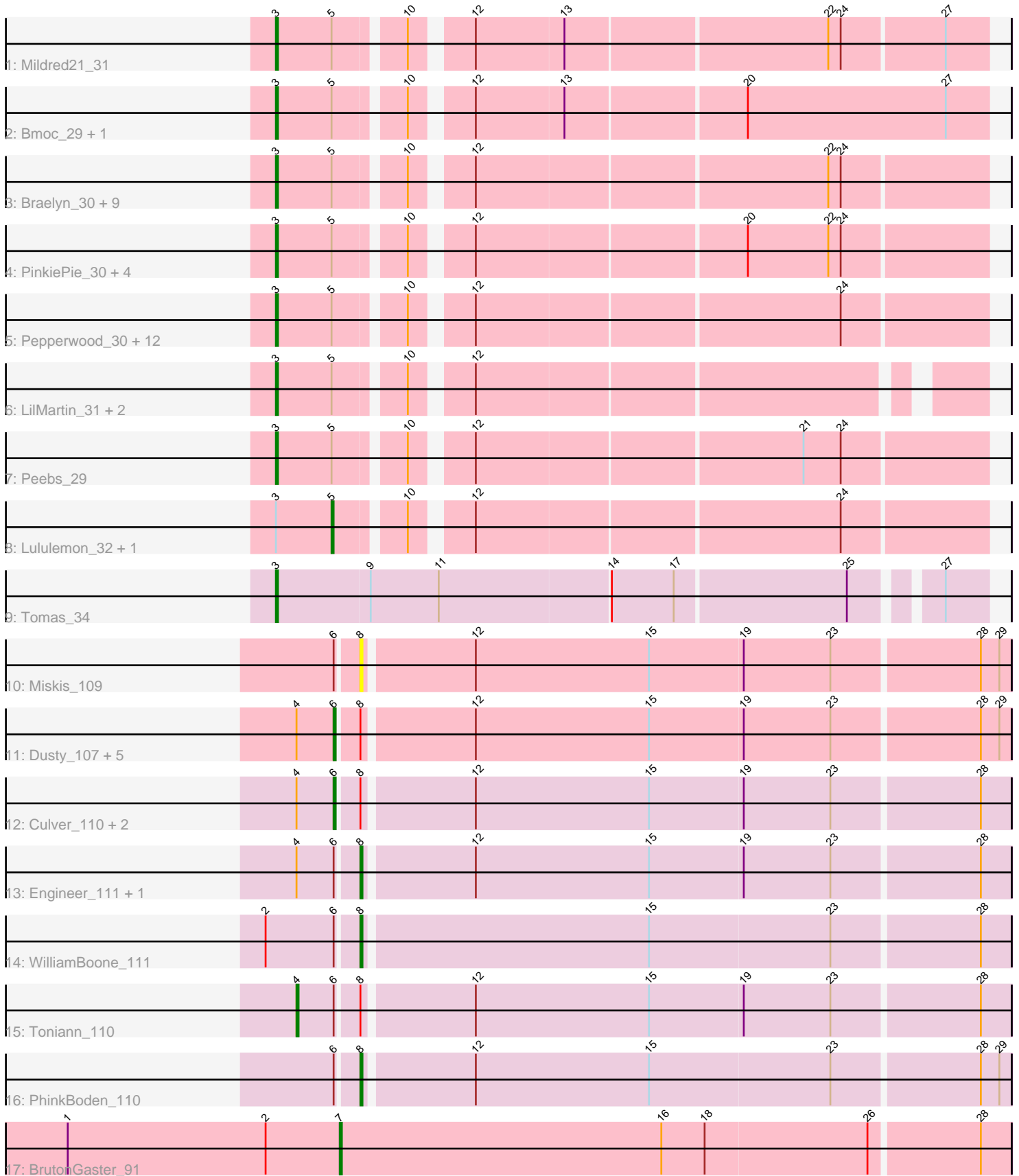


Pham 171509



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 171509 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171509 has 54 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Mildred21_31
- Track 2 : Bmoc_29, Anedea_29
- Track 3 : Braelyn_30, Warpy_33, Persimmon_27, NootNoot_27, Samisti12_27, Jay2Jay_33, Paradiddles_27, Evy_31, WhereRU_29, Targaryen_30
- Track 4 : PinkiePie_30, Squillium_30, Navo_29, Liandry_30, Bartholomune_30
- Track 5 : Pepperwood_30, Watermoore_30, Sushi23_30, Teutsch_29, Tribute_28, Leo04_30, Daubenski_32, Larnav_35, Cursive_28, BlueOtter_32, PacManQ_32, EGole_28, HangryHippo_32
- Track 6 : LilMartin_31, Angela_31, MulchMansion_31
- Track 7 : Peebs_29
- Track 8 : Lululemon_32, Cross_30
- Track 9 : Tomas_34
- Track 10 : Miskis_109
- Track 11 : Dusty_107, Aphelion_111, ClubL_111, Cucurbita_111, Norvs_112, Bachita_112
- Track 12 : Culver_110, Lozinak_110, Abscondus_109
- Track 13 : Engineer_111, Smoothie_111
- Track 14 : WilliamBoone_111
- Track 15 : Toniann_110
- Track 16 : PhinkBoden_110
- Track 17 : BrutonGaster_91

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

The start number called the most often in the published annotations is 3, it was called in 31 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anedea_29, Angela_31, Bartholomune_30, BlueOtter_32, Bmoc_29, Braelyn_30, Cursive_28, Daubenski_32, EGole_28, Evy_31, HangryHippo_32, Jay2Jay_33, Larnav_35, Leo04_30, Liandry_30, LilMartin_31, Mildred21_31, MulchMansion_31, Navo_29, NootNoot_27, PacManQ_32, Paradiddles_27, Peebs_29, Pepperwood_30, Persimmon_27, PinkiePie_30, Samisti12_27, Squillium_30, Sushi23_30, Targaryen_30, Teutsch_29, Tomas_34, Tribute_28, Warpy_33, Watermoore_30,

WhereRU_29,

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

- Cross_30, Lululemon_32,

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

- Abscondus_109, Aphelion_111, Bachita_112, BrutonGaster_91, ClubL_111, Cucurbita_111, Culver_110, Dusty_107, Engineer_111, Lozinak_110, Miskis_109, Norvs_112, PhinkBoden_110, Smoothie_111, Toniann_110, WilliamBoone_111,

Summary by start number:

Start 3:

- Found in 38 of 54 (70.4%) of genes in pham
- Manual Annotations of this start: 31 of 45
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Anedea_29 (BE1), Angela_31 (BE1), Bartholomune_30 (BE1), BlueOtter_32 (BE1), Bmoc_29 (BE1), Braelyn_30 (BE1), Cursive_28 (BE1), Daubenski_32 (BE1), EGole_28 (BE1), Evy_31 (BE1), HangryHippo_32 (BE1), Jay2Jay_33 (BE1), Larnav_35 (BE1), Leo04_30 (BE1), Liandry_30 (BE1), LilMartin_31 (BE1), Mildred21_31 (BE1), MulchMansion_31 (BE1), Navo_29 (BE1), NootNoot_27 (BE1), PacManQ_32 (BE1), Paradiddles_27 (BE1), Peebs_29 (BE1), Pepperwood_30 (BE1), Persimmon_27 (BE1), PinkiePie_30 (BE1), Samisti12_27 (BE1), Squillium_30 (BE1), Sushi23_30 (BE1), Targaryen_30 (BE1), Teutsch_29 (BE1), Tomas_34 (BE2), Tribute_28 (BE1), Warpy_33 (BE1), Watermoore_30 (BE1), WhereRU_29 (BE1),

Start 4:

- Found in 12 of 54 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Toniann_110 (CQ1),

Start 5:

- Found in 37 of 54 (68.5%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 5.4% of time when present
- Phage (with cluster) where this start called: Cross_30 (BE1), Lululemon_32 (BE1),

Start 6:

- Found in 15 of 54 (27.8%) of genes in pham
- Manual Annotations of this start: 7 of 45
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Abscondus_109 (CQ), Aphelion_111 (CQ1), Bachita_112 (CQ1), ClubL_111 (CQ1), Cucurbita_111 (CQ1), Culver_110 (CQ1), Dusty_107 (CQ), Lozinak_110 (CQ1), Norvs_112 (CQ),

Start 7:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_91 (CQ2),

Start 8:

- Found in 15 of 54 (27.8%) of genes in pham
- Manual Annotations of this start: 4 of 45
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Engineer_111 (CQ1), Miskis_109 (CQ), PhinkBoden_110 (CQ1), Smoothie_111 (CQ1), WilliamBoone_111 (CQ1),

Summary by clusters:

There are 5 clusters represented in this pham: BE2, CQ2, CQ, BE1, CQ1,

Info for manual annotations of cluster BE1:

- Start number 3 was manually annotated 30 times for cluster BE1.
- Start number 5 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 3 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster CQ:

- Start number 6 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 4 was manually annotated 1 time for cluster CQ1.
- Start number 6 was manually annotated 6 times for cluster CQ1.
- Start number 8 was manually annotated 4 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 7 was manually annotated 1 time for cluster CQ2.

Gene Information:

Gene: Abscondus_109 Start: 64171, Stop: 64485, Start Num: 6

Candidate Starts for Abscondus_109:

(Start: 4 @64153 has 1 MA's), (Start: 6 @64171 has 7 MA's), (Start: 8 @64180 has 4 MA's), (12, 64231), (15, 64315), (19, 64360), (23, 64402), (28, 64471),

Gene: Anedea_29 Start: 13422, Stop: 13099, Start Num: 3

Candidate Starts for Anedea_29:

(Start: 3 @13422 has 31 MA's), (Start: 5 @13395 has 1 MA's), (10, 13365), (12, 13341), (13, 13299), (20, 13215), (27, 13119),

Gene: Angela_31 Start: 13843, Stop: 13538, Start Num: 3

Candidate Starts for Angela_31:

(Start: 3 @13843 has 31 MA's), (Start: 5 @13816 has 1 MA's), (10, 13786), (12, 13762),

Gene: Aphelion_111 Start: 65724, Stop: 66038, Start Num: 6

Candidate Starts for Aphelion_111:

(Start: 4 @65706 has 1 MA's), (Start: 6 @65724 has 7 MA's), (Start: 8 @65733 has 4 MA's), (12, 65784), (15, 65868), (19, 65913), (23, 65955), (28, 66024), (29, 66033),

Gene: Bachita_112 Start: 65382, Stop: 65696, Start Num: 6

Candidate Starts for Bachita_112:

(Start: 4 @65364 has 1 MA's), (Start: 6 @65382 has 7 MA's), (Start: 8 @65391 has 4 MA's), (12, 65442), (15, 65526), (19, 65571), (23, 65613), (28, 65682), (29, 65691),

Gene: Bartholomune_30 Start: 13236, Stop: 12916, Start Num: 3

Candidate Starts for Bartholomune_30:

(Start: 3 @13236 has 31 MA's), (Start: 5 @13209 has 1 MA's), (10, 13179), (12, 13155), (20, 13029), (22, 12990), (24, 12984),

Gene: BlueOtter_32 Start: 13185, Stop: 12865, Start Num: 3

Candidate Starts for BlueOtter_32:

(Start: 3 @13185 has 31 MA's), (Start: 5 @13158 has 1 MA's), (10, 13128), (12, 13104), (24, 12933),

Gene: Bmoc_29 Start: 13600, Stop: 13277, Start Num: 3

Candidate Starts for Bmoc_29:

(Start: 3 @13600 has 31 MA's), (Start: 5 @13573 has 1 MA's), (10, 13543), (12, 13519), (13, 13477), (20, 13393), (27, 13297),

Gene: Braelyn_30 Start: 13631, Stop: 13311, Start Num: 3

Candidate Starts for Braelyn_30:

(Start: 3 @13631 has 31 MA's), (Start: 5 @13604 has 1 MA's), (10, 13574), (12, 13550), (22, 13385), (24, 13379),

Gene: BrutonGaster_91 Start: 59582, Stop: 59902, Start Num: 7

Candidate Starts for BrutonGaster_91:

(1, 59450), (2, 59546), (Start: 7 @59582 has 1 MA's), (16, 59738), (18, 59759), (26, 59837), (28, 59888),

Gene: ClubL_111 Start: 64312, Stop: 64626, Start Num: 6

Candidate Starts for ClubL_111:

(Start: 4 @64294 has 1 MA's), (Start: 6 @64312 has 7 MA's), (Start: 8 @64321 has 4 MA's), (12, 64372), (15, 64456), (19, 64501), (23, 64543), (28, 64612), (29, 64621),

Gene: Cross_30 Start: 13159, Stop: 12866, Start Num: 5

Candidate Starts for Cross_30:

(Start: 3 @13186 has 31 MA's), (Start: 5 @13159 has 1 MA's), (10, 13129), (12, 13105), (24, 12934),

Gene: Cucurbita_111 Start: 65889, Stop: 66203, Start Num: 6

Candidate Starts for Cucurbita_111:

(Start: 4 @65871 has 1 MA's), (Start: 6 @65889 has 7 MA's), (Start: 8 @65898 has 4 MA's), (12, 65949), (15, 66033), (19, 66078), (23, 66120), (28, 66189), (29, 66198),

Gene: Culver_110 Start: 63643, Stop: 63957, Start Num: 6

Candidate Starts for Culver_110:

(Start: 4 @63625 has 1 MA's), (Start: 6 @63643 has 7 MA's), (Start: 8 @63652 has 4 MA's), (12, 63703), (15, 63787), (19, 63832), (23, 63874), (28, 63943),

Gene: Cursive_28 Start: 12003, Stop: 11683, Start Num: 3

Candidate Starts for Cursive_28:

(Start: 3 @12003 has 31 MA's), (Start: 5 @11976 has 1 MA's), (10, 11946), (12, 11922), (24, 11751),

Gene: Daubenski_32 Start: 13597, Stop: 13277, Start Num: 3

Candidate Starts for Daubenski_32:

(Start: 3 @13597 has 31 MA's), (Start: 5 @13570 has 1 MA's), (10, 13540), (12, 13516), (24, 13345),

Gene: Dusty_107 Start: 64230, Stop: 64544, Start Num: 6

Candidate Starts for Dusty_107:

(Start: 4 @64212 has 1 MA's), (Start: 6 @64230 has 7 MA's), (Start: 8 @64239 has 4 MA's), (12, 64290), (15, 64374), (19, 64419), (23, 64461), (28, 64530), (29, 64539),

Gene: EGole_28 Start: 13195, Stop: 12875, Start Num: 3

Candidate Starts for EGole_28:

(Start: 3 @13195 has 31 MA's), (Start: 5 @13168 has 1 MA's), (10, 13138), (12, 13114), (24, 12943),

Gene: Engineer_111 Start: 65364, Stop: 65669, Start Num: 8

Candidate Starts for Engineer_111:

(Start: 4 @65337 has 1 MA's), (Start: 6 @65355 has 7 MA's), (Start: 8 @65364 has 4 MA's), (12, 65415), (15, 65499), (19, 65544), (23, 65586), (28, 65655),

Gene: Evy_31 Start: 13213, Stop: 12893, Start Num: 3

Candidate Starts for Evy_31:

(Start: 3 @13213 has 31 MA's), (Start: 5 @13186 has 1 MA's), (10, 13156), (12, 13132), (22, 12967), (24, 12961),

Gene: HangryHippo_32 Start: 13185, Stop: 12865, Start Num: 3

Candidate Starts for HangryHippo_32:

(Start: 3 @13185 has 31 MA's), (Start: 5 @13158 has 1 MA's), (10, 13128), (12, 13104), (24, 12933),

Gene: Jay2Jay_33 Start: 13403, Stop: 13083, Start Num: 3

Candidate Starts for Jay2Jay_33:

(Start: 3 @13403 has 31 MA's), (Start: 5 @13376 has 1 MA's), (10, 13346), (12, 13322), (22, 13157), (24, 13151),

Gene: Larnav_35 Start: 13133, Stop: 12813, Start Num: 3

Candidate Starts for Larnav_35:

(Start: 3 @13133 has 31 MA's), (Start: 5 @13106 has 1 MA's), (10, 13076), (12, 13052), (24, 12881),

Gene: Leo04_30 Start: 13184, Stop: 12864, Start Num: 3

Candidate Starts for Leo04_30:

(Start: 3 @13184 has 31 MA's), (Start: 5 @13157 has 1 MA's), (10, 13127), (12, 13103), (24, 12932),

Gene: Liandry_30 Start: 13235, Stop: 12915, Start Num: 3

Candidate Starts for Liandry_30:

(Start: 3 @13235 has 31 MA's), (Start: 5 @13208 has 1 MA's), (10, 13178), (12, 13154), (20, 13028), (22, 12989), (24, 12983),

Gene: LilMartin_31 Start: 13790, Stop: 13485, Start Num: 3

Candidate Starts for LilMartin_31:

(Start: 3 @13790 has 31 MA's), (Start: 5 @13763 has 1 MA's), (10, 13733), (12, 13709),

Gene: Lozinak_110 Start: 65193, Stop: 65507, Start Num: 6

Candidate Starts for Lozinak_110:

(Start: 4 @65175 has 1 MA's), (Start: 6 @65193 has 7 MA's), (Start: 8 @65202 has 4 MA's), (12, 65253), (15, 65337), (19, 65382), (23, 65424), (28, 65493),

Gene: Lululemon_32 Start: 12538, Stop: 12245, Start Num: 5

Candidate Starts for Lululemon_32:

(Start: 3 @12565 has 31 MA's), (Start: 5 @12538 has 1 MA's), (10, 12508), (12, 12484), (24, 12313),

Gene: Mildred21_31 Start: 13507, Stop: 13187, Start Num: 3

Candidate Starts for Mildred21_31:

(Start: 3 @13507 has 31 MA's), (Start: 5 @13480 has 1 MA's), (10, 13450), (12, 13426), (13, 13384), (22, 13261), (24, 13255), (27, 13207),

Gene: Miskis_109 Start: 64165, Stop: 64470, Start Num: 8

Candidate Starts for Miskis_109:

(Start: 6 @64156 has 7 MA's), (Start: 8 @64165 has 4 MA's), (12, 64216), (15, 64300), (19, 64345), (23, 64387), (28, 64456), (29, 64465),

Gene: MulchMansion_31 Start: 13791, Stop: 13486, Start Num: 3

Candidate Starts for MulchMansion_31:

(Start: 3 @13791 has 31 MA's), (Start: 5 @13764 has 1 MA's), (10, 13734), (12, 13710),

Gene: Navo_29 Start: 13394, Stop: 13074, Start Num: 3

Candidate Starts for Navo_29:

(Start: 3 @13394 has 31 MA's), (Start: 5 @13367 has 1 MA's), (10, 13337), (12, 13313), (20, 13187), (22, 13148), (24, 13142),

Gene: NootNoot_27 Start: 12417, Stop: 12097, Start Num: 3

Candidate Starts for NootNoot_27:

(Start: 3 @12417 has 31 MA's), (Start: 5 @12390 has 1 MA's), (10, 12360), (12, 12336), (22, 12171), (24, 12165),

Gene: Norvs_112 Start: 65220, Stop: 65534, Start Num: 6

Candidate Starts for Norvs_112:

(Start: 4 @65202 has 1 MA's), (Start: 6 @65220 has 7 MA's), (Start: 8 @65229 has 4 MA's), (12, 65280), (15, 65364), (19, 65409), (23, 65451), (28, 65520), (29, 65529),

Gene: PacManQ_32 Start: 12565, Stop: 12245, Start Num: 3

Candidate Starts for PacManQ_32:

(Start: 3 @12565 has 31 MA's), (Start: 5 @12538 has 1 MA's), (10, 12508), (12, 12484), (24, 12313),

Gene: Paradiddles_27 Start: 12408, Stop: 12088, Start Num: 3

Candidate Starts for Paradiddles_27:

(Start: 3 @12408 has 31 MA's), (Start: 5 @12381 has 1 MA's), (10, 12351), (12, 12327), (22, 12162), (24, 12156),

Gene: Peebs_29 Start: 12884, Stop: 12564, Start Num: 3

Candidate Starts for Peebs_29:

(Start: 3 @12884 has 31 MA's), (Start: 5 @12857 has 1 MA's), (10, 12827), (12, 12803), (21, 12650), (24, 12632),

Gene: Pepperwood_30 Start: 13057, Stop: 12737, Start Num: 3

Candidate Starts for Pepperwood_30:

(Start: 3 @13057 has 31 MA's), (Start: 5 @13030 has 1 MA's), (10, 13000), (12, 12976), (24, 12805),

Gene: Persimmon_27 Start: 12465, Stop: 12145, Start Num: 3

Candidate Starts for Persimmon_27:

(Start: 3 @12465 has 31 MA's), (Start: 5 @12438 has 1 MA's), (10, 12408), (12, 12384), (22, 12219), (24, 12213),

Gene: PhinkBoden_110 Start: 65503, Stop: 65808, Start Num: 8

Candidate Starts for PhinkBoden_110:

(Start: 6 @65494 has 7 MA's), (Start: 8 @65503 has 4 MA's), (12, 65554), (15, 65638), (23, 65725), (28, 65794), (29, 65803),

Gene: PinkiePie_30 Start: 13236, Stop: 12916, Start Num: 3

Candidate Starts for PinkiePie_30:

(Start: 3 @13236 has 31 MA's), (Start: 5 @13209 has 1 MA's), (10, 13179), (12, 13155), (20, 13029), (22, 12990), (24, 12984),

Gene: Samisti12_27 Start: 12802, Stop: 12482, Start Num: 3

Candidate Starts for Samisti12_27:

(Start: 3 @12802 has 31 MA's), (Start: 5 @12775 has 1 MA's), (10, 12745), (12, 12721), (22, 12556), (24, 12550),

Gene: Smoothie_111 Start: 65202, Stop: 65507, Start Num: 8

Candidate Starts for Smoothie_111:

(Start: 4 @65175 has 1 MA's), (Start: 6 @65193 has 7 MA's), (Start: 8 @65202 has 4 MA's), (12, 65253), (15, 65337), (19, 65382), (23, 65424), (28, 65493),

Gene: Squillium_30 Start: 13235, Stop: 12915, Start Num: 3

Candidate Starts for Squillium_30:

(Start: 3 @13235 has 31 MA's), (Start: 5 @13208 has 1 MA's), (10, 13178), (12, 13154), (20, 13028), (22, 12989), (24, 12983),

Gene: Sushi23_30 Start: 13280, Stop: 12960, Start Num: 3

Candidate Starts for Sushi23_30:

(Start: 3 @13280 has 31 MA's), (Start: 5 @13253 has 1 MA's), (10, 13223), (12, 13199), (24, 13028),

Gene: Targaryen_30 Start: 13960, Stop: 13640, Start Num: 3

Candidate Starts for Targaryen_30:

(Start: 3 @13960 has 31 MA's), (Start: 5 @13933 has 1 MA's), (10, 13903), (12, 13879), (22, 13714), (24, 13708),

Gene: Teutsch_29 Start: 12973, Stop: 12653, Start Num: 3

Candidate Starts for Teutsch_29:

(Start: 3 @12973 has 31 MA's), (Start: 5 @12946 has 1 MA's), (10, 12916), (12, 12892), (24, 12721),

Gene: Tomas_34 Start: 14845, Stop: 14519, Start Num: 3

Candidate Starts for Tomas_34:

(Start: 3 @14845 has 31 MA's), (9, 14800), (11, 14767), (14, 14686), (17, 14656), (25, 14575), (27, 14539),

Gene: Toniann_110 Start: 64577, Stop: 64909, Start Num: 4

Candidate Starts for Toniann_110:

(Start: 4 @64577 has 1 MA's), (Start: 6 @64595 has 7 MA's), (Start: 8 @64604 has 4 MA's), (12, 64655), (15, 64739), (19, 64784), (23, 64826), (28, 64895),

Gene: Tribute_28 Start: 12751, Stop: 12431, Start Num: 3

Candidate Starts for Tribute_28:

(Start: 3 @12751 has 31 MA's), (Start: 5 @12724 has 1 MA's), (10, 12694), (12, 12670), (24, 12499),

Gene: Warpy_33 Start: 13423, Stop: 13103, Start Num: 3

Candidate Starts for Warpy_33:

(Start: 3 @13423 has 31 MA's), (Start: 5 @13396 has 1 MA's), (10, 13366), (12, 13342), (22, 13177), (24, 13171),

Gene: Watermoore_30 Start: 13186, Stop: 12866, Start Num: 3

Candidate Starts for Watermoore_30:

(Start: 3 @13186 has 31 MA's), (Start: 5 @13159 has 1 MA's), (10, 13129), (12, 13105), (24, 12934),

Gene: WhereRU_29 Start: 12465, Stop: 12145, Start Num: 3

Candidate Starts for WhereRU_29:

(Start: 3 @12465 has 31 MA's), (Start: 5 @12438 has 1 MA's), (10, 12408), (12, 12384), (22, 12219), (24, 12213),

Gene: WilliamBoone_111 Start: 63615, Stop: 63920, Start Num: 8

Candidate Starts for WilliamBoone_111:

(2, 63573), (Start: 6 @63606 has 7 MA's), (Start: 8 @63615 has 4 MA's), (15, 63750), (23, 63837), (28, 63906),