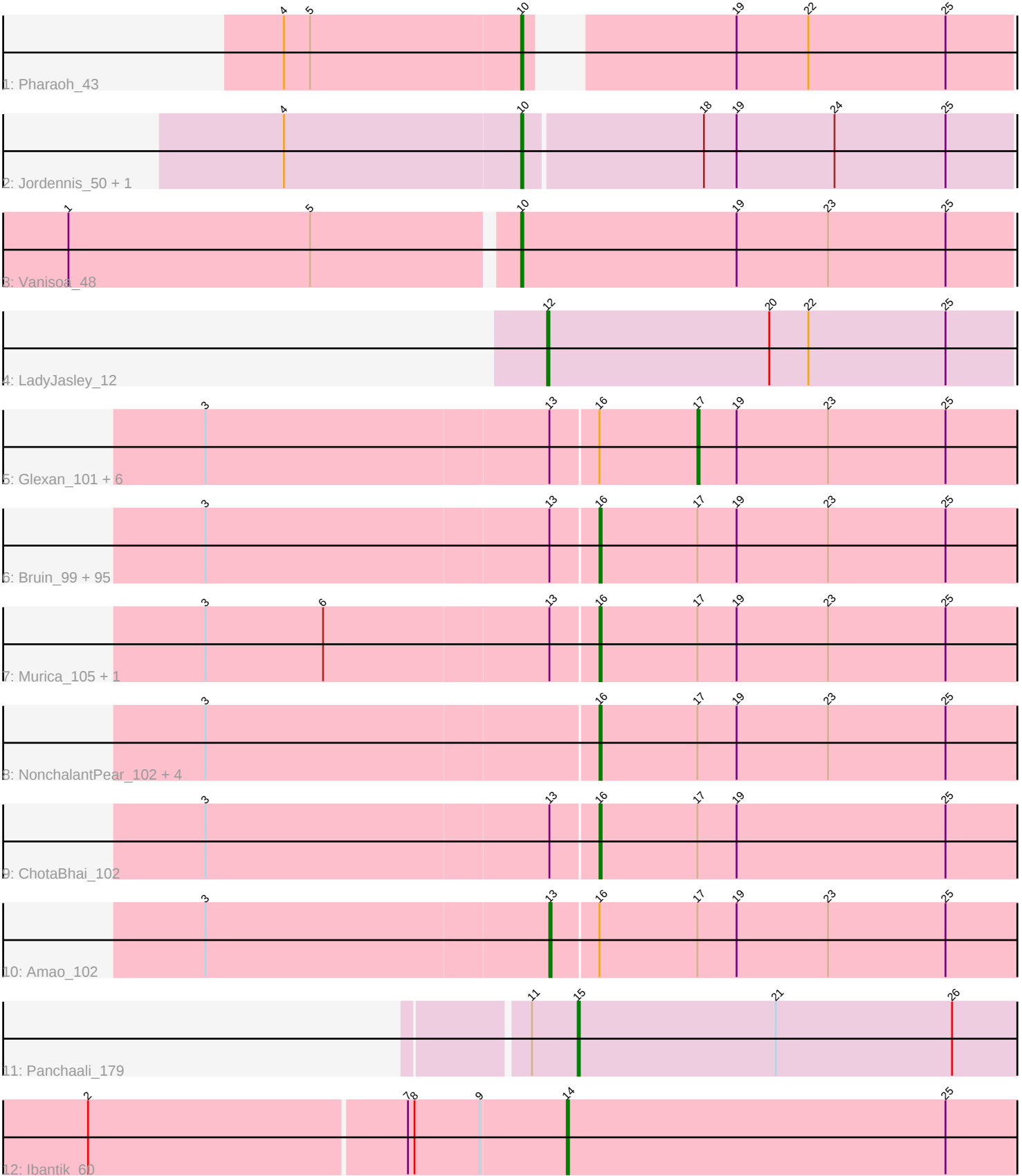


Pham 330640



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 330640 Report

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

Pham number 330640 has 119 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh_43
- Track 2 : Jordennis_50, Polyphemus_52
- Track 3 : Vanisoa_48
- Track 4 : LadyJasley_12
- Track 5 : Glexan_101, FairyPath_103, Becksu_100, Thimble_104, FoghornLeghorn_95, BugsBunny_101, Palpatine_103
- Track 6 : Bruin_99, Greep_106, Miniwave_97, Lilpickle_101, Nimrod_102, Petra64142_106, Livelaughbron_103, Paperbeatsrock_101, DrDrey_102, ShamWow_102, Emmina_102, Nala_104, Pat3_99, Pharsalus_99, Dusk_99, StormChicken_103, TBrady12_105, BilboSwaggins_100, Stank_104, Misfit_103, Contagion_98, Phaja_100, SirDuracell_102, PhatBacter_105, Bask21_102, Adnama_106, Elite2014_101, Manda_103, Marshmallow_99, Buck_103, ChosenOne_102, Harella_102, Command613_104, Kostya_102, Phaux_104, Mindy_101, Tarkin_101, Tomaszewski_97, Mosby_98, Eureka_101, CrystalP_101, Wiggin_104, GoldenSpark_106, Barbarian_101, NelitzaMV_99, xkcd_105, Cookies_99, DoctorDiddles_101, Gator_100, Easy2Say_102, Cactus_106, Hoonter_105, Gemini_107, YassJohnny_99, Qualification_103, Inca_99, FireRed_105, Brewer_98, ABCat_99, Henry_99, TeamEdward_102, Sotrice96_103, Argent26_106, Goldilocks_105, TeardropMSU_98, Sassay_97, SophKB_100, Icee_103, Balomoji_102, Bogg_102, Asriel_100, Youngblood_105, Tuco_103, Rimmer_100, StellaBean_101, Terminus_105, Kanye_99, HuffyPuff_104, BadStone_99, Policronamos_104, Holt_107, ShereKhan_100, Goku_101, BigBubba_102, GooberAzure_105, Myrale_102, Daikon_102, MollyToe_97, Willez_97, Toto_100, IHOP_100, Kimchi_106, Rakim_103, Traaww1_98, MPhalcon_103, Flypotenuse_98
- Track 7 : Murica_105, MISSy_103
- Track 8 : NonchalantPear_102, StolenFromERC_104, Gage_104, Xandras_101, Ptowny_98
- Track 9 : ChotaBhai_102
- Track 10 : Amao_102
- Track 11 : Panchaali_179
- Track 12 : Ibantik_60

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

The start number called the most often in the published annotations is 16, it was called in 97 of the 109 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABCat_99, Adnama_106, Argent26_106, Asriel_100, BadStone_99, Balomoji_102, Barbarian_101, Bask21_102, BigBubba_102, BilboSwaggins_100, Bogg_102, Brewer_98, Bruin_99, Buck_103, Cactus_106, ChosenOne_102, ChotaBhai_102, Command613_104, Contagion_98, Cookies_99, CrystalP_101, Daikon_102, DoctorDiddles_101, DrDrey_102, Dusk_99, Easy2Say_102, Elite2014_101, Emmina_102, Eureka_101, FireRed_105, Flypotenuse_98, Gage_104, Gator_100, Gemini_107, Goku_101, GoldenSpark_106, Goldilocks_105, GooberAzure_105, Greep_106, Harella_102, Henry_99, Holt_107, Hoonter_105, HufflyPuff_104, IHOP_100, Icee_103, Inca_99, Kanye_99, Kimchi_106, Kostya_102, Lilpickle_101, Liveloughbron_103, MISSy_103, MPhalcon_103, Manda_103, Marshmallow_99, Mindy_101, Miniwave_97, Misfit_103, MollyToe_97, Mosby_98, Murica_105, Myrale_102, Nala_104, NelitzaMV_99, Nimrod_102, NonchalantPear_102, Paperbeatsrock_101, Pat3_99, Petra64142_106, Phaja_100, Pharsalus_99, PhatBacter_105, Phaux_104, Policronamos_104, Ptowny_98, Qualification_103, Rakim_103, Rimmer_100, Sassay_97, ShamWow_102, ShereKhan_100, SirDuracell_102, SophKB_100, Sotrice96_103, Stank_104, StellaBean_101, StolenFromERC_104, StormChicken_103, TBrady12_105, Tarkin_101, TeamEdward_102, TeardropMSU_98, Terminus_105, Tomaszewski_97, Toto_100, Traaww1_98, Tuco_103, Wiggin_104, Willez_97, Xandras_101, YassJohnny_99, Youngblood_105, xkcd_105,

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

- Amao_102, Becksu_100, BugsBunny_101, FairyPath_103, FoghornLeghorn_95, Glexan_101, Palpatine_103, Thimble_104,

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

- Ibantik_60, Jordennis_50, LadyJasley_12, Panchaali_179, Pharaoh_43, Polyphemos_52, Vanisoa_48,

Summary by start number:

Start 10:

- Found in 4 of 119 (3.4%) of genes in pham
- Manual Annotations of this start: 4 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jordennis_50 (A6), Pharaoh_43 (A12), Polyphemos_52 (A6), Vanisoa_48 (A9),

Start 12:

- Found in 1 of 119 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LadyJasley_12 (AV),

Start 13:

- Found in 107 of 119 (89.9%) of genes in pham
- Manual Annotations of this start: 1 of 109
- Called 0.9% of time when present

- Phage (with cluster) where this start called: Amao_102 (E),

Start 14:

- Found in 1 of 119 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_60 (JN),

Start 15:

- Found in 1 of 119 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Panchaali_179 (FC),

Start 16:

- Found in 112 of 119 (94.1%) of genes in pham
- Manual Annotations of this start: 97 of 109
- Called 92.9% of time when present
- Phage (with cluster) where this start called: ABCat_99 (E), Adnama_106 (E), Argent26_106 (E), Asriel_100 (E), BadStone_99 (E), Balomoji_102 (E), Barbarian_101 (E), Bask21_102 (E), BigBubba_102 (E), BilboSwaggins_100 (E), Bogg_102 (E), Brewer_98 (E), Bruin_99 (E), Buck_103 (E), Cactus_106 (E), ChosenOne_102 (E), ChotaBhai_102 (E), Command613_104 (E), Contagion_98 (E), Cookies_99 (E), CrystalP_101 (E), Daikon_102 (E), DoctorDiddles_101 (E), DrDrey_102 (E), Dusk_99 (E), Easy2Say_102 (E), Elite2014_101 (E), Emmina_102 (E), Eureka_101 (E), FireRed_105 (E), Flypotenuse_98 (E), Gage_104 (E), Gator_100 (E), Gemini_107 (E), Goku_101 (E), GoldenSpark_106 (E), Goldilocks_105 (E), GooberAzure_105 (E), Greep_106 (E), Harella_102 (E), Henry_99 (E), Holt_107 (E), Hoonter_105 (E), HuffyPuff_104 (E), IHOP_100 (E), Icee_103 (E), Inca_99 (E), Kanye_99 (E), Kimchi_106 (E), Kostya_102 (E), Lilpickle_101 (E), Liveloughbron_103 (E), MISSy_103 (E), MPhalcon_103 (E), Manda_103 (E), Marshmallow_99 (E), Mindy_101 (E), Miniwave_97 (E), Misfit_103 (E), MollyToe_97 (E), Mosby_98 (E), Murica_105 (E), Myrale_102 (E), Nala_104 (E), NelitzaMV_99 (E), Nimrod_102 (E), NonchalantPear_102 (E), Paperbeatsrock_101 (E), Pat3_99 (E), Petra64142_106 (E), Phaja_100 (E), Pharsalus_99 (E), PhatBacter_105 (E), Phaux_104 (E), Policronamos_104 (E), Ptowny_98 (E), Quallification_103 (E), Rakim_103 (E), Rimmer_100 (E), Sassay_97 (E), ShamWow_102 (E), ShereKhan_100 (E), SirDuracell_102 (E), SophKB_100 (E), Sotrice96_103 (E), Stank_104 (E), StellaBean_101 (E), StolenFromERC_104 (E), StormChicken_103 (E), TBrady12_105 (E), Tarkin_101 (E), TeamEdward_102 (E), TeardropMSU_98 (E), Terminus_105 (E), Tomaszewski_97 (E), Toto_100 (E), Traaww1_98 (E), Tuco_103 (E), Wiggin_104 (E), Willez_97 (E), Xandras_101 (E), YassJohnny_99 (E), Youngblood_105 (E), xkcd_105 (E),

Start 17:

- Found in 112 of 119 (94.1%) of genes in pham
- Manual Annotations of this start: 4 of 109
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Becksu_100 (E), BugsBunny_101 (E), FairyPath_103 (E), FoghornLeghorn_95 (E), Glexan_101 (E), Palpatine_103 (E), Thimble_104 (E),

Summary by clusters:

There are 7 clusters represented in this pham: E, A12, AV, JN, FC, A6, A9,

Info for manual annotations of cluster A12:

- Start number 10 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 10 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AV:

- Start number 12 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster E:

- Start number 13 was manually annotated 1 time for cluster E.
- Start number 16 was manually annotated 97 times for cluster E.
- Start number 17 was manually annotated 4 times for cluster E.

Info for manual annotations of cluster FC:

- Start number 15 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster JN:

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

Gene Information:

Gene: ABCat_99 Start: 61561, Stop: 61758, Start Num: 16

Candidate Starts for ABCat_99:

(3, 61384), (Start: 13 @61540 has 1 MA's), (Start: 16 @61561 has 97 MA's), (Start: 17 @61606 has 4 MA's), (19, 61624), (23, 61666), (25, 61720),

Gene: Adnama_106 Start: 60871, Stop: 61068, Start Num: 16

Candidate Starts for Adnama_106:

(3, 60694), (Start: 13 @60850 has 1 MA's), (Start: 16 @60871 has 97 MA's), (Start: 17 @60916 has 4 MA's), (19, 60934), (23, 60976), (25, 61030),

Gene: Amao_102 Start: 60964, Stop: 61182, Start Num: 13

Candidate Starts for Amao_102:

(3, 60808), (Start: 13 @60964 has 1 MA's), (Start: 16 @60985 has 97 MA's), (Start: 17 @61030 has 4 MA's), (19, 61048), (23, 61090), (25, 61144),

Gene: Argent26_106 Start: 60795, Stop: 60992, Start Num: 16

Candidate Starts for Argent26_106:

(3, 60618), (Start: 13 @60774 has 1 MA's), (Start: 16 @60795 has 97 MA's), (Start: 17 @60840 has 4 MA's), (19, 60858), (23, 60900), (25, 60954),

Gene: Asriel_100 Start: 59208, Stop: 59405, Start Num: 16

Candidate Starts for Asriel_100:

(3, 59031), (Start: 13 @59187 has 1 MA's), (Start: 16 @59208 has 97 MA's), (Start: 17 @59253 has 4 MA's), (19, 59271), (23, 59313), (25, 59367),

Gene: BadStone_99 Start: 61130, Stop: 61327, Start Num: 16

Candidate Starts for BadStone_99:

(3, 60953), (Start: 13 @61109 has 1 MA's), (Start: 16 @61130 has 97 MA's), (Start: 17 @61175 has 4 MA's), (19, 61193), (23, 61235), (25, 61289),

Gene: Balomoji_102 Start: 60991, Stop: 61188, Start Num: 16

Candidate Starts for Balomoji_102:

(3, 60814), (Start: 13 @60970 has 1 MA's), (Start: 16 @60991 has 97 MA's), (Start: 17 @61036 has 4 MA's), (19, 61054), (23, 61096), (25, 61150),

Gene: Barbarian_101 Start: 59208, Stop: 59405, Start Num: 16

Candidate Starts for Barbarian_101:

(3, 59031), (Start: 13 @59187 has 1 MA's), (Start: 16 @59208 has 97 MA's), (Start: 17 @59253 has 4 MA's), (19, 59271), (23, 59313), (25, 59367),

Gene: Bask21_102 Start: 59847, Stop: 60044, Start Num: 16

Candidate Starts for Bask21_102:

(3, 59670), (Start: 13 @59826 has 1 MA's), (Start: 16 @59847 has 97 MA's), (Start: 17 @59892 has 4 MA's), (19, 59910), (23, 59952), (25, 60006),

Gene: Becksu_100 Start: 61229, Stop: 61381, Start Num: 17

Candidate Starts for Becksu_100:

(3, 61007), (Start: 13 @61163 has 1 MA's), (Start: 16 @61184 has 97 MA's), (Start: 17 @61229 has 4 MA's), (19, 61247), (23, 61289), (25, 61343),

Gene: BigBubba_102 Start: 59904, Stop: 60101, Start Num: 16

Candidate Starts for BigBubba_102:

(3, 59727), (Start: 13 @59883 has 1 MA's), (Start: 16 @59904 has 97 MA's), (Start: 17 @59949 has 4 MA's), (19, 59967), (23, 60009), (25, 60063),

Gene: BilboSwaggins_100 Start: 61530, Stop: 61727, Start Num: 16

Candidate Starts for BilboSwaggins_100:

(3, 61353), (Start: 13 @61509 has 1 MA's), (Start: 16 @61530 has 97 MA's), (Start: 17 @61575 has 4 MA's), (19, 61593), (23, 61635), (25, 61689),

Gene: Bogg_102 Start: 61071, Stop: 61268, Start Num: 16

Candidate Starts for Bogg_102:

(3, 60894), (Start: 13 @61050 has 1 MA's), (Start: 16 @61071 has 97 MA's), (Start: 17 @61116 has 4 MA's), (19, 61134), (23, 61176), (25, 61230),

Gene: Brewer_98 Start: 59729, Stop: 59926, Start Num: 16

Candidate Starts for Brewer_98:

(3, 59552), (Start: 13 @59708 has 1 MA's), (Start: 16 @59729 has 97 MA's), (Start: 17 @59774 has 4 MA's), (19, 59792), (23, 59834), (25, 59888),

Gene: Bruin_99 Start: 60236, Stop: 60433, Start Num: 16

Candidate Starts for Bruin_99:

(3, 60059), (Start: 13 @60215 has 1 MA's), (Start: 16 @60236 has 97 MA's), (Start: 17 @60281 has 4 MA's), (19, 60299), (23, 60341), (25, 60395),

Gene: Buck_103 Start: 62073, Stop: 62270, Start Num: 16

Candidate Starts for Buck_103:

(3, 61896), (Start: 13 @62052 has 1 MA's), (Start: 16 @62073 has 97 MA's), (Start: 17 @62118 has 4 MA's), (19, 62136), (23, 62178), (25, 62232),

Gene: BugsBunny_101 Start: 61595, Stop: 61747, Start Num: 17

Candidate Starts for BugsBunny_101:

(3, 61373), (Start: 13 @61529 has 1 MA's), (Start: 16 @61550 has 97 MA's), (Start: 17 @61595 has 4 MA's), (19, 61613), (23, 61655), (25, 61709),

Gene: Cactus_106 Start: 60490, Stop: 60687, Start Num: 16

Candidate Starts for Cactus_106:

(3, 60313), (Start: 13 @60469 has 1 MA's), (Start: 16 @60490 has 97 MA's), (Start: 17 @60535 has 4 MA's), (19, 60553), (23, 60595), (25, 60649),

Gene: ChosenOne_102 Start: 60439, Stop: 60636, Start Num: 16

Candidate Starts for ChosenOne_102:

(3, 60262), (Start: 13 @60418 has 1 MA's), (Start: 16 @60439 has 97 MA's), (Start: 17 @60484 has 4 MA's), (19, 60502), (23, 60544), (25, 60598),

Gene: ChotaBhai_102 Start: 60849, Stop: 61046, Start Num: 16

Candidate Starts for ChotaBhai_102:

(3, 60672), (Start: 13 @60828 has 1 MA's), (Start: 16 @60849 has 97 MA's), (Start: 17 @60894 has 4 MA's), (19, 60912), (25, 61008),

Gene: Command613_104 Start: 61005, Stop: 61202, Start Num: 16

Candidate Starts for Command613_104:

(3, 60828), (Start: 13 @60984 has 1 MA's), (Start: 16 @61005 has 97 MA's), (Start: 17 @61050 has 4 MA's), (19, 61068), (23, 61110), (25, 61164),

Gene: Contagion_98 Start: 60598, Stop: 60795, Start Num: 16

Candidate Starts for Contagion_98:

(3, 60421), (Start: 13 @60577 has 1 MA's), (Start: 16 @60598 has 97 MA's), (Start: 17 @60643 has 4 MA's), (19, 60661), (23, 60703), (25, 60757),

Gene: Cookies_99 Start: 60775, Stop: 60972, Start Num: 16

Candidate Starts for Cookies_99:

(3, 60598), (Start: 13 @60754 has 1 MA's), (Start: 16 @60775 has 97 MA's), (Start: 17 @60820 has 4 MA's), (19, 60838), (23, 60880), (25, 60934),

Gene: CrystalP_101 Start: 61530, Stop: 61727, Start Num: 16

Candidate Starts for CrystalP_101:

(3, 61353), (Start: 13 @61509 has 1 MA's), (Start: 16 @61530 has 97 MA's), (Start: 17 @61575 has 4 MA's), (19, 61593), (23, 61635), (25, 61689),

Gene: Daikon_102 Start: 60404, Stop: 60601, Start Num: 16

Candidate Starts for Daikon_102:

(3, 60227), (Start: 13 @60383 has 1 MA's), (Start: 16 @60404 has 97 MA's), (Start: 17 @60449 has 4 MA's), (19, 60467), (23, 60509), (25, 60563),

Gene: DoctorDiddles_101 Start: 60253, Stop: 60450, Start Num: 16

Candidate Starts for DoctorDiddles_101:

(3, 60076), (Start: 13 @60232 has 1 MA's), (Start: 16 @60253 has 97 MA's), (Start: 17 @60298 has 4 MA's), (19, 60316), (23, 60358), (25, 60412),

Gene: DrDrey_102 Start: 62268, Stop: 62465, Start Num: 16

Candidate Starts for DrDrey_102:

(3, 62091), (Start: 13 @62247 has 1 MA's), (Start: 16 @62268 has 97 MA's), (Start: 17 @62313 has 4 MA's), (19, 62331), (23, 62373), (25, 62427),

Gene: Dusk_99 Start: 60790, Stop: 60987, Start Num: 16

Candidate Starts for Dusk_99:

(3, 60613), (Start: 13 @60769 has 1 MA's), (Start: 16 @60790 has 97 MA's), (Start: 17 @60835 has 4 MA's), (19, 60853), (23, 60895), (25, 60949),

Gene: Easy2Say_102 Start: 61262, Stop: 61459, Start Num: 16

Candidate Starts for Easy2Say_102:

(3, 61085), (Start: 13 @61241 has 1 MA's), (Start: 16 @61262 has 97 MA's), (Start: 17 @61307 has 4 MA's), (19, 61325), (23, 61367), (25, 61421),

Gene: Elite2014_101 Start: 60438, Stop: 60635, Start Num: 16

Candidate Starts for Elite2014_101:

(3, 60261), (Start: 13 @60417 has 1 MA's), (Start: 16 @60438 has 97 MA's), (Start: 17 @60483 has 4 MA's), (19, 60501), (23, 60543), (25, 60597),

Gene: Emmina_102 Start: 60213, Stop: 60410, Start Num: 16

Candidate Starts for Emmina_102:

(3, 60036), (Start: 13 @60192 has 1 MA's), (Start: 16 @60213 has 97 MA's), (Start: 17 @60258 has 4 MA's), (19, 60276), (23, 60318), (25, 60372),

Gene: Eureka_101 Start: 61401, Stop: 61598, Start Num: 16

Candidate Starts for Eureka_101:

(3, 61224), (Start: 13 @61380 has 1 MA's), (Start: 16 @61401 has 97 MA's), (Start: 17 @61446 has 4 MA's), (19, 61464), (23, 61506), (25, 61560),

Gene: FairyPath_103 Start: 61751, Stop: 61903, Start Num: 17

Candidate Starts for FairyPath_103:

(3, 61529), (Start: 13 @61685 has 1 MA's), (Start: 16 @61706 has 97 MA's), (Start: 17 @61751 has 4 MA's), (19, 61769), (23, 61811), (25, 61865),

Gene: FireRed_105 Start: 61677, Stop: 61874, Start Num: 16

Candidate Starts for FireRed_105:

(3, 61500), (Start: 13 @61656 has 1 MA's), (Start: 16 @61677 has 97 MA's), (Start: 17 @61722 has 4 MA's), (19, 61740), (23, 61782), (25, 61836),

Gene: Flypotenuse_98 Start: 59862, Stop: 60059, Start Num: 16

Candidate Starts for Flypotenuse_98:

(3, 59685), (Start: 13 @59841 has 1 MA's), (Start: 16 @59862 has 97 MA's), (Start: 17 @59907 has 4 MA's), (19, 59925), (23, 59967), (25, 60021),

Gene: FoghornLeghorn_95 Start: 58612, Stop: 58764, Start Num: 17

Candidate Starts for FoghornLeghorn_95:

(3, 58390), (Start: 13 @58546 has 1 MA's), (Start: 16 @58567 has 97 MA's), (Start: 17 @58612 has 4 MA's), (19, 58630), (23, 58672), (25, 58726),

Gene: Gage_104 Start: 60933, Stop: 61130, Start Num: 16

Candidate Starts for Gage_104:

(3, 60756), (Start: 16 @60933 has 97 MA's), (Start: 17 @60978 has 4 MA's), (19, 60996), (23, 61038), (25, 61092),

Gene: Gator_100 Start: 60718, Stop: 60915, Start Num: 16

Candidate Starts for Gator_100:

(3, 60541), (Start: 13 @60697 has 1 MA's), (Start: 16 @60718 has 97 MA's), (Start: 17 @60763 has 4 MA's), (19, 60781), (23, 60823), (25, 60877),

Gene: Gemini_107 Start: 61312, Stop: 61509, Start Num: 16

Candidate Starts for Gemini_107:

(3, 61135), (Start: 13 @61291 has 1 MA's), (Start: 16 @61312 has 97 MA's), (Start: 17 @61357 has 4 MA's), (19, 61375), (23, 61417), (25, 61471),

Gene: Glexan_101 Start: 61037, Stop: 61189, Start Num: 17

Candidate Starts for Glexan_101:

(3, 60815), (Start: 13 @60971 has 1 MA's), (Start: 16 @60992 has 97 MA's), (Start: 17 @61037 has 4 MA's), (19, 61055), (23, 61097), (25, 61151),

Gene: Goku_101 Start: 61130, Stop: 61327, Start Num: 16

Candidate Starts for Goku_101:

(3, 60953), (Start: 13 @61109 has 1 MA's), (Start: 16 @61130 has 97 MA's), (Start: 17 @61175 has 4 MA's), (19, 61193), (23, 61235), (25, 61289),

Gene: GoldenSpark_106 Start: 60795, Stop: 60992, Start Num: 16

Candidate Starts for GoldenSpark_106:

(3, 60618), (Start: 13 @60774 has 1 MA's), (Start: 16 @60795 has 97 MA's), (Start: 17 @60840 has 4 MA's), (19, 60858), (23, 60900), (25, 60954),

Gene: Goldilocks_105 Start: 60712, Stop: 60909, Start Num: 16

Candidate Starts for Goldilocks_105:

(3, 60535), (Start: 13 @60691 has 1 MA's), (Start: 16 @60712 has 97 MA's), (Start: 17 @60757 has 4 MA's), (19, 60775), (23, 60817), (25, 60871),

Gene: GooberAzure_105 Start: 60795, Stop: 60992, Start Num: 16

Candidate Starts for GooberAzure_105:

(3, 60618), (Start: 13 @60774 has 1 MA's), (Start: 16 @60795 has 97 MA's), (Start: 17 @60840 has 4 MA's), (19, 60858), (23, 60900), (25, 60954),

Gene: Greep_106 Start: 62367, Stop: 62564, Start Num: 16

Candidate Starts for Greep_106:

(3, 62190), (Start: 13 @62346 has 1 MA's), (Start: 16 @62367 has 97 MA's), (Start: 17 @62412 has 4 MA's), (19, 62430), (23, 62472), (25, 62526),

Gene: Harella_102 Start: 61508, Stop: 61705, Start Num: 16

Candidate Starts for Harella_102:

(3, 61331), (Start: 13 @61487 has 1 MA's), (Start: 16 @61508 has 97 MA's), (Start: 17 @61553 has 4 MA's), (19, 61571), (23, 61613), (25, 61667),

Gene: Henry_99 Start: 60835, Stop: 61032, Start Num: 16

Candidate Starts for Henry_99:

(3, 60658), (Start: 13 @60814 has 1 MA's), (Start: 16 @60835 has 97 MA's), (Start: 17 @60880 has 4 MA's), (19, 60898), (23, 60940), (25, 60994),

Gene: Holt_107 Start: 61209, Stop: 61406, Start Num: 16

Candidate Starts for Holt_107:

(3, 61032), (Start: 13 @61188 has 1 MA's), (Start: 16 @61209 has 97 MA's), (Start: 17 @61254 has 4 MA's), (19, 61272), (23, 61314), (25, 61368),

Gene: Hoonter_105 Start: 61288, Stop: 61485, Start Num: 16

Candidate Starts for Hoonter_105:

(3, 61111), (Start: 13 @61267 has 1 MA's), (Start: 16 @61288 has 97 MA's), (Start: 17 @61333 has 4 MA's), (19, 61351), (23, 61393), (25, 61447),

Gene: HufflyPuff_104 Start: 61903, Stop: 62100, Start Num: 16

Candidate Starts for HufflyPuff_104:

(3, 61726), (Start: 13 @61882 has 1 MA's), (Start: 16 @61903 has 97 MA's), (Start: 17 @61948 has 4 MA's), (19, 61966), (23, 62008), (25, 62062),

Gene: IHOP_100 Start: 60511, Stop: 60708, Start Num: 16

Candidate Starts for IHOP_100:

(3, 60334), (Start: 13 @60490 has 1 MA's), (Start: 16 @60511 has 97 MA's), (Start: 17 @60556 has 4 MA's), (19, 60574), (23, 60616), (25, 60670),

Gene: Ibantik_60 Start: 25970, Stop: 26188, Start Num: 14

Candidate Starts for Ibantik_60:

(2, 25754), (7, 25898), (8, 25901), (9, 25931), (Start: 14 @25970 has 1 MA's), (25, 26144),

Gene: Icee_103 Start: 60319, Stop: 60516, Start Num: 16

Candidate Starts for Icee_103:

(3, 60142), (Start: 13 @60298 has 1 MA's), (Start: 16 @60319 has 97 MA's), (Start: 17 @60364 has 4 MA's), (19, 60382), (23, 60424), (25, 60478),

Gene: Inca_99 Start: 59000, Stop: 59197, Start Num: 16

Candidate Starts for Inca_99:

(3, 58823), (Start: 13 @58979 has 1 MA's), (Start: 16 @59000 has 97 MA's), (Start: 17 @59045 has 4 MA's), (19, 59063), (23, 59105), (25, 59159),

Gene: Jordennis_50 Start: 31033, Stop: 30803, Start Num: 10

Candidate Starts for Jordennis_50:

(4, 31141), (Start: 10 @31033 has 4 MA's), (18, 30952), (19, 30937), (24, 30892), (25, 30841),

Gene: Kanye_99 Start: 61044, Stop: 61241, Start Num: 16

Candidate Starts for Kanye_99:

(3, 60867), (Start: 13 @61023 has 1 MA's), (Start: 16 @61044 has 97 MA's), (Start: 17 @61089 has 4 MA's), (19, 61107), (23, 61149), (25, 61203),

Gene: Kimchi_106 Start: 60936, Stop: 61133, Start Num: 16

Candidate Starts for Kimchi_106:

(3, 60759), (Start: 13 @60915 has 1 MA's), (Start: 16 @60936 has 97 MA's), (Start: 17 @60981 has 4 MA's), (19, 60999), (23, 61041), (25, 61095),

Gene: Kostya_102 Start: 60613, Stop: 60810, Start Num: 16

Candidate Starts for Kostya_102:

(3, 60436), (Start: 13 @60592 has 1 MA's), (Start: 16 @60613 has 97 MA's), (Start: 17 @60658 has 4 MA's), (19, 60676), (23, 60718), (25, 60772),

Gene: LadyJasley_12 Start: 5128, Stop: 5349, Start Num: 12
Candidate Starts for LadyJasley_12:
(Start: 12 @5128 has 1 MA's), (20, 5230), (22, 5248), (25, 5311),

Gene: Lilpickle_101 Start: 60438, Stop: 60635, Start Num: 16
Candidate Starts for Lilpickle_101:
(3, 60261), (Start: 13 @60417 has 1 MA's), (Start: 16 @60438 has 97 MA's), (Start: 17 @60483 has 4 MA's), (19, 60501), (23, 60543), (25, 60597),

Gene: Liveloughbron_103 Start: 62036, Stop: 62233, Start Num: 16
Candidate Starts for Liveloughbron_103:
(3, 61859), (Start: 13 @62015 has 1 MA's), (Start: 16 @62036 has 97 MA's), (Start: 17 @62081 has 4 MA's), (19, 62099), (23, 62141), (25, 62195),

Gene: MISSy_103 Start: 61721, Stop: 61918, Start Num: 16
Candidate Starts for MISSy_103:
(3, 61544), (6, 61598), (Start: 13 @61700 has 1 MA's), (Start: 16 @61721 has 97 MA's), (Start: 17 @61766 has 4 MA's), (19, 61784), (23, 61826), (25, 61880),

Gene: MPhalcon_103 Start: 61138, Stop: 61335, Start Num: 16
Candidate Starts for MPhalcon_103:
(3, 60961), (Start: 13 @61117 has 1 MA's), (Start: 16 @61138 has 97 MA's), (Start: 17 @61183 has 4 MA's), (19, 61201), (23, 61243), (25, 61297),

Gene: Manda_103 Start: 61175, Stop: 61372, Start Num: 16
Candidate Starts for Manda_103:
(3, 60998), (Start: 13 @61154 has 1 MA's), (Start: 16 @61175 has 97 MA's), (Start: 17 @61220 has 4 MA's), (19, 61238), (23, 61280), (25, 61334),

Gene: Marshmallow_99 Start: 61133, Stop: 61330, Start Num: 16
Candidate Starts for Marshmallow_99:
(3, 60956), (Start: 13 @61112 has 1 MA's), (Start: 16 @61133 has 97 MA's), (Start: 17 @61178 has 4 MA's), (19, 61196), (23, 61238), (25, 61292),

Gene: Mindy_101 Start: 60454, Stop: 60651, Start Num: 16
Candidate Starts for Mindy_101:
(3, 60277), (Start: 13 @60433 has 1 MA's), (Start: 16 @60454 has 97 MA's), (Start: 17 @60499 has 4 MA's), (19, 60517), (23, 60559), (25, 60613),

Gene: Miniwave_97 Start: 60631, Stop: 60828, Start Num: 16
Candidate Starts for Miniwave_97:
(3, 60454), (Start: 13 @60610 has 1 MA's), (Start: 16 @60631 has 97 MA's), (Start: 17 @60676 has 4 MA's), (19, 60694), (23, 60736), (25, 60790),

Gene: Misfit_103 Start: 62234, Stop: 62431, Start Num: 16
Candidate Starts for Misfit_103:
(3, 62057), (Start: 13 @62213 has 1 MA's), (Start: 16 @62234 has 97 MA's), (Start: 17 @62279 has 4 MA's), (19, 62297), (23, 62339), (25, 62393),

Gene: MollyToe_97 Start: 59032, Stop: 59229, Start Num: 16

Candidate Starts for MollyToe_97:

(3, 58855), (Start: 13 @59011 has 1 MA's), (Start: 16 @59032 has 97 MA's), (Start: 17 @59077 has 4 MA's), (19, 59095), (23, 59137), (25, 59191),

Gene: Mosby_98 Start: 60598, Stop: 60795, Start Num: 16

Candidate Starts for Mosby_98:

(3, 60421), (Start: 13 @60577 has 1 MA's), (Start: 16 @60598 has 97 MA's), (Start: 17 @60643 has 4 MA's), (19, 60661), (23, 60703), (25, 60757),

Gene: Murica_105 Start: 62937, Stop: 63134, Start Num: 16

Candidate Starts for Murica_105:

(3, 62760), (6, 62814), (Start: 13 @62916 has 1 MA's), (Start: 16 @62937 has 97 MA's), (Start: 17 @62982 has 4 MA's), (19, 63000), (23, 63042), (25, 63096),

Gene: Myrale_102 Start: 61293, Stop: 61490, Start Num: 16

Candidate Starts for Myrale_102:

(3, 61116), (Start: 13 @61272 has 1 MA's), (Start: 16 @61293 has 97 MA's), (Start: 17 @61338 has 4 MA's), (19, 61356), (23, 61398), (25, 61452),

Gene: Nala_104 Start: 61647, Stop: 61844, Start Num: 16

Candidate Starts for Nala_104:

(3, 61470), (Start: 13 @61626 has 1 MA's), (Start: 16 @61647 has 97 MA's), (Start: 17 @61692 has 4 MA's), (19, 61710), (23, 61752), (25, 61806),

Gene: NelitzaMV_99 Start: 59641, Stop: 59838, Start Num: 16

Candidate Starts for NelitzaMV_99:

(3, 59464), (Start: 13 @59620 has 1 MA's), (Start: 16 @59641 has 97 MA's), (Start: 17 @59686 has 4 MA's), (19, 59704), (23, 59746), (25, 59800),

Gene: Nimrod_102 Start: 61260, Stop: 61457, Start Num: 16

Candidate Starts for Nimrod_102:

(3, 61083), (Start: 13 @61239 has 1 MA's), (Start: 16 @61260 has 97 MA's), (Start: 17 @61305 has 4 MA's), (19, 61323), (23, 61365), (25, 61419),

Gene: NonchalantPear_102 Start: 59888, Stop: 60085, Start Num: 16

Candidate Starts for NonchalantPear_102:

(3, 59711), (Start: 16 @59888 has 97 MA's), (Start: 17 @59933 has 4 MA's), (19, 59951), (23, 59993), (25, 60047),

Gene: Palpatine_103 Start: 61977, Stop: 62129, Start Num: 17

Candidate Starts for Palpatine_103:

(3, 61755), (Start: 13 @61911 has 1 MA's), (Start: 16 @61932 has 97 MA's), (Start: 17 @61977 has 4 MA's), (19, 61995), (23, 62037), (25, 62091),

Gene: Panchaali_179 Start: 122700, Stop: 122903, Start Num: 15

Candidate Starts for Panchaali_179:

(11, 122679), (Start: 15 @122700 has 1 MA's), (21, 122790), (26, 122871),

Gene: Paperbeatsrock_101 Start: 61309, Stop: 61506, Start Num: 16

Candidate Starts for Paperbeatsrock_101:

(3, 61132), (Start: 13 @61288 has 1 MA's), (Start: 16 @61309 has 97 MA's), (Start: 17 @61354 has 4 MA's), (19, 61372), (23, 61414), (25, 61468),

Gene: Pat3_99 Start: 59826, Stop: 60023, Start Num: 16

Candidate Starts for Pat3_99:

(3, 59649), (Start: 13 @59805 has 1 MA's), (Start: 16 @59826 has 97 MA's), (Start: 17 @59871 has 4 MA's), (19, 59889), (23, 59931), (25, 59985),

Gene: Petra64142_106 Start: 61798, Stop: 61995, Start Num: 16

Candidate Starts for Petra64142_106:

(3, 61621), (Start: 13 @61777 has 1 MA's), (Start: 16 @61798 has 97 MA's), (Start: 17 @61843 has 4 MA's), (19, 61861), (23, 61903), (25, 61957),

Gene: Phaja_100 Start: 60513, Stop: 60710, Start Num: 16

Candidate Starts for Phaja_100:

(3, 60336), (Start: 13 @60492 has 1 MA's), (Start: 16 @60513 has 97 MA's), (Start: 17 @60558 has 4 MA's), (19, 60576), (23, 60618), (25, 60672),

Gene: Pharaoh_43 Start: 32085, Stop: 31876, Start Num: 10

Candidate Starts for Pharaoh_43:

(4, 32193), (5, 32181), (Start: 10 @32085 has 4 MA's), (19, 32010), (22, 31977), (25, 31914),

Gene: Pharsalus_99 Start: 61008, Stop: 61205, Start Num: 16

Candidate Starts for Pharsalus_99:

(3, 60831), (Start: 13 @60987 has 1 MA's), (Start: 16 @61008 has 97 MA's), (Start: 17 @61053 has 4 MA's), (19, 61071), (23, 61113), (25, 61167),

Gene: PhatBacter_105 Start: 61677, Stop: 61874, Start Num: 16

Candidate Starts for PhatBacter_105:

(3, 61500), (Start: 13 @61656 has 1 MA's), (Start: 16 @61677 has 97 MA's), (Start: 17 @61722 has 4 MA's), (19, 61740), (23, 61782), (25, 61836),

Gene: Phaux_104 Start: 62237, Stop: 62434, Start Num: 16

Candidate Starts for Phaux_104:

(3, 62060), (Start: 13 @62216 has 1 MA's), (Start: 16 @62237 has 97 MA's), (Start: 17 @62282 has 4 MA's), (19, 62300), (23, 62342), (25, 62396),

Gene: Policronamos_104 Start: 61941, Stop: 62138, Start Num: 16

Candidate Starts for Policronamos_104:

(3, 61764), (Start: 13 @61920 has 1 MA's), (Start: 16 @61941 has 97 MA's), (Start: 17 @61986 has 4 MA's), (19, 62004), (23, 62046), (25, 62100),

Gene: Polyphemus_52 Start: 31731, Stop: 31501, Start Num: 10

Candidate Starts for Polyphemus_52:

(4, 31839), (Start: 10 @31731 has 4 MA's), (18, 31650), (19, 31635), (24, 31590), (25, 31539),

Gene: Ptowny_98 Start: 59349, Stop: 59546, Start Num: 16

Candidate Starts for Ptowny_98:

(3, 59172), (Start: 16 @59349 has 97 MA's), (Start: 17 @59394 has 4 MA's), (19, 59412), (23, 59454), (25, 59508),

Gene: Quallification_103 Start: 61723, Stop: 61920, Start Num: 16

Candidate Starts for Quallification_103:

(3, 61546), (Start: 13 @61702 has 1 MA's), (Start: 16 @61723 has 97 MA's), (Start: 17 @61768 has 4 MA's), (19, 61786), (23, 61828), (25, 61882),

Gene: Rakim_103 Start: 60745, Stop: 60942, Start Num: 16

Candidate Starts for Rakim_103:

(3, 60568), (Start: 13 @60724 has 1 MA's), (Start: 16 @60745 has 97 MA's), (Start: 17 @60790 has 4 MA's), (19, 60808), (23, 60850), (25, 60904),

Gene: Rimmer_100 Start: 61135, Stop: 61332, Start Num: 16

Candidate Starts for Rimmer_100:

(3, 60958), (Start: 13 @61114 has 1 MA's), (Start: 16 @61135 has 97 MA's), (Start: 17 @61180 has 4 MA's), (19, 61198), (23, 61240), (25, 61294),

Gene: Sassay_97 Start: 59560, Stop: 59757, Start Num: 16

Candidate Starts for Sassay_97:

(3, 59383), (Start: 13 @59539 has 1 MA's), (Start: 16 @59560 has 97 MA's), (Start: 17 @59605 has 4 MA's), (19, 59623), (23, 59665), (25, 59719),

Gene: ShamWow_102 Start: 61530, Stop: 61727, Start Num: 16

Candidate Starts for ShamWow_102:

(3, 61353), (Start: 13 @61509 has 1 MA's), (Start: 16 @61530 has 97 MA's), (Start: 17 @61575 has 4 MA's), (19, 61593), (23, 61635), (25, 61689),

Gene: ShereKhan_100 Start: 61969, Stop: 62166, Start Num: 16

Candidate Starts for ShereKhan_100:

(3, 61792), (Start: 13 @61948 has 1 MA's), (Start: 16 @61969 has 97 MA's), (Start: 17 @62014 has 4 MA's), (19, 62032), (23, 62074), (25, 62128),

Gene: SirDuracell_102 Start: 60347, Stop: 60544, Start Num: 16

Candidate Starts for SirDuracell_102:

(3, 60170), (Start: 13 @60326 has 1 MA's), (Start: 16 @60347 has 97 MA's), (Start: 17 @60392 has 4 MA's), (19, 60410), (23, 60452), (25, 60506),

Gene: SophKB_100 Start: 60770, Stop: 60967, Start Num: 16

Candidate Starts for SophKB_100:

(3, 60593), (Start: 13 @60749 has 1 MA's), (Start: 16 @60770 has 97 MA's), (Start: 17 @60815 has 4 MA's), (19, 60833), (23, 60875), (25, 60929),

Gene: Sotrice96_103 Start: 61234, Stop: 61431, Start Num: 16

Candidate Starts for Sotrice96_103:

(3, 61057), (Start: 13 @61213 has 1 MA's), (Start: 16 @61234 has 97 MA's), (Start: 17 @61279 has 4 MA's), (19, 61297), (23, 61339), (25, 61393),

Gene: Stank_104 Start: 61008, Stop: 61205, Start Num: 16

Candidate Starts for Stank_104:

(3, 60831), (Start: 13 @60987 has 1 MA's), (Start: 16 @61008 has 97 MA's), (Start: 17 @61053 has 4 MA's), (19, 61071), (23, 61113), (25, 61167),

Gene: StellaBean_101 Start: 61370, Stop: 61567, Start Num: 16

Candidate Starts for StellaBean_101:

(3, 61193), (Start: 13 @61349 has 1 MA's), (Start: 16 @61370 has 97 MA's), (Start: 17 @61415 has 4 MA's), (19, 61433), (23, 61475), (25, 61529),

Gene: StolenFromERC_104 Start: 60933, Stop: 61130, Start Num: 16

Candidate Starts for StolenFromERC_104:

(3, 60756), (Start: 16 @60933 has 97 MA's), (Start: 17 @60978 has 4 MA's), (19, 60996), (23, 61038), (25, 61092),

Gene: StormChicken_103 Start: 61299, Stop: 61496, Start Num: 16

Candidate Starts for StormChicken_103:

(3, 61122), (Start: 13 @61278 has 1 MA's), (Start: 16 @61299 has 97 MA's), (Start: 17 @61344 has 4 MA's), (19, 61362), (23, 61404), (25, 61458),

Gene: TBrady12_105 Start: 60448, Stop: 60645, Start Num: 16

Candidate Starts for TBrady12_105:

(3, 60271), (Start: 13 @60427 has 1 MA's), (Start: 16 @60448 has 97 MA's), (Start: 17 @60493 has 4 MA's), (19, 60511), (23, 60553), (25, 60607),

Gene: Tarkin_101 Start: 61834, Stop: 62031, Start Num: 16

Candidate Starts for Tarkin_101:

(3, 61657), (Start: 13 @61813 has 1 MA's), (Start: 16 @61834 has 97 MA's), (Start: 17 @61879 has 4 MA's), (19, 61897), (23, 61939), (25, 61993),

Gene: TeamEdward_102 Start: 61496, Stop: 61693, Start Num: 16

Candidate Starts for TeamEdward_102:

(3, 61319), (Start: 13 @61475 has 1 MA's), (Start: 16 @61496 has 97 MA's), (Start: 17 @61541 has 4 MA's), (19, 61559), (23, 61601), (25, 61655),

Gene: TeardropMSU_98 Start: 60315, Stop: 60512, Start Num: 16

Candidate Starts for TeardropMSU_98:

(3, 60138), (Start: 13 @60294 has 1 MA's), (Start: 16 @60315 has 97 MA's), (Start: 17 @60360 has 4 MA's), (19, 60378), (23, 60420), (25, 60474),

Gene: Terminus_105 Start: 62234, Stop: 62431, Start Num: 16

Candidate Starts for Terminus_105:

(3, 62057), (Start: 13 @62213 has 1 MA's), (Start: 16 @62234 has 97 MA's), (Start: 17 @62279 has 4 MA's), (19, 62297), (23, 62339), (25, 62393),

Gene: Thimble_104 Start: 60243, Stop: 60395, Start Num: 17

Candidate Starts for Thimble_104:

(3, 60021), (Start: 13 @60177 has 1 MA's), (Start: 16 @60198 has 97 MA's), (Start: 17 @60243 has 4 MA's), (19, 60261), (23, 60303), (25, 60357),

Gene: Tomaszewski_97 Start: 60772, Stop: 60969, Start Num: 16

Candidate Starts for Tomaszewski_97:

(3, 60595), (Start: 13 @60751 has 1 MA's), (Start: 16 @60772 has 97 MA's), (Start: 17 @60817 has 4 MA's), (19, 60835), (23, 60877), (25, 60931),

Gene: Toto_100 Start: 61530, Stop: 61727, Start Num: 16

Candidate Starts for Toto_100:

(3, 61353), (Start: 13 @61509 has 1 MA's), (Start: 16 @61530 has 97 MA's), (Start: 17 @61575 has 4 MA's), (19, 61593), (23, 61635), (25, 61689),

Gene: Traaww1_98 Start: 60037, Stop: 60234, Start Num: 16

Candidate Starts for Traaww1_98:

(3, 59860), (Start: 13 @60016 has 1 MA's), (Start: 16 @60037 has 97 MA's), (Start: 17 @60082 has 4 MA's), (19, 60100), (23, 60142), (25, 60196),

Gene: Tuco_103 Start: 62395, Stop: 62592, Start Num: 16

Candidate Starts for Tuco_103:

(3, 62218), (Start: 13 @62374 has 1 MA's), (Start: 16 @62395 has 97 MA's), (Start: 17 @62440 has 4 MA's), (19, 62458), (23, 62500), (25, 62554),

Gene: Vanisoa_48 Start: 33142, Stop: 32909, Start Num: 10

Candidate Starts for Vanisoa_48:

(1, 33343), (5, 33232), (Start: 10 @33142 has 4 MA's), (19, 33043), (23, 33001), (25, 32947),

Gene: Wiggin_104 Start: 60438, Stop: 60635, Start Num: 16

Candidate Starts for Wiggin_104:

(3, 60261), (Start: 13 @60417 has 1 MA's), (Start: 16 @60438 has 97 MA's), (Start: 17 @60483 has 4 MA's), (19, 60501), (23, 60543), (25, 60597),

Gene: Willez_97 Start: 59560, Stop: 59757, Start Num: 16

Candidate Starts for Willez_97:

(3, 59383), (Start: 13 @59539 has 1 MA's), (Start: 16 @59560 has 97 MA's), (Start: 17 @59605 has 4 MA's), (19, 59623), (23, 59665), (25, 59719),

Gene: Xandras_101 Start: 60261, Stop: 60458, Start Num: 16

Candidate Starts for Xandras_101:

(3, 60084), (Start: 16 @60261 has 97 MA's), (Start: 17 @60306 has 4 MA's), (19, 60324), (23, 60366), (25, 60420),

Gene: YassJohnny_99 Start: 59581, Stop: 59778, Start Num: 16

Candidate Starts for YassJohnny_99:

(3, 59404), (Start: 13 @59560 has 1 MA's), (Start: 16 @59581 has 97 MA's), (Start: 17 @59626 has 4 MA's), (19, 59644), (23, 59686), (25, 59740),

Gene: Youngblood_105 Start: 61731, Stop: 61928, Start Num: 16

Candidate Starts for Youngblood_105:

(3, 61554), (Start: 13 @61710 has 1 MA's), (Start: 16 @61731 has 97 MA's), (Start: 17 @61776 has 4 MA's), (19, 61794), (23, 61836), (25, 61890),

Gene: xkcd_105 Start: 61915, Stop: 62112, Start Num: 16

Candidate Starts for xkcd_105:

(3, 61738), (Start: 13 @61894 has 1 MA's), (Start: 16 @61915 has 97 MA's), (Start: 17 @61960 has 4 MA's), (19, 61978), (23, 62020), (25, 62074),