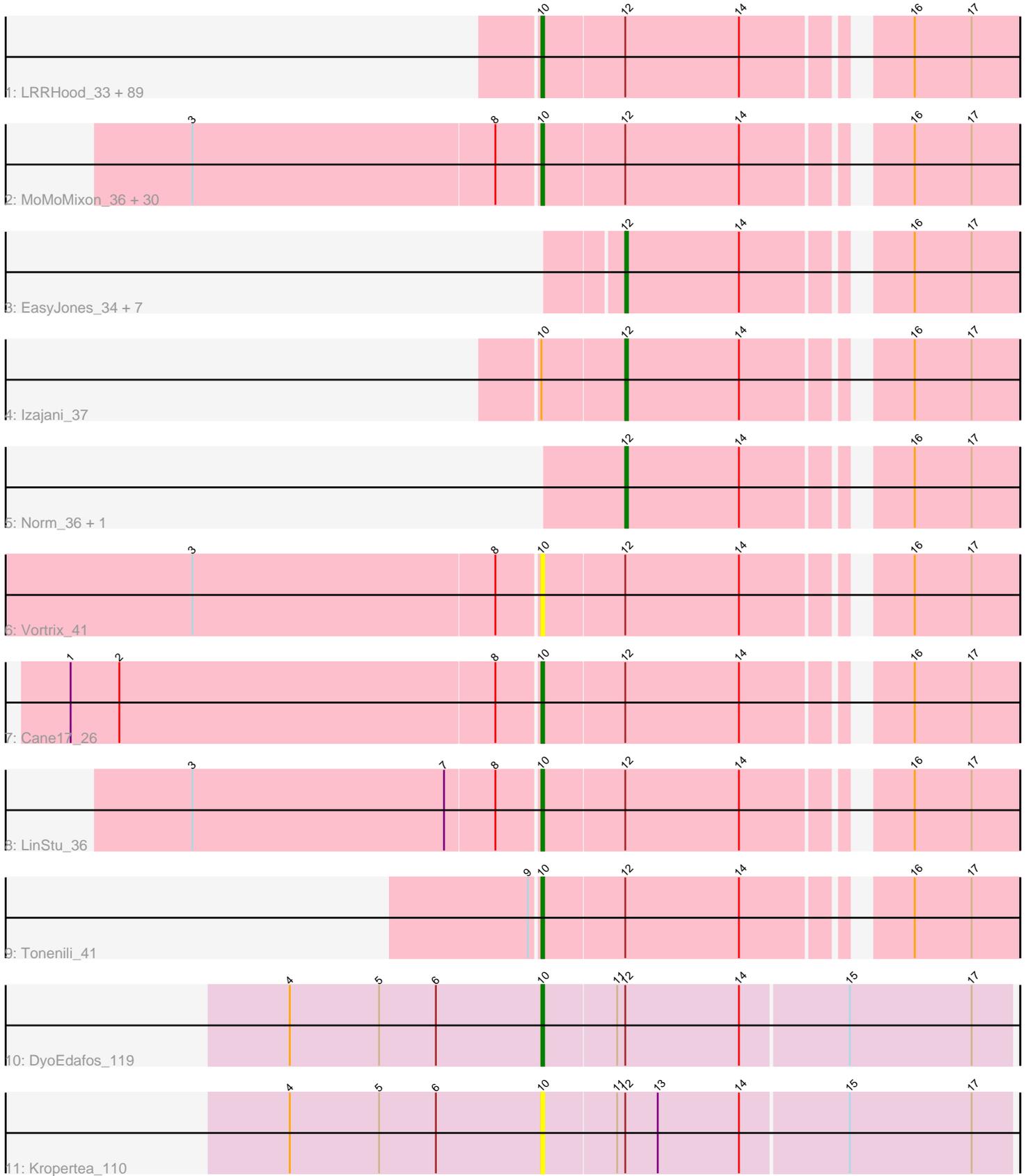


Pham 290938



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 290938 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290938 has 138 members, 20 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, Darko_35, 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, Pier_38, Bxz1_36, Zalkecks_38, BobaPhatt_33, SrishMeg2525_35, Daffodil_38, TinyTim_36, Bread_37, Phusco_36, Shaq nato_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
- Track 2 : MoMoMixon_36, Specks_40, Blackbrain_33, Mangeria_38, 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, Lethe_34, Bigswole_41, ChaylaJr_34, IkeLoa_31, Chargie21_34
- Track 3 : EasyJones_34, Stubby_32, Astraea_36, Shelob_36, Pinkcreek_26, Flabslab_35, Alice_29, Roots515_35
- Track 4 : Izajani_37
- Track 5 : Norm_36, DirtMonster_34
- Track 6 : Vortex_41
- Track 7 : Cane17_26
- Track 8 : LinStu_36
- Track 9 : Tonenili_41
- Track 10 : DyoEdafos_119
- Track 11 : Kropertea_110

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

The start number called the most often in the published annotations is 10, it was called in 107 of the 118 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, DyoEdafos_119, 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, Kropertea_110, 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, Specks_40, Sprinklers_36, Spud_37, SrishMeg2525_35, StubbySaigey_35, Teardrop_35, TinyTim_36, Tonenili_41, Trinitium_34, Turret_33, Vortex_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:

- Alice_29, Astraea_36, DirtMonster_34, EasyJones_34, Flabslab_35, Norm_36, Pinkcreek_26, Roots515_35, Shelob_36, Stubby_32,

Summary by start number:

Start 10:

- Found in 128 of 138 (92.8%) of genes in pham
- Manual Annotations of this start: 107 of 118
- 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), DyoEdafos_119 (L4), 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), Kropertea_110 (L4), 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), Shaqnato_32 (C1), Shrimp_36 (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 12:

- Found in 138 of 138 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 118
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Alice_29 (C1), Astraea_36 (C1), DirtMonster_34 (C1), EasyJones_34 (C1), Flabslab_35 (C1), Izajani_37 (C1), Norm_36 (C1), Pinkcreek_26 (C1), Roots515_35 (C1), Shelob_36 (C1), Stubby_32 (C1),

Summary by clusters:

There are 2 clusters represented in this pham: C1, L4,

Info for manual annotations of cluster C1:

- Start number 10 was manually annotated 106 times for cluster C1.
- Start number 12 was manually annotated 11 times for cluster C1.

Info for manual annotations of cluster L4:

- Start number 10 was manually annotated 1 time for cluster L4.

Gene Information:

Gene: Alice_29 Start: 10039, Stop: 10170, Start Num: 12

Candidate Starts for Alice_29:

(Start: 12 @10039 has 11 MA's), (14, 10081), (16, 10132), (17, 10153),

Gene: ArcherS7_35 Start: 11458, Stop: 11619, Start Num: 10

Candidate Starts for ArcherS7_35:

(Start: 10 @11458 has 107 MA's), (Start: 12 @11488 has 11 MA's), (14, 11530), (16, 11581), (17, 11602),

Gene: Asterius_37 Start: 11733, Stop: 11894, Start Num: 10
Candidate Starts for Asterius_37:
(Start: 10 @11733 has 107 MA's), (Start: 12 @11763 has 11 MA's), (14, 11805), (16, 11856), (17, 11877),

Gene: Astraea_36 Start: 11448, Stop: 11579, Start Num: 12
Candidate Starts for Astraea_36:
(Start: 12 @11448 has 11 MA's), (14, 11490), (16, 11541), (17, 11562),

Gene: Ava3_37 Start: 12013, Stop: 12174, Start Num: 10
Candidate Starts for Ava3_37:
(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: BackyardAgain_33 Start: 10887, Stop: 11048, Start Num: 10
Candidate Starts for BackyardAgain_33:
(Start: 10 @10887 has 107 MA's), (Start: 12 @10917 has 11 MA's), (14, 10959), (16, 11010), (17, 11031),

Gene: BadAgartude_37 Start: 12100, Stop: 12261, Start Num: 10
Candidate Starts for BadAgartude_37:
(Start: 10 @12100 has 107 MA's), (Start: 12 @12130 has 11 MA's), (14, 12172), (16, 12223), (17, 12244),

Gene: BananaFence_37 Start: 11897, Stop: 12058, Start Num: 10
Candidate Starts for BananaFence_37:
(Start: 10 @11897 has 107 MA's), (Start: 12 @11927 has 11 MA's), (14, 11969), (16, 12020), (17, 12041),

Gene: Bangla1971_35 Start: 11464, Stop: 11625, Start Num: 10
Candidate Starts for Bangla1971_35:
(Start: 10 @11464 has 107 MA's), (Start: 12 @11494 has 11 MA's), (14, 11536), (16, 11587), (17, 11608),

Gene: Basquiat_34 Start: 10669, Stop: 10830, Start Num: 10
Candidate Starts for Basquiat_34:
(3, 10543), (8, 10654), (Start: 10 @10669 has 107 MA's), (Start: 12 @10699 has 11 MA's), (14, 10741), (16, 10792), (17, 10813),

Gene: Bezza_28 Start: 10533, Stop: 10694, Start Num: 10
Candidate Starts for Bezza_28:
(Start: 10 @10533 has 107 MA's), (Start: 12 @10563 has 11 MA's), (14, 10605), (16, 10656), (17, 10677),

Gene: Bigswole_41 Start: 13585, Stop: 13746, Start Num: 10
Candidate Starts for Bigswole_41:
(3, 13459), (8, 13570), (Start: 10 @13585 has 107 MA's), (Start: 12 @13615 has 11 MA's), (14, 13657), (16, 13708), (17, 13729),

Gene: Bipolarisk_35 Start: 11724, Stop: 11885, Start Num: 10
Candidate Starts for Bipolarisk_35:
(Start: 10 @11724 has 107 MA's), (Start: 12 @11754 has 11 MA's), (14, 11796), (16, 11847), (17, 11868),

Gene: Blackbrain_33 Start: 10485, Stop: 10646, Start Num: 10

Candidate Starts for Blackbrain_33:

(3, 10359), (8, 10470), (Start: 10 @10485 has 107 MA's), (Start: 12 @10515 has 11 MA's), (14, 10557), (16, 10608), (17, 10629),

Gene: BobaPhatt_33 Start: 10898, Stop: 11059, Start Num: 10

Candidate Starts for BobaPhatt_33:

(Start: 10 @10898 has 107 MA's), (Start: 12 @10928 has 11 MA's), (14, 10970), (16, 11021), (17, 11042),

Gene: Bonray_36 Start: 12001, Stop: 12162, Start Num: 10

Candidate Starts for Bonray_36:

(Start: 10 @12001 has 107 MA's), (Start: 12 @12031 has 11 MA's), (14, 12073), (16, 12124), (17, 12145),

Gene: Bowman_35 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Bowman_35:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Bread_37 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Bread_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Breeniome_36 Start: 10896, Stop: 11057, Start Num: 10

Candidate Starts for Breeniome_36:

(Start: 10 @10896 has 107 MA's), (Start: 12 @10926 has 11 MA's), (14, 10968), (16, 11019), (17, 11040),

Gene: Burrough_36 Start: 11724, Stop: 11885, Start Num: 10

Candidate Starts for Burrough_36:

(Start: 10 @11724 has 107 MA's), (Start: 12 @11754 has 11 MA's), (14, 11796), (16, 11847), (17, 11868),

Gene: Bxz1_36 Start: 12473, Stop: 12634, Start Num: 10

Candidate Starts for Bxz1_36:

(Start: 10 @12473 has 107 MA's), (Start: 12 @12503 has 11 MA's), (14, 12545), (16, 12596), (17, 12617),

Gene: Cactojaque_33 Start: 10592, Stop: 10753, Start Num: 10

Candidate Starts for Cactojaque_33:

(Start: 10 @10592 has 107 MA's), (Start: 12 @10622 has 11 MA's), (14, 10664), (16, 10715), (17, 10736),

Gene: Cali_36 Start: 13034, Stop: 13195, Start Num: 10

Candidate Starts for Cali_36:

(Start: 10 @13034 has 107 MA's), (Start: 12 @13064 has 11 MA's), (14, 13106), (16, 13157), (17, 13178),

Gene: Cane17_26 Start: 9150, Stop: 9311, Start Num: 10

Candidate Starts for Cane17_26:

(1, 8979), (2, 8997), (8, 9135), (Start: 10 @9150 has 107 MA's), (Start: 12 @9180 has 11 MA's), (14, 9222), (16, 9273), (17, 9294),

Gene: Caravan_33 Start: 11065, Stop: 11226, Start Num: 10

Candidate Starts for Caravan_33:

(3, 10939), (8, 11050), (Start: 10 @11065 has 107 MA's), (Start: 12 @11095 has 11 MA's), (14, 11137), (16, 11188), (17, 11209),

Gene: Catera_34 Start: 10891, Stop: 11052, Start Num: 10

Candidate Starts for Catera_34:

(Start: 10 @10891 has 107 MA's), (Start: 12 @10921 has 11 MA's), (14, 10963), (16, 11014), (17, 11035),

Gene: Chargie21_34 Start: 10669, Stop: 10830, Start Num: 10

Candidate Starts for Chargie21_34:

(3, 10543), (8, 10654), (Start: 10 @10669 has 107 MA's), (Start: 12 @10699 has 11 MA's), (14, 10741), (16, 10792), (17, 10813),

Gene: CharlieB_36 Start: 11032, Stop: 11193, Start Num: 10

Candidate Starts for CharlieB_36:

(Start: 10 @11032 has 107 MA's), (Start: 12 @11062 has 11 MA's), (14, 11104), (16, 11155), (17, 11176),

Gene: ChaylaJr_34 Start: 10756, Stop: 10917, Start Num: 10

Candidate Starts for ChaylaJr_34:

(3, 10630), (8, 10741), (Start: 10 @10756 has 107 MA's), (Start: 12 @10786 has 11 MA's), (14, 10828), (16, 10879), (17, 10900),

Gene: ChickenPhender_34 Start: 10714, Stop: 10875, Start Num: 10

Candidate Starts for ChickenPhender_34:

(3, 10588), (8, 10699), (Start: 10 @10714 has 107 MA's), (Start: 12 @10744 has 11 MA's), (14, 10786), (16, 10837), (17, 10858),

Gene: Colt_28 Start: 10017, Stop: 10178, Start Num: 10

Candidate Starts for Colt_28:

(3, 9891), (8, 10002), (Start: 10 @10017 has 107 MA's), (Start: 12 @10047 has 11 MA's), (14, 10089), (16, 10140), (17, 10161),

Gene: Concombres_35 Start: 12239, Stop: 12400, Start Num: 10

Candidate Starts for Concombres_35:

(Start: 10 @12239 has 107 MA's), (Start: 12 @12269 has 11 MA's), (14, 12311), (16, 12362), (17, 12383),

Gene: Daffodil_38 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Daffodil_38:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Dandelion_39 Start: 13110, Stop: 13271, Start Num: 10

Candidate Starts for Dandelion_39:

(3, 12984), (8, 13095), (Start: 10 @13110 has 107 MA's), (Start: 12 @13140 has 11 MA's), (14, 13182), (16, 13233), (17, 13254),

Gene: Darko_35 Start: 11866, Stop: 12027, Start Num: 10

Candidate Starts for Darko_35:

(Start: 10 @11866 has 107 MA's), (Start: 12 @11896 has 11 MA's), (14, 11938), (16, 11989), (17, 12010),

Gene: DeejaClivia_30 Start: 10018, Stop: 10179, Start Num: 10

Candidate Starts for DeejaClivia_30:

(3, 9892), (8, 10003), (Start: 10 @10018 has 107 MA's), (Start: 12 @10048 has 11 MA's), (14, 10090), (16, 10141), (17, 10162),

Gene: Delilah_36 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Delilah_36:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Demodog_34 Start: 12239, Stop: 12400, Start Num: 10

Candidate Starts for Demodog_34:

(Start: 10 @12239 has 107 MA's), (Start: 12 @12269 has 11 MA's), (14, 12311), (16, 12362), (17, 12383),

Gene: Derek_37 Start: 11425, Stop: 11586, Start Num: 10

Candidate Starts for Derek_37:

(Start: 10 @11425 has 107 MA's), (Start: 12 @11455 has 11 MA's), (14, 11497), (16, 11548), (17, 11569),

Gene: Dietrick_30 Start: 10442, Stop: 10603, Start Num: 10

Candidate Starts for Dietrick_30:

(3, 10316), (8, 10427), (Start: 10 @10442 has 107 MA's), (Start: 12 @10472 has 11 MA's), (14, 10514), (16, 10565), (17, 10586),

Gene: DirtMonster_34 Start: 12364, Stop: 12495, Start Num: 12

Candidate Starts for DirtMonster_34:

(Start: 12 @12364 has 11 MA's), (14, 12406), (16, 12457), (17, 12478),

Gene: DrPhinkDaddy_36 Start: 12010, Stop: 12171, Start Num: 10

Candidate Starts for DrPhinkDaddy_36:

(Start: 10 @12010 has 107 MA's), (Start: 12 @12040 has 11 MA's), (14, 12082), (16, 12133), (17, 12154),

Gene: Duckfeet_33 Start: 11204, Stop: 11365, Start Num: 10

Candidate Starts for Duckfeet_33:

(Start: 10 @11204 has 107 MA's), (Start: 12 @11234 has 11 MA's), (14, 11276), (16, 11327), (17, 11348),

Gene: DyoEdafos_119 Start: 64998, Stop: 65168, Start Num: 10

Candidate Starts for DyoEdafos_119:

(4, 64905), (5, 64938), (6, 64959), (Start: 10 @64998 has 107 MA's), (11, 65025), (Start: 12 @65028 has 11 MA's), (14, 65070), (15, 65109), (17, 65154),

Gene: EasyJones_34 Start: 10447, Stop: 10578, Start Num: 12

Candidate Starts for EasyJones_34:

(Start: 12 @10447 has 11 MA's), (14, 10489), (16, 10540), (17, 10561),

Gene: EmToTheThree_39 Start: 13427, Stop: 13588, Start Num: 10

Candidate Starts for EmToTheThree_39:

(Start: 10 @13427 has 107 MA's), (Start: 12 @13457 has 11 MA's), (14, 13499), (16, 13550), (17, 13571),

Gene: EmmaElysia_34 Start: 10652, Stop: 10813, Start Num: 10

Candidate Starts for EmmaElysia_34:

(Start: 10 @10652 has 107 MA's), (Start: 12 @10682 has 11 MA's), (14, 10724), (16, 10775), (17, 10796),

Gene: Erdmann_37 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Erdmann_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: ErnieJ_36 Start: 11615, Stop: 11776, Start Num: 10

Candidate Starts for ErnieJ_36:

(3, 11489), (8, 11600), (Start: 10 @11615 has 107 MA's), (Start: 12 @11645 has 11 MA's), (14, 11687), (16, 11738), (17, 11759),

Gene: Ewok_36 Start: 12016, Stop: 12177, Start Num: 10

Candidate Starts for Ewok_36:

(Start: 10 @12016 has 107 MA's), (Start: 12 @12046 has 11 MA's), (14, 12088), (16, 12139), (17, 12160),

Gene: Flabslab_35 Start: 11432, Stop: 11563, Start Num: 12

Candidate Starts for Flabslab_35:

(Start: 12 @11432 has 11 MA's), (14, 11474), (16, 11525), (17, 11546),

Gene: Fludd_35 Start: 10888, Stop: 11049, Start Num: 10

Candidate Starts for Fludd_35:

(Start: 10 @10888 has 107 MA's), (Start: 12 @10918 has 11 MA's), (14, 10960), (16, 11011), (17, 11032),

Gene: Fongie_36 Start: 12548, Stop: 12709, Start Num: 10

Candidate Starts for Fongie_36:

(Start: 10 @12548 has 107 MA's), (Start: 12 @12578 has 11 MA's), (14, 12620), (16, 12671), (17, 12692),

Gene: FoxtrotP1_36 Start: 12341, Stop: 12502, Start Num: 10

Candidate Starts for FoxtrotP1_36:

(Start: 10 @12341 has 107 MA's), (Start: 12 @12371 has 11 MA's), (14, 12413), (16, 12464), (17, 12485),

Gene: FudgeTart_37 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for FudgeTart_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Gabriel_36 Start: 10887, Stop: 11048, Start Num: 10

Candidate Starts for Gabriel_36:

(Start: 10 @10887 has 107 MA's), (Start: 12 @10917 has 11 MA's), (14, 10959), (16, 11010), (17, 11031),

Gene: Gizmo_38 Start: 12015, Stop: 12176, Start Num: 10

Candidate Starts for Gizmo_38:

(Start: 10 @12015 has 107 MA's), (Start: 12 @12045 has 11 MA's), (14, 12087), (16, 12138), (17, 12159),

Gene: Grungle_29 Start: 9584, Stop: 9745, Start Num: 10

Candidate Starts for Grungle_29:

(Start: 10 @9584 has 107 MA's), (Start: 12 @9614 has 11 MA's), (14, 9656), (16, 9707), (17, 9728),

Gene: Halldule_31 Start: 10036, Stop: 10197, Start Num: 10

Candidate Starts for Halldule_31:

(3, 9910), (8, 10021), (Start: 10 @10036 has 107 MA's), (Start: 12 @10066 has 11 MA's), (14, 10108), (16, 10159), (17, 10180),

Gene: I3_37 Start: 12344, Stop: 12505, Start Num: 10

Candidate Starts for I3_37:

(3, 12218), (8, 12329), (Start: 10 @12344 has 107 MA's), (Start: 12 @12374 has 11 MA's), (14, 12416), (16, 12467), (17, 12488),

Gene: IkeLoa_31 Start: 11093, Stop: 11254, Start Num: 10

Candidate Starts for IkeLoa_31:

(3, 10967), (8, 11078), (Start: 10 @11093 has 107 MA's), (Start: 12 @11123 has 11 MA's), (14, 11165), (16, 11216), (17, 11237),

Gene: Izajani_37 Start: 12043, Stop: 12174, Start Num: 12

Candidate Starts for Izajani_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Jessibeth14_35 Start: 11733, Stop: 11894, Start Num: 10

Candidate Starts for Jessibeth14_35:

(Start: 10 @11733 has 107 MA's), (Start: 12 @11763 has 11 MA's), (14, 11805), (16, 11856), (17, 11877),

Gene: Jezreel_34 Start: 11264, Stop: 11425, Start Num: 10

Candidate Starts for Jezreel_34:

(3, 11138), (8, 11249), (Start: 10 @11264 has 107 MA's), (Start: 12 @11294 has 11 MA's), (14, 11336), (16, 11387), (17, 11408),

Gene: JigglyPuff_36 Start: 12289, Stop: 12450, Start Num: 10

Candidate Starts for JigglyPuff_36:

(Start: 10 @12289 has 107 MA's), (Start: 12 @12319 has 11 MA's), (14, 12361), (16, 12412), (17, 12433),

Gene: JulietS_31 Start: 9887, Stop: 10048, Start Num: 10

Candidate Starts for JulietS_31:

(Start: 10 @9887 has 107 MA's), (Start: 12 @9917 has 11 MA's), (14, 9959), (16, 10010), (17, 10031),

Gene: JustHall_34 Start: 11695, Stop: 11856, Start Num: 10

Candidate Starts for JustHall_34:

(3, 11569), (8, 11680), (Start: 10 @11695 has 107 MA's), (Start: 12 @11725 has 11 MA's), (14, 11767), (16, 11818), (17, 11839),

Gene: Kamryn_35 Start: 11568, Stop: 11729, Start Num: 10

Candidate Starts for Kamryn_35:

(3, 11442), (8, 11553), (Start: 10 @11568 has 107 MA's), (Start: 12 @11598 has 11 MA's), (14, 11640), (16, 11691), (17, 11712),

Gene: Kboogie_36 Start: 10943, Stop: 11104, Start Num: 10

Candidate Starts for Kboogie_36:

(Start: 10 @10943 has 107 MA's), (Start: 12 @10973 has 11 MA's), (14, 11015), (16, 11066), (17, 11087),

Gene: Khaleesi_35 Start: 11760, Stop: 11921, Start Num: 10

Candidate Starts for Khaleesi_35:

(Start: 10 @11760 has 107 MA's), (Start: 12 @11790 has 11 MA's), (14, 11832), (16, 11883), (17, 11904),

Gene: Koguma_32 Start: 10230, Stop: 10391, Start Num: 10

Candidate Starts for Koguma_32:

(Start: 10 @10230 has 107 MA's), (Start: 12 @10260 has 11 MA's), (14, 10302), (16, 10353), (17, 10374),

Gene: Kropertea_110 Start: 64243, Stop: 64413, Start Num: 10

Candidate Starts for Kropertea_110:

(4, 64150), (5, 64183), (6, 64204), (Start: 10 @64243 has 107 MA's), (11, 64270), (Start: 12 @64273 has 11 MA's), (13, 64285), (14, 64315), (15, 64354), (17, 64399),

Gene: LRRHood_33 Start: 12153, Stop: 12314, Start Num: 10

Candidate Starts for LRRHood_33:

(Start: 10 @12153 has 107 MA's), (Start: 12 @12183 has 11 MA's), (14, 12225), (16, 12276), (17, 12297),

Gene: Lee7_35 Start: 12010, Stop: 12171, Start Num: 10

Candidate Starts for Lee7_35:

(Start: 10 @12010 has 107 MA's), (Start: 12 @12040 has 11 MA's), (14, 12082), (16, 12133), (17, 12154),

Gene: Lethe_34 Start: 11486, Stop: 11647, Start Num: 10

Candidate Starts for Lethe_34:

(3, 11360), (8, 11471), (Start: 10 @11486 has 107 MA's), (Start: 12 @11516 has 11 MA's), (14, 11558), (16, 11609), (17, 11630),

Gene: LinStu_36 Start: 12146, Stop: 12307, Start Num: 10

Candidate Starts for LinStu_36:

(3, 12020), (7, 12113), (8, 12131), (Start: 10 @12146 has 107 MA's), (Start: 12 @12176 has 11 MA's), (14, 12218), (16, 12269), (17, 12290),

Gene: Loanshark_36 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Loanshark_36:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: LookingGlass_39 Start: 12784, Stop: 12945, Start Num: 10

Candidate Starts for LookingGlass_39:

(Start: 10 @12784 has 107 MA's), (Start: 12 @12814 has 11 MA's), (14, 12856), (16, 12907), (17, 12928),

Gene: Lukilu_29 Start: 10604, Stop: 10765, Start Num: 10

Candidate Starts for Lukilu_29:

(Start: 10 @10604 has 107 MA's), (Start: 12 @10634 has 11 MA's), (14, 10676), (16, 10727), (17, 10748),

Gene: Lunareta_35 Start: 11744, Stop: 11905, Start Num: 10

Candidate Starts for Lunareta_35:

(Start: 10 @11744 has 107 MA's), (Start: 12 @11774 has 11 MA's), (14, 11816), (16, 11867), (17, 11888),

Gene: Maby2021_37 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Maby2021_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Mangeria_38 Start: 12318, Stop: 12479, Start Num: 10

Candidate Starts for Mangeria_38:

(3, 12192), (8, 12303), (Start: 10 @12318 has 107 MA's), (Start: 12 @12348 has 11 MA's), (14, 12390), (16, 12441), (17, 12462),

Gene: McWolfish_35 Start: 11760, Stop: 11921, Start Num: 10

Candidate Starts for McWolfish_35:

(Start: 10 @11760 has 107 MA's), (Start: 12 @11790 has 11 MA's), (14, 11832), (16, 11883), (17, 11904),

Gene: Megamind_36 Start: 11998, Stop: 12159, Start Num: 10

Candidate Starts for Megamind_36:

(Start: 10 @11998 has 107 MA's), (Start: 12 @12028 has 11 MA's), (14, 12070), (16, 12121), (17, 12142),

Gene: Melpomini_34 Start: 10652, Stop: 10813, Start Num: 10

Candidate Starts for Melpomini_34:

(3, 10526), (8, 10637), (Start: 10 @10652 has 107 MA's), (Start: 12 @10682 has 11 MA's), (14, 10724), (16, 10775), (17, 10796),

Gene: MikeLiesIn_36 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for MikeLiesIn_36:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Mikro_34 Start: 12499, Stop: 12660, Start Num: 10

Candidate Starts for Mikro_34:

(Start: 10 @12499 has 107 MA's), (Start: 12 @12529 has 11 MA's), (14, 12571), (16, 12622), (17, 12643),

Gene: MoMoMixon_36 Start: 12109, Stop: 12270, Start Num: 10

Candidate Starts for MoMoMixon_36:

(3, 11983), (8, 12094), (Start: 10 @12109 has 107 MA's), (Start: 12 @12139 has 11 MA's), (14, 12181), (16, 12232), (17, 12253),

Gene: Montpel_35 Start: 11744, Stop: 11905, Start Num: 10
Candidate Starts for Montpel_35:
(Start: 10 @11744 has 107 MA's), (Start: 12 @11774 has 11 MA's), (14, 11816), (16, 11867), (17, 11888),

Gene: Morizzled23_35 Start: 10864, Stop: 11025, Start Num: 10
Candidate Starts for Morizzled23_35:
(Start: 10 @10864 has 107 MA's), (Start: 12 @10894 has 11 MA's), (14, 10936), (16, 10987), (17, 11008),

Gene: Napoleon13_34 Start: 10665, Stop: 10826, Start Num: 10
Candidate Starts for Napoleon13_34:
(3, 10539), (8, 10650), (Start: 10 @10665 has 107 MA's), (Start: 12 @10695 has 11 MA's), (14, 10737), (16, 10788), (17, 10809),

Gene: Naval22_38 Start: 12053, Stop: 12214, Start Num: 10
Candidate Starts for Naval22_38:
(Start: 10 @12053 has 107 MA's), (Start: 12 @12083 has 11 MA's), (14, 12125), (16, 12176), (17, 12197),

Gene: NedWong_37 Start: 12013, Stop: 12174, Start Num: 10
Candidate Starts for NedWong_37:
(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Nidhogg_36 Start: 11859, Stop: 12020, Start Num: 10
Candidate Starts for Nidhogg_36:
(3, 11733), (8, 11844), (Start: 10 @11859 has 107 MA's), (Start: 12 @11889 has 11 MA's), (14, 11931), (16, 11982), (17, 12003),

Gene: Norm_36 Start: 12044, Stop: 12175, Start Num: 12
Candidate Starts for Norm_36:
(Start: 12 @12044 has 11 MA's), (14, 12086), (16, 12137), (17, 12158),

Gene: NuevoMundo_38 Start: 12849, Stop: 13010, Start Num: 10
Candidate Starts for NuevoMundo_38:
(3, 12723), (8, 12834), (Start: 10 @12849 has 107 MA's), (Start: 12 @12879 has 11 MA's), (14, 12921), (16, 12972), (17, 12993),

Gene: OrediggerDelux_35 Start: 12013, Stop: 12174, Start Num: 10
Candidate Starts for OrediggerDelux_35:
(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: ParkTD_35 Start: 12013, Stop: 12174, Start Num: 10
Candidate Starts for ParkTD_35:
(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Phox_34 Start: 11959, Stop: 12120, Start Num: 10
Candidate Starts for Phox_34:
(3, 11833), (8, 11944), (Start: 10 @11959 has 107 MA's), (Start: 12 @11989 has 11 MA's), (14, 12031), (16, 12082), (17, 12103),

Gene: Phusco_36 Start: 11464, Stop: 11625, Start Num: 10

Candidate Starts for Phusco_36:

(Start: 10 @11464 has 107 MA's), (Start: 12 @11494 has 11 MA's), (14, 11536), (16, 11587), (17, 11608),

Gene: Pier_38 Start: 12171, Stop: 12332, Start Num: 10

Candidate Starts for Pier_38:

(Start: 10 @12171 has 107 MA's), (Start: 12 @12201 has 11 MA's), (14, 12243), (16, 12294), (17, 12315),

Gene: Pinkcreek_26 Start: 9368, Stop: 9499, Start Num: 12

Candidate Starts for Pinkcreek_26:

(Start: 12 @9368 has 11 MA's), (14, 9410), (16, 9461), (17, 9482),

Gene: Pio_39 Start: 12862, Stop: 13023, Start Num: 10

Candidate Starts for Pio_39:

(Start: 10 @12862 has 107 MA's), (Start: 12 @12892 has 11 MA's), (14, 12934), (16, 12985), (17, 13006),

Gene: Pleione_38 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Pleione_38:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Primadonna_31 Start: 11117, Stop: 11278, Start Num: 10

Candidate Starts for Primadonna_31:

(Start: 10 @11117 has 107 MA's), (Start: 12 @11147 has 11 MA's), (14, 11189), (16, 11240), (17, 11261),

Gene: PurduePete_35 Start: 11724, Stop: 11885, Start Num: 10

Candidate Starts for PurduePete_35:

(Start: 10 @11724 has 107 MA's), (Start: 12 @11754 has 11 MA's), (14, 11796), (16, 11847), (17, 11868),

Gene: Quasimodo_36 Start: 12428, Stop: 12589, Start Num: 10

Candidate Starts for Quasimodo_36:

(Start: 10 @12428 has 107 MA's), (Start: 12 @12458 has 11 MA's), (14, 12500), (16, 12551), (17, 12572),

Gene: Rahel_36 Start: 11464, Stop: 11625, Start Num: 10

Candidate Starts for Rahel_36:

(Start: 10 @11464 has 107 MA's), (Start: 12 @11494 has 11 MA's), (14, 11536), (16, 11587), (17, 11608),

Gene: Rizal_34 Start: 10930, Stop: 11091, Start Num: 10

Candidate Starts for Rizal_34:

(Start: 10 @10930 has 107 MA's), (Start: 12 @10960 has 11 MA's), (14, 11002), (16, 11053), (17, 11074),

Gene: RoMag_31 Start: 11262, Stop: 11423, Start Num: 10

Candidate Starts for RoMag_31:

(Start: 10 @11262 has 107 MA's), (Start: 12 @11292 has 11 MA's), (14, 11334), (16, 11385), (17, 11406),

Gene: Rocha_34 Start: 10958, Stop: 11119, Start Num: 10

Candidate Starts for Rocha_34:

(Start: 10 @10958 has 107 MA's), (Start: 12 @10988 has 11 MA's), (14, 11030), (16, 11081), (17, 11102),

Gene: Roots515_35 Start: 11822, Stop: 11953, Start Num: 12

Candidate Starts for Roots515_35:

(Start: 12 @11822 has 11 MA's), (14, 11864), (16, 11915), (17, 11936),

Gene: SVoro_35 Start: 12007, Stop: 12168, Start Num: 10

Candidate Starts for SVoro_35:

(Start: 10 @12007 has 107 MA's), (Start: 12 @12037 has 11 MA's), (14, 12079), (16, 12130), (17, 12151),

Gene: Salacia_38 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for Salacia_38:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: ScottMcG_35 Start: 12102, Stop: 12263, Start Num: 10

Candidate Starts for ScottMcG_35:

(3, 11976), (8, 12087), (Start: 10 @12102 has 107 MA's), (Start: 12 @12132 has 11 MA's), (14, 12174), (16, 12225), (17, 12246),

Gene: Shaqnato_32 Start: 10575, Stop: 10736, Start Num: 10

Candidate Starts for Shaqnato_32:

(Start: 10 @10575 has 107 MA's), (Start: 12 @10605 has 11 MA's), (14, 10647), (16, 10698), (17, 10719),

Gene: Shelob_36 Start: 12392, Stop: 12523, Start Num: 12

Candidate Starts for Shelob_36:

(Start: 12 @12392 has 11 MA's), (14, 12434), (16, 12485), (17, 12506),

Gene: Shrimp_36 Start: 12017, Stop: 12178, Start Num: 10

Candidate Starts for Shrimp_36:

(Start: 10 @12017 has 107 MA's), (Start: 12 @12047 has 11 MA's), (14, 12089), (16, 12140), (17, 12161),

Gene: Specks_40 Start: 13084, Stop: 13245, Start Num: 10

Candidate Starts for Specks_40:

(3, 12958), (8, 13069), (Start: 10 @13084 has 107 MA's), (Start: 12 @13114 has 11 MA's), (14, 13156), (16, 13207), (17, 13228),

Gene: Sprinklers_36 Start: 11502, Stop: 11663, Start Num: 10

Candidate Starts for Sprinklers_36:

(Start: 10 @11502 has 107 MA's), (Start: 12 @11532 has 11 MA's), (14, 11574), (16, 11625), (17, 11646),

Gene: Spud_37 Start: 12641, Stop: 12802, Start Num: 10

Candidate Starts for Spud_37:

(3, 12515), (8, 12626), (Start: 10 @12641 has 107 MA's), (Start: 12 @12671 has 11 MA's), (14, 12713), (16, 12764), (17, 12785),

Gene: SrishMeg2525_35 Start: 11724, Stop: 11885, Start Num: 10

Candidate Starts for SrishMeg2525_35:

(Start: 10 @11724 has 107 MA's), (Start: 12 @11754 has 11 MA's), (14, 11796), (16, 11847), (17, 11868),

Gene: Stubby_32 Start: 10769, Stop: 10900, Start Num: 12

Candidate Starts for Stubby_32:

(Start: 12 @10769 has 11 MA's), (14, 10811), (16, 10862), (17, 10883),

Gene: StubbySaigey_35 Start: 10653, Stop: 10814, Start Num: 10

Candidate Starts for StubbySaigey_35:

(Start: 10 @10653 has 107 MA's), (Start: 12 @10683 has 11 MA's), (14, 10725), (16, 10776), (17, 10797),

Gene: Teardrop_35 Start: 10929, Stop: 11090, Start Num: 10

Candidate Starts for Teardrop_35:

(Start: 10 @10929 has 107 MA's), (Start: 12 @10959 has 11 MA's), (14, 11001), (16, 11052), (17, 11073),

Gene: TinyTim_36 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for TinyTim_36:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Tonenili_41 Start: 13559, Stop: 13720, Start Num: 10

Candidate Starts for Tonenili_41:

(9, 13556), (Start: 10 @13559 has 107 MA's), (Start: 12 @13589 has 11 MA's), (14, 13631), (16, 13682), (17, 13703),

Gene: Trinitium_34 Start: 10700, Stop: 10861, Start Num: 10

Candidate Starts for Trinitium_34:

(3, 10574), (8, 10685), (Start: 10 @10700 has 107 MA's), (Start: 12 @10730 has 11 MA's), (14, 10772), (16, 10823), (17, 10844),

Gene: Turret_33 Start: 10423, Stop: 10584, Start Num: 10

Candidate Starts for Turret_33:

(3, 10297), (8, 10408), (Start: 10 @10423 has 107 MA's), (Start: 12 @10453 has 11 MA's), (14, 10495), (16, 10546), (17, 10567),

Gene: Vortrix_41 Start: 13510, Stop: 13671, Start Num: 10

Candidate Starts for Vortrix_41:

(3, 13384), (8, 13495), (Start: 10 @13510 has 107 MA's), (Start: 12 @13540 has 11 MA's), (14, 13582), (16, 13633), (17, 13654),

Gene: Wally_35 Start: 10885, Stop: 11046, Start Num: 10

Candidate Starts for Wally_35:

(Start: 10 @10885 has 107 MA's), (Start: 12 @10915 has 11 MA's), (14, 10957), (16, 11008), (17, 11029),

Gene: Willis_36 Start: 11908, Stop: 12069, Start Num: 10

Candidate Starts for Willis_36:

(Start: 10 @11908 has 107 MA's), (Start: 12 @11938 has 11 MA's), (14, 11980), (16, 12031), (17, 12052),

Gene: Yassified_33 Start: 10665, Stop: 10826, Start Num: 10

Candidate Starts for Yassified_33:

(Start: 10 @10665 has 107 MA's), (Start: 12 @10695 has 11 MA's), (14, 10737), (16, 10788), (17, 10809),

Gene: YemiJoy2021_37 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for YemiJoy2021_37:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),

Gene: Yucca_36 Start: 11935, Stop: 12096, Start Num: 10

Candidate Starts for Yucca_36:

(Start: 10 @11935 has 107 MA's), (Start: 12 @11965 has 11 MA's), (14, 12007), (16, 12058), (17, 12079),

Gene: Zalkecks_38 Start: 12017, Stop: 12178, Start Num: 10

Candidate Starts for Zalkecks_38:

(Start: 10 @12017 has 107 MA's), (Start: 12 @12047 has 11 MA's), (14, 12089), (16, 12140), (17, 12161),

Gene: Zeenon_38 Start: 11999, Stop: 12160, Start Num: 10

Candidate Starts for Zeenon_38:

(Start: 10 @11999 has 107 MA's), (Start: 12 @12029 has 11 MA's), (14, 12071), (16, 12122), (17, 12143),

Gene: ZygoTaiga_36 Start: 12013, Stop: 12174, Start Num: 10

Candidate Starts for ZygoTaiga_36:

(Start: 10 @12013 has 107 MA's), (Start: 12 @12043 has 11 MA's), (14, 12085), (16, 12136), (17, 12157),