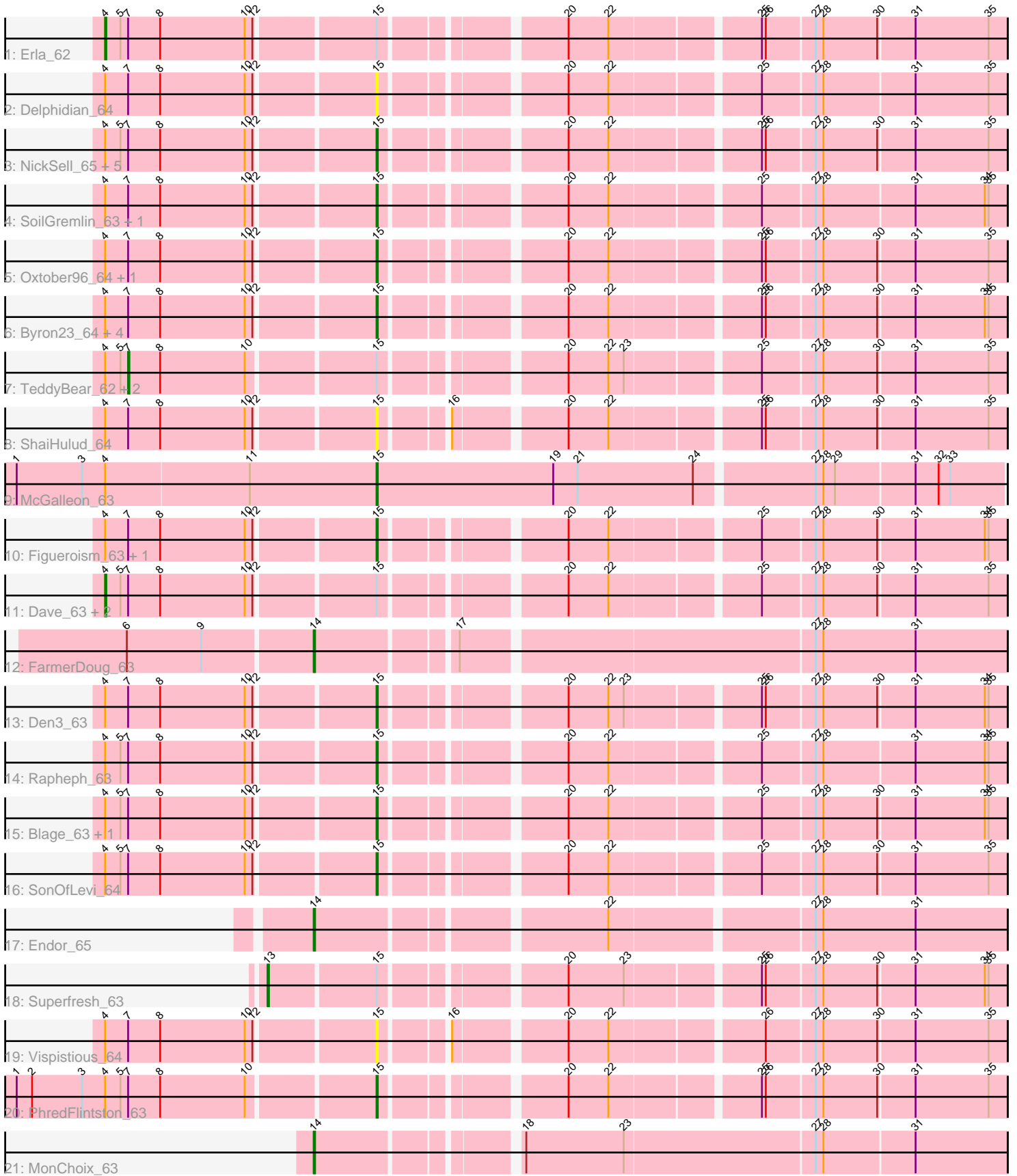


Pham 166819



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 166819 Report

This analysis was run 07/09/24 on database version 566.

Pham number 166819 has 38 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Erla_62
- Track 2 : Delphidian_64
- Track 3 : NickSell_65, Jerbirus_64, Kurt1_63, MrWorldwide_63, JeriBeth_64, Phiderman_63
- Track 4 : SoilGremlin_63, OldNelly_63
- Track 5 : Oxtober96_64, Lovelyunicorn_63
- Track 6 : Byron23_64, Sedgewig_62, StirfryIV_64, HankSprout_63, Janus167_62
- Track 7 : TeddyBear_62, Asta_62, Gershwin_62
- Track 8 : ShaiHulud_64
- Track 9 : McGalleon_63
- Track 10 : Figueroism_63, Clancy_62
- Track 11 : Dave_63, Renzie_63, Antoinette_63
- Track 12 : FarmerDoug_63
- Track 13 : Den3_63
- Track 14 : Rapheph_63
- Track 15 : Blage_63, Velene_63
- Track 16 : SonOfLevi_64
- Track 17 : Endor_65
- Track 18 : Superfresh_63
- Track 19 : Vispistious_64
- Track 20 : PhredFlintston_63
- Track 21 : MonChoix_63

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

The start number called the most often in the published annotations is 15, it was called in 18 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blage_63, Byron23_64, Clancy_62, Delphidian_64, Den3_63, Figueroism_63, HankSprout_63, Janus167_62, Jerbirus_64, JeriBeth_64, Kurt1_63, Lovelyunicorn_63, McGalleon_63, MrWorldwide_63, NickSell_65, OldNelly_63, Oxtober96_64, Phiderman_63, PhredFlintston_63, Rapheph_63, Sedgewig_62, ShaiHulud_64, SoilGremlin_63, SonOfLevi_64, StirfryIV_64, Velene_63,

Vispistious_64,

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

- Antoinette_63, Asta_62, Dave_63, Erla_62, Gershwin_62, Renzie_63, Superfresh_63, TeddyBear_62,

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

- Endor_65, FarmerDoug_63, MonChoix_63,

Summary by start number:

Start 4:

- Found in 34 of 38 (89.5%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Antoinette_63 (EA1), Dave_63 (EA1), Erla_62 (EA1), Renzie_63 (EA1),

Start 7:

- Found in 33 of 38 (86.8%) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Asta_62 (EA1), Gershwin_62 (EA1), TeddyBear_62 (EA1),

Start 13:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Superfresh_63 (EA1),

Start 14:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Endor_65 (EA1), FarmerDoug_63 (EA1), MonChoix_63 (EA1),

Start 15:

- Found in 35 of 38 (92.1%) of genes in pham
- Manual Annotations of this start: 18 of 29
- Called 77.1% of time when present
- Phage (with cluster) where this start called: Blage_63 (EA1), Byron23_64 (EA1), Clancy_62 (EA1), Delphidian_64 (EA1), Den3_63 (EA1), Figueroism_63 (EA1), HankSprout_63 (EA1), Janus167_62 (EA1), Jerbirus_64 (EA1), JeriBeth_64 (EA1), Kurt1_63 (EA1), Lovelyunicorn_63 (EA1), McGalleon_63 (EA1), MrWorldwide_63 (EA1), NickSell_65 (EA1), OldNelly_63 (EA1), Oxtober96_64 (EA1), Phiderman_63 (EA1), PhredFlintston_63 (EA1), Rapheph_63 (EA1), Sedgewig_62 (EA1), ShaiHulud_64 (EA1), SoilGremlin_63 (EA1), SonOfLevi_64 (EA1), StirfryIV_64 (EA1), Velene_63 (EA1), Vispistious_64 (EA1),

Summary by clusters:

There is one cluster represented in this pham: EA1

Info for manual annotations of cluster EA1:

- Start number 4 was manually annotated 4 times for cluster EA1.
- Start number 7 was manually annotated 3 times for cluster EA1.
- Start number 13 was manually annotated 1 time for cluster EA1.
- Start number 14 was manually annotated 3 times for cluster EA1.
- Start number 15 was manually annotated 18 times for cluster EA1.

Gene Information:

Gene: Antoinette_63 Start: 41033, Stop: 41674, Start Num: 4

Candidate Starts for Antoinette_63:

(Start: 4 @41033 has 4 MA's), (5, 41045), (Start: 7 @41051 has 3 MA's), (8, 41075), (10, 41141), (12, 41147), (Start: 15 @41231 has 18 MA's), (20, 41354), (22, 41384), (25, 41489), (27, 41528), (28, 41534), (30, 41576), (31, 41603), (35, 41660),

Gene: Asta_62 Start: 40748, Stop: 41371, Start Num: 7

Candidate Starts for Asta_62:

(Start: 4 @40730 has 4 MA's), (5, 40742), (Start: 7 @40748 has 3 MA's), (8, 40772), (10, 40838), (Start: 15 @40928 has 18 MA's), (20, 41051), (22, 41081), (23, 41093), (25, 41186), (27, 41225), (28, 41231), (30, 41273), (31, 41300), (35, 41357),

Gene: Blage_63 Start: 41170, Stop: 41613, Start Num: 15

Candidate Starts for Blage_63:

(Start: 4 @40972 has 4 MA's), (5, 40984), (Start: 7 @40990 has 3 MA's), (8, 41014), (10, 41080), (12, 41086), (Start: 15 @41170 has 18 MA's), (20, 41293), (22, 41323), (25, 41428), (27, 41467), (28, 41473), (30, 41515), (31, 41542), (34, 41596), (35, 41599),

Gene: Byron23_64 Start: 41180, Stop: 41623, Start Num: 15

Candidate Starts for Byron23_64:

(Start: 4 @40982 has 4 MA's), (Start: 7 @41000 has 3 MA's), (8, 41024), (10, 41090), (12, 41096), (Start: 15 @41180 has 18 MA's), (20, 41303), (22, 41333), (25, 41438), (26, 41441), (27, 41477), (28, 41483), (30, 41525), (31, 41552), (34, 41606), (35, 41609),

Gene: Clancy_62 Start: 40928, Stop: 41371, Start Num: 15

Candidate Starts for Clancy_62:

(Start: 4 @40730 has 4 MA's), (Start: 7 @40748 has 3 MA's), (8, 40772), (10, 40838), (12, 40844), (Start: 15 @40928 has 18 MA's), (20, 41051), (22, 41081), (25, 41186), (27, 41225), (28, 41231), (30, 41273), (31, 41300), (34, 41354), (35, 41357),

Gene: Dave_63 Start: 41033, Stop: 41674, Start Num: 4

Candidate Starts for Dave_63:

(Start: 4 @41033 has 4 MA's), (5, 41045), (Start: 7 @41051 has 3 MA's), (8, 41075), (10, 41141), (12, 41147), (Start: 15 @41231 has 18 MA's), (20, 41354), (22, 41384), (25, 41489), (27, 41528), (28, 41534), (30, 41576), (31, 41603), (35, 41660),

Gene: Delphidian_64 Start: 40968, Stop: 41411, Start Num: 15

Candidate Starts for Delphidian_64:

(Start: 4 @40770 has 4 MA's), (Start: 7 @40788 has 3 MA's), (8, 40812), (10, 40878), (12, 40884), (Start: 15 @40968 has 18 MA's), (20, 41091), (22, 41121), (25, 41226), (27, 41265), (28, 41271), (31,

41340), (35, 41397),

Gene: Den3_63 Start: 41173, Stop: 41616, Start Num: 15

Candidate Starts for Den3_63:

(Start: 4 @40975 has 4 MA's), (Start: 7 @40993 has 3 MA's), (8, 41017), (10, 41083), (12, 41089), (Start: 15 @41173 has 18 MA's), (20, 41296), (22, 41326), (23, 41338), (25, 41431), (26, 41434), (27, 41470), (28, 41476), (30, 41518), (31, 41545), (34, 41599), (35, 41602),

Gene: Endor_65 Start: 41639, Stop: 42139, Start Num: 14

Candidate Starts for Endor_65:

(Start: 14 @41639 has 3 MA's), (22, 41843), (27, 41990), (28, 41996), (31, 42068),

Gene: Erla_62 Start: 40713, Stop: 41354, Start Num: 4

Candidate Starts for Erla_62:

(Start: 4 @40713 has 4 MA's), (5, 40725), (Start: 7 @40731 has 3 MA's), (8, 40755), (10, 40821), (12, 40827), (Start: 15 @40911 has 18 MA's), (20, 41034), (22, 41064), (25, 41169), (26, 41172), (27, 41208), (28, 41214), (30, 41256), (31, 41283), (35, 41340),

Gene: FarmerDoug_63 Start: 41088, Stop: 41597, Start Num: 14

Candidate Starts for FarmerDoug_63:

(6, 40950), (9, 41007), (Start: 14 @41088 has 3 MA's), (17, 41187), (27, 41448), (28, 41454), (31, 41526),

Gene: Figueroism_63 Start: 41220, Stop: 41663, Start Num: 15

Candidate Starts for Figueroism_63:

(Start: 4 @41022 has 4 MA's), (Start: 7 @41040 has 3 MA's), (8, 41064), (10, 41130), (12, 41136), (Start: 15 @41220 has 18 MA's), (20, 41343), (22, 41373), (25, 41478), (27, 41517), (28, 41523), (30, 41565), (31, 41592), (34, 41646), (35, 41649),

Gene: Gershwin_62 Start: 40748, Stop: 41371, Start Num: 7

Candidate Starts for Gershwin_62:

(Start: 4 @40730 has 4 MA's), (5, 40742), (Start: 7 @40748 has 3 MA's), (8, 40772), (10, 40838), (Start: 15 @40928 has 18 MA's), (20, 41051), (22, 41081), (23, 41093), (25, 41186), (27, 41225), (28, 41231), (30, 41273), (31, 41300), (35, 41357),

Gene: HankSprout_63 Start: 40794, Stop: 41237, Start Num: 15

Candidate Starts for HankSprout_63:

(Start: 4 @40596 has 4 MA's), (Start: 7 @40614 has 3 MA's), (8, 40638), (10, 40704), (12, 40710), (Start: 15 @40794 has 18 MA's), (20, 40917), (22, 40947), (25, 41052), (26, 41055), (27, 41091), (28, 41097), (30, 41139), (31, 41166), (34, 41220), (35, 41223),

Gene: Janus167_62 Start: 40903, Stop: 41346, Start Num: 15

Candidate Starts for Janus167_62:

(Start: 4 @40705 has 4 MA's), (Start: 7 @40723 has 3 MA's), (8, 40747), (10, 40813), (12, 40819), (Start: 15 @40903 has 18 MA's), (20, 41026), (22, 41056), (25, 41161), (26, 41164), (27, 41200), (28, 41206), (30, 41248), (31, 41275), (34, 41329), (35, 41332),

Gene: Jerbirus_64 Start: 40919, Stop: 41362, Start Num: 15

Candidate Starts for Jerbirus_64:

(Start: 4 @40721 has 4 MA's), (5, 40733), (Start: 7 @40739 has 3 MA's), (8, 40763), (10, 40829), (12, 40835), (Start: 15 @40919 has 18 MA's), (20, 41042), (22, 41072), (25, 41177), (26, 41180), (27, 41216), (28, 41222), (30, 41264), (31, 41291), (35, 41348),

Gene: JeriBeth_64 Start: 40807, Stop: 41250, Start Num: 15

Candidate Starts for JeriBeth_64:

(Start: 4 @40609 has 4 MA's), (5, 40621), (Start: 7 @40627 has 3 MA's), (8, 40651), (10, 40717), (12, 40723), (Start: 15 @40807 has 18 MA's), (20, 40930), (22, 40960), (25, 41065), (26, 41068), (27, 41104), (28, 41110), (30, 41152), (31, 41179), (35, 41236),

Gene: Kurt1_63 Start: 41176, Stop: 41619, Start Num: 15

Candidate Starts for Kurt1_63:

(Start: 4 @40978 has 4 MA's), (5, 40990), (Start: 7 @40996 has 3 MA's), (8, 41020), (10, 41086), (12, 41092), (Start: 15 @41176 has 18 MA's), (20, 41299), (22, 41329), (25, 41434), (26, 41437), (27, 41473), (28, 41479), (30, 41521), (31, 41548), (35, 41605),

Gene: Lovelyunicorn_63 Start: 41171, Stop: 41614, Start Num: 15

Candidate Starts for Lovelyunicorn_63:

(Start: 4 @40973 has 4 MA's), (Start: 7 @40991 has 3 MA's), (8, 41015), (10, 41081), (12, 41087), (Start: 15 @41171 has 18 MA's), (20, 41294), (22, 41324), (25, 41429), (26, 41432), (27, 41468), (28, 41474), (30, 41516), (31, 41543), (35, 41600),

Gene: McGalleon_63 Start: 41920, Stop: 42396, Start Num: 15

Candidate Starts for McGalleon_63:

(1, 41641), (3, 41692), (Start: 4 @41710 has 4 MA's), (11, 41821), (Start: 15 @41920 has 18 MA's), (19, 42058), (21, 42076), (24, 42166), (27, 42253), (28, 42259), (29, 42268), (31, 42328), (32, 42346), (33, 42355),

Gene: MonChoix_63 Start: 41006, Stop: 41509, Start Num: 14

Candidate Starts for MonChoix_63:

(Start: 14 @41006 has 3 MA's), (18, 41144), (23, 41219), (27, 41363), (28, 41369), (31, 41438),

Gene: MrWorldwide_63 Start: 41183, Stop: 41626, Start Num: 15

Candidate Starts for MrWorldwide_63:

(Start: 4 @40985 has 4 MA's), (5, 40997), (Start: 7 @41003 has 3 MA's), (8, 41027), (10, 41093), (12, 41099), (Start: 15 @41183 has 18 MA's), (20, 41306), (22, 41336), (25, 41441), (26, 41444), (27, 41480), (28, 41486), (30, 41528), (31, 41555), (35, 41612),

Gene: NickSell_65 Start: 41186, Stop: 41629, Start Num: 15

Candidate Starts for NickSell_65:

(Start: 4 @40988 has 4 MA's), (5, 41000), (Start: 7 @41006 has 3 MA's), (8, 41030), (10, 41096), (12, 41102), (Start: 15 @41186 has 18 MA's), (20, 41309), (22, 41339), (25, 41444), (26, 41447), (27, 41483), (28, 41489), (30, 41531), (31, 41558), (35, 41615),

Gene: OldNelly_63 Start: 40973, Stop: 41416, Start Num: 15

Candidate Starts for OldNelly_63:

(Start: 4 @40775 has 4 MA's), (Start: 7 @40793 has 3 MA's), (8, 40817), (10, 40883), (12, 40889), (Start: 15 @40973 has 18 MA's), (20, 41096), (22, 41126), (25, 41231), (27, 41270), (28, 41276), (31, 41345), (34, 41399), (35, 41402),

Gene: Oxtober96_64 Start: 41171, Stop: 41614, Start Num: 15

Candidate Starts for Oxtober96_64:

(Start: 4 @40973 has 4 MA's), (Start: 7 @40991 has 3 MA's), (8, 41015), (10, 41081), (12, 41087), (Start: 15 @41171 has 18 MA's), (20, 41294), (22, 41324), (25, 41429), (26, 41432), (27, 41468), (28, 41474), (30, 41516), (31, 41543), (35, 41600),

Gene: Phiderman_63 Start: 41172, Stop: 41615, Start Num: 15

Candidate Starts for Phiderman_63:

(Start: 4 @40974 has 4 MA's), (5, 40986), (Start: 7 @40992 has 3 MA's), (8, 41016), (10, 41082), (12, 41088), (Start: 15 @41172 has 18 MA's), (20, 41295), (22, 41325), (25, 41430), (26, 41433), (27, 41469), (28, 41475), (30, 41517), (31, 41544), (35, 41601),

Gene: PhredFlintston_63 Start: 41176, Stop: 41619, Start Num: 15

Candidate Starts for PhredFlintston_63:

(1, 40909), (2, 40921), (3, 40960), (Start: 4 @40978 has 4 MA's), (5, 40990), (Start: 7 @40996 has 3 MA's), (8, 41020), (10, 41086), (Start: 15 @41176 has 18 MA's), (20, 41299), (22, 41329), (25, 41434), (26, 41437), (27, 41473), (28, 41479), (30, 41521), (31, 41548), (35, 41605),

Gene: Rapheph_63 Start: 41176, Stop: 41619, Start Num: 15

Candidate Starts for Rapheph_63:

(Start: 4 @40978 has 4 MA's), (5, 40990), (Start: 7 @40996 has 3 MA's), (8, 41020), (10, 41086), (12, 41092), (Start: 15 @41176 has 18 MA's), (20, 41299), (22, 41329), (25, 41434), (27, 41473), (28, 41479), (31, 41548), (34, 41602), (35, 41605),

Gene: Renzie_63 Start: 41033, Stop: 41674, Start Num: 4

Candidate Starts for Renzie_63:

(Start: 4 @41033 has 4 MA's), (5, 41045), (Start: 7 @41051 has 3 MA's), (8, 41075), (10, 41141), (12, 41147), (Start: 15 @41231 has 18 MA's), (20, 41354), (22, 41384), (25, 41489), (27, 41528), (28, 41534), (30, 41576), (31, 41603), (35, 41660),

Gene: Sedgewig_62 Start: 40878, Stop: 41321, Start Num: 15

Candidate Starts for Sedgewig_62:

(Start: 4 @40680 has 4 MA's), (Start: 7 @40698 has 3 MA's), (8, 40722), (10, 40788), (12, 40794), (Start: 15 @40878 has 18 MA's), (20, 41001), (22, 41031), (25, 41136), (26, 41139), (27, 41175), (28, 41181), (30, 41223), (31, 41250), (34, 41304), (35, 41307),

Gene: ShaiHulud_64 Start: 41185, Stop: 41628, Start Num: 15

Candidate Starts for ShaiHulud_64:

(Start: 4 @40987 has 4 MA's), (Start: 7 @41005 has 3 MA's), (8, 41029), (10, 41095), (12, 41101), (Start: 15 @41185 has 18 MA's), (16, 41230), (20, 41308), (22, 41338), (25, 41443), (26, 41446), (27, 41482), (28, 41488), (30, 41530), (31, 41557), (35, 41614),

Gene: SoilGremlin_63 Start: 40969, Stop: 41412, Start Num: 15

Candidate Starts for SoilGremlin_63:

(Start: 4 @40771 has 4 MA's), (Start: 7 @40789 has 3 MA's), (8, 40813), (10, 40879), (12, 40885), (Start: 15 @40969 has 18 MA's), (20, 41092), (22, 41122), (25, 41227), (27, 41266), (28, 41272), (31, 41341), (34, 41395), (35, 41398),

Gene: SonOfLevi_64 Start: 40946, Stop: 41389, Start Num: 15

Candidate Starts for SonOfLevi_64:

(Start: 4 @40748 has 4 MA's), (5, 40760), (Start: 7 @40766 has 3 MA's), (8, 40790), (10, 40856), (12, 40862), (Start: 15 @40946 has 18 MA's), (20, 41069), (22, 41099), (25, 41204), (27, 41243), (28, 41249), (30, 41291), (31, 41318), (35, 41375),

Gene: StirfryIV_64 Start: 40892, Stop: 41335, Start Num: 15

Candidate Starts for StirfryIV_64:

(Start: 4 @40694 has 4 MA's), (Start: 7 @40712 has 3 MA's), (8, 40736), (10, 40802), (12, 40808), (Start: 15 @40892 has 18 MA's), (20, 41015), (22, 41045), (25, 41150), (26, 41153), (27, 41189), (28, 41195), (30, 41237), (31, 41264), (34, 41318), (35, 41321),

Gene: Superfresh_63 Start: 41155, Stop: 41676, Start Num: 13

Candidate Starts for Superfresh_63:

(Start: 13 @41155 has 1 MA's), (Start: 15 @41233 has 18 MA's), (20, 41356), (23, 41398), (25, 41491), (26, 41494), (27, 41530), (28, 41536), (30, 41578), (31, 41605), (34, 41659), (35, 41662),

Gene: TeddyBear_62 Start: 40748, Stop: 41371, Start Num: 7

Candidate Starts for TeddyBear_62:

(Start: 4 @40730 has 4 MA's), (5, 40742), (Start: 7 @40748 has 3 MA's), (8, 40772), (10, 40838), (Start: 15 @40928 has 18 MA's), (20, 41051), (22, 41081), (23, 41093), (25, 41186), (27, 41225), (28, 41231), (30, 41273), (31, 41300), (35, 41357),

Gene: Velene_63 Start: 41171, Stop: 41614, Start Num: 15

Candidate Starts for Velene_63:

(Start: 4 @40973 has 4 MA's), (5, 40985), (Start: 7 @40991 has 3 MA's), (8, 41015), (10, 41081), (12, 41087), (Start: 15 @41171 has 18 MA's), (20, 41294), (22, 41324), (25, 41429), (27, 41468), (28, 41474), (30, 41516), (31, 41543), (34, 41597), (35, 41600),

Gene: Vispistious_64 Start: 41176, Stop: 41619, Start Num: 15

Candidate Starts for Vispistious_64:

(Start: 4 @40978 has 4 MA's), (Start: 7 @40996 has 3 MA's), (8, 41020), (10, 41086), (12, 41092), (Start: 15 @41176 has 18 MA's), (16, 41221), (20, 41299), (22, 41329), (26, 41437), (27, 41473), (28, 41479), (30, 41521), (31, 41548), (35, 41605),