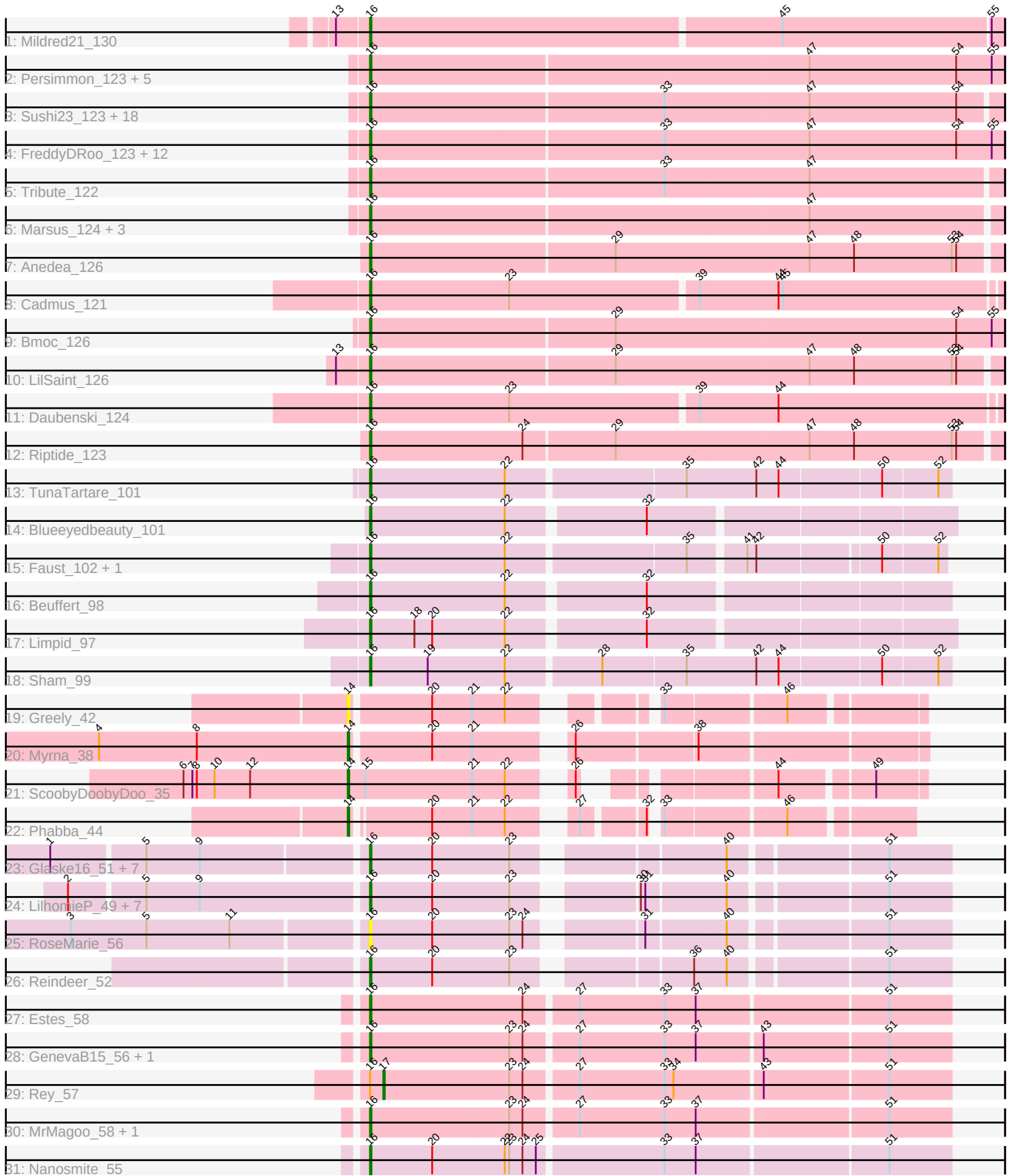


Pham 330732



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 330732 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330732 has 86 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Mildred21_130
- Track 2 : Persimmon_123, PynkPanther_123, Navo_121, WhereRU_122, Bartholomune_123, Davielle_123
- Track 3 : Sushi23_123, Watermoore_123, EGole_127, Peebs_122, Cross_124, HangryHippo_124, WashU_124, Leo04_125, PacManQ_123, Lululemon_123, Larnav_124, Pepperwood_124, BlueOtter_124, Scheme_125, ArianaSWT_130, Coogler_124, Deutsch_123, Samisti12_125, Cursive_122
- Track 4 : FreddyDRoo_123, Squillium_124, NootNoot_120, Eliot67_122, Paradiddles_119, Liandry_123, Braelyn_124, Evy_122, Targaryen_125, Warpy_128, Shuckle_122, Jay2Jay_129, PinkiePie_121
- Track 5 : Tribute_122
- Track 6 : Marsus_124, Angela_123, MulchMansion_122, LilMartin_122
- Track 7 : Anedea_126
- Track 8 : Cadmus_121
- Track 9 : Bmoc_126
- Track 10 : LilSaint_126
- Track 11 : Daubenski_124
- Track 12 : Riptide_123
- Track 13 : TunaTartare_101
- Track 14 : Blueeyedbeauty_101
- Track 15 : Faust_102, SeresaTree_102
- Track 16 : Beuffert_98
- Track 17 : Limpid_97
- Track 18 : Sham_99
- Track 19 : Greely_42
- Track 20 : Myrna_38
- Track 21 : ScoobyDoobyDoo_35
- Track 22 : Phabba_44
- Track 23 : Glaske16_51, Diminimus_51, KleverKiS_51, FreakyGoo_51, Dulcita_51, Auspice_50, Bricole_50, Izel_51
- Track 24 : LilhomieP_49, PegLeg_50, TyDawg_50, Bongo_50, SlimJimmy_49, TpudiCK_52, IPhane7_50, Skinny_51
- Track 25 : RoseMarie_56
- Track 26 : Reindeer_52
- Track 27 : Estes_58
- Track 28 : GenevaB15_56, Aziz_56
- Track 29 : Rey_57

- Track 30 : MrMagoo_58, GardenSalsa_58
- Track 31 : Nanosmite_55

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

The start number called the most often in the published annotations is 16, it was called in 75 of the 79 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anedea_126, Angela_123, ArianaSWT_130, Auspice_50, Aziz_56, Bartholomune_123, Beuffert_98, BlueOtter_124, Blueeyedbeauty_101, Bmoc_126, Bongo_50, Braelyn_124, Bricole_50, Cadmus_121, Coogler_124, Cross_124, Cursive_122, Daubenski_124, Davielle_123, Diminimus_51, Dulcita_51, EGole_127, Eliot67_122, Estes_58, Evy_122, Faust_102, FreakyGoo_51, FreddyDRoo_123, GardenSalsa_58, GenevaB15_56, Glaske16_51, HangryHippo_124, IPhone7_50, Izel_51, Jay2Jay_129, KleverKiS_51, Larnav_124, Leo04_125, Liandry_123, LilMartin_122, LilSaint_126, LilhomieP_49, Limpid_97, Lululemon_123, Marsus_124, Mildred21_130, MrMagoo_58, MulchMansion_122, Nanosmite_55, Navo_121, NootNoot_120, PacManQ_123, Paradiddles_119, Peebs_122, PegLeg_50, Pepperwood_124, Persimmon_123, PinkiePie_121, PynkPanther_123, Reindeer_52, Riptide_123, RoseMarie_56, Samisti12_125, Scheme_125, SeresaTree_102, Sham_99, Shuckle_122, Skinny_51, SlimJimmy_49, Squillium_124, Sushi23_123, Targaryen_125, Teutsch_123, TpudiCK_52, Tribute_122, TunaTartare_101, TyDawg_50, Warpy_128, WashU_124, Watermoore_123, WhereRU_122,

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

- Rey_57,

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

- Greely_42, Myrna_38, Phabba_44, ScoobyDoobyDoo_35,

Summary by start number:

Start 14:

- Found in 4 of 86 (4.7%) of genes in pham
- Manual Annotations of this start: 3 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely_42 (C2), Myrna_38 (C2), Phabba_44 (C2), ScoobyDoobyDoo_35 (C2),

Start 16:

- Found in 82 of 86 (95.3%) of genes in pham
- Manual Annotations of this start: 75 of 79
- Called 98.8% of time when present
- Phage (with cluster) where this start called: Anedea_126 (BE1), Angela_123 (BE1), ArianaSWT_130 (BE1), Auspice_50 (M1), Aziz_56 (M2), Bartholomune_123 (BE1), Beuffert_98 (BK1), BlueOtter_124 (BE1), Blueeyedbeauty_101 (BK1), Bmoc_126 (BE1), Bongo_50 (M1), Braelyn_124 (BE1), Bricole_50 (M1), Cadmus_121 (BE1), Coogler_124 (BE1), Cross_124 (BE1), Cursive_122 (BE1), Daubenski_124 (BE1), Davielle_123 (BE1), Diminimus_51 (M1), Dulcita_51 (M1), EGole_127 (BE1),

Eliot67_122 (BE1), Estes_58 (M2), Evy_122 (BE1), Faust_102 (BK1), FreakyGoo_51 (M1), FreddyDRoo_123 (BE1), GardenSalsa_58 (M2), GenevaB15_56 (M2), Glaske16_51 (M1), HangryHippo_124 (BE1), IPHane7_50 (M1), Izel_51 (M1), Jay2Jay_129 (BE1), KleverKiS_51 (M1), Larnav_124 (BE1), Leo04_125 (BE1), Liandry_123 (BE1), LilMartin_122 (BE1), LilSaint_126 (BE1), LilhomieP_49 (M1), Limpid_97 (BK1), Lululemon_123 (BE1), Marsus_124 (BE1), Mildred21_130 (BE1), MrMagoo_58 (M2), MulchMansion_122 (BE1), Nanosmite_55 (M3), Navo_121 (BE1), NootNoot_120 (BE1), PacManQ_123 (BE1), Paradiddles_119 (BE1), Peebs_122 (BE1), PegLeg_50 (M1), Pepperwood_124 (BE1), Persimmon_123 (BE1), PinkiePie_121 (BE1), PynkPanther_123 (BE1), Reindeer_52 (M1), Riptide_123 (BE1), RoseMarie_56 (M1), Samisti12_125 (BE1), Scheme_125 (BE1), SeresaTree_102 (BK1), Sham_99 (BK1), Shuckle_122 (BE1), Skinny_51 (M1), SlimJimmy_49 (M1), Squillium_124 (BE1), Sushi23_123 (BE1), Targaryen_125 (BE1), Teutsch_123 (BE1), TpudiCK_52 (M1), Tribute_122 (BE1), TunaTartare_101 (BK1), TyDawg_50 (M1), Warpy_128 (BE1), WashU_124 (BE1), Watermoore_123 (BE1), WhereRU_122 (BE1),

Start 17:

- Found in 1 of 86 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rey_57 (M2),

Summary by clusters:

There are 6 clusters represented in this pham: M1, BK1, M3, M2, C2, BE1,

Info for manual annotations of cluster BE1:

- Start number 16 was manually annotated 48 times for cluster BE1.

Info for manual annotations of cluster BK1:

- Start number 16 was manually annotated 6 times for cluster BK1.

Info for manual annotations of cluster C2:

- Start number 14 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster M1:

- Start number 16 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 16 was manually annotated 5 times for cluster M2.
- Start number 17 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster M3:

- Start number 16 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Anedea_126 Start: 79387, Stop: 79803, Start Num: 16

Candidate Starts for Anedea_126:

(Start: 16 @79387 has 75 MA's), (29, 79549), (47, 79678), (48, 79708), (53, 79774), (54, 79777),

Gene: Angela_123 Start: 79460, Stop: 79876, Start Num: 16

Candidate Starts for Angela_123:

(Start: 16 @79460 has 75 MA's), (47, 79751),

Gene: ArianaSWT_130 Start: 81857, Stop: 82273, Start Num: 16

Candidate Starts for ArianaSWT_130:

(Start: 16 @81857 has 75 MA's), (33, 82052), (47, 82148), (54, 82247),

Gene: Auspice_50 Start: 37254, Stop: 37604, Start Num: 16

Candidate Starts for Auspice_50:

(1, 37053), (5, 37113), (9, 37149), (Start: 16 @37254 has 75 MA's), (20, 37296), (23, 37347), (40, 37467), (51, 37563),

Gene: Aziz_56 Start: 39168, Stop: 39545, Start Num: 16

Candidate Starts for Aziz_56:

(Start: 16 @39168 has 75 MA's), (23, 39261), (24, 39270), (27, 39303), (33, 39360), (37, 39381), (43, 39423), (51, 39504),

Gene: Bartholomune_123 Start: 79645, Stop: 80067, Start Num: 16

Candidate Starts for Bartholomune_123:

(Start: 16 @79645 has 75 MA's), (47, 79936), (54, 80035), (55, 80059),

Gene: Beuffert_98 Start: 67977, Stop: 68345, Start Num: 16

Candidate Starts for Beuffert_98:

(Start: 16 @67977 has 75 MA's), (22, 68067), (32, 68154),

Gene: BlueOtter_124 Start: 81894, Stop: 82310, Start Num: 16

Candidate Starts for BlueOtter_124:

(Start: 16 @81894 has 75 MA's), (33, 82089), (47, 82185), (54, 82284),

Gene: Blueeyedbeauty_101 Start: 67379, Stop: 67750, Start Num: 16

Candidate Starts for Blueeyedbeauty_101:

(Start: 16 @67379 has 75 MA's), (22, 67469), (32, 67556),

Gene: Bmoc_126 Start: 79770, Stop: 80192, Start Num: 16

Candidate Starts for Bmoc_126:

(Start: 16 @79770 has 75 MA's), (29, 79932), (54, 80160), (55, 80184),

Gene: Bongo_50 Start: 37258, Stop: 37608, Start Num: 16

Candidate Starts for Bongo_50:

(2, 37066), (5, 37114), (9, 37150), (Start: 16 @37258 has 75 MA's), (20, 37300), (23, 37351), (30, 37417), (31, 37420), (40, 37471), (51, 37567),

Gene: Braelyn_124 Start: 80531, Stop: 80953, Start Num: 16

Candidate Starts for Braelyn_124:

(Start: 16 @80531 has 75 MA's), (33, 80726), (47, 80822), (54, 80921), (55, 80945),

Gene: Bricole_50 Start: 37240, Stop: 37590, Start Num: 16

Candidate Starts for Bricole_50:

(1, 37039), (5, 37099), (9, 37135), (Start: 16 @37240 has 75 MA's), (20, 37282), (23, 37333), (40, 37453), (51, 37549),

Gene: Cadmus_121 Start: 80245, Stop: 80658, Start Num: 16
Candidate Starts for Cadmus_121:
(Start: 16 @80245 has 75 MA's), (23, 80338), (39, 80461), (44, 80512), (45, 80515),

Gene: Coogler_124 Start: 81919, Stop: 82335, Start Num: 16
Candidate Starts for Coogler_124:
(Start: 16 @81919 has 75 MA's), (33, 82114), (47, 82210), (54, 82309),

Gene: Cross_124 Start: 81895, Stop: 82311, Start Num: 16
Candidate Starts for Cross_124:
(Start: 16 @81895 has 75 MA's), (33, 82090), (47, 82186), (54, 82285),

Gene: Cursive_122 Start: 80104, Stop: 80520, Start Num: 16
Candidate Starts for Cursive_122:
(Start: 16 @80104 has 75 MA's), (33, 80299), (47, 80395), (54, 80494),

Gene: Daubenski_124 Start: 81481, Stop: 81894, Start Num: 16
Candidate Starts for Daubenski_124:
(Start: 16 @81481 has 75 MA's), (23, 81574), (39, 81697), (44, 81748),

Gene: Davielle_123 Start: 79988, Stop: 80410, Start Num: 16
Candidate Starts for Davielle_123:
(Start: 16 @79988 has 75 MA's), (47, 80279), (54, 80378), (55, 80402),

Gene: Diminimus_51 Start: 37253, Stop: 37603, Start Num: 16
Candidate Starts for Diminimus_51:
(1, 37052), (5, 37112), (9, 37148), (Start: 16 @37253 has 75 MA's), (20, 37295), (23, 37346), (40, 37466), (51, 37562),

Gene: Dulcita_51 Start: 37254, Stop: 37604, Start Num: 16
Candidate Starts for Dulcita_51:
(1, 37053), (5, 37113), (9, 37149), (Start: 16 @37254 has 75 MA's), (20, 37296), (23, 37347), (40, 37467), (51, 37563),

Gene: EGole_127 Start: 82928, Stop: 83344, Start Num: 16
Candidate Starts for EGole_127:
(Start: 16 @82928 has 75 MA's), (33, 83123), (47, 83219), (54, 83318),

Gene: Eliot67_122 Start: 79681, Stop: 80103, Start Num: 16
Candidate Starts for Eliot67_122:
(Start: 16 @79681 has 75 MA's), (33, 79876), (47, 79972), (54, 80071), (55, 80095),

Gene: Estes_58 Start: 39425, Stop: 39802, Start Num: 16
Candidate Starts for Estes_58:
(Start: 16 @39425 has 75 MA's), (24, 39527), (27, 39560), (33, 39617), (37, 39638), (51, 39761),

Gene: Evy_122 Start: 81803, Stop: 82225, Start Num: 16
Candidate Starts for Evy_122:
(Start: 16 @81803 has 75 MA's), (33, 81998), (47, 82094), (54, 82193), (55, 82217),

Gene: Faust_102 Start: 69072, Stop: 69434, Start Num: 16
Candidate Starts for Faust_102:

(Start: 16 @69072 has 75 MA's), (22, 69162), (35, 69276), (41, 69309), (42, 69315), (50, 69393), (52, 69429),

Gene: FreakyGoo_51 Start: 37254, Stop: 37604, Start Num: 16

Candidate Starts for FreakyGoo_51:

(1, 37053), (5, 37113), (9, 37149), (Start: 16 @37254 has 75 MA's), (20, 37296), (23, 37347), (40, 37467), (51, 37563),

Gene: FreddyDRoo_123 Start: 79681, Stop: 80103, Start Num: 16

Candidate Starts for FreddyDRoo_123:

(Start: 16 @79681 has 75 MA's), (33, 79876), (47, 79972), (54, 80071), (55, 80095),

Gene: GardenSalsa_58 Start: 39575, Stop: 39952, Start Num: 16

Candidate Starts for GardenSalsa_58:

(Start: 16 @39575 has 75 MA's), (23, 39668), (24, 39677), (27, 39710), (33, 39767), (37, 39788), (51, 39911),

Gene: GenevaB15_56 Start: 39168, Stop: 39545, Start Num: 16

Candidate Starts for GenevaB15_56:

(Start: 16 @39168 has 75 MA's), (23, 39261), (24, 39270), (27, 39303), (33, 39360), (37, 39381), (43, 39423), (51, 39504),

Gene: Glaske16_51 Start: 37253, Stop: 37603, Start Num: 16

Candidate Starts for Glaske16_51:

(1, 37052), (5, 37112), (9, 37148), (Start: 16 @37253 has 75 MA's), (20, 37295), (23, 37346), (40, 37466), (51, 37562),

Gene: Greely_42 Start: 16620, Stop: 16946, Start Num: 14

Candidate Starts for Greely_42:

(Start: 14 @16620 has 3 MA's), (20, 16671), (21, 16698), (22, 16719), (33, 16788), (46, 16863),

Gene: HangryHippo_124 Start: 81894, Stop: 82310, Start Num: 16

Candidate Starts for HangryHippo_124:

(Start: 16 @81894 has 75 MA's), (33, 82089), (47, 82185), (54, 82284),

Gene: IPHane7_50 Start: 37258, Stop: 37608, Start Num: 16

Candidate Starts for IPHane7_50:

(2, 37066), (5, 37114), (9, 37150), (Start: 16 @37258 has 75 MA's), (20, 37300), (23, 37351), (30, 37417), (31, 37420), (40, 37471), (51, 37567),

Gene: Izel_51 Start: 37253, Stop: 37603, Start Num: 16

Candidate Starts for Izel_51:

(1, 37052), (5, 37112), (9, 37148), (Start: 16 @37253 has 75 MA's), (20, 37295), (23, 37346), (40, 37466), (51, 37562),

Gene: Jay2Jay_129 Start: 82640, Stop: 83062, Start Num: 16

Candidate Starts for Jay2Jay_129:

(Start: 16 @82640 has 75 MA's), (33, 82835), (47, 82931), (54, 83030), (55, 83054),

Gene: KleverKiS_51 Start: 37234, Stop: 37584, Start Num: 16

Candidate Starts for KleverKiS_51:

(1, 37033), (5, 37093), (9, 37129), (Start: 16 @37234 has 75 MA's), (20, 37276), (23, 37327), (40, 37447), (51, 37543),

Gene: Larnav_124 Start: 81878, Stop: 82294, Start Num: 16
Candidate Starts for Larnav_124:
(Start: 16 @81878 has 75 MA's), (33, 82073), (47, 82169), (54, 82268),

Gene: Leo04_125 Start: 82394, Stop: 82810, Start Num: 16
Candidate Starts for Leo04_125:
(Start: 16 @82394 has 75 MA's), (33, 82589), (47, 82685), (54, 82784),

Gene: Liandry_123 Start: 80388, Stop: 80810, Start Num: 16
Candidate Starts for Liandry_123:
(Start: 16 @80388 has 75 MA's), (33, 80583), (47, 80679), (54, 80778), (55, 80802),

Gene: LilMartin_122 Start: 79365, Stop: 79781, Start Num: 16
Candidate Starts for LilMartin_122:
(Start: 16 @79365 has 75 MA's), (47, 79656),

Gene: LilSaint_126 Start: 79278, Stop: 79694, Start Num: 16
Candidate Starts for LilSaint_126:
(13, 79257), (Start: 16 @79278 has 75 MA's), (29, 79440), (47, 79569), (48, 79599), (53, 79665), (54, 79668),

Gene: LilhomieP_49 Start: 37258, Stop: 37608, Start Num: 16
Candidate Starts for LilhomieP_49:
(2, 37066), (5, 37114), (9, 37150), (Start: 16 @37258 has 75 MA's), (20, 37300), (23, 37351), (30, 37417), (31, 37420), (40, 37471), (51, 37567),

Gene: Limpid_97 Start: 67416, Stop: 67787, Start Num: 16
Candidate Starts for Limpid_97:
(Start: 16 @67416 has 75 MA's), (18, 67446), (20, 67458), (22, 67506), (32, 67593),

Gene: Lululemon_123 Start: 81275, Stop: 81691, Start Num: 16
Candidate Starts for Lululemon_123:
(Start: 16 @81275 has 75 MA's), (33, 81470), (47, 81566), (54, 81665),

Gene: Marsus_124 Start: 79839, Stop: 80255, Start Num: 16
Candidate Starts for Marsus_124:
(Start: 16 @79839 has 75 MA's), (47, 80130),

Gene: Mildred21_130 Start: 80335, Stop: 80751, Start Num: 16
Candidate Starts for Mildred21_130:
(13, 80314), (Start: 16 @80335 has 75 MA's), (45, 80605), (55, 80743),

Gene: MrMagoo_58 Start: 39575, Stop: 39952, Start Num: 16
Candidate Starts for MrMagoo_58:
(Start: 16 @39575 has 75 MA's), (23, 39668), (24, 39677), (27, 39710), (33, 39767), (37, 39788), (51, 39911),

Gene: MulchMansion_122 Start: 79408, Stop: 79824, Start Num: 16
Candidate Starts for MulchMansion_122:
(Start: 16 @79408 has 75 MA's), (47, 79699),

Gene: Myrna_38 Start: 17055, Stop: 17402, Start Num: 14

Candidate Starts for Myrna_38:

(4, 16887), (8, 16953), (Start: 14 @17055 has 3 MA's), (20, 17106), (21, 17133), (26, 17181), (38, 17259),

Gene: Nanosmite_55 Start: 38885, Stop: 39262, Start Num: 16

Candidate Starts for Nanosmite_55:

(Start: 16 @38885 has 75 MA's), (20, 38927), (22, 38975), (23, 38978), (24, 38987), (25, 38996), (33, 39077), (37, 39098), (51, 39221),

Gene: Navo_121 Start: 80193, Stop: 80615, Start Num: 16

Candidate Starts for Navo_121:

(Start: 16 @80193 has 75 MA's), (47, 80484), (54, 80583), (55, 80607),

Gene: NootNoot_120 Start: 79302, Stop: 79724, Start Num: 16

Candidate Starts for NootNoot_120:

(Start: 16 @79302 has 75 MA's), (33, 79497), (47, 79593), (54, 79692), (55, 79716),

Gene: PacManQ_123 Start: 81275, Stop: 81691, Start Num: 16

Candidate Starts for PacManQ_123:

(Start: 16 @81275 has 75 MA's), (33, 81470), (47, 81566), (54, 81665),

Gene: Paradiddles_119 Start: 81204, Stop: 81626, Start Num: 16

Candidate Starts for Paradiddles_119:

(Start: 16 @81204 has 75 MA's), (33, 81399), (47, 81495), (54, 81594), (55, 81618),

Gene: Peebs_122 Start: 81691, Stop: 82107, Start Num: 16

Candidate Starts for Peebs_122:

(Start: 16 @81691 has 75 MA's), (33, 81886), (47, 81982), (54, 82081),

Gene: PegLeg_50 Start: 37257, Stop: 37607, Start Num: 16

Candidate Starts for PegLeg_50:

(2, 37065), (5, 37113), (9, 37149), (Start: 16 @37257 has 75 MA's), (20, 37299), (23, 37350), (30, 37416), (31, 37419), (40, 37470), (51, 37566),

Gene: Pepperwood_124 Start: 81822, Stop: 82238, Start Num: 16

Candidate Starts for Pepperwood_124:

(Start: 16 @81822 has 75 MA's), (33, 82017), (47, 82113), (54, 82212),

Gene: Persimmon_123 Start: 79236, Stop: 79658, Start Num: 16

Candidate Starts for Persimmon_123:

(Start: 16 @79236 has 75 MA's), (47, 79527), (54, 79626), (55, 79650),

Gene: Phabba_44 Start: 16811, Stop: 17128, Start Num: 14

Candidate Starts for Phabba_44:

(Start: 14 @16811 has 3 MA's), (20, 16859), (21, 16886), (22, 16907), (27, 16937), (32, 16973), (33, 16976), (46, 17051),

Gene: PinkiePie_121 Start: 80388, Stop: 80810, Start Num: 16

Candidate Starts for PinkiePie_121:

(Start: 16 @80388 has 75 MA's), (33, 80583), (47, 80679), (54, 80778), (55, 80802),

Gene: PynkPanther_123 Start: 80925, Stop: 81347, Start Num: 16

Candidate Starts for PynkPanther_123:

(Start: 16 @80925 has 75 MA's), (47, 81216), (54, 81315), (55, 81339),

Gene: Reindeer_52 Start: 38460, Stop: 38810, Start Num: 16

Candidate Starts for Reindeer_52:

(Start: 16 @38460 has 75 MA's), (20, 38502), (23, 38553), (36, 38652), (40, 38673), (51, 38769),

Gene: Rey_57 Start: 39459, Stop: 39827, Start Num: 17

Candidate Starts for Rey_57:

(Start: 16 @39450 has 75 MA's), (Start: 17 @39459 has 1 MA's), (23, 39543), (24, 39552), (27, 39585), (33, 39642), (34, 39648), (43, 39705), (51, 39786),

Gene: Riptide_123 Start: 79065, Stop: 79481, Start Num: 16

Candidate Starts for Riptide_123:

(Start: 16 @79065 has 75 MA's), (24, 79167), (29, 79227), (47, 79356), (48, 79386), (53, 79452), (54, 79455),

Gene: RoseMarie_56 Start: 40904, Stop: 41254, Start Num: 16

Candidate Starts for RoseMarie_56:

(3, 40715), (5, 40766), (11, 40820), (Start: 16 @40904 has 75 MA's), (20, 40946), (23, 40997), (24, 41006), (31, 41066), (40, 41117), (51, 41213),

Gene: Samisti12_125 Start: 83070, Stop: 83486, Start Num: 16

Candidate Starts for Samisti12_125:

(Start: 16 @83070 has 75 MA's), (33, 83265), (47, 83361), (54, 83460),

Gene: Scheme_125 Start: 82476, Stop: 82892, Start Num: 16

Candidate Starts for Scheme_125:

(Start: 16 @82476 has 75 MA's), (33, 82671), (47, 82767), (54, 82866),

Gene: ScoobyDoobyDoo_35 Start: 13310, Stop: 13627, Start Num: 14

Candidate Starts for ScoobyDoobyDoo_35:

(6, 13199), (7, 13205), (8, 13208), (10, 13220), (12, 13244), (Start: 14 @13310 has 3 MA's), (15, 13322), (21, 13394), (22, 13415), (26, 13442), (44, 13538), (49, 13595),

Gene: SeresaTree_102 Start: 68454, Stop: 68816, Start Num: 16

Candidate Starts for SeresaTree_102:

(Start: 16 @68454 has 75 MA's), (22, 68544), (35, 68658), (41, 68691), (42, 68697), (50, 68775), (52, 68811),

Gene: Sham_99 Start: 68644, Stop: 69018, Start Num: 16

Candidate Starts for Sham_99:

(Start: 16 @68644 has 75 MA's), (19, 68683), (22, 68734), (28, 68794), (35, 68848), (42, 68893), (44, 68908), (50, 68974), (52, 69010),

Gene: Shuckle_122 Start: 80541, Stop: 80963, Start Num: 16

Candidate Starts for Shuckle_122:

(Start: 16 @80541 has 75 MA's), (33, 80736), (47, 80832), (54, 80931), (55, 80955),

Gene: Skinny_51 Start: 37687, Stop: 38037, Start Num: 16

Candidate Starts for Skinny_51:

(2, 37495), (5, 37543), (9, 37579), (Start: 16 @37687 has 75 MA's), (20, 37729), (23, 37780), (30, 37846), (31, 37849), (40, 37900), (51, 37996),

Gene: SlimJimmy_49 Start: 37241, Stop: 37591, Start Num: 16

Candidate Starts for SlimJimmy_49:

(2, 37049), (5, 37097), (9, 37133), (Start: 16 @37241 has 75 MA's), (20, 37283), (23, 37334), (30, 37400), (31, 37403), (40, 37454), (51, 37550),

Gene: Squillum_124 Start: 80390, Stop: 80812, Start Num: 16

Candidate Starts for Squillum_124:

(Start: 16 @80390 has 75 MA's), (33, 80585), (47, 80681), (54, 80780), (55, 80804),

Gene: Sushi23_123 Start: 82047, Stop: 82463, Start Num: 16

Candidate Starts for Sushi23_123:

(Start: 16 @82047 has 75 MA's), (33, 82242), (47, 82338), (54, 82437),

Gene: Targaryen_125 Start: 82782, Stop: 83204, Start Num: 16

Candidate Starts for Targaryen_125:

(Start: 16 @82782 has 75 MA's), (33, 82977), (47, 83073), (54, 83172), (55, 83196),

Gene: Deutsch_123 Start: 82252, Stop: 82668, Start Num: 16

Candidate Starts for Deutsch_123:

(Start: 16 @82252 has 75 MA's), (33, 82447), (47, 82543), (54, 82642),

Gene: TpudiCK_52 Start: 37257, Stop: 37607, Start Num: 16

Candidate Starts for TpudiCK_52:

(2, 37065), (5, 37113), (9, 37149), (Start: 16 @37257 has 75 MA's), (20, 37299), (23, 37350), (30, 37416), (31, 37419), (40, 37470), (51, 37566),

Gene: Tribute_122 Start: 81901, Stop: 82317, Start Num: 16

Candidate Starts for Tribute_122:

(Start: 16 @81901 has 75 MA's), (33, 82096), (47, 82192),

Gene: TunaTartare_101 Start: 69807, Stop: 70181, Start Num: 16

Candidate Starts for TunaTartare_101:

(Start: 16 @69807 has 75 MA's), (22, 69897), (35, 70011), (42, 70056), (44, 70071), (50, 70137), (52, 70173),

Gene: TyDawg_50 Start: 37258, Stop: 37608, Start Num: 16

Candidate Starts for TyDawg_50:

(2, 37066), (5, 37114), (9, 37150), (Start: 16 @37258 has 75 MA's), (20, 37300), (23, 37351), (30, 37417), (31, 37420), (40, 37471), (51, 37567),

Gene: Warpy_128 Start: 82295, Stop: 82717, Start Num: 16

Candidate Starts for Warpy_128:

(Start: 16 @82295 has 75 MA's), (33, 82490), (47, 82586), (54, 82685), (55, 82709),

Gene: WashU_124 Start: 82264, Stop: 82680, Start Num: 16

Candidate Starts for WashU_124:

(Start: 16 @82264 has 75 MA's), (33, 82459), (47, 82555), (54, 82654),

Gene: Watermoore_123 Start: 82466, Stop: 82882, Start Num: 16

Candidate Starts for Watermoore_123:

(Start: 16 @82466 has 75 MA's), (33, 82661), (47, 82757), (54, 82856),

Gene: WhereRU_122 Start: 79988, Stop: 80410, Start Num: 16

Candidate Starts for WhereRU_122:

(Start: 16 @79988 has 75 MA's), (47, 80279), (54, 80378), (55, 80402),