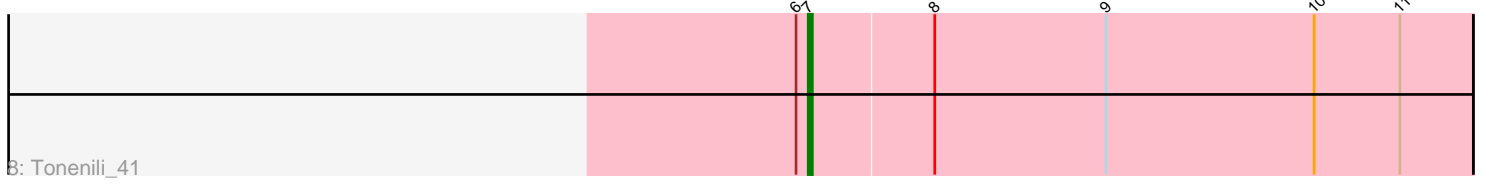
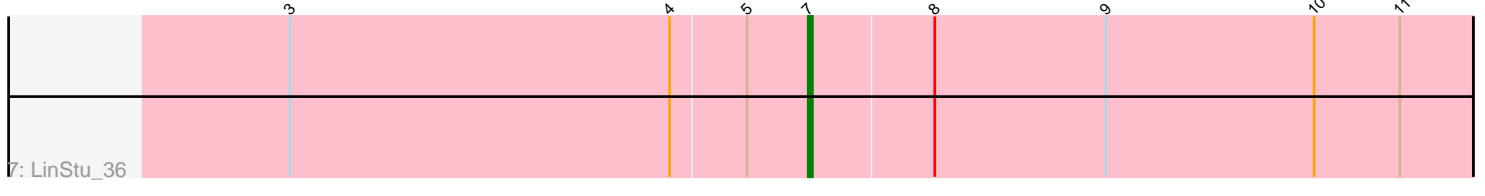
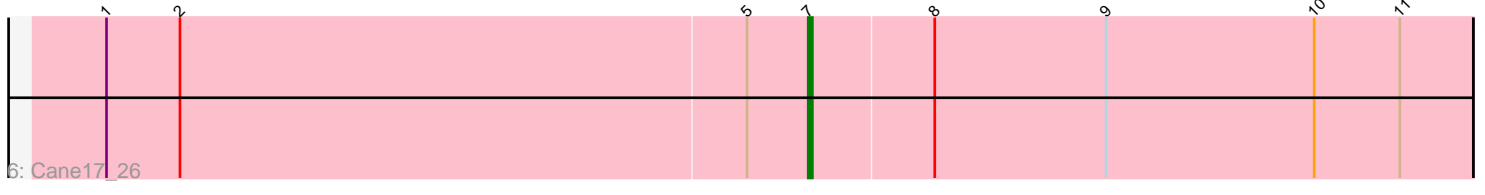
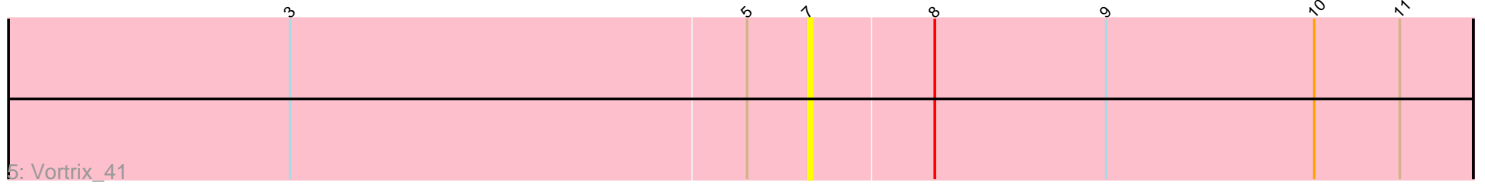
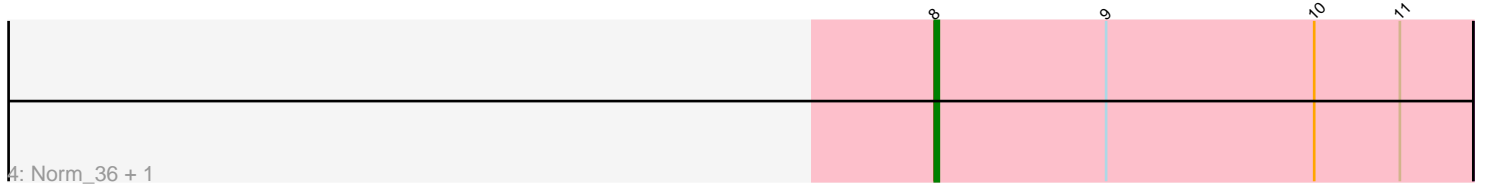
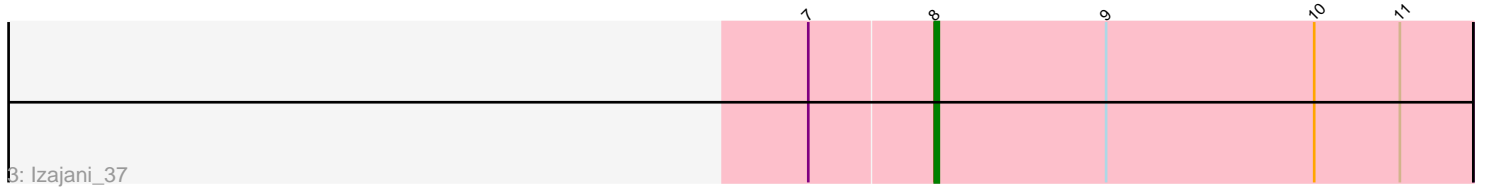
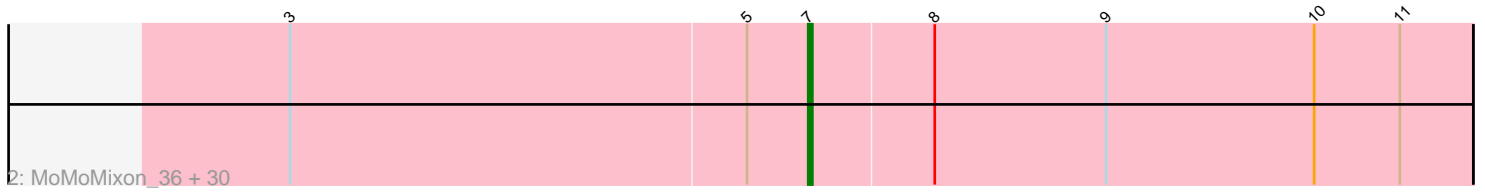
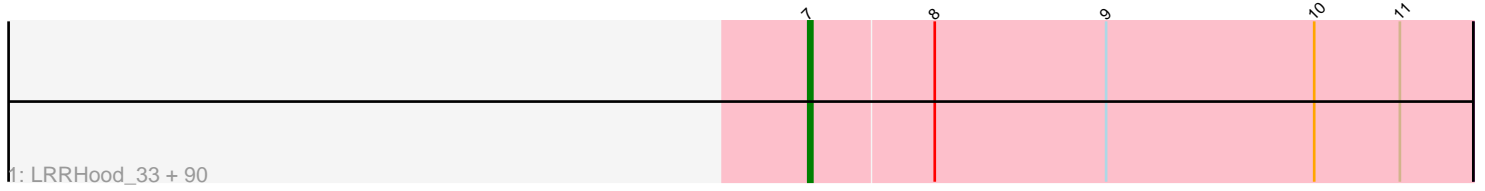


Pham 306251



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 306251 Report

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

Pham number 306251 has 129 members, 19 are drafts.

Phages represented in each track:

- Track 1 : LRRHood_33, CharlieB_36, SVoro_35, Gizmo_38, Bowman_35, Pio_39, Rahel_36, Bezza_28, MikeLiesIn_36, Lunareta_35, Maby2021_37, Catera_34, ArcherS7_35, Grungle_29, Zeenon_38, McWolfish_35, Ewok_36, YemiJoy2021_37, Bangla1971_35, Kboogie_36, Pleione_38, Montpel_35, Asterius_37, Lee7_35, Morizzled23_35, Shrimp_36, EmToTheThree_39, Cactojaque_33, Yucca_36, PurduePete_35, Sprinklers_36, Jessibeth14_35, Rizal_34, NedWong_37, Koguma_32, Darko_35, Pier_38, Bxz1_36, Zalkecks_38, BobaPhatt_33, SrishMeg2525_35, Daffodil_38, TinyTim_36, Bread_37, Phusco_36, Shaqnato_32, Delilah_36, StubbySaigey_35, Concombre_35, Khaleesi_35, ParkTD_35, Burrough_36, Derek_37, Fongie_36, Duckfeet_33, FoxtrotP1_36, Loanshark_36, Breeniome_36, JigglyPuff_36, Gabriel_36, EmmaElysia_34, Fludd_35, Erdmann_37, Rocha_34, Cali_36, Yassified_33, JulietS_31, FudgeTart_37, DrPhinkDaddy_36, Willis_36, Demodog_34, Salacia_38, Bipolarisk_35, Naval22_38, BackyardAgain_33, BadAgartude_37, RoMag_31, Wally_35, Mikro_34, OrediggerDelux_35, LookingGlass_39, Quasimodo_36, Primadonna_31, Lukilu_29, ZygoTaiga_36, Teardrop_35, Megamind_36, BananaFence_37, Ava3_37, Bonray_36, SoilZilla_33
- Track 2 : MoMoMixon_36, Specks_40, Blackbrain_33, Mangeria_38, Lethe_34, Kamryn_35, Phox_34, ChickenPhender_34, JustHall_34, Dandelion_39, Turret_33, Dietrick_30, I3_37, Halldule_31, Trinitium_34, Spud_37, NuevoMundo_38, ErnieJ_36, Caravan_33, DeejaClivia_30, Jezreel_34, Basquiat_34, ScottMcG_35, Napoleon13_34, Colt_28, Nidhogg_36, Melpomini_34, Bigswole_41, ChaylaJr_34, Chargie21_34, IkeLoa_31
- Track 3 : Izajani_37
- Track 4 : Norm_36, DirtMonster_34
- Track 5 : Vortex_41
- Track 6 : Cane17_26
- Track 7 : LinStu_36
- Track 8 : Tonenili_41

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

The start number called the most often in the published annotations is 7, it was called in 107 of the 110 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArcherS7_35, Asterius_37, Ava3_37, BackyardAgain_33, BadAgartude_37, BananaFence_37, Bangla1971_35, Basquiat_34, Bezza_28, Bigswole_41, Bipolarisk_35, Blackbrain_33, BobaPhatt_33, Bonray_36, Bowman_35, Bread_37, Breeniome_36, Burrough_36, Bxz1_36, Cactojaque_33, Cali_36, Cane17_26, Caravan_33, Catera_34, Chargie21_34, CharlieB_36, ChaylaJr_34, ChickenPhender_34, Colt_28, Concombre_35, Daffodil_38, Dandelion_39, Darko_35, DeejaClivia_30, Delilah_36, Demodog_34, Derek_37, Dietrick_30, DrPhinkDaddy_36, Duckfeet_33, EmToTheThree_39, EmmaElysia_34, Erdmann_37, ErnieJ_36, Ewok_36, Fludd_35, Fongie_36, FoxtrotP1_36, FudgeTart_37, Gabriel_36, Gizmo_38, Grungle_29, Halldule_31, I3_37, IkeLoa_31, Jessibeth14_35, Jezreel_34, JigglyPuff_36, JulietS_31, JustHall_34, Kamryn_35, Kboogie_36, Khaleesi_35, Koguma_32, LRRHood_33, Lee7_35, Lethe_34, LinStu_36, Loanshark_36, LookingGlass_39, Lukilu_29, Lunareta_35, Maby2021_37, Mangeria_38, McWolfish_35, Megamind_36, Melpomini_34, MikeLiesIn_36, Mikro_34, MoMoMixon_36, Montpel_35, Morizzled23_35, Napoleon13_34, Naval22_38, NedWong_37, Nidhogg_36, NuevoMundo_38, OrediggerDelux_35, ParkTD_35, Phox_34, Phusco_36, Pier_38, Pio_39, Pleione_38, Primadonna_31, PurduePete_35, Quasimodo_36, Rahel_36, Rizal_34, RoMag_31, Rocha_34, SVoro_35, Salacia_38, ScottMcG_35, Shaqnato_32, Shrimp_36, SoilZilla_33, Specks_40, Sprinklers_36, Spud_37, SrishMeg2525_35, StubbySaigey_35, Teardrop_35, TinyTim_36, Tonenili_41, Trinitium_34, Turret_33, Vortrix_41, Wally_35, Willis_36, Yassified_33, YemiJoy2021_37, Yucca_36, Zalkecks_38, Zeenon_38, ZygoTaiga_36,

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

- Izajani_37,

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

- DirtMonster_34, Norm_36,

Summary by start number:

Start 7:

- Found in 127 of 129 (98.4%) of genes in pham
- Manual Annotations of this start: 107 of 110
- Called 99.2% of time when present
- Phage (with cluster) where this start called: ArcherS7_35 (C1), Asterius_37 (C1), Ava3_37 (C1), BackyardAgain_33 (C1), BadAgartude_37 (C1), BananaFence_37 (C1), Bangla1971_35 (C1), Basquiat_34 (C1), Bezza_28 (C1), Bigswole_41 (C1), Bipolarisk_35 (C1), Blackbrain_33 (C1), BobaPhatt_33 (C1), Bonray_36 (C1), Bowman_35 (C1), Bread_37 (C1), Breeniome_36 (C1), Burrough_36 (C1), Bxz1_36 (C1), Cactojaque_33 (C1), Cali_36 (C1), Cane17_26 (C1), Caravan_33 (C1), Catera_34 (C1), Chargie21_34 (C1), CharlieB_36 (C1), ChaylaJr_34 (C1), ChickenPhender_34 (C1), Colt_28 (C1), Concombre_35 (C1), Daffodil_38 (C1), Dandelion_39 (C1), Darko_35 (C1), DeejaClivia_30 (C1), Delilah_36 (C1), Demodog_34 (C1), Derek_37 (C1), Dietrick_30 (C1), DrPhinkDaddy_36 (C1), Duckfeet_33 (C1), EmToTheThree_39 (C1), EmmaElysia_34 (C1), Erdmann_37 (C1), ErnieJ_36 (C1), Ewok_36 (C1), Fludd_35 (C1), Fongie_36 (C1), FoxtrotP1_36 (C1), FudgeTart_37 (C1), Gabriel_36 (C1), Gizmo_38 (C1), Grungle_29 (C1), Halldule_31 (C1), I3_37 (C1), IkeLoa_31 (C1), Jessibeth14_35 (C1), Jezreel_34 (C1), JigglyPuff_36 (C1), JulietS_31 (C1), JustHall_34 (C1), Kamryn_35 (C1), Kboogie_36 (C1), Khaleesi_35 (C1), Koguma_32 (C1), LRRHood_33 (C1), Lee7_35 (C1),

Lethe_34 (C1), LinStu_36 (C1), Loanshark_36 (C1), LookingGlass_39 (C1), Lukilu_29 (C1), Lunareta_35 (C1), Maby2021_37 (C1), Mangeria_38 (C1), McWolfish_35 (C1), Megamind_36 (C1), Melpomini_34 (C1), MikeLiesIn_36 (C1), Mikro_34 (C1), MoMoMixon_36 (C1), Montpel_35 (C1), Morizzled23_35 (C1), Napoleon13_34 (C1), Naval22_38 (C1), NedWong_37 (C1), Nidhogg_36 (C1), NuevoMundo_38 (C1), OrediggerDelux_35 (C1), ParkTD_35 (C1), Phox_34 (C1), Phusco_36 (C1), Pier_38 (C1), Pio_39 (C1), Pleione_38 (C1), Primadonna_31 (C1), PurduePete_35 (C1), Quasimodo_36 (C1), Rahel_36 (C1), Rizal_34 (C1), RoMag_31 (C1), Rocha_34 (C1), SVoro_35 (C1), Salacia_38 (C1), ScottMcG_35 (C1), Shaq nato_32 (C1), Shrimp_36 (C1), SoilZilla_33 (C1), Specks_40 (C1), Sprinklers_36 (C1), Spud_37 (C1), SrishMeg2525_35 (C1), StubbySaigey_35 (C1), Teardrop_35 (C1), TinyTim_36 (C1), Tonenili_41 (C1), Trinitium_34 (C1), Turret_33 (C1), Vortrix_41 (C1), Wally_35 (C1), Willis_36 (C1), Yassified_33 (C1), YemiJoy2021_37 (C1), Yucca_36 (C1), Zalkecks_38 (C1), Zeenon_38 (C1), ZygoTaiga_36 (C1),

Start 8:

- Found in 129 of 129 (100.0%) of genes in pham
- Manual Annotations of this start: 3 of 110
- Called 2.3% of time when present
- Phage (with cluster) where this start called: DirtMonster_34 (C1), Izajani_37 (C1), Norm_36 (C1),

Summary by clusters:

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:

- Start number 7 was manually annotated 107 times for cluster C1.
- Start number 8 was manually annotated 3 times for cluster C1.

Gene Information:

Gene: ArcherS7_35 Start: 11458, Stop: 11619, Start Num: 7

Candidate Starts for ArcherS7_35:

(Start: 7 @11458 has 107 MA's), (Start: 8 @11488 has 3 MA's), (9, 11530), (10, 11581), (11, 11602),

Gene: Asterius_37 Start: 11733, Stop: 11894, Start Num: 7

Candidate Starts for Asterius_37:

(Start: 7 @11733 has 107 MA's), (Start: 8 @11763 has 3 MA's), (9, 11805), (10, 11856), (11, 11877),

Gene: Ava3_37 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Ava3_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: BackyardAgain_33 Start: 10887, Stop: 11048, Start Num: 7

Candidate Starts for BackyardAgain_33:

(Start: 7 @10887 has 107 MA's), (Start: 8 @10917 has 3 MA's), (9, 10959), (10, 11010), (11, 11031),

Gene: BadAgartude_37 Start: 12100, Stop: 12261, Start Num: 7

Candidate Starts for BadAgartude_37:

(Start: 7 @12100 has 107 MA's), (Start: 8 @12130 has 3 MA's), (9, 12172), (10, 12223), (11, 12244),

Gene: BananaFence_37 Start: 11897, Stop: 12058, Start Num: 7

Candidate Starts for BananaFence_37:

(Start: 7 @11897 has 107 MA's), (Start: 8 @11927 has 3 MA's), (9, 11969), (10, 12020), (11, 12041),

Gene: Bangla1971_35 Start: 11464, Stop: 11625, Start Num: 7

Candidate Starts for Bangla1971_35:

(Start: 7 @11464 has 107 MA's), (Start: 8 @11494 has 3 MA's), (9, 11536), (10, 11587), (11, 11608),

Gene: Basquiat_34 Start: 10669, Stop: 10830, Start Num: 7

Candidate Starts for Basquiat_34:

(3, 10543), (5, 10654), (Start: 7 @10669 has 107 MA's), (Start: 8 @10699 has 3 MA's), (9, 10741), (10, 10792), (11, 10813),

Gene: Bezza_28 Start: 10533, Stop: 10694, Start Num: 7

Candidate Starts for Bezza_28:

(Start: 7 @10533 has 107 MA's), (Start: 8 @10563 has 3 MA's), (9, 10605), (10, 10656), (11, 10677),

Gene: Bigswole_41 Start: 13585, Stop: 13746, Start Num: 7

Candidate Starts for Bigswole_41:

(3, 13459), (5, 13570), (Start: 7 @13585 has 107 MA's), (Start: 8 @13615 has 3 MA's), (9, 13657), (10, 13708), (11, 13729),

Gene: Bipolarisk_35 Start: 11724, Stop: 11885, Start Num: 7

Candidate Starts for Bipolarisk_35:

(Start: 7 @11724 has 107 MA's), (Start: 8 @11754 has 3 MA's), (9, 11796), (10, 11847), (11, 11868),

Gene: Blackbrain_33 Start: 10485, Stop: 10646, Start Num: 7

Candidate Starts for Blackbrain_33:

(3, 10359), (5, 10470), (Start: 7 @10485 has 107 MA's), (Start: 8 @10515 has 3 MA's), (9, 10557), (10, 10608), (11, 10629),

Gene: BobaPhatt_33 Start: 10898, Stop: 11059, Start Num: 7

Candidate Starts for BobaPhatt_33:

(Start: 7 @10898 has 107 MA's), (Start: 8 @10928 has 3 MA's), (9, 10970), (10, 11021), (11, 11042),

Gene: Bonray_36 Start: 12001, Stop: 12162, Start Num: 7

Candidate Starts for Bonray_36:

(Start: 7 @12001 has 107 MA's), (Start: 8 @12031 has 3 MA's), (9, 12073), (10, 12124), (11, 12145),

Gene: Bowman_35 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Bowman_35:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Bread_37 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Bread_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Breeniome_36 Start: 10896, Stop: 11057, Start Num: 7

Candidate Starts for Breeniome_36:

(Start: 7 @10896 has 107 MA's), (Start: 8 @10926 has 3 MA's), (9, 10968), (10, 11019), (11, 11040),

Gene: Burrough_36 Start: 11724, Stop: 11885, Start Num: 7
Candidate Starts for Burrough_36:
(Start: 7 @11724 has 107 MA's), (Start: 8 @11754 has 3 MA's), (9, 11796), (10, 11847), (11, 11868),

Gene: Bxz1_36 Start: 12473, Stop: 12634, Start Num: 7
Candidate Starts for Bxz1_36:
(Start: 7 @12473 has 107 MA's), (Start: 8 @12503 has 3 MA's), (9, 12545), (10, 12596), (11, 12617),

Gene: Cactojaque_33 Start: 10592, Stop: 10753, Start Num: 7
Candidate Starts for Cactojaque_33:
(Start: 7 @10592 has 107 MA's), (Start: 8 @10622 has 3 MA's), (9, 10664), (10, 10715), (11, 10736),

Gene: Cali_36 Start: 13034, Stop: 13195, Start Num: 7
Candidate Starts for Cali_36:
(Start: 7 @13034 has 107 MA's), (Start: 8 @13064 has 3 MA's), (9, 13106), (10, 13157), (11, 13178),

Gene: Cane17_26 Start: 9150, Stop: 9311, Start Num: 7
Candidate Starts for Cane17_26:
(1, 8979), (2, 8997), (5, 9135), (Start: 7 @9150 has 107 MA's), (Start: 8 @9180 has 3 MA's), (9, 9222),
(10, 9273), (11, 9294),

Gene: Caravan_33 Start: 11065, Stop: 11226, Start Num: 7
Candidate Starts for Caravan_33:
(3, 10939), (5, 11050), (Start: 7 @11065 has 107 MA's), (Start: 8 @11095 has 3 MA's), (9, 11137), (10,
11188), (11, 11209),

Gene: Catera_34 Start: 10891, Stop: 11052, Start Num: 7
Candidate Starts for Catera_34:
(Start: 7 @10891 has 107 MA's), (Start: 8 @10921 has 3 MA's), (9, 10963), (10, 11014), (11, 11035),

Gene: Chargie21_34 Start: 10669, Stop: 10830, Start Num: 7
Candidate Starts for Chargie21_34:
(3, 10543), (5, 10654), (Start: 7 @10669 has 107 MA's), (Start: 8 @10699 has 3 MA's), (9, 10741), (10,
10792), (11, 10813),

Gene: CharlieB_36 Start: 11032, Stop: 11193, Start Num: 7
Candidate Starts for CharlieB_36:
(Start: 7 @11032 has 107 MA's), (Start: 8 @11062 has 3 MA's), (9, 11104), (10, 11155), (11, 11176),

Gene: ChaylaJr_34 Start: 10756, Stop: 10917, Start Num: 7
Candidate Starts for ChaylaJr_34:
(3, 10630), (5, 10741), (Start: 7 @10756 has 107 MA's), (Start: 8 @10786 has 3 MA's), (9, 10828), (10,
10879), (11, 10900),

Gene: ChickenPhender_34 Start: 10714, Stop: 10875, Start Num: 7
Candidate Starts for ChickenPhender_34:
(3, 10588), (5, 10699), (Start: 7 @10714 has 107 MA's), (Start: 8 @10744 has 3 MA's), (9, 10786), (10,
10837), (11, 10858),

Gene: Colt_28 Start: 10017, Stop: 10178, Start Num: 7
Candidate Starts for Colt_28:
(3, 9891), (5, 10002), (Start: 7 @10017 has 107 MA's), (Start: 8 @10047 has 3 MA's), (9, 10089), (10,
10140), (11, 10161),

Gene: Concombres_35 Start: 12239, Stop: 12400, Start Num: 7
Candidate Starts for Concombres_35:
(Start: 7 @12239 has 107 MA's), (Start: 8 @12269 has 3 MA's), (9, 12311), (10, 12362), (11, 12383),

Gene: Daffodil_38 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for Daffodil_38:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Dandelion_39 Start: 13110, Stop: 13271, Start Num: 7
Candidate Starts for Dandelion_39:
(3, 12984), (5, 13095), (Start: 7 @13110 has 107 MA's), (Start: 8 @13140 has 3 MA's), (9, 13182), (10, 13233), (11, 13254),

Gene: Darko_35 Start: 11866, Stop: 12027, Start Num: 7
Candidate Starts for Darko_35:
(Start: 7 @11866 has 107 MA's), (Start: 8 @11896 has 3 MA's), (9, 11938), (10, 11989), (11, 12010),

Gene: DeejaClivia_30 Start: 10018, Stop: 10179, Start Num: 7
Candidate Starts for DeejaClivia_30:
(3, 9892), (5, 10003), (Start: 7 @10018 has 107 MA's), (Start: 8 @10048 has 3 MA's), (9, 10090), (10, 10141), (11, 10162),

Gene: Delilah_36 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for Delilah_36:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Demodog_34 Start: 12239, Stop: 12400, Start Num: 7
Candidate Starts for Demodog_34:
(Start: 7 @12239 has 107 MA's), (Start: 8 @12269 has 3 MA's), (9, 12311), (10, 12362), (11, 12383),

Gene: Derek_37 Start: 11425, Stop: 11586, Start Num: 7
Candidate Starts for Derek_37:
(Start: 7 @11425 has 107 MA's), (Start: 8 @11455 has 3 MA's), (9, 11497), (10, 11548), (11, 11569),

Gene: Dietrick_30 Start: 10442, Stop: 10603, Start Num: 7
Candidate Starts for Dietrick_30:
(3, 10316), (5, 10427), (Start: 7 @10442 has 107 MA's), (Start: 8 @10472 has 3 MA's), (9, 10514), (10, 10565), (11, 10586),

Gene: DirtMonster_34 Start: 12364, Stop: 12495, Start Num: 8
Candidate Starts for DirtMonster_34:
(Start: 8 @12364 has 3 MA's), (9, 12406), (10, 12457), (11, 12478),

Gene: DrPhinkDaddy_36 Start: 12010, Stop: 12171, Start Num: 7
Candidate Starts for DrPhinkDaddy_36:
(Start: 7 @12010 has 107 MA's), (Start: 8 @12040 has 3 MA's), (9, 12082), (10, 12133), (11, 12154),

Gene: Duckfeet_33 Start: 11204, Stop: 11365, Start Num: 7
Candidate Starts for Duckfeet_33:
(Start: 7 @11204 has 107 MA's), (Start: 8 @11234 has 3 MA's), (9, 11276), (10, 11327), (11, 11348),

Gene: EmToTheThree_39 Start: 13427, Stop: 13588, Start Num: 7

Candidate Starts for EmToTheThree_39:

(Start: 7 @13427 has 107 MA's), (Start: 8 @13457 has 3 MA's), (9, 13499), (10, 13550), (11, 13571),

Gene: EmmaElysia_34 Start: 10652, Stop: 10813, Start Num: 7

Candidate Starts for EmmaElysia_34:

(Start: 7 @10652 has 107 MA's), (Start: 8 @10682 has 3 MA's), (9, 10724), (10, 10775), (11, 10796),

Gene: Erdmann_37 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Erdmann_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: ErnieJ_36 Start: 11615, Stop: 11776, Start Num: 7

Candidate Starts for ErnieJ_36:

(3, 11489), (5, 11600), (Start: 7 @11615 has 107 MA's), (Start: 8 @11645 has 3 MA's), (9, 11687), (10, 11738), (11, 11759),

Gene: Ewok_36 Start: 12016, Stop: 12177, Start Num: 7

Candidate Starts for Ewok_36:

(Start: 7 @12016 has 107 MA's), (Start: 8 @12046 has 3 MA's), (9, 12088), (10, 12139), (11, 12160),

Gene: Fludd_35 Start: 10888, Stop: 11049, Start Num: 7

Candidate Starts for Fludd_35:

(Start: 7 @10888 has 107 MA's), (Start: 8 @10918 has 3 MA's), (9, 10960), (10, 11011), (11, 11032),

Gene: Fongie_36 Start: 12548, Stop: 12709, Start Num: 7

Candidate Starts for Fongie_36:

(Start: 7 @12548 has 107 MA's), (Start: 8 @12578 has 3 MA's), (9, 12620), (10, 12671), (11, 12692),

Gene: FoxtrotP1_36 Start: 12341, Stop: 12502, Start Num: 7

Candidate Starts for FoxtrotP1_36:

(Start: 7 @12341 has 107 MA's), (Start: 8 @12371 has 3 MA's), (9, 12413), (10, 12464), (11, 12485),

Gene: FudgeTart_37 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for FudgeTart_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Gabriel_36 Start: 10887, Stop: 11048, Start Num: 7

Candidate Starts for Gabriel_36:

(Start: 7 @10887 has 107 MA's), (Start: 8 @10917 has 3 MA's), (9, 10959), (10, 11010), (11, 11031),

Gene: Gizmo_38 Start: 12015, Stop: 12176, Start Num: 7

Candidate Starts for Gizmo_38:

(Start: 7 @12015 has 107 MA's), (Start: 8 @12045 has 3 MA's), (9, 12087), (10, 12138), (11, 12159),

Gene: Grungle_29 Start: 9584, Stop: 9745, Start Num: 7

Candidate Starts for Grungle_29:

(Start: 7 @9584 has 107 MA's), (Start: 8 @9614 has 3 MA's), (9, 9656), (10, 9707), (11, 9728),

Gene: Halldule_31 Start: 10036, Stop: 10197, Start Num: 7

Candidate Starts for Halldule_31:

(3, 9910), (5, 10021), (Start: 7 @10036 has 107 MA's), (Start: 8 @10066 has 3 MA's), (9, 10108), (10, 10159), (11, 10180),

Gene: I3_37 Start: 12344, Stop: 12505, Start Num: 7

Candidate Starts for I3_37:

(3, 12218), (5, 12329), (Start: 7 @12344 has 107 MA's), (Start: 8 @12374 has 3 MA's), (9, 12416), (10, 12467), (11, 12488),

Gene: IkeLoa_31 Start: 11093, Stop: 11254, Start Num: 7

Candidate Starts for IkeLoa_31:

(3, 10967), (5, 11078), (Start: 7 @11093 has 107 MA's), (Start: 8 @11123 has 3 MA's), (9, 11165), (10, 11216), (11, 11237),

Gene: Izajani_37 Start: 12043, Stop: 12174, Start Num: 8

Candidate Starts for Izajani_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Jessibeth14_35 Start: 11733, Stop: 11894, Start Num: 7

Candidate Starts for Jessibeth14_35:

(Start: 7 @11733 has 107 MA's), (Start: 8 @11763 has 3 MA's), (9, 11805), (10, 11856), (11, 11877),

Gene: Jezreel_34 Start: 11264, Stop: 11425, Start Num: 7

Candidate Starts for Jezreel_34:

(3, 11138), (5, 11249), (Start: 7 @11264 has 107 MA's), (Start: 8 @11294 has 3 MA's), (9, 11336), (10, 11387), (11, 11408),

Gene: JigglyPuff_36 Start: 12289, Stop: 12450, Start Num: 7

Candidate Starts for JigglyPuff_36:

(Start: 7 @12289 has 107 MA's), (Start: 8 @12319 has 3 MA's), (9, 12361), (10, 12412), (11, 12433),

Gene: JulietS_31 Start: 9887, Stop: 10048, Start Num: 7

Candidate Starts for JulietS_31:

(Start: 7 @9887 has 107 MA's), (Start: 8 @9917 has 3 MA's), (9, 9959), (10, 10010), (11, 10031),

Gene: JustHall_34 Start: 11695, Stop: 11856, Start Num: 7

Candidate Starts for JustHall_34:

(3, 11569), (5, 11680), (Start: 7 @11695 has 107 MA's), (Start: 8 @11725 has 3 MA's), (9, 11767), (10, 11818), (11, 11839),

Gene: Kamryn_35 Start: 11568, Stop: 11729, Start Num: 7

Candidate Starts for Kamryn_35:

(3, 11442), (5, 11553), (Start: 7 @11568 has 107 MA's), (Start: 8 @11598 has 3 MA's), (9, 11640), (10, 11691), (11, 11712),

Gene: Kboogie_36 Start: 10943, Stop: 11104, Start Num: 7

Candidate Starts for Kboogie_36:

(Start: 7 @10943 has 107 MA's), (Start: 8 @10973 has 3 MA's), (9, 11015), (10, 11066), (11, 11087),

Gene: Khaleesi_35 Start: 11760, Stop: 11921, Start Num: 7

Candidate Starts for Khaleesi_35:

(Start: 7 @11760 has 107 MA's), (Start: 8 @11790 has 3 MA's), (9, 11832), (10, 11883), (11, 11904),

Gene: Koguma_32 Start: 10230, Stop: 10391, Start Num: 7

Candidate Starts for Koguma_32:

(Start: 7 @10230 has 107 MA's), (Start: 8 @10260 has 3 MA's), (9, 10302), (10, 10353), (11, 10374),

Gene: LRRHood_33 Start: 12153, Stop: 12314, Start Num: 7
Candidate Starts for LRRHood_33:
(Start: 7 @12153 has 107 MA's), (Start: 8 @12183 has 3 MA's), (9, 12225), (10, 12276), (11, 12297),

Gene: Lee7_35 Start: 12010, Stop: 12171, Start Num: 7
Candidate Starts for Lee7_35:
(Start: 7 @12010 has 107 MA's), (Start: 8 @12040 has 3 MA's), (9, 12082), (10, 12133), (11, 12154),

Gene: Lethe_34 Start: 11486, Stop: 11647, Start Num: 7
Candidate Starts for Lethe_34:
(3, 11360), (5, 11471), (Start: 7 @11486 has 107 MA's), (Start: 8 @11516 has 3 MA's), (9, 11558), (10, 11609), (11, 11630),

Gene: LinStu_36 Start: 12146, Stop: 12307, Start Num: 7
Candidate Starts for LinStu_36:
(3, 12020), (4, 12113), (5, 12131), (Start: 7 @12146 has 107 MA's), (Start: 8 @12176 has 3 MA's), (9, 12218), (10, 12269), (11, 12290),

Gene: Loanshark_36 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for Loanshark_36:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: LookingGlass_39 Start: 12784, Stop: 12945, Start Num: 7
Candidate Starts for LookingGlass_39:
(Start: 7 @12784 has 107 MA's), (Start: 8 @12814 has 3 MA's), (9, 12856), (10, 12907), (11, 12928),

Gene: Lukilu_29 Start: 10604, Stop: 10765, Start Num: 7
Candidate Starts for Lukilu_29:
(Start: 7 @10604 has 107 MA's), (Start: 8 @10634 has 3 MA's), (9, 10676), (10, 10727), (11, 10748),

Gene: Lunareta_35 Start: 11744, Stop: 11905, Start Num: 7
Candidate Starts for Lunareta_35:
(Start: 7 @11744 has 107 MA's), (Start: 8 @11774 has 3 MA's), (9, 11816), (10, 11867), (11, 11888),

Gene: Maby2021_37 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for Maby2021_37:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Mangeria_38 Start: 12318, Stop: 12479, Start Num: 7
Candidate Starts for Mangeria_38:
(3, 12192), (5, 12303), (Start: 7 @12318 has 107 MA's), (Start: 8 @12348 has 3 MA's), (9, 12390), (10, 12441), (11, 12462),

Gene: McWolfish_35 Start: 11760, Stop: 11921, Start Num: 7
Candidate Starts for McWolfish_35:
(Start: 7 @11760 has 107 MA's), (Start: 8 @11790 has 3 MA's), (9, 11832), (10, 11883), (11, 11904),

Gene: Megamind_36 Start: 11998, Stop: 12159, Start Num: 7
Candidate Starts for Megamind_36:
(Start: 7 @11998 has 107 MA's), (Start: 8 @12028 has 3 MA's), (9, 12070), (10, 12121), (11, 12142),

Gene: Melpomini_34 Start: 10652, Stop: 10813, Start Num: 7
Candidate Starts for Melpomini_34:

(3, 10526), (5, 10637), (Start: 7 @10652 has 107 MA's), (Start: 8 @10682 has 3 MA's), (9, 10724), (10, 10775), (11, 10796),

Gene: MikeLiesIn_36 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for MikeLiesIn_36:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Mikro_34 Start: 12499, Stop: 12660, Start Num: 7

Candidate Starts for Mikro_34:

(Start: 7 @12499 has 107 MA's), (Start: 8 @12529 has 3 MA's), (9, 12571), (10, 12622), (11, 12643),

Gene: MoMoMixon_36 Start: 12109, Stop: 12270, Start Num: 7

Candidate Starts for MoMoMixon_36:

(3, 11983), (5, 12094), (Start: 7 @12109 has 107 MA's), (Start: 8 @12139 has 3 MA's), (9, 12181), (10, 12232), (11, 12253),

Gene: Montpel_35 Start: 11744, Stop: 11905, Start Num: 7

Candidate Starts for Montpel_35:

(Start: 7 @11744 has 107 MA's), (Start: 8 @11774 has 3 MA's), (9, 11816), (10, 11867), (11, 11888),

Gene: Morizzled23_35 Start: 10864, Stop: 11025, Start Num: 7

Candidate Starts for Morizzled23_35:

(Start: 7 @10864 has 107 MA's), (Start: 8 @10894 has 3 MA's), (9, 10936), (10, 10987), (11, 11008),

Gene: Napoleon13_34 Start: 10665, Stop: 10826, Start Num: 7

Candidate Starts for Napoleon13_34:

(3, 10539), (5, 10650), (Start: 7 @10665 has 107 MA's), (Start: 8 @10695 has 3 MA's), (9, 10737), (10, 10788), (11, 10809),

Gene: Naval22_38 Start: 12053, Stop: 12214, Start Num: 7

Candidate Starts for Naval22_38:

(Start: 7 @12053 has 107 MA's), (Start: 8 @12083 has 3 MA's), (9, 12125), (10, 12176), (11, 12197),

Gene: NedWong_37 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for NedWong_37:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Nidhogg_36 Start: 11859, Stop: 12020, Start Num: 7

Candidate Starts for Nidhogg_36:

(3, 11733), (5, 11844), (Start: 7 @11859 has 107 MA's), (Start: 8 @11889 has 3 MA's), (9, 11931), (10, 11982), (11, 12003),

Gene: Norm_36 Start: 12044, Stop: 12175, Start Num: 8

Candidate Starts for Norm_36:

(Start: 8 @12044 has 3 MA's), (9, 12086), (10, 12137), (11, 12158),

Gene: NuevoMundo_38 Start: 12849, Stop: 13010, Start Num: 7

Candidate Starts for NuevoMundo_38:

(3, 12723), (5, 12834), (Start: 7 @12849 has 107 MA's), (Start: 8 @12879 has 3 MA's), (9, 12921), (10, 12972), (11, 12993),

Gene: OrediggerDelux_35 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for OrediggerDelux_35:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: ParkTD_35 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for ParkTD_35:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Phox_34 Start: 11959, Stop: 12120, Start Num: 7

Candidate Starts for Phox_34:

(3, 11833), (5, 11944), (Start: 7 @11959 has 107 MA's), (Start: 8 @11989 has 3 MA's), (9, 12031), (10, 12082), (11, 12103),

Gene: Phusco_36 Start: 11464, Stop: 11625, Start Num: 7

Candidate Starts for Phusco_36:

(Start: 7 @11464 has 107 MA's), (Start: 8 @11494 has 3 MA's), (9, 11536), (10, 11587), (11, 11608),

Gene: Pier_38 Start: 12171, Stop: 12332, Start Num: 7

Candidate Starts for Pier_38:

(Start: 7 @12171 has 107 MA's), (Start: 8 @12201 has 3 MA's), (9, 12243), (10, 12294), (11, 12315),

Gene: Pio_39 Start: 12862, Stop: 13023, Start Num: 7

Candidate Starts for Pio_39:

(Start: 7 @12862 has 107 MA's), (Start: 8 @12892 has 3 MA's), (9, 12934), (10, 12985), (11, 13006),

Gene: Pleione_38 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Pleione_38:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Primadonna_31 Start: 11117, Stop: 11278, Start Num: 7

Candidate Starts for Primadonna_31:

(Start: 7 @11117 has 107 MA's), (Start: 8 @11147 has 3 MA's), (9, 11189), (10, 11240), (11, 11261),

Gene: PurduePete_35 Start: 11724, Stop: 11885, Start Num: 7

Candidate Starts for PurduePete_35:

(Start: 7 @11724 has 107 MA's), (Start: 8 @11754 has 3 MA's), (9, 11796), (10, 11847), (11, 11868),

Gene: Quasimodo_36 Start: 12428, Stop: 12589, Start Num: 7

Candidate Starts for Quasimodo_36:

(Start: 7 @12428 has 107 MA's), (Start: 8 @12458 has 3 MA's), (9, 12500), (10, 12551), (11, 12572),

Gene: Rahel_36 Start: 11464, Stop: 11625, Start Num: 7

Candidate Starts for Rahel_36:

(Start: 7 @11464 has 107 MA's), (Start: 8 @11494 has 3 MA's), (9, 11536), (10, 11587), (11, 11608),

Gene: Rizal_34 Start: 10930, Stop: 11091, Start Num: 7

Candidate Starts for Rizal_34:

(Start: 7 @10930 has 107 MA's), (Start: 8 @10960 has 3 MA's), (9, 11002), (10, 11053), (11, 11074),

Gene: RoMag_31 Start: 11262, Stop: 11423, Start Num: 7

Candidate Starts for RoMag_31:

(Start: 7 @11262 has 107 MA's), (Start: 8 @11292 has 3 MA's), (9, 11334), (10, 11385), (11, 11406),

Gene: Rocha_34 Start: 10958, Stop: 11119, Start Num: 7

Candidate Starts for Rocha_34:

(Start: 7 @10958 has 107 MA's), (Start: 8 @10988 has 3 MA's), (9, 11030), (10, 11081), (11, 11102),

Gene: SVoro_35 Start: 12007, Stop: 12168, Start Num: 7

Candidate Starts for SVoro_35:

(Start: 7 @12007 has 107 MA's), (Start: 8 @12037 has 3 MA's), (9, 12079), (10, 12130), (11, 12151),

Gene: Salacia_38 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for Salacia_38:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: ScottMcG_35 Start: 12102, Stop: 12263, Start Num: 7

Candidate Starts for ScottMcG_35:

(3, 11976), (5, 12087), (Start: 7 @12102 has 107 MA's), (Start: 8 @12132 has 3 MA's), (9, 12174), (10, 12225), (11, 12246),

Gene: Shaqnato_32 Start: 10575, Stop: 10736, Start Num: 7

Candidate Starts for Shaqnato_32:

(Start: 7 @10575 has 107 MA's), (Start: 8 @10605 has 3 MA's), (9, 10647), (10, 10698), (11, 10719),

Gene: Shrimp_36 Start: 12017, Stop: 12178, Start Num: 7

Candidate Starts for Shrimp_36:

(Start: 7 @12017 has 107 MA's), (Start: 8 @12047 has 3 MA's), (9, 12089), (10, 12140), (11, 12161),

Gene: SoilZilla_33 Start: 11718, Stop: 11879, Start Num: 7

Candidate Starts for SoilZilla_33:

(Start: 7 @11718 has 107 MA's), (Start: 8 @11748 has 3 MA's), (9, 11790), (10, 11841), (11, 11862),

Gene: Specks_40 Start: 13084, Stop: 13245, Start Num: 7

Candidate Starts for Specks_40:

(3, 12958), (5, 13069), (Start: 7 @13084 has 107 MA's), (Start: 8 @13114 has 3 MA's), (9, 13156), (10, 13207), (11, 13228),

Gene: Sprinklers_36 Start: 11502, Stop: 11663, Start Num: 7

Candidate Starts for Sprinklers_36:

(Start: 7 @11502 has 107 MA's), (Start: 8 @11532 has 3 MA's), (9, 11574), (10, 11625), (11, 11646),

Gene: Spud_37 Start: 12641, Stop: 12802, Start Num: 7

Candidate Starts for Spud_37:

(3, 12515), (5, 12626), (Start: 7 @12641 has 107 MA's), (Start: 8 @12671 has 3 MA's), (9, 12713), (10, 12764), (11, 12785),

Gene: SrishMeg2525_35 Start: 11724, Stop: 11885, Start Num: 7

Candidate Starts for SrishMeg2525_35:

(Start: 7 @11724 has 107 MA's), (Start: 8 @11754 has 3 MA's), (9, 11796), (10, 11847), (11, 11868),

Gene: StubbySaigey_35 Start: 10653, Stop: 10814, Start Num: 7

Candidate Starts for StubbySaigey_35:

(Start: 7 @10653 has 107 MA's), (Start: 8 @10683 has 3 MA's), (9, 10725), (10, 10776), (11, 10797),

Gene: Teardrop_35 Start: 10929, Stop: 11090, Start Num: 7

Candidate Starts for Teardrop_35:

(Start: 7 @10929 has 107 MA's), (Start: 8 @10959 has 3 MA's), (9, 11001), (10, 11052), (11, 11073),

Gene: TinyTim_36 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for TinyTim_36:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Tonenili_41 Start: 13559, Stop: 13720, Start Num: 7
Candidate Starts for Tonenili_41:
(6, 13556), (Start: 7 @13559 has 107 MA's), (Start: 8 @13589 has 3 MA's), (9, 13631), (10, 13682),
(11, 13703),

Gene: Trinitium_34 Start: 10700, Stop: 10861, Start Num: 7
Candidate Starts for Trinitium_34:
(3, 10574), (5, 10685), (Start: 7 @10700 has 107 MA's), (Start: 8 @10730 has 3 MA's), (9, 10772), (10,
10823), (11, 10844),

Gene: Turret_33 Start: 10423, Stop: 10584, Start Num: 7
Candidate Starts for Turret_33:
(3, 10297), (5, 10408), (Start: 7 @10423 has 107 MA's), (Start: 8 @10453 has 3 MA's), (9, 10495), (10,
10546), (11, 10567),

Gene: Vortrix_41 Start: 13510, Stop: 13671, Start Num: 7
Candidate Starts for Vortrix_41:
(3, 13384), (5, 13495), (Start: 7 @13510 has 107 MA's), (Start: 8 @13540 has 3 MA's), (9, 13582), (10,
13633), (11, 13654),

Gene: Wally_35 Start: 10885, Stop: 11046, Start Num: 7
Candidate Starts for Wally_35:
(Start: 7 @10885 has 107 MA's), (Start: 8 @10915 has 3 MA's), (9, 10957), (10, 11008), (11, 11029),

Gene: Willis_36 Start: 11908, Stop: 12069, Start Num: 7
Candidate Starts for Willis_36:
(Start: 7 @11908 has 107 MA's), (Start: 8 @11938 has 3 MA's), (9, 11980), (10, 12031), (11, 12052),

Gene: Yassified_33 Start: 10665, Stop: 10826, Start Num: 7
Candidate Starts for Yassified_33:
(Start: 7 @10665 has 107 MA's), (Start: 8 @10695 has 3 MA's), (9, 10737), (10, 10788), (11, 10809),

Gene: YemiJoy2021_37 Start: 12013, Stop: 12174, Start Num: 7
Candidate Starts for YemiJoy2021_37:
(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),

Gene: Yucca_36 Start: 11935, Stop: 12096, Start Num: 7
Candidate Starts for Yucca_36:
(Start: 7 @11935 has 107 MA's), (Start: 8 @11965 has 3 MA's), (9, 12007), (10, 12058), (11, 12079),

Gene: Zalkecks_38 Start: 12017, Stop: 12178, Start Num: 7
Candidate Starts for Zalkecks_38:
(Start: 7 @12017 has 107 MA's), (Start: 8 @12047 has 3 MA's), (9, 12089), (10, 12140), (11, 12161),

Gene: Zeenon_38 Start: 11999, Stop: 12160, Start Num: 7
Candidate Starts for Zeenon_38:
(Start: 7 @11999 has 107 MA's), (Start: 8 @12029 has 3 MA's), (9, 12071), (10, 12122), (11, 12143),

Gene: ZygoTaiga_36 Start: 12013, Stop: 12174, Start Num: 7

Candidate Starts for ZygoTaiga_36:

(Start: 7 @12013 has 107 MA's), (Start: 8 @12043 has 3 MA's), (9, 12085), (10, 12136), (11, 12157),