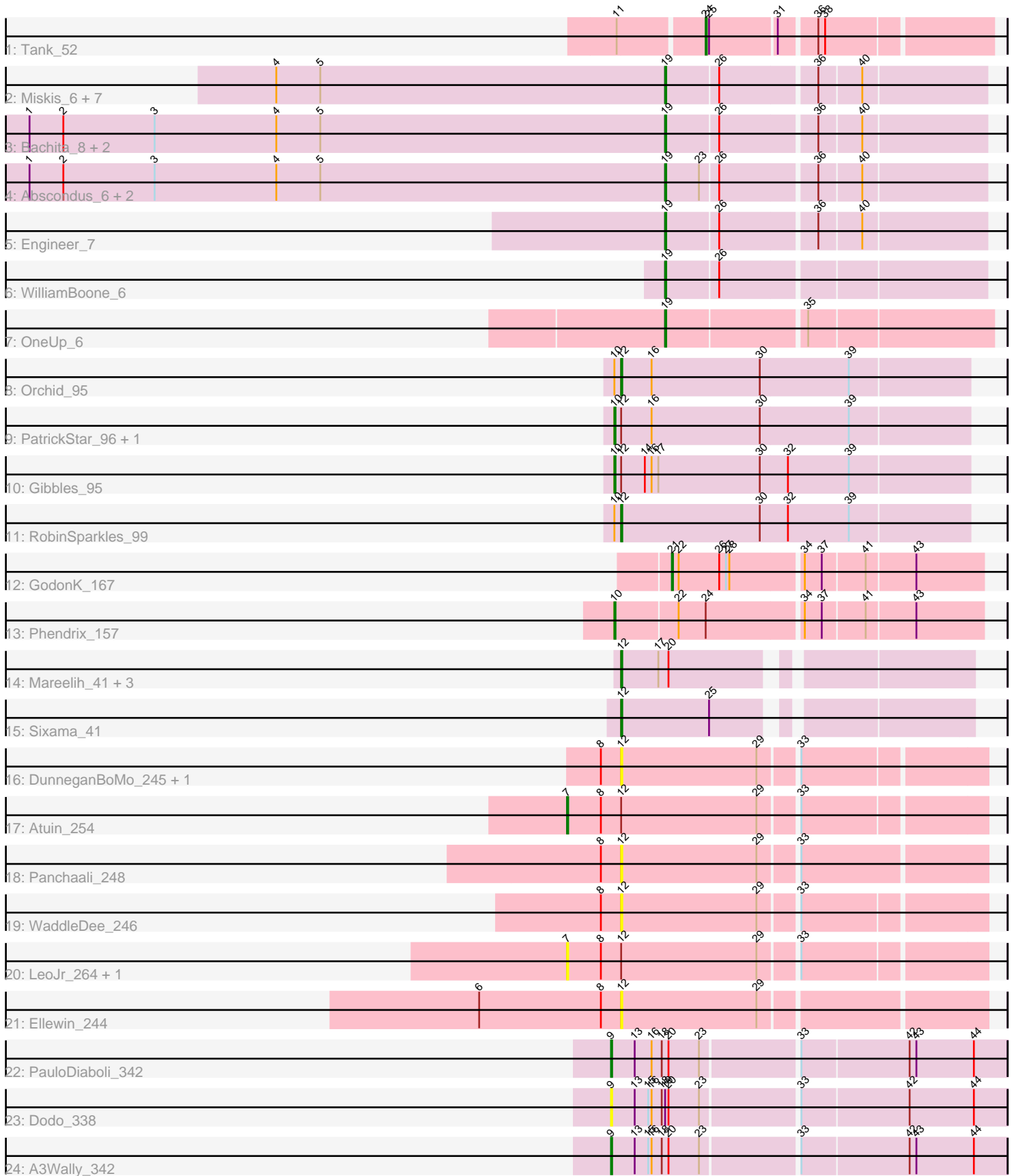


Pham 224712



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 224712 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224712 has 41 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Tank_52
- Track 2 : Miskis_6, Cucurbita_7, ClubL_7, Toniann_7, Smoothie_7, Lozinak_7, Norvs_7, Aphelion_7
- Track 3 : Bachita_8, PhinkBoden_8, Geeche_6
- Track 4 : Abscondus_6, Dusty_6, Culver_6
- Track 5 : Engineer_7
- Track 6 : WilliamBoone_6
- Track 7 : OneUp_6
- Track 8 : Orchid_95
- Track 9 : PatrickStar_96, Kampe_96
- Track 10 : Gibbles_95
- Track 11 : RobinSparkles_99
- Track 12 : GodonK_167
- Track 13 : Phendrix_157
- Track 14 : Mareelih_41, Boopy_43, Forza_42, BlueNGGold_41
- Track 15 : Sixama_41
- Track 16 : DunneganBoMo_245, KSunshine22_244
- Track 17 : Atuin_254
- Track 18 : Panchaali_248
- Track 19 : WaddleDee_246
- Track 20 : LeoJr_264, ReginaGlobina_266
- Track 21 : Ellewin_244
- Track 22 : PauloDiaboli_342
- Track 23 : Dodo_338
- Track 24 : A3Wally_342

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

The start number called the most often in the published annotations is 19, it was called in 15 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_6, Aphelion_7, Bachita_8, ClubL_7, Cucurbita_7, Culver_6, Dusty_6, Engineer_7, Geeche_6, Lozinak_7, Miskis_6, Norvs_7, OneUp_6, PhinkBoden_8,

Smoothie_7, Toniann_7, WilliamBoone_6,

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

- Dodo_338,

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

- A3Wally_342, Atuin_254, BlueNGold_41, Boopy_43, DunneganBoMo_245, Ellewin_244, Forza_42, Gibbles_95, GodonK_167, KSunshine22_244, Kampe_96, LeoJr_264, Mareelih_41, Orchid_95, Panchaali_248, PatrickStar_96, PauloDiaboli_342, Phendrix_157, ReginaGlobina_266, RobinSparkles_99, Sixama_41, Tank_52, WaddleDee_246,

Summary by start number:

Start 7:

- Found in 3 of 41 (7.3%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_254 (FC), LeoJr_264 (FC), ReginaGlobina_266 (FC),

Start 9:

- Found in 3 of 41 (7.3%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_342 (GD1), Dodo_338 (GD1), PauloDiaboli_342 (GD1),

Start 10:

- Found in 6 of 41 (14.6%) of genes in pham
- Manual Annotations of this start: 4 of 31
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Gibbles_95 (CX), Kampe_96 (CX), PatrickStar_96 (CX), Phendrix_157 (DK),

Start 12:

- Found in 18 of 41 (43.9%) of genes in pham
- Manual Annotations of this start: 7 of 31
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BlueNGold_41 (DS), Boopy_43 (DS), DunneganBoMo_245 (FC), Ellewin_244 (FC), Forza_42 (DS), KSunshine22_244 (FC), Mareelih_41 (DS), Orchid_95 (CX), Panchaali_248 (FC), RobinSparkles_99 (CX), Sixama_41 (DS), WaddleDee_246 (FC),

Start 19:

- Found in 18 of 41 (43.9%) of genes in pham
- Manual Annotations of this start: 15 of 31
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Abscondus_6 (CQ1), Aphelion_7 (CQ1), Bachita_8 (CQ1), ClubL_7 (CQ1), Cucurbita_7 (CQ1), Culver_6 (CQ1), Dusty_6 (CQ1), Engineer_7 (CQ1), Geeche_6 (CQ1), Lozinak_7 (CQ1), Miskis_6 (CQ1), Norvs_7 (CQ1), OneUp_6 (CQ2), PhinkBoden_8 (CQ1), Smoothie_7 (CQ1), Toniann_7 (CQ1), WilliamBoone_6 (CQ1),

Start 21:

- Found in 1 of 41 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK_167 (DK),

Start 24:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tank_52 (AP1),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, DK, FC, AP1, CX, CQ2, CQ1, DS,

Info for manual annotations of cluster AP1:

- Start number 24 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster CQ1:

- Start number 19 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 19 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CX:

- Start number 10 was manually annotated 3 times for cluster CX.
- Start number 12 was manually annotated 2 times for cluster CX.

Info for manual annotations of cluster DK:

- Start number 10 was manually annotated 1 time for cluster DK.
- Start number 21 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

- Start number 12 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster FC:

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

Info for manual annotations of cluster GD1:

- Start number 9 was manually annotated 2 times for cluster GD1.

Gene Information:

Gene: A3Wally_342 Start: 176311, Stop: 176649, Start Num: 9

Candidate Starts for A3Wally_342:

(Start: 9 @176311 has 2 MA's), (13, 176332), (15, 176344), (16, 176347), (18, 176356), (20, 176362), (23, 176389), (33, 176470), (42, 176563), (43, 176569), (44, 176620),

Gene: Abscondus_6 Start: 1603, Stop: 1334, Start Num: 19

Candidate Starts for Abscondus_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 19 @1603 has 15 MA's), (23, 1573), (26, 1558), (36, 1477), (40, 1441),

Gene: Aphelion_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for Aphelion_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Atuin_254 Start: 161281, Stop: 161634, Start Num: 7

Candidate Starts for Atuin_254:

(Start: 7 @161281 has 1 MA's), (8, 161311), (Start: 12 @161329 has 7 MA's), (29, 161449), (33, 161479),

Gene: Bachita_8 Start: 2279, Stop: 2010, Start Num: 19

Candidate Starts for Bachita_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (5, 2585), (Start: 19 @2279 has 15 MA's), (26, 2234), (36, 2153), (40, 2117),

Gene: BlueNGold_41 Start: 14735, Stop: 14454, Start Num: 12

Candidate Starts for BlueNGold_41:

(Start: 12 @14735 has 7 MA's), (17, 14702), (20, 14693),

Gene: Boopy_43 Start: 14747, Stop: 14466, Start Num: 12

Candidate Starts for Boopy_43:

(Start: 12 @14747 has 7 MA's), (17, 14714), (20, 14705),

Gene: ClubL_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for ClubL_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Cucurbita_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for Cucurbita_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Culver_6 Start: 1603, Stop: 1334, Start Num: 19

Candidate Starts for Culver_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 19 @1603 has 15 MA's), (23, 1573), (26, 1558), (36, 1477), (40, 1441),

Gene: Dodo_338 Start: 175376, Stop: 175714, Start Num: 9

Candidate Starts for Dodo_338:

(Start: 9 @175376 has 2 MA's), (13, 175397), (15, 175409), (16, 175412), (18, 175421), (Start: 19 @175424 has 15 MA's), (20, 175427), (23, 175454), (33, 175535), (42, 175628), (44, 175685),

Gene: DunneganBoMo_245 Start: 159407, Stop: 159712, Start Num: 12

Candidate Starts for DunneganBoMo_245:

(8, 159389), (Start: 12 @159407 has 7 MA's), (29, 159527), (33, 159557),

Gene: Dusty_6 Start: 1603, Stop: 1334, Start Num: 19

Candidate Starts for Dusty_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 19 @1603 has 15 MA's), (23, 1573), (26, 1558), (36, 1477), (40, 1441),

Gene: Ellewin_244 Start: 158948, Stop: 159256, Start Num: 12
Candidate Starts for Ellewin_244:
(6, 158822), (8, 158930), (Start: 12 @158948 has 7 MA's), (29, 159068),

Gene: Engineer_7 Start: 1779, Stop: 1510, Start Num: 19
Candidate Starts for Engineer_7:
(Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Forza_42 Start: 14663, Stop: 14382, Start Num: 12
Candidate Starts for Forza_42:
(Start: 12 @14663 has 7 MA's), (17, 14630), (20, 14621),

Gene: Geeche_6 Start: 1598, Stop: 1329, Start Num: 19
Candidate Starts for Geeche_6:
(1, 2162), (2, 2132), (3, 2051), (4, 1943), (5, 1904), (Start: 19 @1598 has 15 MA's), (26, 1553), (36, 1472), (40, 1436),

Gene: Gibbles_95 Start: 69566, Stop: 69255, Start Num: 10
Candidate Starts for Gibbles_95:
(Start: 10 @69566 has 4 MA's), (Start: 12 @69560 has 7 MA's), (14, 69539), (16, 69533), (17, 69527), (30, 69437), (32, 69413), (39, 69359),

Gene: GodonK_167 Start: 85677, Stop: 85414, Start Num: 21
Candidate Starts for GodonK_167:
(Start: 21 @85677 has 1 MA's), (22, 85671), (26, 85635), (27, 85629), (28, 85626), (34, 85566), (37, 85551), (41, 85515), (43, 85473),

Gene: KSunshine22_244 Start: 158806, Stop: 159111, Start Num: 12
Candidate Starts for KSunshine22_244:
(8, 158788), (Start: 12 @158806 has 7 MA's), (29, 158926), (33, 158956),

Gene: Kampe_96 Start: 69516, Stop: 69205, Start Num: 10
Candidate Starts for Kampe_96:
(Start: 10 @69516 has 4 MA's), (Start: 12 @69510 has 7 MA's), (16, 69483), (30, 69387), (39, 69309),

Gene: LeoJr_264 Start: 160668, Stop: 161021, Start Num: 7
Candidate Starts for LeoJr_264:
(Start: 7 @160668 has 1 MA's), (8, 160698), (Start: 12 @160716 has 7 MA's), (29, 160836), (33, 160866),

Gene: Lozinak_7 Start: 1779, Stop: 1510, Start Num: 19
Candidate Starts for Lozinak_7:
(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Mareelih_41 Start: 14165, Stop: 13884, Start Num: 12
Candidate Starts for Mareelih_41:
(Start: 12 @14165 has 7 MA's), (17, 14132), (20, 14123),

Gene: Miskis_6 Start: 1779, Stop: 1510, Start Num: 19
Candidate Starts for Miskis_6:
(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Norvs_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for Norvs_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: OneUp_6 Start: 1509, Stop: 1234, Start Num: 19

Candidate Starts for OneUp_6:

(Start: 19 @1509 has 15 MA's), (35, 1392),

Gene: Orchid_95 Start: 69511, Stop: 69206, Start Num: 12

Candidate Starts for Orchid_95:

(Start: 10 @69517 has 4 MA's), (Start: 12 @69511 has 7 MA's), (16, 69484), (30, 69388), (39, 69310),

Gene: Panchaali_248 Start: 159103, Stop: 159411, Start Num: 12

Candidate Starts for Panchaali_248:

(8, 159085), (Start: 12 @159103 has 7 MA's), (29, 159223), (33, 159253),

Gene: PatrickStar_96 Start: 69516, Stop: 69205, Start Num: 10

Candidate Starts for PatrickStar_96:

(Start: 10 @69516 has 4 MA's), (Start: 12 @69510 has 7 MA's), (16, 69483), (30, 69387), (39, 69309),

Gene: PauloDiaboli_342 Start: 173467, Stop: 173805, Start Num: 9

Candidate Starts for PauloDiaboli_342:

(Start: 9 @173467 has 2 MA's), (13, 173488), (16, 173503), (18, 173512), (20, 173518), (23, 173545), (33, 173626), (42, 173719), (43, 173725), (44, 173776),

Gene: Phendrix_157 Start: 84630, Stop: 84319, Start Num: 10

Candidate Starts for Phendrix_157:

(Start: 10 @84630 has 4 MA's), (22, 84576), (Start: 24 @84552 has 1 MA's), (34, 84471), (37, 84456), (41, 84420), (43, 84378),

Gene: PhinkBoden_8 Start: 2279, Stop: 2010, Start Num: 19

Candidate Starts for PhinkBoden_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (5, 2585), (Start: 19 @2279 has 15 MA's), (26, 2234), (36, 2153), (40, 2117),

Gene: ReginaGlobina_266 Start: 161874, Stop: 162227, Start Num: 7

Candidate Starts for ReginaGlobina_266:

(Start: 7 @161874 has 1 MA's), (8, 161904), (Start: 12 @161922 has 7 MA's), (29, 162042), (33, 162072),

Gene: RobinSparkles_99 Start: 69573, Stop: 69268, Start Num: 12

Candidate Starts for RobinSparkles_99:

(Start: 10 @69579 has 4 MA's), (Start: 12 @69573 has 7 MA's), (30, 69450), (32, 69426), (39, 69372),

Gene: Sixama_41 Start: 13852, Stop: 13571, Start Num: 12

Candidate Starts for Sixama_41:

(Start: 12 @13852 has 7 MA's), (25, 13774),

Gene: Smoothie_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for Smoothie_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: Tank_52 Start: 40878, Stop: 40642, Start Num: 24

Candidate Starts for Tank_52:

(11, 40950), (Start: 24 @40878 has 1 MA's), (25, 40875), (31, 40818), (36, 40788), (38, 40782),

Gene: Toniann_7 Start: 1779, Stop: 1510, Start Num: 19

Candidate Starts for Toniann_7:

(4, 2124), (5, 2085), (Start: 19 @1779 has 15 MA's), (26, 1734), (36, 1653), (40, 1617),

Gene: WaddleDee_246 Start: 158940, Stop: 159245, Start Num: 12

Candidate Starts for WaddleDee_246:

(8, 158922), (Start: 12 @158940 has 7 MA's), (29, 159060), (33, 159090),

Gene: WilliamBoone_6 Start: 1630, Stop: 1361, Start Num: 19

Candidate Starts for WilliamBoone_6:

(Start: 19 @1630 has 15 MA's), (26, 1585),