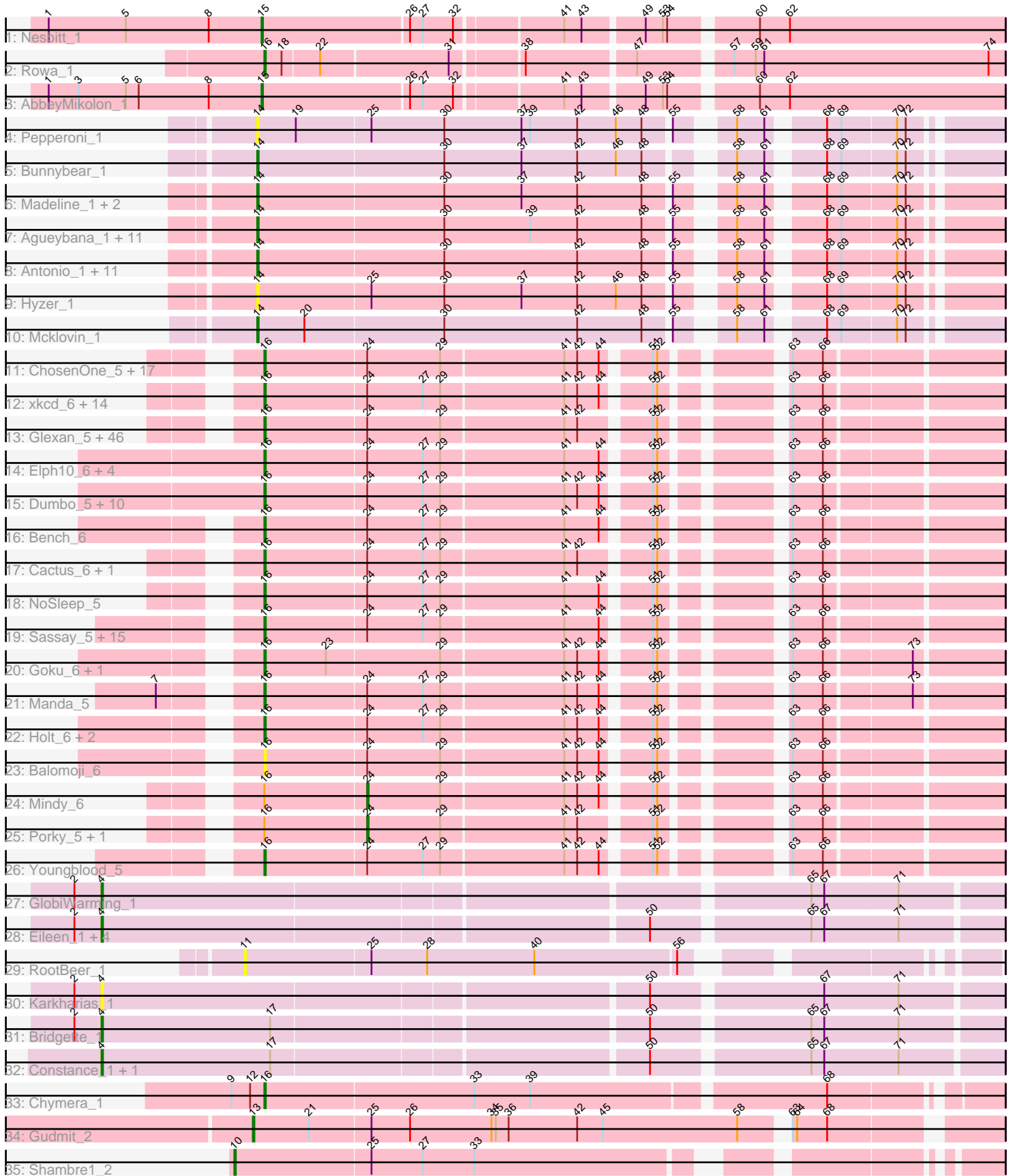


Pham 157627



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 157627 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157627 has 175 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Nesbitt_1
- Track 2 : Rowa_1
- Track 3 : AbbeyMikolon_1
- Track 4 : Pepperoni_1
- Track 5 : Bunnybear_1
- Track 6 : Madeline_1, WelcomeAyanna_1, ThankyouJordi_1
- Track 7 : Agueybana_1, Nymphadora_1, Herod_1, AlumE_1, Eviarto_1, Bialota_1, BatStarr_1, BoyNamedSue_1, Hugley_1, TimTam_1, Zirinka_1, Bosnia_1
- Track 8 : Antonio_1, Suscepit_1, Maridalia_1, Polly_1, Manasvini_1, Trumpet_1, RavenCo17_1, Zameen_1, Eudoria_1, Kita_1, Tayonia_1, Neobush_1
- Track 9 : Hyzer_1
- Track 10 : Mcklovin_1
- Track 11 : ChosenOne_5, IHOP_6, BaboJay_6, Marshmallow_6, Pharsalus_6, Elite2014_5, Myrale_6, Phaja_6, NelitzaMV_6, StellaBean_6, ShamWow_6, SophKB_6, Toto_6, Lilpickle_5, Hoonter_6, Cookies_6, Tarkin_6, TeardropMSU_5
- Track 12 : xkcd_6, Moldemort_5, Kanye_6, DoctorDiddles_5, Czyszczonek_5, Highbury_5, Saints25_5, HanKaySha_5, Simpliphy_5, Qualification_6, OrionPax_5, Stank_6, DrDrey_6, AmericanBeauty_6, ShereKhan_6
- Track 13 : Glexan_5, Paperbeatsrock_6, StolenFromERC_6, Rimmer_6, Goldilocks_6, Wiggin_6, Rakim_6, Barbarian_5, Buck_6, Flypotenuse_5, BigBubba_6, MadamMonkfish_5, SirDuracell_6, Adnama_6, Murphy_5, Gage_6, Henry_6, TBrady12_6, ChotaBhai_6, Miniwave_6, Tuco_6, ABCat_5, CrystalP_6, Dusk_6, BadStone_5, Inca_6, GooberAzure_6, Traaaw1_5, Asriel_5, Nimrod_6, Bask21_6, Emmina_6, Gemini_6, Kimchi_6, Gator_5, GoldenSpark_6, Argent26_6, Harella_5, Teaspoon_6, Amao_6, YassJohnny_6, Pat3_6, Lilizi_6, Xandras_6, BilboSwaggins_6, Kostya_6, Command613_6
- Track 14 : Elph10_6, Maxxinista_6, Filch_6, RiverMonster_5, 244_6
- Track 15 : Dumbo_5, Hopey_6, Lilac_7, Thresher_6, Easy2Say_6, Phrux_5, Cjw1_5, Pumpkin_6, JeTaime_7, Stark_6, Ukulele_5
- Track 16 : Bench_6
- Track 17 : Cactus_6, Icee_6
- Track 18 : NoSleep_5
- Track 19 : Sassay_5, Murica_4, Phaux_4, HufflyPuff_4, Terminus_5, Bruin_5, FireRed_5, Tomaszewski_5, MPhalcon_5, PhatBacter_5, Contagion_5, MISSy_5, Willez_5, Nala_5, Mosby_5, Misfit_5
- Track 20 : Goku_6, Eureka_5
- Track 21 : Manda_5

- Track 22 : Holt_6, Sotrice96_6, Daikon_5
- Track 23 : Balomoji_6
- Track 24 : Mindy_6
- Track 25 : Porky_5, Petra64142_6
- Track 26 : Youngblood_5
- Track 27 : GlobiWarming_1
- Track 28 : Eileen_1, Pucara_1, ChuckDuck_1, Judy_1, Peas_1
- Track 29 : RootBeer_1
- Track 30 : Karkharias_1
- Track 31 : Bridgette_1
- Track 32 : Constance_1, PeggyLeg03_1
- Track 33 : Chymera_1
- Track 34 : Gudmit_2
- Track 35 : Shambre1_2

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 116 of the 157 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_6, ABCat_5, Adnama_6, Amao_6, AmericanBeauty_6, Argent26_6, Asriel_5, BaboJay_6, BadStone_5, Balomoji_6, Barbarian_5, Bask21_6, Bench_6, BigBubba_6, BilboSwaggins_6, Bruin_5, Buck_6, Cactus_6, ChosenOne_5, ChotaBhai_6, Chymera_1, Cjw1_5, Command613_6, Contagion_5, Cookies_6, CrystalP_6, Czyszczonek_5, Daikon_5, DoctorDiddles_5, DrDrey_6, Dumbo_5, Dusk_6, Easy2Say_6, Elite2014_5, Elph10_6, Emmina_6, Eureka_5, Filch_6, FireRed_5, Flypotenuse_5, Gage_6, Gator_5, Gemini_6, Glexan_5, Goku_6, GoldenSpark_6, Goldilocks_6, GooberAzure_6, HanKaySha_5, Harella_5, Henry_6, Highbury_5, Holt_6, Hoonter_6, Hopey_6, HufflyPuff_4, IHOP_6, Icee_6, Inca_6, JeTaime_7, Kanye_6, Kimchi_6, Kostya_6, Lilac_7, Lilizi_6, Lilpickle_5, MISSy_5, MPhalcon_5, MadamMonkfish_5, Manda_5, Marshmallow_6, Maxxinista_6, Miniwave_6, Misfit_5, Moldemort_5, Mosby_5, Murica_4, Murphy_5, Myrale_6, Nala_5, NelitzaMV_6, Nimrod_6, NoSleep_5, OrionPax_5, Paperbeatsrock_6, Pat3_6, Phaja_6, Pharsalus_6, PhatBacter_5, Phaux_4, Phrux_5, Pumpkin_6, Quallification_6, Rakim_6, Rimmer_6, RiverMonster_5, Rowa_1, Saints25_5, Sassay_5, ShamWow_6, ShereKhan_6, Simpliphy_5, SirDuracell_6, SophKB_6, Sotrice96_6, Stank_6, Stark_6, StellaBean_6, StolenFromERC_6, TBrady12_6, Tarkin_6, TeardropMSU_5, Teaspoon_6, Terminus_5, Thresher_6, Tomaszewski_5, Toto_6, Traaww1_5, Tuco_6, Ukulele_5, Wiggin_6, Willez_5, Xandras_6, YassJohnny_6, Youngblood_5, xkcd_6,

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

- Mindy_6, Petra64142_6, Porky_5,

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

- AbbeyMikolon_1, Agueybana_1, AlumE_1, Antonio_1, BatStarr_1, Bialota_1, Bosnia_1, BoyNamedSue_1, Bridgette_1, Bunnybear_1, ChuckDuck_1, Constance_1, Eileen_1, Eudoria_1, Eviarto_1, GlobiWarming_1, Gudmit_2, Herod_1, Hugley_1, Hyzer_1, Judy_1, Karkharias_1, Kita_1, Madeline_1, Manasvini_1,

Maridalia_1, Mcklovin_1, Neobush_1, Nesbitt_1, Nymphadora_1, Peas_1, PeggyLeg03_1, Pepperoni_1, Polly_1, Pucara_1, RavenCo17_1, RootBeer_1, Shambre1_2, Suscepit_1, Tayonia_1, ThankyouJordi_1, TimTam_1, Trumpet_1, WelcomeAyanna_1, Zameen_1, Zirinka_1,

Summary by start number:

Start 4:

- Found in 10 of 175 (5.7%) of genes in pham
- Manual Annotations of this start: 7 of 157
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette_1 (FA), ChuckDuck_1 (FA), Constance_1 (FA), Eileen_1 (FA), GlobiWarming_1 (FA), Judy_1 (FA), Karkharias_1 (FA), Peas_1 (FA), PeggyLeg03_1 (FA), Pucara_1 (FA),

Start 10:

- Found in 1 of 175 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 157
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_2 (singleton),

Start 11:

- Found in 1 of 175 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RootBeer_1 (FA),

Start 13:

- Found in 1 of 175 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 157
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit_2 (singleton),

Start 14:

- Found in 31 of 175 (17.7%) of genes in pham
- Manual Annotations of this start: 28 of 157
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agueybana_1 (CZ1), AlumE_1 (CZ1), Antonio_1 (CZ1), BatStarr_1 (CZ1), Bialota_1 (CZ1), Bosnia_1 (CZ1), BoyNamedSue_1 (CZ1), Bunnybear_1 (CZ), Eudoria_1 (CZ1), Eviarto_1 (CZ1), Herod_1 (CZ1), Hugley_1 (CZ1), Hyzer_1 (CZ1), Kita_1 (CZ1), Madeline_1 (CZ1), Manasvini_1 (CZ1), Maridalia_1 (CZ1), Mcklovin_1 (CZ4), Neobush_1 (CZ1), Nymphadora_1 (CZ1), Pepperoni_1 (CZ), Polly_1 (CZ1), RavenCo17_1 (CZ8), Suscepit_1 (CZ1), Tayonia_1 (CZ1), ThankyouJordi_1 (CZ1), TimTam_1 (CZ1), Trumpet_1 (CZ1), WelcomeAyanna_1 (CZ1), Zameen_1 (CZ1), Zirinka_1 (CZ1),

Start 15:

- Found in 2 of 175 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 157
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_1 (BL), Nesbitt_1 (BL),

Start 16:

- Found in 129 of 175 (73.7%) of genes in pham
- Manual Annotations of this start: 116 of 157
- Called 97.7% of time when present
- Phage (with cluster) where this start called: 244_6 (E), ABCat_5 (E), Adnama_6 (E), Amao_6 (E), AmericanBeauty_6 (E), Argent26_6 (E), Asriel_5 (E), BaboJay_6 (E), BadStone_5 (E), Balomoji_6 (E), Barbarian_5 (E), Bask21_6 (E), Bench_6 (E), BigBubba_6 (E), BilboSwaggins_6 (E), Bruin_5 (E), Buck_6 (E), Cactus_6 (E), ChosenOne_5 (E), ChotaBhai_6 (E), Chymera_1 (singleton), Cjw1_5 (E), Command613_6 (E), Contagion_5 (E), Cookies_6 (E), CrystalP_6 (E), Czyszczonek1_5 (E), Daikon_5 (E), DoctorDiddles_5 (E), DrDrey_6 (E), Dumbo_5 (E), Dusk_6 (E), Easy2Say_6 (E), Elite2014_5 (E), Elph10_6 (E), Emmina_6 (E), Eureka_5 (E), Filch_6 (E), FireRed_5 (E), Flypotenuse_5 (E), Gage_6 (E), Gator_5 (E), Gemini_6 (E), Glexan_5 (E), Goku_6 (E), GoldenSpark_6 (E), Goldilocks_6 (E), GooberAzure_6 (E), HanKaySha_5 (E), Harella_5 (E), Henry_6 (E), Highbury_5 (E), Holt_6 (E), Hoonter_6 (E), Hopey_6 (E), HufflyPuff_4 (E), IHOP_6 (E), Icee_6 (E), Inca_6 (E), JeTaime_7 (E), Kanye_6 (E), Kimchi_6 (E), Kostya_6 (E), Lilac_7 (E), Lilizi_6 (E), Lilpickle_5 (E), MISSy_5 (E), MPhalcon_5 (E), MadamMonkfish_5 (E), Manda_5 (E), Marshmallow_6 (E), Maxxinista_6 (E), Miniwave_6 (E), Misfit_5 (E), Moldemort_5 (E), Mosby_5 (E), Murica_4 (E), Murphy_5 (E), Myrale_6 (E), Nala_5 (E), NelitzaMV_6 (E), Nimrod_6 (E), NoSleep_5 (E), OrionPax_5 (E), Paperbeatsrock_6 (E), Pat3_6 (E), Phaja_6 (E), Pharsalus_6 (E), PhatBacter_5 (E), Phaux_4 (E), Phrux_5 (E), Pumpkin_6 (E), Quallification_6 (E), Rakim_6 (E), Rimmer_6 (E), RiverMonster_5 (E), Rowa_1 (BL), Saints25_5 (E), Sassay_5 (E), ShamWow_6 (E), ShereKhan_6 (E), Simpliphy_5 (E), SirDuracell_6 (E), SophKB_6 (E), Sotrice96_6 (E), Stank_6 (E), Stark_6 (E), StellaBean_6 (E), StolenFromERC_6 (E), TBrady12_6 (E), Tarkin_6 (E), TeardropMSU_5 (E), Teaspoon_6 (E), Terminus_5 (E), Thresher_6 (E), Tomaszewski_5 (E), Toto_6 (E), Traaww1_5 (E), Tuco_6 (E), Ukulele_5 (E), Wiggin_6 (E), Willez_5 (E), Xandras_6 (E), YassJohnny_6 (E), Youngblood_5 (E), xkcd_6 (E),

Start 24:

- Found in 125 of 175 (71.4%) of genes in pham
- Manual Annotations of this start: 2 of 157
- Called 2.4% of time when present
- Phage (with cluster) where this start called: Mindy_6 (E), Petra64142_6 (E), Porky_5 (E),

Summary by clusters:

There are 8 clusters represented in this pham: CZ8, E, CZ, BL, CZ1, singleton, CZ4, FA,

Info for manual annotations of cluster BL:

- Start number 15 was manually annotated 2 times for cluster BL.
- Start number 16 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ1:

- Start number 14 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ4:

- Start number 14 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ8:

- Start number 14 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster E:

- Start number 16 was manually annotated 114 times for cluster E.
- Start number 24 was manually annotated 2 times for cluster E.

Info for manual annotations of cluster FA:

- Start number 4 was manually annotated 7 times for cluster FA.

Gene Information:

Gene: 244_6 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for 244_6:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: ABCat_5 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for ABCat_5:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: AbbeyMikolon_1 Start: 162, Stop: 650, Start Num: 15

Candidate Starts for AbbeyMikolon_1:

(1, 15), (3, 36), (5, 69), (6, 78), (8, 126), (Start: 15 @162 has 2 MA's), (26, 261), (27, 270), (32, 291), (41, 360), (43, 372), (49, 411), (53, 423), (54, 426), (60, 480), (62, 501),

Gene: Adnama_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Adnama_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Agueybana_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Agueybana_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: AlumE_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for AlumE_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Amao_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Amao_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: AmericanBeauty_6 Start: 1054, Stop: 1515, Start Num: 16

Candidate Starts for AmericanBeauty_6:

(Start: 16 @1054 has 116 MA's), (Start: 24 @1123 has 2 MA's), (27, 1162), (29, 1174), (41, 1258), (42, 1267), (44, 1282), (51, 1309), (52, 1312), (63, 1378), (66, 1399),

Gene: Antonio_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Antonio_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Argent26_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Argent26_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Asriel_5 Start: 1043, Stop: 1504, Start Num: 16

Candidate Starts for Asriel_5:

(Start: 16 @1043 has 116 MA's), (Start: 24 @1112 has 2 MA's), (29, 1163), (41, 1247), (42, 1256), (51, 1298), (52, 1301), (63, 1367), (66, 1388),

Gene: BaboJay_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for BaboJay_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (44, 1156), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: BadStone_5 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for BadStone_5:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Balomoji_6 Start: 1131, Stop: 1592, Start Num: 16

Candidate Starts for Balomoji_6:

(Start: 16 @1131 has 116 MA's), (Start: 24 @1200 has 2 MA's), (29, 1251), (41, 1335), (42, 1344), (44, 1359), (51, 1386), (52, 1389), (63, 1455), (66, 1476),

Gene: Barbarian_5 Start: 1043, Stop: 1504, Start Num: 16

Candidate Starts for Barbarian_5:

(Start: 16 @1043 has 116 MA's), (Start: 24 @1112 has 2 MA's), (29, 1163), (41, 1247), (42, 1256), (51, 1298), (52, 1301), (63, 1367), (66, 1388),

Gene: Bask21_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Bask21_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: BatStarr_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for BatStarr_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Bench_6 Start: 1128, Stop: 1589, Start Num: 16

Candidate Starts for Bench_6:

(Start: 16 @1128 has 116 MA's), (Start: 24 @1197 has 2 MA's), (27, 1236), (29, 1248), (41, 1332), (44, 1356), (51, 1383), (52, 1386), (63, 1452), (66, 1473),

Gene: Bialota_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Bialota_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: BigBubba_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for BigBubba_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: BilboSwaggins_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for BilboSwaggins_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Bosnia_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Bosnia_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: BoyNamedSue_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for BoyNamedSue_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Bridgette_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Bridgette_1:

(2, 33), (Start: 4 @51 has 7 MA's), (17, 168), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: Bruin_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Bruin_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Buck_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Buck_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Bunnybear_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Bunnybear_1:

(Start: 14 @56 has 28 MA's), (30, 185), (37, 239), (42, 278), (46, 305), (48, 323), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Cactus_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Cactus_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: ChosenOne_5 Start: 1010, Stop: 1471, Start Num: 16

Candidate Starts for ChosenOne_5:

(Start: 16 @1010 has 116 MA's), (Start: 24 @1079 has 2 MA's), (29, 1130), (41, 1214), (42, 1223), (44, 1238), (51, 1265), (52, 1268), (63, 1334), (66, 1355),

Gene: ChotaBhai_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for ChotaBhai_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: ChuckDuck_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for ChuckDuck_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: Chymera_1 Start: 80, Stop: 562, Start Num: 16

Candidate Starts for Chymera_1:

(9, 62), (12, 74), (Start: 16 @80 has 116 MA's), (33, 224), (39, 263), (68, 458),

Gene: Cjw1_5 Start: 1158, Stop: 1619, Start Num: 16

Candidate Starts for Cjw1_5:

(Start: 16 @1158 has 116 MA's), (Start: 24 @1227 has 2 MA's), (27, 1266), (29, 1278), (41, 1362), (42, 1371), (44, 1386), (51, 1413), (52, 1416), (63, 1482), (66, 1503),

Gene: Command613_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for Command613_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Constance_1 Start: 52, Stop: 648, Start Num: 4

Candidate Starts for Constance_1:

(Start: 4 @52 has 7 MA's), (17, 169), (50, 418), (65, 520), (67, 529), (71, 580),

Gene: Contagion_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Contagion_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Cookies_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Cookies_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: CrystalP_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for CrystalP_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Czyszczone1_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Czyszczone1_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (27, 1121), (29, 1133), (41, 1217), (42, 1226), (44, 1241), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Daikon_5 Start: 1131, Stop: 1592, Start Num: 16

Candidate Starts for Daikon_5:

(Start: 16 @1131 has 116 MA's), (Start: 24 @1200 has 2 MA's), (27, 1239), (29, 1251), (41, 1335), (42, 1344), (44, 1359), (51, 1386), (52, 1389), (63, 1455), (66, 1476),

Gene: DoctorDiddles_5 Start: 1010, Stop: 1471, Start Num: 16

Candidate Starts for DoctorDiddles_5:

(Start: 16 @1010 has 116 MA's), (Start: 24 @1079 has 2 MA's), (27, 1118), (29, 1130), (41, 1214), (42, 1223), (44, 1238), (51, 1265), (52, 1268), (63, 1334), (66, 1355),

Gene: DrDrey_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for DrDrey_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Dumbo_5 Start: 1152, Stop: 1613, Start Num: 16

Candidate Starts for Dumbo_5:

(Start: 16 @1152 has 116 MA's), (Start: 24 @1221 has 2 MA's), (27, 1260), (29, 1272), (41, 1356), (42, 1365), (44, 1380), (51, 1407), (52, 1410), (63, 1476), (66, 1497),

Gene: Dusk_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Dusk_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Easy2Say_6 Start: 1134, Stop: 1595, Start Num: 16

Candidate Starts for Easy2Say_6:

(Start: 16 @1134 has 116 MA's), (Start: 24 @1203 has 2 MA's), (27, 1242), (29, 1254), (41, 1338), (42, 1347), (44, 1362), (51, 1389), (52, 1392), (63, 1458), (66, 1479),

Gene: Eileen_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Eileen_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: Elite2014_5 Start: 1010, Stop: 1471, Start Num: 16

Candidate Starts for Elite2014_5:

(Start: 16 @1010 has 116 MA's), (Start: 24 @1079 has 2 MA's), (29, 1130), (41, 1214), (42, 1223), (44, 1238), (51, 1265), (52, 1268), (63, 1334), (66, 1355),

Gene: Elph10_6 Start: 1152, Stop: 1613, Start Num: 16

Candidate Starts for Elph10_6:

(Start: 16 @1152 has 116 MA's), (Start: 24 @1221 has 2 MA's), (27, 1260), (29, 1272), (41, 1356), (44, 1380), (51, 1407), (52, 1410), (63, 1476), (66, 1497),

Gene: Emmina_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for Emmina_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Eudoria_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Eudoria_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Eureka_5 Start: 999, Stop: 1460, Start Num: 16

Candidate Starts for Eureka_5:

(Start: 16 @999 has 116 MA's), (23, 1041), (29, 1119), (41, 1203), (42, 1212), (44, 1227), (51, 1254), (52, 1257), (63, 1323), (66, 1344), (73, 1401),

Gene: Eviarto_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Eviarto_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Filch_6 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for Filch_6:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: FireRed_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for FireRed_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Flypotenuse_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Flypotenuse_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (29, 1133), (41, 1217), (42, 1226), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Gage_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Gage_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Gator_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Gator_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (29, 1133), (41, 1217), (42, 1226), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Gemini_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Gemini_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Glexan_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Glexan_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (29, 1133), (41, 1217), (42, 1226), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: GlobiWarming_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for GlobiWarming_1:

(2, 33), (Start: 4 @51 has 7 MA's), (65, 519), (67, 528), (71, 579),

Gene: Goku_6 Start: 999, Stop: 1460, Start Num: 16

Candidate Starts for Goku_6:

(Start: 16 @999 has 116 MA's), (23, 1041), (29, 1119), (41, 1203), (42, 1212), (44, 1227), (51, 1254), (52, 1257), (63, 1323), (66, 1344), (73, 1401),

Gene: GoldenSpark_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for GoldenSpark_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Goldilocks_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Goldilocks_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: GooberAzure_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for GooberAzure_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Gudmit_2 Start: 492, Stop: 980, Start Num: 13

Candidate Starts for Gudmit_2:

(Start: 13 @492 has 1 MA's), (21, 531), (25, 573), (26, 600), (34, 657), (35, 660), (36, 669), (42, 717), (45, 735), (58, 828), (63, 852), (64, 855), (68, 876),

Gene: HanKaySha_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for HanKaySha_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (27, 1121), (29, 1133), (41, 1217), (42, 1226), (44, 1241), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Harella_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Harella_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (29, 1133), (41, 1217), (42, 1226), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Henry_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Henry_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Herod_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Herod_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Highbury_5 Start: 1022, Stop: 1483, Start Num: 16

Candidate Starts for Highbury_5:

(Start: 16 @1022 has 116 MA's), (Start: 24 @1091 has 2 MA's), (27, 1130), (29, 1142), (41, 1226), (42, 1235), (44, 1250), (51, 1277), (52, 1280), (63, 1346), (66, 1367),

Gene: Holt_6 Start: 1128, Stop: 1589, Start Num: 16

Candidate Starts for Holt_6:

(Start: 16 @1128 has 116 MA's), (Start: 24 @1197 has 2 MA's), (27, 1236), (29, 1248), (41, 1332), (42, 1341), (44, 1356), (51, 1383), (52, 1386), (63, 1452), (66, 1473),

Gene: Hoonter_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Hoonter_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Hopey_6 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for Hopey_6:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (42, 1362), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: HufflyPuff_4 Start: 732, Stop: 1193, Start Num: 16

Candidate Starts for HufflyPuff_4:

(Start: 16 @732 has 116 MA's), (Start: 24 @801 has 2 MA's), (27, 840), (29, 852), (41, 936), (44, 960), (51, 987), (52, 990), (63, 1056), (66, 1077),

Gene: Hugley_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Hugley_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Hyzer_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Hyzer_1:

(Start: 14 @56 has 28 MA's), (25, 134), (30, 185), (37, 239), (42, 278), (46, 305), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: IHOP_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for IHOP_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Icee_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Icee_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Inca_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Inca_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: JeTaime_7 Start: 1196, Stop: 1657, Start Num: 16

Candidate Starts for JeTaime_7:

(Start: 16 @1196 has 116 MA's), (Start: 24 @1265 has 2 MA's), (27, 1304), (29, 1316), (41, 1400), (42, 1409), (44, 1424), (51, 1451), (52, 1454), (63, 1520), (66, 1541),

Gene: Judy_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Judy_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: Kanye_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Kanye_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Karkharias_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Karkharias_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (67, 528), (71, 579),

Gene: Kimchi_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Kimchi_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Kita_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Kita_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Kostya_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Kostya_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Lilac_7 Start: 1175, Stop: 1636, Start Num: 16

Candidate Starts for Lilac_7:

(Start: 16 @1175 has 116 MA's), (Start: 24 @1244 has 2 MA's), (27, 1283), (29, 1295), (41, 1379), (42, 1388), (44, 1403), (51, 1430), (52, 1433), (63, 1499), (66, 1520),

Gene: Lilizi_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Lilizi_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Lilpickle_5 Start: 1010, Stop: 1471, Start Num: 16

Candidate Starts for Lilpickle_5:

(Start: 16 @1010 has 116 MA's), (Start: 24 @1079 has 2 MA's), (29, 1130), (41, 1214), (42, 1223), (44, 1238), (51, 1265), (52, 1268), (63, 1334), (66, 1355),

Gene: MISSy_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for MISSy_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: MPhalcon_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for MPhalcon_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: MadamMonkfish_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for MadamMonkfish_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (29, 1133), (41, 1217), (42, 1226), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Madeline_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Madeline_1:

(Start: 14 @56 has 28 MA's), (30, 185), (37, 239), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Manasvini_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Manasvini_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Manda_5 Start: 791, Stop: 1252, Start Num: 16

Candidate Starts for Manda_5:

(7, 740), (Start: 16 @791 has 116 MA's), (Start: 24 @860 has 2 MA's), (27, 899), (29, 911), (41, 995), (42, 1004), (44, 1019), (51, 1046), (52, 1049), (63, 1115), (66, 1136), (73, 1193),

Gene: Maridalia_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Maridalia_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Marshmallow_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Marshmallow_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Maxxinista_6 Start: 1152, Stop: 1613, Start Num: 16

Candidate Starts for Maxxinista_6:

(Start: 16 @1152 has 116 MA's), (Start: 24 @1221 has 2 MA's), (27, 1260), (29, 1272), (41, 1356), (44, 1380), (51, 1407), (52, 1410), (63, 1476), (66, 1497),

Gene: Mcklovin_1 Start: 57, Stop: 521, Start Num: 14

Candidate Starts for Mcklovin_1:

(Start: 14 @57 has 28 MA's), (20, 90), (30, 186), (42, 279), (48, 324), (55, 339), (58, 366), (61, 384), (68, 414), (69, 423), (70, 459), (72, 465),

Gene: Mindy_6 Start: 997, Stop: 1389, Start Num: 24

Candidate Starts for Mindy_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (44, 1156), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Miniwave_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Miniwave_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Misfit_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Misfit_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Moldemort_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Moldemort_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (27, 1121), (29, 1133), (41, 1217), (42, 1226), (44, 1241), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Mosby_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Mosby_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Murica_4 Start: 732, Stop: 1193, Start Num: 16

Candidate Starts for Murica_4:

(Start: 16 @732 has 116 MA's), (Start: 24 @801 has 2 MA's), (27, 840), (29, 852), (41, 936), (44, 960), (51, 987), (52, 990), (63, 1056), (66, 1077),

Gene: Murphy_5 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Murphy_5:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Myrale_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for Myrale_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (44, 1156), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Nala_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Nala_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: NelitzaMV_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for NelitzaMV_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (44, 1156), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Neobush_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Neobush_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Nesbitt_1 Start: 162, Stop: 650, Start Num: 15

Candidate Starts for Nesbitt_1:

(1, 15), (5, 69), (8, 126), (Start: 15 @162 has 2 MA's), (26, 261), (27, 270), (32, 291), (41, 360), (43, 372), (49, 411), (53, 423), (54, 426), (60, 480), (62, 501),

Gene: Nimrod_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Nimrod_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: NoSleep_5 Start: 1010, Stop: 1471, Start Num: 16

Candidate Starts for NoSleep_5:

(Start: 16 @1010 has 116 MA's), (Start: 24 @1079 has 2 MA's), (27, 1118), (29, 1130), (41, 1214), (44, 1238), (51, 1265), (52, 1268), (63, 1334), (66, 1355),

Gene: Nymphadora_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Nymphadora_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: OrionPax_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for OrionPax_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (27, 1121), (29, 1133), (41, 1217), (42, 1226), (44, 1241), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: Paperbeatsrock_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Paperbeatsrock_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Pat3_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Pat3_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Peas_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Peas_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: PeggyLeg03_1 Start: 52, Stop: 648, Start Num: 4

Candidate Starts for PeggyLeg03_1:

(Start: 4 @52 has 7 MA's), (17, 169), (50, 418), (65, 520), (67, 529), (71, 580),

Gene: Pepperoni_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Pepperoni_1:

(Start: 14 @56 has 28 MA's), (19, 83), (25, 134), (30, 185), (37, 239), (39, 245), (42, 278), (46, 305), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Petra64142_6 Start: 1126, Stop: 1518, Start Num: 24

Candidate Starts for Petra64142_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Phaja_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Phaja_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Pharsalus_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Pharsalus_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: PhatBacter_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for PhatBacter_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Phaux_4 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Phaux_4:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Phrux_5 Start: 1135, Stop: 1596, Start Num: 16

Candidate Starts for Phrux_5:

(Start: 16 @1135 has 116 MA's), (Start: 24 @1204 has 2 MA's), (27, 1243), (29, 1255), (41, 1339), (42, 1348), (44, 1363), (51, 1390), (52, 1393), (63, 1459), (66, 1480),

Gene: Polly_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Polly_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Porky_5 Start: 997, Stop: 1389, Start Num: 24

Candidate Starts for Porky_5:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (29, 1048), (41, 1132), (42, 1141), (51, 1183), (52, 1186), (63, 1252), (66, 1273),

Gene: Pucara_1 Start: 51, Stop: 647, Start Num: 4

Candidate Starts for Pucara_1:

(2, 33), (Start: 4 @51 has 7 MA's), (50, 417), (65, 519), (67, 528), (71, 579),

Gene: Pumpkin_6 Start: 1153, Stop: 1614, Start Num: 16

Candidate Starts for Pumpkin_6:

(Start: 16 @1153 has 116 MA's), (Start: 24 @1222 has 2 MA's), (27, 1261), (29, 1273), (41, 1357), (42, 1366), (44, 1381), (51, 1408), (52, 1411), (63, 1477), (66, 1498),

Gene: Quallification_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Quallification_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Rakim_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Rakim_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: RavenCo17_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for RavenCo17_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Rimmer_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Rimmer_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: RiverMonster_5 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for RiverMonster_5:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: RootBeer_1 Start: 41, Stop: 505, Start Num: 11

Candidate Starts for RootBeer_1:

(11, 41), (25, 128), (28, 167), (40, 242), (56, 338),

Gene: Rowa_1 Start: 67, Stop: 552, Start Num: 16

Candidate Starts for Rowa_1:

(Start: 16 @67 has 116 MA's), (18, 79), (22, 103), (31, 190), (38, 235), (47, 307), (57, 364), (59, 379), (61, 385), (74, 541),

Gene: Saints25_5 Start: 1022, Stop: 1483, Start Num: 16

Candidate Starts for Saints25_5:

(Start: 16 @1022 has 116 MA's), (Start: 24 @1091 has 2 MA's), (27, 1130), (29, 1142), (41, 1226), (42, 1235), (44, 1250), (51, 1277), (52, 1280), (63, 1346), (66, 1367),

Gene: Sassay_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Sassay_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: ShamWow_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for ShamWow_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Shambre1_2 Start: 1495, Stop: 1965, Start Num: 10

Candidate Starts for Shambre1_2:

(Start: 10 @1495 has 1 MA's), (25, 1588), (27, 1624), (33, 1660),

Gene: ShereKhan_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for ShereKhan_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Simpliphy_5 Start: 1013, Stop: 1474, Start Num: 16

Candidate Starts for Simpliphy_5:

(Start: 16 @1013 has 116 MA's), (Start: 24 @1082 has 2 MA's), (27, 1121), (29, 1133), (41, 1217), (42, 1226), (44, 1241), (51, 1268), (52, 1271), (63, 1337), (66, 1358),

Gene: SirDuracell_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for SirDuracell_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: SophKB_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for SophKB_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Sotrice96_6 Start: 1131, Stop: 1592, Start Num: 16

Candidate Starts for Sotrice96_6:

(Start: 16 @1131 has 116 MA's), (Start: 24 @1200 has 2 MA's), (27, 1239), (29, 1251), (41, 1335), (42, 1344), (44, 1359), (51, 1386), (52, 1389), (63, 1455), (66, 1476),

Gene: Stank_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Stank_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (27, 1165), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Stark_6 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for Stark_6:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (42, 1362), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: StellaBean_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for StellaBean_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: StolenFromERC_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for StolenFromERC_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Susceptit_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Susceptit_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: TBrady12_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for TBrady12_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Tarkin_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Tarkin_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Tayonia_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Tayonia_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: TeardropMSU_5 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for TeardropMSU_5:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Teaspoon_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Teaspoon_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Terminus_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Terminus_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: ThankyouJordi_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for ThankyouJordi_1:

(Start: 14 @56 has 28 MA's), (30, 185), (37, 239), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Thresher_6 Start: 1149, Stop: 1610, Start Num: 16

Candidate Starts for Thresher_6:

(Start: 16 @1149 has 116 MA's), (Start: 24 @1218 has 2 MA's), (27, 1257), (29, 1269), (41, 1353), (42, 1362), (44, 1377), (51, 1404), (52, 1407), (63, 1473), (66, 1494),

Gene: TimTam_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for TimTam_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Tomaszewski_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Tomaszewski_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Toto_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Toto_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (44, 1285), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Traaww1_5 Start: 1043, Stop: 1504, Start Num: 16

Candidate Starts for Traaww1_5:

(Start: 16 @1043 has 116 MA's), (Start: 24 @1112 has 2 MA's), (29, 1163), (41, 1247), (42, 1256), (51, 1298), (52, 1301), (63, 1367), (66, 1388),

Gene: Trumpet_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Trumpet_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Tuco_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Tuco_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Ukulele_5 Start: 1152, Stop: 1613, Start Num: 16

Candidate Starts for Ukulele_5:

(Start: 16 @1152 has 116 MA's), (Start: 24 @1221 has 2 MA's), (27, 1260), (29, 1272), (41, 1356), (42, 1365), (44, 1380), (51, 1407), (52, 1410), (63, 1476), (66, 1497),

Gene: WelcomeAyanna_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for WelcomeAyanna_1:

(Start: 14 @56 has 28 MA's), (30, 185), (37, 239), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Wiggin_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Wiggin_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Willez_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Willez_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Xandras_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for Xandras_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: YassJohnny_6 Start: 1057, Stop: 1518, Start Num: 16

Candidate Starts for YassJohnny_6:

(Start: 16 @1057 has 116 MA's), (Start: 24 @1126 has 2 MA's), (29, 1177), (41, 1261), (42, 1270), (51, 1312), (52, 1315), (63, 1381), (66, 1402),

Gene: Youngblood_5 Start: 776, Stop: 1237, Start Num: 16

Candidate Starts for Youngblood_5:

(Start: 16 @776 has 116 MA's), (Start: 24 @845 has 2 MA's), (27, 884), (29, 896), (41, 980), (42, 989), (44, 1004), (51, 1031), (52, 1034), (63, 1100), (66, 1121),

Gene: Zameen_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Zameen_1:

(Start: 14 @56 has 28 MA's), (30, 185), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: Zirinka_1 Start: 56, Stop: 520, Start Num: 14

Candidate Starts for Zirinka_1:

(Start: 14 @56 has 28 MA's), (30, 185), (39, 245), (42, 278), (48, 323), (55, 338), (58, 365), (61, 383), (68, 413), (69, 422), (70, 458), (72, 464),

Gene: xkcd_6 Start: 928, Stop: 1389, Start Num: 16

Candidate Starts for xkcd_6:

(Start: 16 @928 has 116 MA's), (Start: 24 @997 has 2 MA's), (27, 1036), (29, 1048), (41, 1132), (42, 1141), (44, 1156), (51, 1183), (52, 1186), (63, 1252), (66, 1273),