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

- Danforth_56, Groundhog_55, NearlyHeadless_56, Saintus_51,

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

- PP_56,

Summary by start number:

Start 7:

- Found in 1 of 45 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_56 (A7),

Start 9:

- Found in 44 of 45 (97.8%) of genes in pham
- Manual Annotations of this start: 39 of 44
- Called 90.9% of time when present
- Phage (with cluster) where this start called: AgentM_49 (A5), Airmid_51 (A5), Aragog_49 (A5), Archetta_49 (A5), Astro_56 (A8), Benedict_54 (A5), Bluefalcon_49 (A5), Bonamassa_50 (A5), Chadwick_54 (A5), Conspiracy_50 (A5), Coog_49 (A5), Cuco_50 (A5), Discoknowium_48 (A5), Dublin_50 (A5), ElTiger69_53 (A5), ForGetIt_50 (A5), George_48 (A5), Ghouboy_53 (A5), HuhtaEnerson15_50 (A5), Jabiru_52 (A5), Jovo_50 (A5), Lev2_50 (A5), LittleCherry_50 (A5), MarysWell_50 (A5), Micasa_50 (A5), Midas2_49 (A5), Milcery_50 (A5), Naca_51 (A5), PetterN_55 (A5), Phlorence_48 (A5), PickleBack_50 (A5), Roary_57 (A8), Scorpia_55 (A5), Swirley_52 (A5), SydNat_53 (A5), Tarynearal_48 (A5), Theia_49 (A5), Tiger_49 (A5), UnionJack_52 (A5), Zolita_52 (A5),

Start 10:

- Found in 5 of 45 (11.1%) of genes in pham
- Manual Annotations of this start: 4 of 44
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Danforth_56 (A8), Groundhog_55 (A8), NearlyHeadless_56 (A8), Saintus_51 (A8),

Summary by clusters:

There are 3 clusters represented in this pham: A8, A5, A7,

Info for manual annotations of cluster A5:

- Start number 9 was manually annotated 37 times for cluster A5.

Info for manual annotations of cluster A7:

- Start number 7 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 9 was manually annotated 2 times for cluster A8.
- Start number 10 was manually annotated 4 times for cluster A8.

Gene Information:

Gene: AgentM_49 Start: 36924, Stop: 36505, Start Num: 9

Candidate Starts for AgentM_49:

(1, 37287), (3, 37224), (5, 37065), (Start: 9 @36924 has 39 MA's), (16, 36843), (21, 36780), (24, 36735), (26, 36708), (28, 36696), (33, 36642), (35, 36624), (37, 36600),

Gene: Airmid_51 Start: 37065, Stop: 36664, Start Num: 9

Candidate Starts for Airmid_51:

(Start: 9 @37065 has 39 MA's), (16, 36984), (21, 36921), (27, 36864), (28, 36855), (33, 36801), (37, 36759),

Gene: Aragog_49 Start: 36944, Stop: 36525, Start Num: 9

Candidate Starts for Aragog_49:

(1, 37307), (3, 37244), (5, 37085), (Start: 9 @36944 has 39 MA's), (16, 36863), (21, 36800), (24, 36755), (26, 36728), (28, 36716), (33, 36662), (35, 36644), (37, 36620),

Gene: Archetta_49 Start: 37354, Stop: 36935, Start Num: 9

Candidate Starts for Archetta_49:

(1, 37717), (3, 37654), (5, 37495), (Start: 9 @37354 has 39 MA's), (16, 37273), (21, 37210), (24, 37165), (26, 37138), (28, 37126), (33, 37072), (35, 37054), (37, 37030),

Gene: Astro_56 Start: 36909, Stop: 36574, Start Num: 9

Candidate Starts for Astro_56:

(4, 37194), (6, 37035), (Start: 9 @36909 has 39 MA's), (14, 36855), (16, 36834), (17, 36813), (18, 36807), (19, 36801), (29, 36687),

Gene: Benedict_54 Start: 37313, Stop: 36912, Start Num: 9

Candidate Starts for Benedict_54:

(Start: 9 @37313 has 39 MA's), (16, 37232), (21, 37169), (27, 37112), (28, 37103), (33, 37049),

Gene: Bluefalcon_49 Start: 37490, Stop: 37080, Start Num: 9

Candidate Starts for Bluefalcon_49:

(Start: 9 @37490 has 39 MA's), (23, 37313), (30, 37265), (31, 37232), (32, 37220), (36, 37190), (42, 37091),

Gene: Bonamassa_50 Start: 37367, Stop: 36948, Start Num: 9

Candidate Starts for Bonamassa_50:

(Start: 9 @37367 has 39 MA's), (12, 37349), (21, 37223), (22, 37187), (24, 37178), (26, 37151), (28, 37139),

Gene: Chadwick_54 Start: 37154, Stop: 36753, Start Num: 9

Candidate Starts for Chadwick_54:

(Start: 9 @37154 has 39 MA's), (16, 37073), (21, 37010), (27, 36953), (28, 36944), (33, 36890), (37, 36848),

Gene: Conspiracy_50 Start: 37166, Stop: 36747, Start Num: 9

Candidate Starts for Conspiracy_50:

(1, 37529), (3, 37466), (5, 37307), (Start: 9 @37166 has 39 MA's), (16, 37085), (21, 37022), (24, 36977), (26, 36950), (28, 36938), (33, 36884), (35, 36866), (37, 36842),

Gene: Coog_49 Start: 37357, Stop: 36932, Start Num: 9

Candidate Starts for Coog_49:

(Start: 9 @37357 has 39 MA's), (12, 37339), (15, 37279), (21, 37213), (24, 37162), (26, 37135), (28, 37123), (31, 37084), (33, 37069),

Gene: Cuco_50 Start: 37214, Stop: 36804, Start Num: 9

Candidate Starts for Cuco_50:

(2, 37517), (5, 37355), (Start: 9 @37214 has 39 MA's), (19, 37100), (30, 36989), (31, 36956), (32, 36944), (36, 36914), (42, 36815),

Gene: Danforth_56 Start: 36969, Stop: 36607, Start Num: 10

Candidate Starts for Danforth_56:

(4, 37257), (6, 37098), (Start: 9 @36972 has 39 MA's), (Start: 10 @36969 has 4 MA's), (13, 36933), (16, 36897), (18, 36870), (23, 36792), (25, 36780), (27, 36759), (34, 36690), (38, 36660), (41, 36618),

Gene: Discoknowium_48 Start: 36833, Stop: 36414, Start Num: 9

Candidate Starts for Discoknowium_48:

(1, 37196), (3, 37133), (5, 36974), (Start: 9 @36833 has 39 MA's), (16, 36752), (21, 36689), (24, 36644), (26, 36617), (28, 36605), (33, 36551), (35, 36533), (37, 36509),

Gene: Dublin_50 Start: 37326, Stop: 36916, Start Num: 9

Candidate Starts for Dublin_50:

(Start: 9 @37326 has 39 MA's), (23, 37149), (30, 37101), (31, 37068), (32, 37056), (36, 37026), (42, 36927),

Gene: ElTiger69_53 Start: 37289, Stop: 36873, Start Num: 9

Candidate Starts for ElTiger69_53:

(Start: 9 @37289 has 39 MA's), (16, 37208), (20, 37160), (21, 37145), (27, 37073), (28, 37064), (33, 37010),

Gene: ForGetIt_50 Start: 37191, Stop: 36772, Start Num: 9

Candidate Starts for ForGetIt_50:

(1, 37554), (3, 37491), (5, 37332), (Start: 9 @37191 has 39 MA's), (16, 37110), (21, 37047), (24, 37002), (26, 36975), (28, 36963), (33, 36909), (35, 36891), (37, 36867),

Gene: George_48 Start: 37264, Stop: 36845, Start Num: 9

Candidate Starts for George_48:

(Start: 9 @37264 has 39 MA's), (12, 37246), (21, 37120), (22, 37084), (24, 37075), (26, 37048), (28, 37036),

Gene: Ghoulboy_53 Start: 38061, Stop: 37651, Start Num: 9

Candidate Starts for Ghoulboy_53:

(Start: 9 @38061 has 39 MA's), (23, 37884), (30, 37836), (31, 37803), (32, 37791), (36, 37761), (42, 37662),

Gene: Groundhog_55 Start: 36884, Stop: 36522, Start Num: 10

Candidate Starts for Groundhog_55:

(4, 37172), (6, 37013), (Start: 9 @36887 has 39 MA's), (Start: 10 @36884 has 4 MA's), (13, 36848), (16, 36812), (18, 36785), (23, 36707), (25, 36695), (27, 36674), (34, 36605), (38, 36575), (41, 36533),

Gene: HuhtaEnerson15_50 Start: 37261, Stop: 36842, Start Num: 9

Candidate Starts for HuhtaEnerson15_50:

(Start: 9 @37261 has 39 MA's), (12, 37243), (21, 37117), (22, 37081), (24, 37072), (26, 37045), (28, 37033),

Gene: Jabiru_52 Start: 37168, Stop: 36767, Start Num: 9

Candidate Starts for Jabiru_52:

(Start: 9 @37168 has 39 MA's), (16, 37087), (21, 37024), (27, 36967), (28, 36958), (33, 36904), (37, 36862),

Gene: Jovo_50 Start: 37447, Stop: 37028, Start Num: 9

Candidate Starts for Jovo_50:

(1, 37810), (3, 37747), (5, 37588), (Start: 9 @37447 has 39 MA's), (16, 37366), (21, 37303), (24, 37258), (26, 37231), (28, 37219), (33, 37165), (35, 37147), (37, 37123),

Gene: Lev2_50 Start: 37079, Stop: 36660, Start Num: 9

Candidate Starts for Lev2_50:

(1, 37442), (3, 37379), (5, 37220), (Start: 9 @37079 has 39 MA's), (16, 36998), (21, 36935), (24, 36890), (26, 36863), (28, 36851), (33, 36797), (35, 36779), (37, 36755),

Gene: LittleCherry_50 Start: 37281, Stop: 36862, Start Num: 9

Candidate Starts for LittleCherry_50:

(Start: 9 @37281 has 39 MA's), (12, 37263), (21, 37137), (22, 37101), (24, 37092), (26, 37065), (28, 37053),

Gene: MarysWell_50 Start: 37569, Stop: 37159, Start Num: 9

Candidate Starts for MarysWell_50:

(Start: 9 @37569 has 39 MA's), (23, 37392), (30, 37344), (31, 37311), (32, 37299), (36, 37269), (42, 37170),

Gene: Micasa_50 Start: 37449, Stop: 37030, Start Num: 9

Candidate Starts for Micasa_50:

(Start: 9 @37449 has 39 MA's), (12, 37431), (21, 37305), (22, 37269), (24, 37260), (26, 37233), (28, 37221), (31, 37182), (33, 37167),

Gene: Midas2_49 Start: 37357, Stop: 36932, Start Num: 9

Candidate Starts for Midas2_49:

(Start: 9 @37357 has 39 MA's), (12, 37339), (15, 37279), (21, 37213), (24, 37162), (26, 37135), (28, 37123), (31, 37084), (33, 37069),

Gene: Milcery_50 Start: 37232, Stop: 36813, Start Num: 9

Candidate Starts for Milcery_50:

(Start: 9 @37232 has 39 MA's), (12, 37214), (21, 37088), (22, 37052), (24, 37043), (26, 37016), (28, 37004), (33, 36950),

Gene: Naca_51 Start: 37707, Stop: 37306, Start Num: 9

Candidate Starts for Naca_51:

(Start: 9 @37707 has 39 MA's), (16, 37626), (21, 37563), (27, 37506), (28, 37497), (33, 37443), (37, 37401),

Gene: NearlyHeadless_56 Start: 36735, Stop: 36373, Start Num: 10

Candidate Starts for NearlyHeadless_56:

(6, 36864), (Start: 9 @36738 has 39 MA's), (Start: 10 @36735 has 4 MA's), (16, 36663), (18, 36636), (23, 36558), (25, 36546), (27, 36525), (34, 36456), (38, 36426), (41, 36384),

Gene: PP_56 Start: 41604, Stop: 41218, Start Num: 7

Candidate Starts for PP_56:

(Start: 7 @41604 has 1 MA's), (8, 41592), (11, 41571), (25, 41388), (28, 41361), (39, 41268), (40, 41232),

Gene: PetterN_55 Start: 37322, Stop: 36921, Start Num: 9

Candidate Starts for PetterN_55:

(Start: 9 @37322 has 39 MA's), (16, 37241), (21, 37178), (27, 37121), (28, 37112), (33, 37058), (37, 37016),

Gene: Phlorence_48 Start: 36824, Stop: 36405, Start Num: 9

Candidate Starts for Phlorence_48:

(1, 37187), (3, 37124), (5, 36965), (Start: 9 @36824 has 39 MA's), (16, 36743), (21, 36680), (24, 36635), (26, 36608), (28, 36596), (33, 36542), (35, 36524), (37, 36500),

Gene: PickleBack_50 Start: 37071, Stop: 36652, Start Num: 9

Candidate Starts for PickleBack_50:

(1, 37434), (3, 37371), (5, 37212), (Start: 9 @37071 has 39 MA's), (16, 36990), (21, 36927), (24, 36882), (26, 36855), (28, 36843), (33, 36789), (35, 36771), (37, 36747),

Gene: Roary_57 Start: 36957, Stop: 36592, Start Num: 9

Candidate Starts for Roary_57:

(4, 37242), (6, 37083), (Start: 9 @36957 has 39 MA's), (Start: 10 @36954 has 4 MA's), (13, 36918), (16, 36882), (18, 36855), (23, 36777), (25, 36765), (27, 36744), (34, 36675), (38, 36645), (41, 36603),

Gene: Saintus_51 Start: 33622, Stop: 33272, Start Num: 10

Candidate Starts for Saintus_51:

(4, 33910), (6, 33751), (Start: 9 @33625 has 39 MA's), (Start: 10 @33622 has 4 MA's), (16, 33550), (18, 33523), (23, 33445), (28, 33406), (41, 33283),

Gene: Scorpia_55 Start: 37381, Stop: 36980, Start Num: 9

Candidate Starts for Scorpia_55:

(Start: 9 @37381 has 39 MA's), (16, 37300), (21, 37237), (27, 37180), (28, 37171), (33, 37117), (37, 37075),

Gene: Swirley_52 Start: 37437, Stop: 37018, Start Num: 9

Candidate Starts for Swirley_52:

(Start: 9 @37437 has 39 MA's), (12, 37419), (21, 37293), (22, 37257), (24, 37248), (26, 37221), (28, 37209), (33, 37155),

Gene: SydNat_53 Start: 38070, Stop: 37660, Start Num: 9

Candidate Starts for SydNat_53:

(Start: 9 @38070 has 39 MA's), (23, 37893), (30, 37845), (31, 37812), (32, 37800), (36, 37770), (42, 37671),

Gene: Tarynearal_48 Start: 36879, Stop: 36460, Start Num: 9

Candidate Starts for Tarynearal_48:

(Start: 9 @36879 has 39 MA's), (12, 36861), (21, 36735), (22, 36699), (24, 36690), (26, 36663), (28, 36651), (33, 36597),

Gene: Theia_49 Start: 37547, Stop: 37137, Start Num: 9

Candidate Starts for Theia_49:

(Start: 9 @37547 has 39 MA's), (19, 37433), (23, 37370), (30, 37322), (31, 37289), (32, 37277), (36, 37247), (42, 37148),

Gene: Tiger_49 Start: 36745, Stop: 36326, Start Num: 9

Candidate Starts for Tiger_49:

(1, 37108), (3, 37045), (5, 36886), (Start: 9 @36745 has 39 MA's), (16, 36664), (21, 36601), (24, 36556), (26, 36529), (28, 36517), (33, 36463), (35, 36445), (37, 36421),

Gene: UnionJack_52 Start: 36886, Stop: 36470, Start Num: 9

Candidate Starts for UnionJack_52:

(Start: 9 @36886 has 39 MA's), (16, 36805), (21, 36742), (27, 36670), (28, 36661), (37, 36565),

Gene: Zolita_52 Start: 38074, Stop: 37664, Start Num: 9

Candidate Starts for Zolita_52:

(Start: 9 @38074 has 39 MA's), (23, 37897), (30, 37849), (31, 37816), (32, 37804), (36, 37774), (42, 37675),