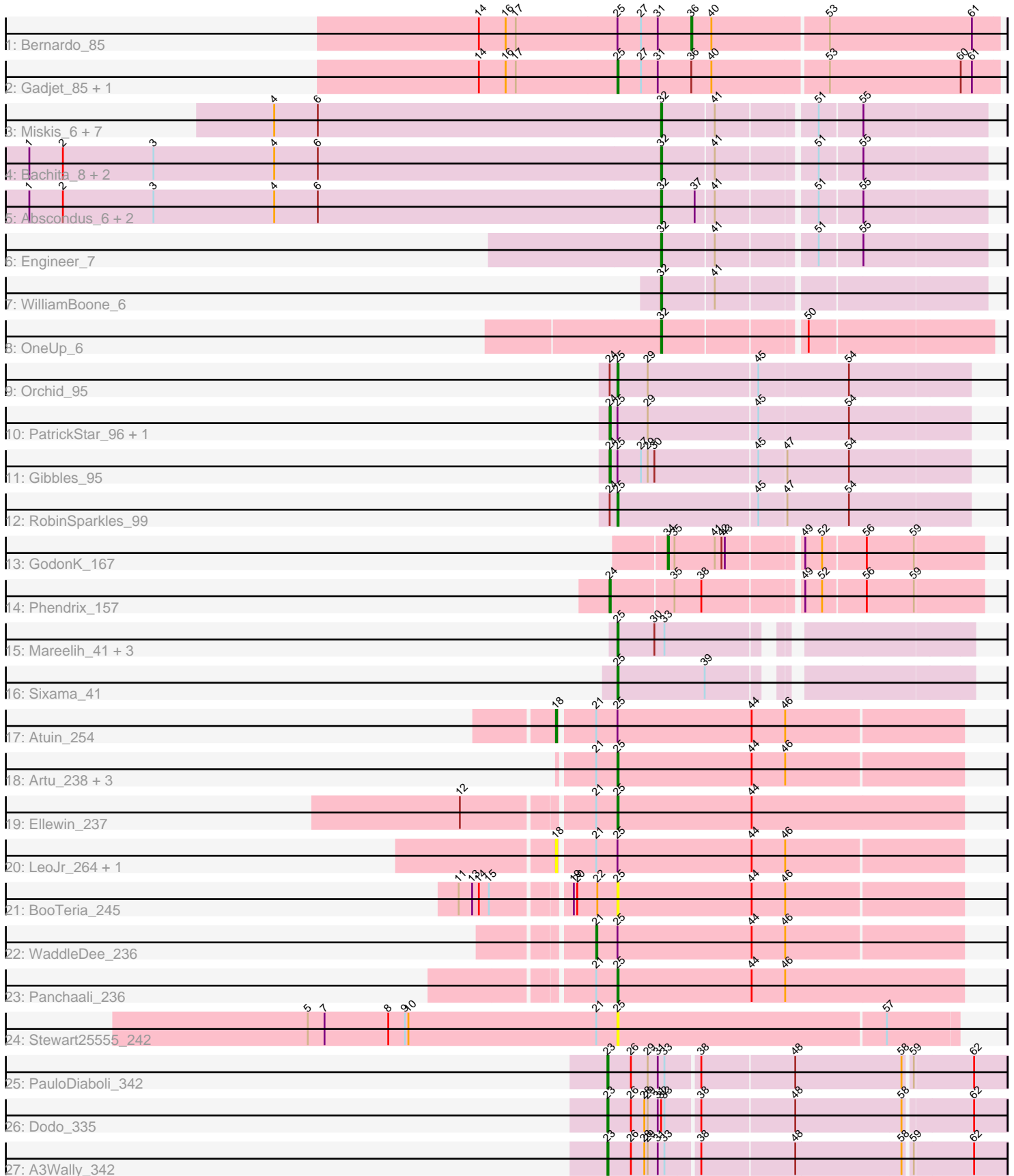


Pham 311725



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 311725 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311725 has 47 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Bernardo_85
- Track 2 : Gadget_85, Pipefish_86
- Track 3 : Miskis_6, Cucurbita_7, ClubL_7, Toniann_7, Smoothie_7, Lozinak_7, Norvs_7, Aphelion_7
- Track 4 : Bachita_8, PhinkBoden_8, Geeche_6
- Track 5 : Abscondus_6, Dusty_6, Culver_6
- Track 6 : Engineer_7
- Track 7 : WilliamBoone_6
- Track 8 : OneUp_6
- Track 9 : Orchid_95
- Track 10 : PatrickStar_96, Kampe_96
- Track 11 : Gibbles_95
- Track 12 : RobinSparkles_99
- Track 13 : GodonK_167
- Track 14 : Phendrix_157
- Track 15 : Mareelih_41, Boopy_43, Forza_42, BlueNGGold_41
- Track 16 : Sixama_41
- Track 17 : Atuin_254
- Track 18 : Artu_238, DunneganBoMo_238, Emmetator_238, KSunshine22_244
- Track 19 : Ellewin_237
- Track 20 : LeoJr_264, ReginaGlobina_266
- Track 21 : BooTeria_245
- Track 22 : WaddleDee_236
- Track 23 : Panchaali_236
- Track 24 : Stewart25555_242
- Track 25 : PauloDiaboli_342
- Track 26 : Dodo_335
- Track 27 : 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 32, it was called in 16 of the 39 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_335,

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

- A3Wally_342, Artu_238, Atuin_254, Bernardo_85, BlueNGold_41, BooTeria_245, Boopy_43, DunneganBoMo_238, Ellewin_237, Emmetator_238, Forza_42, Gadget_85, Gibbles_95, GodonK_167, KSunshine22_244, Kampe_96, LeoJr_264, Mareelih_41, Orchid_95, Panchaali_236, PatrickStar_96, PauloDiaboli_342, Phendrix_157, Pipefish_86, ReginaGlobina_266, RobinSparkles_99, Sixama_41, Stewart25555_242, WaddleDee_236,

Summary by start number:

Start 18:

- Found in 3 of 47 (6.4%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_254 (FC), LeoJr_264 (FC), ReginaGlobina_266 (FC),

Start 21:

- Found in 11 of 47 (23.4%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 9.1% of time when present
- Phage (with cluster) where this start called: WaddleDee_236 (FC),

Start 23:

- Found in 3 of 47 (6.4%) of genes in pham
- Manual Annotations of this start: 3 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_342 (GD1), Dodo_335 (GD1), PauloDiaboli_342 (GD1),

Start 24:

- Found in 6 of 47 (12.8%) of genes in pham
- Manual Annotations of this start: 4 of 39
- 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 25:

- Found in 25 of 47 (53.2%) of genes in pham
- Manual Annotations of this start: 12 of 39
- Called 68.0% of time when present
- Phage (with cluster) where this start called: Artu_238 (FC), BlueNGold_41 (DS), BooTeria_245 (FC), Boopy_43 (DS), DunneganBoMo_238 (FC), Ellewin_237 (FC), Emmetator_238 (FC), Forza_42 (DS), Gadget_85 (B3), KSunshine22_244 (FC), Mareelih_41 (DS), Orchid_95 (CX), Panchaali_236 (FC), Pipefish_86 (B3),

RobinSparkles_99 (CX), Sixama_41 (DS), Stewart25555_242 (FC),

Start 32:

- Found in 18 of 47 (38.3%) of genes in pham
- Manual Annotations of this start: 16 of 39
- 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 34:

- Found in 1 of 47 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK_167 (DK),

Start 36:

- Found in 3 of 47 (6.4%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Bernardo_85 (B3),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, DK, FC, CX, B3, CQ2, CQ1, DS,

Info for manual annotations of cluster B3:

- Start number 25 was manually annotated 2 times for cluster B3.
- Start number 36 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster CQ1:

- Start number 32 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 32 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CX:

- Start number 24 was manually annotated 3 times for cluster CX.
- Start number 25 was manually annotated 2 times for cluster CX.

Info for manual annotations of cluster DK:

- Start number 24 was manually annotated 1 time for cluster DK.
- Start number 34 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

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

Info for manual annotations of cluster FC:

- Start number 18 was manually annotated 1 time for cluster FC.
- Start number 21 was manually annotated 1 time for cluster FC.
- Start number 25 was manually annotated 3 times for cluster FC.

Info for manual annotations of cluster GD1:

•Start number 23 was manually annotated 3 times for cluster GD1.

Gene Information:

Gene: A3Wally_342 Start: 176311, Stop: 176649, Start Num: 23

Candidate Starts for A3Wally_342:

(Start: 23 @176311 has 3 MA's), (26, 176332), (28, 176344), (29, 176347), (31, 176356), (33, 176362), (38, 176389), (48, 176470), (58, 176563), (59, 176569), (62, 176620),

Gene: Abscondus_6 Start: 1603, Stop: 1334, Start Num: 32

Candidate Starts for Abscondus_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (6, 1909), (Start: 32 @1603 has 16 MA's), (37, 1573), (41, 1558), (51, 1477), (55, 1441),

Gene: Aphelion_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Aphelion_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Artu_238 Start: 160801, Stop: 161106, Start Num: 25

Candidate Starts for Artu_238:

(Start: 21 @160783 has 1 MA's), (Start: 25 @160801 has 12 MA's), (44, 160921), (46, 160951),

Gene: Atuin_254 Start: 161281, Stop: 161634, Start Num: 18

Candidate Starts for Atuin_254:

(Start: 18 @161281 has 1 MA's), (Start: 21 @161311 has 1 MA's), (Start: 25 @161329 has 12 MA's), (44, 161449), (46, 161479),

Gene: Bachita_8 Start: 2279, Stop: 2010, Start Num: 32

Candidate Starts for Bachita_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (6, 2585), (Start: 32 @2279 has 16 MA's), (41, 2234), (51, 2153), (55, 2117),

Gene: Bernardo_85 Start: 62136, Stop: 61870, Start Num: 36

Candidate Starts for Bernardo_85:

(14, 62325), (16, 62301), (17, 62292), (Start: 25 @62202 has 12 MA's), (27, 62181), (31, 62166), (Start: 36 @62136 has 1 MA's), (40, 62118), (53, 62019), (61, 61893),

Gene: BlueNGold_41 Start: 14735, Stop: 14454, Start Num: 25

Candidate Starts for BlueNGold_41:

(Start: 25 @14735 has 12 MA's), (30, 14702), (33, 14693),

Gene: BooTeria_245 Start: 159303, Stop: 159608, Start Num: 25

Candidate Starts for BooTeria_245:

(11, 159174), (13, 159186), (14, 159192), (15, 159201), (19, 159264), (20, 159267), (22, 159285), (Start: 25 @159303 has 12 MA's), (44, 159423), (46, 159453),

Gene: Boopy_43 Start: 14747, Stop: 14466, Start Num: 25

Candidate Starts for Boopy_43:

(Start: 25 @14747 has 12 MA's), (30, 14714), (33, 14705),

Gene: ClubL_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for ClubL_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Cucurbita_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Cucurbita_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Culver_6 Start: 1603, Stop: 1334, Start Num: 32

Candidate Starts for Culver_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (6, 1909), (Start: 32 @1603 has 16 MA's), (37, 1573), (41, 1558), (51, 1477), (55, 1441),

Gene: Dodo_335 Start: 175376, Stop: 175714, Start Num: 23

Candidate Starts for Dodo_335:

(Start: 23 @175376 has 3 MA's), (26, 175397), (28, 175409), (29, 175412), (31, 175421), (Start: 32 @175424 has 16 MA's), (33, 175427), (38, 175454), (48, 175535), (58, 175628), (62, 175685),

Gene: DunneganBoMo_238 Start: 159407, Stop: 159712, Start Num: 25

Candidate Starts for DunneganBoMo_238:

(Start: 21 @159389 has 1 MA's), (Start: 25 @159407 has 12 MA's), (44, 159527), (46, 159557),

Gene: Dusty_6 Start: 1603, Stop: 1334, Start Num: 32

Candidate Starts for Dusty_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (6, 1909), (Start: 32 @1603 has 16 MA's), (37, 1573), (41, 1558), (51, 1477), (55, 1441),

Gene: Ellewin_237 Start: 158948, Stop: 159256, Start Num: 25

Candidate Starts for Ellewin_237:

(12, 158822), (Start: 21 @158930 has 1 MA's), (Start: 25 @158948 has 12 MA's), (44, 159068),

Gene: Emmetator_238 Start: 158182, Stop: 158487, Start Num: 25

Candidate Starts for Emmetator_238:

(Start: 21 @158164 has 1 MA's), (Start: 25 @158182 has 12 MA's), (44, 158302), (46, 158332),

Gene: Engineer_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Engineer_7:

(Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Forza_42 Start: 14663, Stop: 14382, Start Num: 25

Candidate Starts for Forza_42:

(Start: 25 @14663 has 12 MA's), (30, 14630), (33, 14621),

Gene: Gadget_85 Start: 62385, Stop: 62053, Start Num: 25

Candidate Starts for Gadget_85:

(14, 62508), (16, 62484), (17, 62475), (Start: 25 @62385 has 12 MA's), (27, 62364), (31, 62349), (Start: 36 @62319 has 1 MA's), (40, 62301), (53, 62202), (60, 62085), (61, 62076),

Gene: Geeche_6 Start: 1598, Stop: 1329, Start Num: 32

Candidate Starts for Geeche_6:

(1, 2162), (2, 2132), (3, 2051), (4, 1943), (6, 1904), (Start: 32 @1598 has 16 MA's), (41, 1553), (51, 1472), (55, 1436),

Gene: Gibbles_95 Start: 69566, Stop: 69255, Start Num: 24

Candidate Starts for Gibbles_95:

(Start: 24 @69566 has 4 MA's), (Start: 25 @69560 has 12 MA's), (27, 69539), (29, 69533), (30, 69527), (45, 69437), (47, 69413), (54, 69359),

Gene: GodonK_167 Start: 85677, Stop: 85414, Start Num: 34

Candidate Starts for GodonK_167:

(Start: 34 @85677 has 1 MA's), (35, 85671), (41, 85635), (42, 85629), (43, 85626), (49, 85566), (52, 85551), (56, 85515), (59, 85473),

Gene: KSunshine22_244 Start: 158806, Stop: 159111, Start Num: 25

Candidate Starts for KSunshine22_244:

(Start: 21 @158788 has 1 MA's), (Start: 25 @158806 has 12 MA's), (44, 158926), (46, 158956),

Gene: Kampe_96 Start: 69516, Stop: 69205, Start Num: 24

Candidate Starts for Kampe_96:

(Start: 24 @69516 has 4 MA's), (Start: 25 @69510 has 12 MA's), (29, 69483), (45, 69387), (54, 69309),

Gene: LeoJr_264 Start: 160668, Stop: 161021, Start Num: 18

Candidate Starts for LeoJr_264:

(Start: 18 @160668 has 1 MA's), (Start: 21 @160698 has 1 MA's), (Start: 25 @160716 has 12 MA's), (44, 160836), (46, 160866),

Gene: Lozinak_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Lozinak_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Mareelih_41 Start: 14165, Stop: 13884, Start Num: 25

Candidate Starts for Mareelih_41:

(Start: 25 @14165 has 12 MA's), (30, 14132), (33, 14123),

Gene: Miskis_6 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Miskis_6:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Norvs_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Norvs_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: OneUp_6 Start: 1509, Stop: 1234, Start Num: 32

Candidate Starts for OneUp_6:

(Start: 32 @1509 has 16 MA's), (50, 1392),

Gene: Orchid_95 Start: 69511, Stop: 69206, Start Num: 25

Candidate Starts for Orchid_95:

(Start: 24 @69517 has 4 MA's), (Start: 25 @69511 has 12 MA's), (29, 69484), (45, 69388), (54, 69310),

Gene: Panchaali_236 Start: 159103, Stop: 159411, Start Num: 25

Candidate Starts for Panchaali_236:

(Start: 21 @159085 has 1 MA's), (Start: 25 @159103 has 12 MA's), (44, 159223), (46, 159253),

Gene: PatrickStar_96 Start: 69516, Stop: 69205, Start Num: 24

Candidate Starts for PatrickStar_96:

(Start: 24 @69516 has 4 MA's), (Start: 25 @69510 has 12 MA's), (29, 69483), (45, 69387), (54, 69309),

Gene: PauloDiaboli_342 Start: 173467, Stop: 173805, Start Num: 23

Candidate Starts for PauloDiaboli_342:

(Start: 23 @173467 has 3 MA's), (26, 173488), (29, 173503), (31, 173512), (33, 173518), (38, 173545), (48, 173626), (58, 173719), (59, 173725), (62, 173776),

Gene: Phendrix_157 Start: 84630, Stop: 84319, Start Num: 24

Candidate Starts for Phendrix_157:

(Start: 24 @84630 has 4 MA's), (35, 84576), (38, 84552), (49, 84471), (52, 84456), (56, 84420), (59, 84378),

Gene: PhinkBoden_8 Start: 2279, Stop: 2010, Start Num: 32

Candidate Starts for PhinkBoden_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (6, 2585), (Start: 32 @2279 has 16 MA's), (41, 2234), (51, 2153), (55, 2117),

Gene: Pipefish_86 Start: 63131, Stop: 62799, Start Num: 25

Candidate Starts for Pipefish_86:

(14, 63254), (16, 63230), (17, 63221), (Start: 25 @63131 has 12 MA's), (27, 63110), (31, 63095), (Start: 36 @63065 has 1 MA's), (40, 63047), (53, 62948), (60, 62831), (61, 62822),

Gene: ReginaGlobina_266 Start: 161874, Stop: 162227, Start Num: 18

Candidate Starts for ReginaGlobina_266:

(Start: 18 @161874 has 1 MA's), (Start: 21 @161904 has 1 MA's), (Start: 25 @161922 has 12 MA's), (44, 162042), (46, 162072),

Gene: RobinSparkles_99 Start: 69573, Stop: 69268, Start Num: 25

Candidate Starts for RobinSparkles_99:

(Start: 24 @69579 has 4 MA's), (Start: 25 @69573 has 12 MA's), (45, 69450), (47, 69426), (54, 69372),

Gene: Sixama_41 Start: 13852, Stop: 13571, Start Num: 25

Candidate Starts for Sixama_41:

(Start: 25 @13852 has 12 MA's), (39, 13774),

Gene: Smoothie_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Smoothie_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: Stewart25555_242 Start: 158516, Stop: 158815, Start Num: 25

Candidate Starts for Stewart25555_242:

(5, 158240), (7, 158255), (8, 158312), (9, 158327), (10, 158330), (Start: 21 @158498 has 1 MA's), (Start: 25 @158516 has 12 MA's), (57, 158753),

Gene: Toniann_7 Start: 1779, Stop: 1510, Start Num: 32

Candidate Starts for Toniann_7:

(4, 2124), (6, 2085), (Start: 32 @1779 has 16 MA's), (41, 1734), (51, 1653), (55, 1617),

Gene: WaddleDee_236 Start: 158922, Stop: 159245, Start Num: 21

Candidate Starts for WaddleDee_236:

(Start: 21 @158922 has 1 MA's), (Start: 25 @158940 has 12 MA's), (44, 159060), (46, 159090),

Gene: WilliamBoone_6 Start: 1630, Stop: 1361, Start Num: 32
Candidate Starts for WilliamBoone_6:
(Start: 32 @1630 has 16 MA's), (41, 1585),