Pham 166441


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 166441 Report

This analysis was run 07/09/24 on database version 566.
Pham number 166441 has 239 members, 15 are drafts.
Phages represented in each track:

- Track 1 : Big3_62
- Track 2 : MalagasyRose 36
- Track 3 : CindyLou_15, SilverDipper_16, Rizal_15, CharlieB_19, Daffodil_18, Megamind_16, PurdūePete_16, BanañaFence_17, StubbySaigey_16, Audrick_17, Gizmo_18, Spec_14, InigoMontoya_17, Rabinōvish_18, NedWong_17, Rahel_15, Derek_16, Burrough_17, Ava3_17, Quasimodo_15, Catera_15, ArcherS7_15, Caravan_18, MikeLiesln_17, ScottMcG_18, Kboogie_16, YemiJoy2021_17, Asterius_16, EmToTheThree_19, Pleione_18, Alexphander_85, Jedediā̄_16, Guwapp_15, Yassified_16, Tūrret_15, Target_62, Sprinklers_19, Willis_17, Delylah_19, Ngannou_15, Zalkecks_18, Ramsey 85, Blackdragon_15, Jemmno_15, Trinitium_15, lbOuu_79, Erdmann_17, ParkTD_16, SrishMeg2525_16, Bread_17, ZygoTaiga_17, McGee_16, Sassafras_82, Ghost_16, BadAgartude_ 20, Izajani_17, Dietrick_13, Yucca_16, Latch_15, Issimir_16, Chomp_14, Phlegm_17, Gamgam_15, Capablānca_17, Māby2021_17, Matsumōto_14, Zeenon_19, Phox_18, YoungMoneỳMata_16, FudḡeTart_17, BangTa1971_15, S̄alacia_18, GÚmbie_80, Lee7_16, RockyHörror_86, EasyJōnes_16, Adlitam_15, Cactojaque_14
- Track 4 : Sauce_20, IkeLoa_14, Bigswole_23, Piē_20, Specks_22, Spud_21, NuevoMundo_22, DTDevon_19, InterFolia_24, FrayBell 24, NoodleTree_17, Ronan_14, LordLeafolot 24, StephanieG_19, RoMag_1 $\overline{3}$, Mikro 17, QBērt_17, Sebata_20, Shaqnato_15, LolaVinca_21, JulietS_14, Kamryn_17, Bxz1_20, Tyke_20, Astraea_19, Lukilu_13, Drazdys_19, Pio_21, Grungle_13
- Track 5 : Loanshark_16, JPickles_15, Patter_15, Flabslab_20, Babyland_15,

Shnickers_15, TinyTim_16, FoxtrotP1_17, ErnieJ_19, Atlantean_15, Ewok_16, Jessibeth14_16, Roots515_16, Khaleesi_16, Chargie21_15, ET0̄8_15, Firehouse51_78, Essence_15, ShiaLabeouf_15, ValleyTerrace_15, ChaylaJr_15, Shelob_19, Bipolarisk_16, JustHall_15, EmmaElysia_15, Jaygup_15, Blackbrain_15, Amataga_15, Melpomini_15, LRRHood_17, DrPhinkD̄addy_16, Darko_15, Napoleon13_15, Ading_15, Inventum_79, Dorothy_82, Wally 15, LifeSavor_16, Breeniome_16, SmallFry_15, Delilah_16, Norm_1 $\overline{6}$, Fludd_15, Janiyra_15, Naija_15, BackyardAgain_14, Morizzled23_15, Tortoise16_14, Cali_ 20 , Basquiat_15, Littleton_16, Mc̄Wolfish_16, Pivoine_15, Momo_15, Gabriel_16, Teardrop_15, ChickenPhender_15, Bōnray_16, Shrimp_16, Phusco_15

- Track 6 : BeanWTater_14, Halldule_15, Koguma_15, MoMoMixon_20, Nidhogg_20, Naval22 20
- Track 7 : Tonenili 23
- Track 8 : LinStu_20
- Track 9 : Marshmallow_7, Paperbeatsrock_7, StolenFromERC_7, Wiggin_7,

Pharsalus_7, Tuco_7, Ad̄nama_7, Henry_7, Gage_7, GooberAzure_7, NelitzaMV_7, BadStone_6, StellaBean_7, Miniwave_7,ABCat_6, TeardropMSU_6, CrystalP_7, Kostya_7,Tarkin_7, Gold̄ilocks_7, Mindy_7, Gemini_7, ShamWow_7, Rakim_7, SophK $\bar{B} \_7$, Kimchi_7, Command613_7, Toto_7, Argent26_7, TBrady12_7, Myrale_7, GoldenSpark_7, Xāndras_7, BilboSwaggins_7, Hoonter_7

- Track 10 : Moldemort_6, Quallification_7, Bench_7, Cactus_7, Kanye_7,

DoctorDiddles_6, Czysz̄czon1_6, Highbūry_6, Simpliphy_6, Saints25_6, Stank_7, HanKaySha 6, OrionPax_6, DrDrey_7, ShēreKhan_7, NoSleep_6, Hōlt_7

- Track 11 : ĀmericanBeauty_7
- Track 12 : Amao 7
- Track 13 : YassJohnny_7
- Track 14 : Lilizi_7
- Track 15 : KristāRAM_81, Mozy_90, LittleE_75
- Track 16 : RedBird $8 \overline{2}$
- Track 17 : Omnicron 37
- Track 18 : MooMoo_76


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

The start number called the most often in the published annotations is 21 , it was called in 106 of the 224 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adlitam_15, Alexphander_85, ArcherS7_15, Asterius_16, Astraea_19, Audrick_17, Ava3_17, BadAgartude_20, BananaFence_17, Bangla1971_15, BeanWater_14, Bigswole_23, Blackdragon_15, Bread_17, Burrough_17, Bxz1_20, Cactojaque_14, Capablanca_17, Caravan_18, Catera_15, CharlieB 19, Chomp_14, CindyLou_15, DTDevon_19, Daffodil_18, Delylah_19, Derek_16, Dietrick_13, Drazdys_19, EasyJones_16, EmToTheThree_19, Erdmann_17, FrayBell_24, FudgeTart_17, GUmbie_80 , Gamgam_15, Ghost_16, Gizmo_18, Grungle_13, Guwapp_15, Halldule_15, IbOuu_79, IkeLoa_14, InigoMontoya_17, InterFolia_24, Issimir_16, Izajani_17, Jedediah_16, Jemmno_15, JulietS_14, Kamryn_17, Kboogie_16, Koguma_15, KristaRĀM_81, Latch_15, Lee7_16, LittleE_75, LolaVinca_ $\overline{2} 1$, LordLeafolot 24, Lukilu_13, Maby2021_17, Matsumoto_14, McGee_16, Megamind_16, MikeLies̄n_17, Mikro_17, MoMoMixon_20, Mozy_90, Naval22_20, NedWong_17, Ngannou_15, Nidhogg_20, NoodleTree_17, NuevōMundo_22, ParkTD_16, Phlegm_17, Phox_18, Pier_20, Pio_21, Pléione_18, Purdue $\overline{\text { Pete_16, }}$ QBert $\overline{17}$, Quasimodo_15, Rabinovish_18, Rahel_15, Ramsey_85, RedBird_82, Rizal_15, RoMag_13, RockyHorror_86, Ronan_14, Salacia_18, Sassafras_82, Sauce_ 20, ScottM̄̄G_18, Sebata_20, Shaqnatō_15, SilverD̄ipper_16, Spē_14, Specks_22, Sprinklers_19, Spud_21, SrishMeg2525_16, StephanieG_19, StubbySaigey_16, Target_62, Tonenili_23, Trinitium_15, Turret_15, Tyke_20, Willis_17, Yassified_16, YemiJoy2021_17, YoungMōneyMata_16, Yucca_16, Zalkecks_18, Zeenōn_19, ZygoTaiga_17,

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

- Ading_15, Amataga 15, Atlantean_15, Babyland_15, BackyardAgain_14, Basquiat_15, Big3_62, Bipolarisk_1̄ , Blackbrain_15, Bonray_16, Breeniome_16, Cali_20, C̄hargie21_15, ChaylaJr_15, ChickenPhēnder_15, Darko_15, Delilā̄_16,

Dorothy_82, DrPhinkDaddy_16, ET08_15, EmmaElysia_15, ErnieJ_19, Essence_15, Ewok_16, Firehouse51_78, Flabslab_20, Fludd_15, FoxtrotP1_17, Gabriel_16, Inven̄̄um_79, JPickles_15, Janiyra_15, Jaygup_15, Jessibeth14_16, JustHall_15, Khaleesi_16, LRRHood_17, LifeSavor_16, LinStu_20, Littleton_16, Loanshark_16, MalagasȳRose_36, McW̄olfish_16, Mē̄pomini_15, Momo_15, Morizzled23_15, Naija_15, Napoleon13_15, Norm_16, Patter_15, Phusco_15, Pivoine_15, Roots515_16, Shelob_19, ShiaLābeouf_15, Shnickers_15, Shrimp_1 $\overline{6}$, SmallFry_15, Teardrop_15, TinyTim_16, Tortoise16_14, ValleyTerrace__15, Wally_15,

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

- ABCat_6, Adnama_7, Amao_7, AmericanBeauty_7, Argent26_7, BadStone_6,

Bench_7, BilboSwaggins_7, Cactus_7, Command6̄13_7, CrystalP_7, Czyszcz̄on1_6,
DoctorD̄iddles_6, DrDrey_7, Gage_7, Gemini_7, GoldēnSpark_7, Goldilocks_7,
GooberAzure_7, HanKaySha_6, Hēnry_7, Highbury_6, Holt_7, Hoonter_7, Kānye_7, Kimchi_7, Kostya_7, Lilizi_7, Marshmallow_7, Mindy_7, Miniwave_7, Mōldemort_6, MooMoo_76, Myrale_7, NelitzaMV_7, NoSleep_6, Omnicron_37, OrionPax_6, Paperbeatsrock_7, Pharsalus_7, Quallification_7, Rakim_7, Saints25_6, ShamWow_7, ShereKhan_7, Simpliphy_6, Sop̄KB_7, Stank_7, StellaBean_7, StolenFromenc_7, TBrady 12_7, Tarkin_7, Teardrō̄MSU_6, Toto_7, Tuco_7, Wiggin_7, Xandras_7, YassJoh̄nny_7,

## Summary by start number:

Start 8:

- Found in 1 of 239 ( $0.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: MalagasyRose_36 (AG),

Start 10:

- Found in 31 of 239 ( $13.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $3.2 \%$ of time when present
- Phage (with cluster) where this start called: LinStu_20 (C1),

Start 13:

- Found in 139 of 239 ( $58.2 \%$ ) of genes in pham
- Manual Annotations of this start: 60 of 224
- Called $43.2 \%$ of time when present
- Phage (with cluster) where this start called: Ading_15 (C1), Amataga_15 (C1),

Atlantean_15 (C1), Babyland_15 (C1), BackyardAgain_14 (C1), Basquiat_15 (C1), Bipolarisk_16 (C1), Blackbrain_15 (C1), Bonray_16 (C1), Breeniome_16 (C1), Cali_20 (두), Chargie21_15 (두), ChaylaJr_15 (C1), ChickenPhender_15 (C1), Darko_15 (C1), Delilah_16 (C1), Dorothy_82 (F1), DrPhinkDaddy_16 (C1), ET08_15 (C1), EmmaElysia 15 (C1), ErnieJ_19 (C1), Essence_15 (C1), Ewok 16 (C1), Firehouse51_78 (F1), Flabslab_20 (C1), Fludd_15 (C1 1 ), FoxtrotP1_17 (C1), Gabriel_16 ( $\overline{\mathrm{C}} 1$ ), Inventum_79 (F1), JPickles_15 (C1), Janiyra_15 (C1), Jaygup_15 (C1), Jessibeth14_16 (C1), JustHall_15 (C1), Khaleesi_16 (C1), LRRHood 17 (C1), LifeSavor_16 (C1), Littleton_16 (C1), Loanshark_16 (C1), McWolfish_16 (C1), Melpomini_15 (C1), Momo_15 (C1), Morizzled23_15 (C1), Naija_15 (C1), Napoleon1" 15 (C1), Norm_16 (C1), Patter_15 (C1), Phusco_15 (C1), Pivoine_15 (C1), Roots515_16 (C1), Shelob_19 (C1), ShiaLabeouf_15 (C1), Shnickers_15 (C1), Shrimp_16 (C1), SmallFry_15 (C1), Teardrop_15 (C1), TinyTim_16 (C1),

Tortoise16_14 (C1), ValleyTerrace_15 (C1), Wally_15 (C1),
Start 14:

- Found in 140 of 239 ( $58.6 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $0.7 \%$ of time when present
- Phage (with cluster) where this start called: Big3_62 (A1),

Start 19:

- Found in 1 of 239 ( $0.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Omnicron_37 (K5),

Start 20:

- Found in 56 of 239 ( $23.4 \%$ ) of genes in pham
- Manual Annotations of this start: 52 of 224
- Called $96.4 \%$ of time when present
- Phage (with cluster) where this start called: ABCat_6 (E), Adnama_7 (E), Amao_7
(E), Argent26_7 (E), BadStone_6 (E), Bench_7 (E), BilboSwaggins_7 (E), Cactus_7
(E), Command̄613_7 (E), CrystalP_7 (E), Czȳszczon1_6 (E), DoctorDiddles_6 (E), DrDrey_7 (E), Gage_7 (E), Gemini_7 (E), GoldenSpark 7 (E), Goldilocks_7 (E), GooberAzzure_7 (E), HanKaySha_6 (E), Henry_7 (E), Highbury_6 (E), Holt 7 (E), Hoonter_7 (E), Kanye_7 (E), Kimchi_7 (E), Kostya_7 (E), Lilizi_7 (E), Marshmallow_7 (E), Mindy_7 (E), Miniwave_7 (E), Mōldemort_6 (E), Myrale_7 (E), NelitzaMV_7 (E), NoSleep_6 (E), OrionPax_6 (E), Paperbeatsrock_7 (E), Pharsalus_7 (E),
Quallification_7 (E), Rakim_7 (E), Saints25_6 (E), ShamWow_7 (E), ShereKhan_7 (E), Simpliphy_6 (E), SophK̄_7 (E), Stank_7 (E), StellaBean_7 (E),

StolenFromERC_7 (E), TBrady12_7 (E), Tarkin_7 (E), TeardropMSU_6 (E), Toto_7 (E), Tuco_7 (E), Wiggin_7 (E), Xandras_7 (E),

Start 21:

- Found in 181 of 239 ( $75.7 \%$ ) of genes in pham
- Manual Annotations of this start: 106 of 224
- Called $65.2 \%$ of time when present
- Phage (with cluster) where this start called: Adlitam_15 (C1), Alexphander_85 (F1), ArcherS7_15 (C1), Asterius_16 (C1), Astraea_19 (C1), Audrick_17 (C1), Ava3_17 (C1), BadĀgartude_20 (C1), BananaFence_17 (C1), Bangla1971_15 (C1), BeanWater_14 (C1), Bigswole_23 (C1), Blackdragon_15 (C1), Bread_17 (C1), Burrough_17 (C1), Bxz1_20 (C1), Cactojaque_14 (C1), Capablanca_17 (C1), Caravan 18 (C1), Caterā15 (C1), CharlieB_19 (C1), Chomp_14 (C1), CindyLou_15 (C1), DTD̄evon_19 (C1), D̄affodil_18 (C1), Dēlylah_19 (C1), Derek_16 (C1), Dietrick_13 (C1), Drazdys_19 (C1), EasyJones_16(C1), EmToTheThree_19 (C1), Erdmann_17 (C1), FrayBell_24 (C1), FudgeTart_17 (C1), GUmbie_80 (F1), Gamgam ${ }_{-1} 15$ (C1), Ghost_16(C1), Gizmo_18(C1), Grungle_13 (C1), Guwapp_15
(C1), Hall्वule 15 (C1), IbOuu 79 (F1), IkēLoa_14 (C1), InigōMontoya_17 (C1), InterFolia_24 (C1), Issimir_16(C1), Izajani_17(C1), Jedediah_16 (C1), Jemmno_15 (C1), JulietS_14 (C1), Kam̄ryn_17 (C1), Kboogie_16 (C1), Koguma_15 (C1),
KristaRAM_81 (F1), Latch_15 (C1), Lee7_16 (C1), LittleE_75 (J), LōlaVinca 21 (C1), LordLeafolot_24 (C1), Lukīlu_13 (C1), Mā̄y2021_17 (C1), Matsumoto_14 (두), McGee_16 (드), Megamind_16 (C1), MikeLiesIn_17 (C1), Mikro_17 (C1), MoMoMixon_20 (C1), Mozy_90 (F1), Naval22_20 (C1), NedWong_17 (C1), Ngannou_15 (C1), Nidhogg_20 (C1), NoodleTree_17 (C1), NuevoMundo_22 (C1),

ParkTD_16 (C1), Phlegm_17 (C1), Phox_18 (C1), Pier_20 (C1), Pio_21 (C1), Pleione_18 (C1), PurduePete_16 (C1), QBert_17 (C1), Quasimodo_15 (C1), Rabinovish_18 (C1), Rahel_15 (C1), Ramsey_85 (F1), RedBird_82 (F1), Rizal_15 (C1), RoMag_13 (C1), RockyHorror_86 (F1), Ronan_14 (C1), Sālacia_18 (C1), Sassafras_82 (F1), Sauce_20 (C1), ScottMcG_18 (C-1), Sebata_20 (C1), Shaqnato_15 (C1), SilverDipper_16 (C1), Spec_14 (C1), Specks_22 (C1), Sprinklers 19 (C1), Spud_21 (C1), SrishMeg2525_16 (C1), StephanieG_19 (C1), StubbySaigey $16(\mathrm{C} 1)$, Tārget 62 (A1), Tonenili_ 23 (C1), Trinitium $15(\mathrm{C} 1)$, Turret_15 (C1), Tyke_20 (C1), Willis_17 (C1), Yāssified_16 (C1), YēmiJoy2021_17 (C1), ȲoungMoneyMāta_16 (C1), Yūcca_16 (C1), Zalkecks_18 (C1), Zeenon_1 $\overline{9}$ (C1), ZygoTaiga_17 (C1),

Start 22:

- Found in 1 of 239 ( $0.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: MooMoo_76 (singleton),

Start 24:

- Found in 239 of 239 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 224
- Called $0.8 \%$ of time when present
- Phage (with cluster) where this start called: AmericanBeauty_7 (E), YassJohnny_7 (E),


## Summary by clusters:

There are 8 clusters represented in this pham: $F 1$, singleton, $E, A G, J, A 1, K 5, C 1$, Info for manual annotations of cluster A1:

- Start number 14 was manually annotated 1 time for cluster A1.
- Start number 21 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AG:

- Start number 8 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster C1:

- Start number 10 was manually annotated 1 time for cluster C1.
- Start number 13 was manually annotated 57 times for cluster C1.
- Start number 21 was manually annotated 96 times for cluster C1.

Info for manual annotations of cluster E:

- Start number 20 was manually annotated 52 times for cluster $E$.
- Start number 24 was manually annotated 1 time for cluster E .

Info for manual annotations of cluster F1:

- Start number 13 was manually annotated 3 times for cluster F1.
- Start number 21 was manually annotated 8 times for cluster F1.

Info for manual annotations of cluster J:

- Start number 21 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster K5:

- Start number 19 was manually annotated 1 time for cluster K5.


## Gene Information:

Gene: ABCat_6 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for ABCat_6:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Ading_15 Start: 4599, Stop: 4961, Start Num: 13
Candidate Starts for Ading_15:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start: 24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),

Gene: Adlitam_15 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Adlitam_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Adnama_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Adnama_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Alexphander_85 Start: 50319, Stop: 50651, Start Num: 21
Candidate Starts for Alexphander_85:
(Start: 13 @50289 has 60 MA's), (Start: 14 @50295 has 1 MA's), (Start: 21 @50319 has 106 MA's), (Start: 24 @50343 has 1 MA's), $(29,50397),(35,50481),(38,50508),(42,50559)$,

Gene: Amao_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Amao_7:
(4, 1349), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: Amataga_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Amataga_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: AmericanBeauty_7 Start: 1535, Stop: 1852, Start Num: 24
Candidate Starts for AmericanBeauty_7:
(7, 1436), (Start: 20 @1508 has 52 MA's), (Start: 24 @1535 has 1 MA's), (27, 1577), (40, 1730),
Gene: ArcherS7_15 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for ArcherS7_15:
(Start: 13 @ 4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Argent26_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Argent26_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Asterius_16 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Asterius_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), ( 29,5793 ), ( 35,5877 ), ( 38,5904 ), ( 42,5955 ),

Gene: Astraea_19 Start: 6075, Stop: 6413, Start Num: 21
Candidate Starts for Astraea_19:
(Start: 10 @6027 has 1 MA's), (11, 6033), (Start: 21 @6075 has 106 MA's), (Start: 24 @6099 has 1
MA's), (29, 6153), (35, 6237), (38, 6264), (42, 6315),
Gene: Atlantean_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Atlantean_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Audrick_17 Start: 4629, Stop: 4961, Start Num: 21
Candidate Starts for Audrick_17:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start: 24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),

Gene: Ava3_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Ava3_17:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Babyland_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Babyland_15:
(Start: 13 @ 4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @ 4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: BackyardAgain_14 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for BackyardAgain_14:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: BadAgartude_20 Start: 6796, Stop: 7134, Start Num: 21
Candidate Starts for BadAgartude_20:
(Start: 13 @6766 has 60 MA's), (Start: 14 @6772 has 1 MA's), (Start: 21 @6796 has 106 MA's), (Start:
24 @6820 has 1 MA's), (29, 6874), (35, 6958), (38, 6985), (42, 7036),
Gene: BadStone_6 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for BadStone_6:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: BananaFence_17 Start: 5651, Stop: 5983, Start Num: 21
Candidate Starts for BananaFence_17:
(Start: 13 @ 5621 has 60 MA's), (Start: 14 @ 5627 has 1 MA's), (Start: 21 @ 5651 has 106 MA's), (Start: 24 @ 5675 has 1 MA's), $(29,5729),(35,5813),(38,5840),(42,5891)$,

Gene: Bangla1971_15 Start: 4646, Stop: 4978, Start Num: 21 Candidate Starts for Bangla1971_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Basquiat_15 Start: 4601, Stop: 4963, Start Num: 13
Candidate Starts for Basquiat_15:
(Start: 13 @4601 has 60 MA's), (Start: 14 @4607 has 1 MA's), (Start: 21 @4631 has 106 MA's), (Start: 24 @4655 has 1 MA's), (29, 4709), (35, 4793), (38, 4820), (42, 4871),

Gene: BeanWater_14 Start: 5778, Stop: 6116, Start Num: 21
Candidate Starts for BeanWater_14:
(Start: 21 @5778 has 106 MA's), (Start: 24 @5802 has 1 MA's), (29, 5856), (35, 5940), (38, 5967),
(42, 6018),
Gene: Bench_7 Start: 1582, Stop: 1926, Start Num: 20
Candidate Starts for Bench_7:
(7, 1510), (Start: 20 @1582 has 52 MA's), (Start: 24 @1609 has 1 MA's), (27, 1651), (40, 1804),
Gene: Big3_62 Start: 42061, Stop: 41699, Start Num: 14
Candidate Starts for Big3_62:
(12, 42079), (Start: 14 @42061 has 1 MA's), (17, 42049), (Start: 21 @42037 has 106 MA's), (Start: 24 @42013 has 1 MA's), (29, 41959), (35, 41875), (38, 41848), (42, 41797),

Gene: Bigswole_23 Start: 7791, Stop: 8129, Start Num: 21
Candidate Starts for Bigswole_23:
(Start: 10 @7743 has 1 MA's), (11, 7749), (Start: 21 @7791 has 106 MA's), (Start: 24 @ 7815 has 1
MA's), (29, 7869), (35, 7953), (38, 7980), (42, 8031),
Gene: BilboSwaggins_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for BilboSwaggins_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Bipolarisk_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Bipolarisk_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Blackbrain_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Blackbrain_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Blackdragon_15 Start: 5205, Stop: 5543, Start Num: 21
Candidate Starts for Blackdragon_15:
(Start: 13 @5175 has 60 MA's), (Start: 14 @5181 has 1 MA's), (Start: 21 @5205 has 106 MA's), (Start: 24 @5229 has 1 MA's), (29, 5283), (35, 5367), (38, 5394), (42, 5445),

Gene: Bonray_16 Start: 5679, Stop: 6041, Start Num: 13
Candidate Starts for Bonray_16:
(Start: 13 @5679 has 60 MA's), (Start: 14 @5685 has 1 MA's), (Start: 21 @5709 has 106 MA's), (Start:
24 @5733 has 1 MA's), (29, 5787), (35, 5871), (38, 5898), (42, 5949),
Gene: Bread_17 Start: 5715, Stop: 6047, Start Num: 21

Candidate Starts for Bread_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Breeniome_16 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Breeniome_16:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Burrough_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Burrough_17:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Bxz1_20 Start: 6901, Stop: 7239, Start Num: 21
Candidate Starts for Bxz1_20:
(Start: 10 @6853 has 1 MA's), (11, 6859), (Start: 21 @6901 has 106 MA's), (Start: 24 @6925 has 1
MA's), (29, 6979), (35, 7063), ( 38,7090 ), ( 42,7141 ),
Gene: Cactojaque_14 Start: 4580, Stop: 4912, Start Num: 21
Candidate Starts for Cactojaque_14:
(Start: 13 @ 4550 has 60 MA's), (Start: 14 @ 4556 has 1 MA's), (Start: 21 @4580 has 106 MA's), (Start: 24 @4604 has 1 MA's), (29, 4658), (35, 4742), (38, 4769), (42, 4820),

Gene: Cactus_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Cactus_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: Cali_20 Start: 7742, Stop: 8110, Start Num: 13
Candidate Starts for Cali_20:
(Start: 13 @7742 has 60 MA's), (Start: 14 @ 7748 has 1 MA's), (Start: 21 @ 7772 has 106 MA's), (Start:
24 @7796 has 1 MA's), (29, 7850), (35, 7934), (38, 7961), (42, 8012),
Gene: Capablanca_17 Start: 5730, Stop: 6062, Start Num: 21
Candidate Starts for Capablanca_17:
(Start: 13 @ 5700 has 60 MA's), (Start: 14 @5706 has 1 MA's), (Start: 21 @ 5730 has 106 MA's), (Start:
24 @5754 has 1 MA's), (29, 5808), ( 35,5892 ), ( 38,5919 ), ( 42,5970 ),
Gene: Caravan_18 Start: 5742, Stop: 6080, Start Num: 21
Candidate Starts for Caravan_18:
(Start: 13 @ 5712 has 60 MA's), (Start: 14 @ 5718 has 1 MA's), (Start: 21 @ 5742 has 106 MA's), (Start: 24 @5766 has 1 MA's), (29, 5820), (35, 5904), (38, 5931), (42, 5982),

Gene: Catera_15 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Catera_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Chargie21_15 Start: 4601, Stop: 4963, Start Num: 13
Candidate Starts for Chargie21_15:
(Start: 13 @4601 has 60 MA's), (Start: 14 @4607 has 1 MA's), (Start: 21 @4631 has 106 MA's), (Start:
24 @4655 has 1 MA's), (29, 4709), (35, 4793), (38, 4820), (42, 4871),

Gene: CharlieB_19 Start: 5737, Stop: 6075, Start Num: 21
Candidate Starts for CharlieB_19:
(Start: 13 @5707 has 60 MA's), (Start: 14 @5713 has 1 MA's), (Start: 21 @5737 has 106 MA's), (Start:
24 @5761 has 1 MA's), (29, 5815), (35, 5899), (38, 5926), (42, 5977),
Gene: ChaylaJr_15 Start: 4643, Stop: 5005, Start Num: 13
Candidate Starts for ChaylaJr_15:
(Start: 13 @4643 has 60 MA's), (Start: 14 @4649 has 1 MA's), (Start: 21 @4673 has 106 MA's), (Start: 24 @4697 has 1 MA's), (29, 4751), (35, 4835), (38, 4862), (42, 4913),

Gene: ChickenPhender_15 Start: 4601, Stop: 4963, Start Num: 13
Candidate Starts for ChickenPhender_15:
(Start: 13 @4601 has 60 MA's), (Start: 14 @4607 has 1 MA's), (Start: 21 @4631 has 106 MA's), (Start:
24 @4655 has 1 MA's), (29, 4709), (35, 4793), (38, 4820), (42, 4871),
Gene: Chomp_14 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Chomp_14:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: CindyLou_15 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for CindyLou_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Command613_7 Start: 1382, Stop: 1726, Start Num: 20
Candidate Starts for Command613_7:
(4, 1220), (7, 1310), (Start: 20 @1382 has 52 MA's), (Start: 24 @1409 has 1 MA's), (27, 1451), (40, 1604),

Gene: CrystalP_7 Start: 1511, Stop: 1855, Start Num: 20 Candidate Starts for CrystalP_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Czyszczon1_6 Start: 1467, Stop: 1811, Start Num: 20
Candidate Starts for Czyszczon1_6:
(7, 1395), (Start: 20 @1467 has 52 MA's), (Start: 24 @1494 has 1 MA's), (27, 1536), (40, 1689),
Gene: DTDevon_19 Start: 6522, Stop: 6860, Start Num: 21
Candidate Starts for DTDevon_19:
(Start: 10 @6474 has 1 MA's), ( 11,6480 ), (Start: 21 @6522 has 106 MA's), (Start: 24 @6546 has 1 MA's), ( 29,6600 ), ( 35,6684 ), $(38,6711),(42,6762)$,

Gene: Daffodil_18 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Daffodil_18:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Darko_15 Start: 5590, Stop: 5952, Start Num: 13
Candidate Starts for Darko_15:
(Start: 13 @5590 has 60 MA's), (Start: 14 @5596 has 1 MA's), (Start: 21 @5620 has 106 MA's), (Start:
24 @5644 has 1 MA's), (29, 5698), (35, 5782), (38, 5809), (42, 5860),

Gene: Delilah_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Delilah_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), $(29,5793),(35,5877),(38,5904),(42,5955)$,

Gene: Delylah_19 Start: 5742, Stop: 6074, Start Num: 21
Candidate Starts for Delylah_19:
(Start: 13 @5712 has 60 MA's), (Start: 14 @5718 has 1 MA's), (Start: 21 @ 5742 has 106 MA's), (Start:
24 @ 5766 has 1 MA's), ( 29,5820 ), ( 35,5904 ), ( 38,5931 ), ( 42,5982 ),
Gene: Derek_16 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Derek_16:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Dietrick_13 Start: 4648, Stop: 4980, Start Num: 21
Candidate Starts for Dietrick_13:
(Start: 13 @ 4618 has 60 MA's), (Start: 14 @4624 has 1 MA's), (Start: 21 @4648 has 106 MA's), (Start: 24 @4672 has 1 MA's), (29, 4726), (35, 4810), (38, 4837), (42, 4888),

Gene: DoctorDiddles_6 Start: 1464, Stop: 1808, Start Num: 20
Candidate Starts for DoctorDiddles_6:
(7, 1392), (Start: 20 @1464 has 52 MA's), (Start: 24 @1491 has 1 MA's), (27, 1533), (40, 1686),
Gene: Dorothy_82 Start: 50681, Stop: 51043, Start Num: 13
Candidate Starts for Dorothy_82:
(Start: 13 @ 50681 has 60 MA's), (Start: 14 @50687 has 1 MA's), (Start: 21 @ 50711 has 106 MA's),
(Start: 24 @50735 has 1 MA's), $(29,50789),(35,50873),(38,50900),(42,50951)$,
Gene: DrDrey_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for DrDrey_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: DrPhinkDaddy_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for DrPhinkDaddy_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Drazdys_19 Start: 6223, Stop: 6561, Start Num: 21
Candidate Starts for Drazdys_19:
(Start: 10 @ 6175 has 1 MA's), ( 11,6181 ), (Start: 21 @6223 has 106 MA's), (Start: 24 @ 6247 has 1
MA's), $(29,6301),(35,6385),(38,6412),(42,6463)$,
Gene: ET08_15 Start: 6135, Stop: 6503, Start Num: 13
Candidate Starts for ET08_15:
(Start: 13 @6135 has 60 MA's), (Start: 14 @6141 has 1 MA's), (Start: 21 @6165 has 106 MA's), (Start: 24 @6189 has 1 MA's), (29, 6243), (35, 6327), (38, 6354), (42, 6405),

Gene: EasyJones_16 Start: 4631, Stop: 4963, Start Num: 21
Candidate Starts for EasyJones_16:
(Start: 13 @4601 has 60 MA's), (Start: 14 @4607 has 1 MA's), (Start: 21 @4631 has 106 MA's), (Start:
24 @4655 has 1 MA's), (29, 4709), (35, 4793), (38, 4820), (42, 4871),

Gene: EmToTheThree_19 Start: 7129, Stop: 7461, Start Num: 21
Candidate Starts for EmToTheThree_19:
(Start: 13 @7099 has 60 MA's), (Start: 14 @ 7105 has 1 MA's), (Start: 21 @ 7129 has 106 MA's), (Start: 24 @7153 has 1 MA's), (29, 7207), (35, 7291), (38, 7318), (42, 7369),

Gene: EmmaElysia_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for EmmaElysia_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Erdmann_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Erdmann_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: ErnieJ_19 Start: 5791, Stop: 6153, Start Num: 13
Candidate Starts for ErnieJ_19:
(Start: 13 @5791 has 60 MA's), (Start: 14 @5797 has 1 MA's), (Start: 21 @5821 has 106 MA's), (Start: 24 @5845 has 1 MA's), (29, 5899), ( 35,5983 ), ( 38,6010 ), ( 42,6061 ),

Gene: Essence_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Essence_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Ewok_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Ewok_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), ( 29,5793 ), ( 35,5877 ), $(38,5904)$, $(42,5955)$,
Gene: Firehouse51_78 Start: 50333, Stop: 50695, Start Num: 13
Candidate Starts for Firehouse51_78:
(Start: 13 @50333 has 60 MA's), (Start: 14 @50339 has 1 MA's), (Start: 21 @50363 has 106 MA's), (Start: 24 @50387 has 1 MA's), $(29,50441),(35,50525),(38,50552),(42,50603)$,

Gene: Flabslab_20 Start: 6552, Stop: 6914, Start Num: 13
Candidate Starts for Flabslab_20:
(Start: 13 @6552 has 60 MA's), (Start: 14 @6558 has 1 MA's), (Start: 21 @6582 has 106 MA's), (Start:
24 @6606 has 1 MA's), (29, 6660), (35, 6744), (38, 6771), (42, 6822),
Gene: Fludd_15 Start: 4602, Stop: 4964, Start Num: 13
Candidate Starts for Fludd_15:
(Start: 13 @4602 has 60 MA's), (Start: 14 @4608 has 1 MA's), (Start: 21 @4632 has 106 MA's), (Start:
24 @4656 has 1 MA's), (29, 4710), (35, 4794), (38, 4821), (42, 4872),
Gene: FoxtrotP1_17 Start: 6244, Stop: 6606, Start Num: 13
Candidate Starts for FoxtrotP1_17:
(Start: 13 @6244 has 60 MA's), (Start: 14 @6250 has 1 MA's), (Start: 21 @6274 has 106 MA's), (Start:
24 @6298 has 1 MA's), (29, 6352), (35, 6436), (38, 6463), (42, 6514),
Gene: FrayBell_24 Start: 8048, Stop: 8386, Start Num: 21
Candidate Starts for FrayBell_24:
(Start: 10 @8000 has 1 MA's), ( 11,8006 ), (Start: 21 @8048 has 106 MA's), (Start: 24 @8072 has 1 MA's), (29, 8126), (35, 8210), (38, 8237), (42, 8288),

Gene: FudgeTart_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for FudgeTart_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), ( 29,5793 ), ( 35,5877 ), ( 38,5904 ), ( 42,5955 ),

Gene: GUmbie_80 Start: 49078, Stop: 49410, Start Num: 21
Candidate Starts for GUmbie_80:
(Start: 13 @49048 has 60 MA's), (Start: 14 @49054 has 1 MA's), (Start: 21 @49078 has 106 MA's), (Start: 24 @49102 has 1 MA's), (29, 49156), (35, 49240), (38, 49267), (42, 49318),

Gene: Gabriel_16 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Gabriel_16:
(Start: 13 @ 4616 has 60 MA's), (Start: 14 @ 4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), ( 29,4724 ), ( 35,4808 ), $(38,4835),(42,4886)$,
Gene: Gage_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Gage_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Gamgam_15 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Gamgam_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Gemini_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Gemini_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Ghost_16 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Ghost_16:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @ 4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Gizmo_18 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Gizmo_18:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), ( 29,5793 ), ( 35,5877 ), $(38,5904),(42,5955)$,

Gene: GoldenSpark_7 Start: 1511, Stop: 1855, Start Num: 20 Candidate Starts for GoldenSpark_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Goldilocks_7 Start: 1511, Stop: 1855, Start Num: 20 Candidate Starts for Goldilocks_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: GooberAzure_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for GooberAzure_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Grungle_13 Start: 4307, Stop: 4645, Start Num: 21
Candidate Starts for Grungle_13:
(Start: 10 @4259 has 1 MA's), (11, 4265), (Start: 21 @4307 has 106 MA's), (Start: 24 @4331 has 1 MA's), (29, 4385), (35, 4469), (38, 4496), (42, 4547),

Gene: Guwapp_15 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Guwapp_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Halldule_15 Start: 4950, Stop: 5288, Start Num: 21
Candidate Starts for Halldule_15:
(Start: 21 @4950 has 106 MA's), (Start: 24 @4974 has 1 MA's), (29, 5028), (35, 5112), (38, 5139), (42, 5190),

Gene: HanKaySha_6 Start: 1467, Stop: 1811, Start Num: 20
Candidate Starts for HanKaySha_6:
(7, 1395), (Start: 20 @1467 has 52 MA's), (Start: 24 @1494 has 1 MA's), (27, 1536), (40, 1689),
Gene: Henry_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Henry_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Highbury_6 Start: 1476, Stop: 1820, Start Num: 20
Candidate Starts for Highbury_6:
(7, 1404), (Start: 20 @1476 has 52 MA's), (Start: 24 @1503 has 1 MA's), (27, 1545), (40, 1698),
Gene: Holt_7 Start: 1582, Stop: 1926, Start Num: 20
Candidate Starts for Holt_7:
(7, 1510), (Start: 20 @1582 has 52 MA's), (Start: 24 @1609 has 1 MA's), (27, 1651), (40, 1804),
Gene: Hoonter_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Hoonter_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: IbOuu_79 Start: 47380, Stop: 47712, Start Num: 21
Candidate Starts for lbOuu_79:
(Start: 13 @47350 has 60 MA's), (Start: 14 @47356 has 1 MA's), (Start: 21 @47380 has 106 MA's), (Start: 24 @47404 has 1 MA's), (29, 47458), (35, 47542), (38, 47569), (42, 47620),

Gene: IkeLoa_14 Start: 5484, Stop: 5822, Start Num: 21
Candidate Starts for IkeLoa_14:
(Start: 10 @5436 has 1 MA's), (11, 5442), (Start: 21 @5484 has 106 MA's), (Start: 24 @5508 has 1
MA's), (29, 5562), (35, 5646), (38, 5673), (42, 5724),
Gene: InigoMontoya_17 Start: 4650, Stop: 4982, Start Num: 21

Candidate Starts for InigoMontoya_17:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: InterFolia 24 Start: 8045, Stop: 8383, Start Num: 21
Candidate Starts for InterFolia_24:
(Start: 10 @7997 has 1 MA's), (11, 8003), (Start: 21 @8045 has 106 MA's), (Start: 24 @8069 has 1
MA's), (29, 8123), (35, 8207), (38, 8234), (42, 8285),
Gene: Inventum_79 Start: 48866, Stop: 49228, Start Num: 13
Candidate Starts for Inventum_79:
(Start: 13 @48866 has 60 MA's), (Start: 14 @48872 has 1 MA's), (Start: 21 @48896 has 106 MA's),
(Start: 24 @48920 has 1 MA's), ( 29,48974 ), $(35,49058),(38,49085),(42,49136)$,
Gene: Issimir_16 Start: 5709, Stop: 6041, Start Num: 21
Candidate Starts for Issimir_16:
(Start: 13 @5679 has 60 MA's), (Start: 14 @5685 has 1 MA's), (Start: 21 @5709 has 106 MA's), (Start:
24 @5733 has 1 MA's), ( 29,5787 ), ( 35,5871 ), ( 38,5898 ), ( 42,5949 ),
Gene: Izajani_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Izajani_17:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: JPickles_15 Start: 4620, Stop: 4982, Start Num: 13 Candidate Starts for JPickles_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Janiyra_15 Start: 4599, Stop: 4961, Start Num: 13
Candidate Starts for Janiyra_15:
(Start: 13 @ 4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start: 24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),

Gene: Jaygup_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Jaygup_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Jedediah_16 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Jedediah_16:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Jemmno_15 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Jemmno_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Jessibeth14_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Jessibeth14_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: JulietS_14 Start: 4583, Stop: 4921, Start Num: 21
Candidate Starts for JulietS_14:
(Start: 10 @ 4535 has 1 MA's), (11, 4541), (Start: 21 @4583 has 106 MA's), (Start: 24 @ 4607 has 1 MA's), (29, 4661), (35, 4745), (38, 4772), (42, 4823),

Gene: JustHall_15 Start: 5615, Stop: 5977, Start Num: 13
Candidate Starts for JustHall_15:
(Start: 13 @ 5615 has 60 MA's), (Start: 14 @5621 has 1 MA's), (Start: 21 @ 5645 has 106 MA's), (Start:
24 @5669 has 1 MA's), (29, 5723), (35, 5807), (38, 5834), (42, 5885),
Gene: Kamryn_17 Start: 5688, Stop: 6026, Start Num: 21
Candidate Starts for Kamryn_17:
(Start: 10 @ 5640 has 1 MA's), ( 11,5646 ), (Start: 21 @5688 has 106 MA's), (Start: 24 @5712 has 1
MA's), $(29,5766),(35,5850),(38,5877),(42,5928)$,
Gene: Kanye_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Kanye_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: Kboogie_16 Start: 4648, Stop: 4980, Start Num: 21
Candidate Starts for Kboogie_16:
(Start: 13 @ 4618 has 60 MA's), (Start: 14 @4624 has 1 MA's), (Start: 21 @4648 has 106 MA's), (Start:
24 @4672 has 1 MA's), (29, 4726), (35, 4810), (38, 4837), (42, 4888),
Gene: Khaleesi_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Khaleesi_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Kimchi_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Kimchi_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Koguma_15 Start: 4950, Stop: 5288, Start Num: 21
Candidate Starts for Koguma_15:
(Start: 21 @4950 has 106 MA's), (Start: 24 @4974 has 1 MA's), (29, 5028), (35, 5112), (38, 5139), (42, 5190),

Gene: Kostya_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Kostya_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: KristaRAM_81 Start: 48545, Stop: 48877, Start Num: 21
Candidate Starts for KristaRAM_81:
(Start: 21 @48545 has 106 MA's), (Start: 24 @48569 has 1 MA's), (29, 48623), (35, 48707), (38, 48734), (42, 48785),

Gene: LRRHood_17 Start: 6846, Stop: 7214, Start Num: 13 Candidate Starts for LRRHood_17:
(Start: 13 @6846 has 60 MA's), (Start: 14 @6852 has 1 MA's), (Start: 21 @6876 has 106 MA's), (Start: 24 @6900 has 1 MA's), (29, 6954), (35, 7038), (38, 7065), (42, 7116),

Gene: Latch_15 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Latch_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Lee7_16 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Lee7_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: LifeSavor_16 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for LifeSavor_16:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Lilizi_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Lilizi_7:
(2, 1337), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: LinStu_20 Start: 7011, Stop: 7397, Start Num: 10
Candidate Starts for LinStu_20:
(Start: 10 @7011 has 1 MA's), (11, 7017), (Start: 21 @7059 has 106 MA's), (Start: 24 @ 7083 has 1
MA's), (29, 7137), (35, 7221), (38, 7248), (42, 7299),
Gene: LittleE_75 Start: 49813, Stop: 49481, Start Num: 21
Candidate Starts for LittleE_75:
(Start: 21 @49813 has 106 MA's), (Start: 24 @49789 has 1 MA's), (29, 49735), (35, 49651), (38, 49624), (42, 49573),

Gene: Littleton_16 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Littleton_16:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Loanshark_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Loanshark_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: LolaVinca_21 Start: 7151, Stop: 7489, Start Num: 21
Candidate Starts for LolaVinca_21:
(Start: 10 @ 7103 has 1 MA's), (11, 7109), (Start: 21 @7151 has 106 MA's), (Start: 24 @ 7175 has 1
MA's), (29, 7229), (35, 7313), (38, 7340), (42, 7391),
Gene: LordLeafolot_24 Start: 8047, Stop: 8385, Start Num: 21
Candidate Starts for LordLeafolot_24:
(Start: 10 @7999 has 1 MA's), (11, 8005), (Start: 21 @8047 has 106 MA's), (Start: 24 @8071 has 1
MA's), (29, 8125), (35, 8209), (38, 8236), (42, 8287),

Gene: Lukilu_13 Start: 5300, Stop: 5638, Start Num: 21
Candidate Starts for Lukilu_13:
(Start: 10 @ 5252 has 1 MA's), ( 11,5258 ), (Start: 21 @ 5300 has 106 MA's), (Start: 24 @5324 has 1 MA's), $(29,5378),(35,5462),(38,5489),(42,5540)$,

Gene: Maby2021_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Maby2021_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: MalagasyRose_36 Start: 29028, Stop: 29441, Start Num: 8
Candidate Starts for MalagasyRose_36:
(1, 28890), (3, 28923), (5, 28941), (6, 28962), (Start: 8 @29028 has 1 MA's), (9, 29037), (11, 29046), (16, 29079), (18, 29085), (Start: 20 @29091 has 52 MA's), (Start: 21 @29094 has 106 MA's), (Start: 24 @29118 has 1 MA's), (27, 29160), (32, 29205), (36, 29268), (39, 29304), (42, 29340), (43, 29385), $(44,29397),(45,29418)$,

Gene: Marshmallow_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Marshmallow_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Matsumoto_14 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Matsumoto_14:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: McGee_16 Start: 4648, Stop: 4980, Start Num: 21
Candidate Starts for McGee_16:
(Start: 13 @ 4618 has 60 MA's), (Start: 14 @4624 has 1 MA's), (Start: 21 @4648 has 106 MA's), (Start: 24 @4672 has 1 MA's), (29, 4726), (35, 4810), (38, 4837), (42, 4888),

Gene: McWolfish_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for McWolfish_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Megamind_16 Start: 5715, Stop: 6047, Start Num: 21 Candidate Starts for Megamind_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: Melpomini_15 Start: 4599, Stop: 4961, Start Num: 13
Candidate Starts for Melpomini_15:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start: 24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),

Gene: MikeLiesIn_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for MikeLiesIn_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Mikro_17 Start: 6684, Stop: 7022, Start Num: 21

Candidate Starts for Mikro_17:
(Start: 10 @6636 has 1 MA's), (11, 6642), (Start: 21 @6684 has 106 MA's), (Start: 24 @6708 has 1 MA's), (29, 6762), (35, 6846), (38, 6873), (42, 6924),

Gene: Mindy_7 Start: 1382, Stop: 1726, Start Num: 20
Candidate Starts for Mindy_7:
(4, 1220), (7, 1310), (Start: 20 @1382 has 52 MA's), (Start: 24 @1409 has 1 MA's), (27, 1451), (40, 1604),

Gene: Miniwave_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Miniwave_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: MoMoMixon_20 Start: 6791, Stop: 7129, Start Num: 21
Candidate Starts for MoMoMixon_20:
(Start: 21 @6791 has 106 MA's), (Start: 24 @6815 has 1 MA's), (29, 6869), (35, 6953), (38, 6980), (42, 7031),

Gene: Moldemort_6 Start: 1467, Stop: 1811, Start Num: 20
Candidate Starts for Moldemort_6:
(7, 1395), (Start: 20 @1467 has 52 MA's), (Start: 24 @1494 has 1 MA's), (27, 1536), (40, 1689),
Gene: Momo_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Momo_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: MooMoo_76 Start: 47208, Stop: 47558, Start Num: 22
Candidate Starts for MooMoo_76:
(17, 47193), (Start: 22 @47208 has 1 MA's), (Start: 24 @47229 has 1 MA's), (25, 47247), (26, 47259), (30, 47292), (31, 47310), (36, 47376), (37, 47379),

Gene: Morizzled23_15 Start: 4599, Stop: 4961, Start Num: 13
Candidate Starts for Morizzled23_15:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start:
24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),
Gene: Mozy_90 Start: 48955, Stop: 49287, Start Num: 21
Candidate Starts for Mozy_90:
(Start: 21 @48955 has 106 MA's), (Start: 24 @48979 has 1 MA's), (29, 49033), (35, 49117), (38, 49144), (42, 49195),

Gene: Myrale_7 Start: 1382, Stop: 1726, Start Num: 20
Candidate Starts for Myrale_7:
(4, 1220), (7, 1310), (Start: 20 @1382 has 52 MA's), (Start: 24 @1409 has 1 MA's), (27, 1451), (40, 1604),

Gene: Naija_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Naija_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
$24 @ 4674$ has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Napoleon13_15 Start: 4618, Stop: 4980, Start Num: 13
Candidate Starts for Napoleon13_15:
(Start: 13 @ 4618 has 60 MA's), (Start: 14 @ 4624 has 1 MA's), (Start: 21 @ 4648 has 106 MA's), (Start: 24 @4672 has 1 MA's), ( 29,4726 ), ( 35,4810 ), $(38,4837),(42,4888)$,

Gene: Naval22_20 Start: 6791, Stop: 7129, Start Num: 21
Candidate Starts for Naval22_20:
(Start: 21 @6791 has 106 MA's), (Start: 24 @6815 has 1 MA's), (29, 6869), (35, 6953), (38, 6980), (42, 7031),

Gene: NedWong_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for NedWong_17:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: NelitzaMV_7 Start: 1382, Stop: 1726, Start Num: 20
Candidate Starts for NelitzaMV_7:
(4, 1220), (7, 1310), (Start: 20 @1382 has 52 MA's), (Start: 24 @1409 has 1 MA's), (27, 1451), (40, 1604),

Gene: Ngannou_15 Start: 4629, Stop: 4961, Start Num: 21
Candidate Starts for Ngannou_15:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start:
24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),
Gene: Nidhogg_20 Start: 6791, Stop: 7129, Start Num: 21
Candidate Starts for Nidhogg_20:
(Start: 21 @6791 has 106 MA's), (Start: 24 @6815 has 1 MA's), (29, 6869), (35, 6953), (38, 6980), (42, 7031),

Gene: NoSleep_6 Start: 1464, Stop: 1808, Start Num: 20
Candidate Starts for NoSleep_6:
(7, 1392), (Start: 20 @1464 has 52 MA's), (Start: 24 @1491 has 1 MA's), (27, 1533), (40, 1686),
Gene: NoodleTree_17 Start: 5685, Stop: 6023, Start Num: 21
Candidate Starts for NoodleTree_17:
(Start: 10 @ 5637 has 1 MA's), ( 11,5643 ), (Start: 21 @5685 has 106 MA's), (Start: 24 @5709 has 1
MA's), $(29,5763),(35,5847),(38,5874),(42,5925)$,
Gene: Norm_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for Norm_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), $(29,5793)$, $(35,5877),(38,5904),(42,5955)$,
Gene: NuevoMundo_22 Start: 7793, Stop: 8131, Start Num: 21
Candidate Starts for NuevoMundo_22:
(Start: 10 @ 7745 has 1 MA's), ( 11,7751 ), (Start: 21 @7793 has 106 MA's), (Start: 24 @7817 has 1 MA's), (29, 7871), (35, 7955), (38, 7982), (42, 8033),

Gene: Omnicron_37 Start: 29239, Stop: 29613, Start Num: 19
Candidate Starts for Omnicron_37:
(Start: 19 @29239 has 1 MA's), (23, 29263), (Start: 24 @29269 has 1 MA's), (26, 29299), (28, 29320), (29, 29323), (33, 29419), (34, 29422), (41, 29485), (42, 29503), (43, 29548),

Gene: OrionPax_6 Start: 1467, Stop: 1811, Start Num: 20
Candidate Starts for OrionPax_6:
(7, 1395), (Start: 20 @1467 has 52 MA's), (Start: 24 @1494 has 1 MA's), (27, 1536), (40, 1689),
Gene: Paperbeatsrock_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Paperbeatsrock_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: ParkTD_16 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for ParkTD_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Patter_15 Start: 4637, Stop: 4999, Start Num: 13
Candidate Starts for Patter_15:
(Start: 13 @4637 has 60 MA's), (Start: 14 @4643 has 1 MA's), (Start: 21 @4667 has 106 MA's), (Start:
24 @4691 has 1 MA's), (29, 4745), (35, 4829), (38, 4856), (42, 4907),
Gene: Pharsalus_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Pharsalus_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Phlegm_17 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for Phlegm_17:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @ 4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Phox_18 Start: 6873, Stop: 7211, Start Num: 21
Candidate Starts for Phox_18:
(Start: 13 @6843 has 60 MA's), (Start: 14 @6849 has 1 MA's), (Start: 21 @6873 has 106 MA's), (Start: 24 @6897 has 1 MA's), (29, 6951), (35, 7035), (38, 7062), (42, 7113),

Gene: Phusco_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Phusco_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Pier_20 Start: 6356, Stop: 6694, Start Num: 21
Candidate Starts for Pier_20:
(Start: 10 @6308 has 1 MA's), ( 11,6314 ), (Start: 21 @6356 has 106 MA's), (Start: 24 @6380 has 1
MA's), $(29,6434),(35,6518),(38,6545),(42,6596)$,
Gene: Pio_21 Start: 7290, Stop: 7628, Start Num: 21
Candidate Starts for Pio_21:
(Start: 10 @ 7242 has 1 MA's), (11, 7248), (Start: 21 @7290 has 106 MA's), (Start: 24 @7314 has 1 MA's), (29, 7368), (35, 7452), (38, 7479), (42, 7530),

Gene: Pivoine_15 Start: 4620, Stop: 4982, Start Num: 13 Candidate Starts for Pivoine_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: Pleione_18 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Pleione_18:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: PurduePete_16 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for PurduePete_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: QBert_17 Start: 6873, Stop: 7211, Start Num: 21
Candidate Starts for QBert_17:
(Start: 10 @6825 has 1 MA's), (11, 6831), (Start: 21 @6873 has 106 MA's), (Start: 24 @6897 has 1 MA's), (29, 6951), (35, 7035), (38, 7062), (42, 7113),

Gene: Quallification_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Quallification_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: Quasimodo_15 Start: 5649, Stop: 5981, Start Num: 21
Candidate Starts for Quasimodo_15:
(Start: 13 @5619 has 60 MA's), (Start: 14 @5625 has 1 MA's), (Start: 21 @5649 has 106 MA's), (Start:
24 @5673 has 1 MA's), (29, 5727), (35, 5811), (38, 5838), (42, 5889),
Gene: Rabinovish_18 Start: 7161, Stop: 7499, Start Num: 21
Candidate Starts for Rabinovish_18:
(Start: 13 @ 7131 has 60 MA's), (Start: 14 @ 7137 has 1 MA's), (Start: 21 @7161 has 106 MA's), (Start: 24 @7185 has 1 MA's), (29, 7239), (35, 7323), (38, 7350), (42, 7401),

Gene: Rahel_15 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Rahel_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Rakim_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Rakim_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Ramsey_85 Start: 50820, Stop: 51152, Start Num: 21
Candidate Starts for Ramsey_85:
(Start: 13 @50790 has 60 MA's), (Start: 14 @50796 has 1 MA's), (Start: 21 @50820 has 106 MA's), (Start: 24 @50844 has 1 MA's), (29, 50898), (35, 50982), (38, 51009), (42, 51060),

Gene: RedBird_82 Start: 50581, Stop: 50913, Start Num: 21
Candidate Starts for RedBird_82:
(Start: 13 @50548 has 60 MA's), (Start: 14 @50554 has 1 MA's), (15, 50557), (Start: 21 @50581 has 106 MA's), (Start: 24 @50605 has 1 MA's), (29, 50659), (35, 50743), (38, 50770), (42, 50821),

Gene: Rizal_15 Start: 4645, Stop: 4977, Start Num: 21

Candidate Starts for Rizal_15:
(Start: 13 @ 4615 has 60 MA's), (Start: 14 @4621 has 1 MA's), (Start: 21 @4645 has 106 MA's), (Start: 24 @4669 has 1 MA's), (29, 4723), (35, 4807), (38, 4834), (42, 4885),

Gene: RoMag_13 Start: 5435, Stop: 5773, Start Num: 21
Candidate Starts for RoMag_13:
(Start: 10 @ 5387 has 1 MA's), (11, 5393), (Start: 21 @5435 has 106 MA's), (Start: 24 @5459 has 1 MA's), $(29,5513),(35,5597),(38,5624),(42,5675)$,

Gene: RockyHorror_86 Start: 49088, Stop: 49420, Start Num: 21
Candidate Starts for RockyHorror_86:
(Start: 13 @49058 has 60 MA's), (Start: 14 @49064 has 1 MA's), (Start: 21 @49088 has 106 MA's), (Start: 24 @49112 has 1 MA's), (29, 49166), (35, 49250), (38, 49277), (42, 49328),

Gene: Ronan_14 Start: 4284, Stop: 4622, Start Num: 21
Candidate Starts for Ronan_14:
(Start: 10 @ 4236 has 1 MA's), ( 11,4242 ), (Start: 21 @ 4284 has 106 MA's), (Start: 24 @ 4308 has 1
MA's), (29, 4362), (35, 4446), ( 38,4473 ), ( 42,4524 ),
Gene: Roots515_16 Start: 5684, Stop: 6046, Start Num: 13
Candidate Starts for Roots515_16:
(Start: 13 @5684 has 60 MA's), (Start: 14 @5690 has 1 MA's), (Start: 21 @ 5714 has 106 MA's), (Start:
24 @5738 has 1 MA's), (29, 5792), (35, 5876), (38, 5903), (42, 5954),
Gene: Saints25_6 Start: 1476, Stop: 1820, Start Num: 20
Candidate Starts for Saints25_6:
(7, 1404), (Start: 20 @1476 has 52 MA's), (Start: 24 @1503 has 1 MA's), (27, 1545), (40, 1698),
Gene: Salacia_18 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Salacia_18:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Sassafras_82 Start: 48895, Stop: 49227, Start Num: 21
Candidate Starts for Sassafras_82:
(Start: 13 @48865 has 60 MA's), (Start: 14 @48871 has 1 MA's), (Start: 21 @48895 has 106 MA's),
(Start: 24 @48919 has 1 MA's), (29, 48973), (35, 49057), (38, 49084), (42, 49135),
Gene: Sauce_20 Start: 6836, Stop: 7174, Start Num: 21
Candidate Starts for Sauce_20:
(Start: 10 @6788 has 1 MA's), ( 11,6794 ), (Start: 21 @6836 has 106 MA's), (Start: 24 @6860 has 1 MA's), (29, 6914), (35, 6998), ( 38,7025 ), ( 42,7076 ),

Gene: ScottMcG_18 Start: 6271, Stop: 6603, Start Num: 21
Candidate Starts for ScottMcG_18:
(Start: 13 @6241 has 60 MA's), (Start: 14 @6247 has 1 MA's), (Start: 21 @6271 has 106 MA's), (Start: 24 @6295 has 1 MA's), (29, 6349), (35, 6433), (38, 6460), (42, 6511),

Gene: Sebata_20 Start: 7059, Stop: 7397, Start Num: 21
Candidate Starts for Sebata_20:
(Start: 10 @ 7011 has 1 MA's), (11, 7017), (Start: 21 @7059 has 106 MA's), (Start: 24 @7083 has 1
MA's), (29, 7137), (35, 7221), (38, 7248), (42, 7299),

Gene: ShamWow_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for ShamWow_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Shaqnato_15 Start: 5289, Stop: 5627, Start Num: 21
Candidate Starts for Shaqnato_15:
(Start: 10 @5241 has 1 MA's), (11, 5247), (Start: 21 @5289 has 106 MA's), (Start: 24 @5313 has 1
MA's), $(29,5367),(35,5451),(38,5478),(42,5529)$,

Gene: Shelob_19 Start: 6859, Stop: 7221, Start Num: 13
Candidate Starts for Shelob_19:
(Start: 13 @6859 has 60 MA's), (Start: 14 @6865 has 1 MA's), (Start: 21 @6889 has 106 MA's), (Start:
24 @6913 has 1 MA's), (29, 6967), (35, 7051), (38, 7078), (42, 7129),
Gene: ShereKhan_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for ShereKhan_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: ShiaLabeouf_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for ShiaLabeouf_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Shnickers_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Shnickers_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: Shrimp_16 Start: 5689, Stop: 6051, Start Num: 13
Candidate Starts for Shrimp_16:
(Start: 13 @ 5689 has 60 MA's), (Start: 14 @5695 has 1 MA's), (Start: 21 @5719 has 106 MA's), (Start: 24 @5743 has 1 MA's), (29, 5797), (35, 5881), (38, 5908), (42, 5959),

Gene: SilverDipper_16 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for SilverDipper_16:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Simpliphy_6 Start: 1467, Stop: 1811, Start Num: 20
Candidate Starts for Simpliphy_6:
(7, 1395), (Start: 20 @1467 has 52 MA's), (Start: 24 @1494 has 1 MA's), (27, 1536), (40, 1689),
Gene: SmallFry_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for SmallFry_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: SophKB_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for SophKB_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Spec_14 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Spec_14:
(Start: 13 @ 4616 has 60 MA's), (Start: 14 @ 4622 has 1 MA's), (Start: 21 @ 4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Specks_22 Start: 7228, Stop: 7566, Start Num: 21
Candidate Starts for Specks_22:
(Start: 10 @ 7180 has 1 MA's), ( 11,7186 ), (Start: 21 @ 7228 has 106 MA's), (Start: 24 @7252 has 1 MA's), (29, 7306), (35, 7390), (38, 7417), (42, 7468),

Gene: Sprinklers_19 Start: 6198, Stop: 6536, Start Num: 21
Candidate Starts for Sprinklers_19:
(Start: 13 @6168 has 60 MA's), (Start: 14 @6174 has 1 MA's), (Start: 21 @6198 has 106 MA's), (Start:
24 @6222 has 1 MA's), (29, 6276), (35, 6360), (38, 6387), (42, 6438),
Gene: Spud_21 Start: 7290, Stop: 7628, Start Num: 21
Candidate Starts for Spud_21:
(Start: 10 @ 7242 has 1 MA's), ( 11,7248 ), (Start: 21 @ 7290 has 106 MA's), (Start: 24 @7314 has 1
MA's), (29, 7368), (35, 7452), (38, 7479), (42, 7530),
Gene: SrishMeg2525_16 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for SrishMeg2525_16:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Stank_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Stank_7:
(7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: StellaBean_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for StellaBean_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: StephanieG_19 Start: 6381, Stop: 6719, Start Num: 21
Candidate Starts for StephanieG_19:
(Start: 10 @6333 has 1 MA's), ( 11,6339 ), (Start: 21 @6381 has 106 MA's), (Start: 24 @6405 has 1
MA's), (29, 6459), (35, 6543), (38, 6570), (42, 6621),
Gene: StolenFromERC_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for StolenFromERC_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: StubbySaigey_16 Start: 4650, Stop: 4982, Start Num: 21
Candidate Starts for StubbySaigey_16:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start: 24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),

Gene: TBrady12_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for TBrady12_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Target_62 Start: 40319, Stop: 39987, Start Num: 21
Candidate Starts for Target_62:
(Start: 13 @ 40349 has 60 MA's), (Start: 14 @40343 has 1 MA's), (Start: 21 @40319 has 106 MA's), (Start: 24 @40295 has 1 MA's), (29, 40241), (35, 40157), (38, 40130), (42, 40079),

Gene: Tarkin_7 Start: 1511, Stop: 1858, Start Num: 20
Candidate Starts for Tarkin_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Teardrop_15 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Teardrop_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start:
24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),
Gene: TeardropMSU_6 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for TeardropMSU_6:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: TinyTim_16 Start: 5685, Stop: 6047, Start Num: 13
Candidate Starts for TinyTim_16:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start:
24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),
Gene: Tonenili_23 Start: 7313, Stop: 7645, Start Num: 21
Candidate Starts for Tonenili_23:
(Start: 10 @ 7265 has 1 MA's), (11, 7271), (Start: 21 @ 7313 has 106 MA's), (Start: 24 @ 7337 has 1 MA's), (29, 7391), (35, 7475), (38, 7502), (42, 7553),

Gene: Tortoise16_14 Start: 4616, Stop: 4978, Start Num: 13
Candidate Starts for Tortoise16_14:
(Start: 13 @ 4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Toto_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Toto_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Trinitium_15 Start: 4646, Stop: 4978, Start Num: 21
Candidate Starts for Trinitium_15:
(Start: 13 @4616 has 60 MA's), (Start: 14 @4622 has 1 MA's), (Start: 21 @4646 has 106 MA's), (Start: 24 @4670 has 1 MA's), (29, 4724), (35, 4808), (38, 4835), (42, 4886),

Gene: Tuco_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Tuco_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Turret_15 Start: 4629, Stop: 4961, Start Num: 21
Candidate Starts for Turret_15:
(Start: 13 @4599 has 60 MA's), (Start: 14 @4605 has 1 MA's), (Start: 21 @4629 has 106 MA's), (Start: 24 @4653 has 1 MA's), (29, 4707), (35, 4791), (38, 4818), (42, 4869),

Gene: Tyke_20 Start: 6766, Stop: 7104, Start Num: 21
Candidate Starts for Tyke_20:
(Start: 10 @6718 has 1 MA's), (11, 6724), (Start: 21 @6766 has 106 MA's), (Start: 24 @6790 has 1
MA's), (29, 6844), (35, 6928), (38, 6955), (42, 7006),
Gene: ValleyTerrace_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for ValleyTerrace_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
24 @4674 has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Wally_15 Start: 4620, Stop: 4982, Start Num: 13
Candidate Starts for Wally_15:
(Start: 13 @4620 has 60 MA's), (Start: 14 @4626 has 1 MA's), (Start: 21 @4650 has 106 MA's), (Start:
$24 @ 4674$ has 1 MA's), (29, 4728), (35, 4812), (38, 4839), (42, 4890),
Gene: Wiggin_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Wiggin_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: Willis_17 Start: 5655, Stop: 5987, Start Num: 21
Candidate Starts for Willis_17:
(Start: 13 @5625 has 60 MA's), (Start: 14 @5631 has 1 MA's), (Start: 21 @5655 has 106 MA's), (Start:
24 @5679 has 1 MA's), (29, 5733), (35, 5817), (38, 5844), (42, 5895),
Gene: Xandras_7 Start: 1511, Stop: 1855, Start Num: 20
Candidate Starts for Xandras_7:
(4, 1349), (7, 1439), (Start: 20 @1511 has 52 MA's), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),

Gene: YassJohnny_7 Start: 1538, Stop: 1855, Start Num: 24
Candidate Starts for YassJohnny_7:
(4, 1349), (7, 1439), (Start: 24 @1538 has 1 MA's), (27, 1580), (40, 1733),
Gene: Yassified_16 Start: 5361, Stop: 5699, Start Num: 21
Candidate Starts for Yassified_16:
(Start: 13 @5331 has 60 MA's), (Start: 14 @5337 has 1 MA's), (Start: 21 @5361 has 106 MA's), (Start:
24 @5385 has 1 MA's), (29, 5439), (35, 5523), (38, 5550), (42, 5601),
Gene: YemiJoy2021_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for YemiJoy2021_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), (35, 5877), (38, 5904), (42, 5955),

Gene: YoungMoneyMata_16 Start: 4648, Stop: 4980, Start Num: 21
Candidate Starts for YoungMoneyMata_16:
(Start: 13 @4618 has 60 MA's), (Start: 14 @4624 has 1 MA's), (Start: 21 @4648 has 106 MA's), (Start:
24 @4672 has 1 MA's), (29, 4726), (35, 4810), (38, 4837), (42, 4888),
Gene: Yucca_16 Start: 5637, Stop: 5969, Start Num: 21

Candidate Starts for Yucca_16:
(Start: 13 @ 5607 has 60 MA's), (Start: 14 @5613 has 1 MA's), (Start: 21 @ 5637 has 106 MA's), (Start: 24 @5661 has 1 MA's), (29, 5715), (35, 5799), (38, 5826), (42, 5877),

Gene: Zalkecks_18 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for Zalkecks_18:
(Start: 13 @5685 has 60 MA's), (Start: 14 @5691 has 1 MA's), (Start: 21 @5715 has 106 MA's), (Start: 24 @5739 has 1 MA's), (29, 5793), ( 35,5877 ), ( 38,5904 ), ( 42,5955 ),

Gene: Zeenon_19 Start: 5716, Stop: 6048, Start Num: 21
Candidate Starts for Zeenon_19:
(Start: 13 @ 5686 has 60 MA's), (Start: 14 @5692 has 1 MA's), (Start: 21 @5716 has 106 MA's), (Start:
24 @5740 has 1 MA's), (29, 5794), (35, 5878), (38, 5905), (42, 5956),
Gene: ZygoTaiga_17 Start: 5715, Stop: 6047, Start Num: 21
Candidate Starts for ZygoTaiga_17:
(Start: 13 @ 5685 has 60 MA's), (Start: 14 @ 5691 has 1 MA's), (Start: 21 @ 5715 has 106 MA's), (Start: 24 @ 5739 has 1 MA's), ( 29,5793 ), ( 35,5877 ), $(38,5904)$, ( 42,5955 ),

