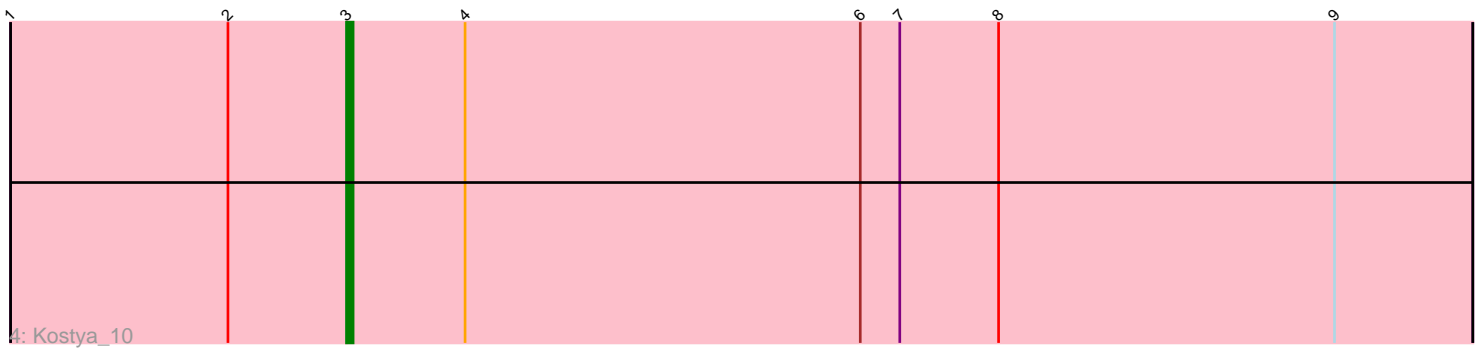
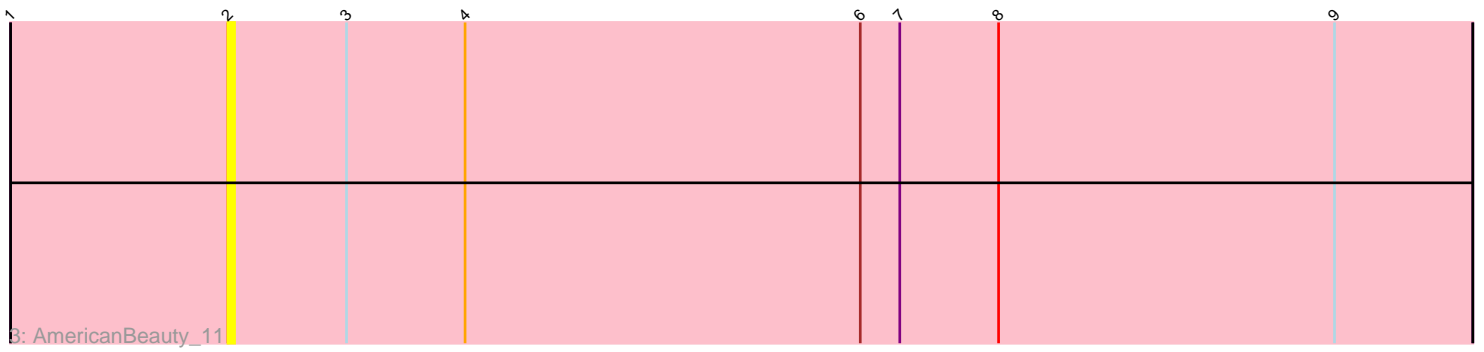
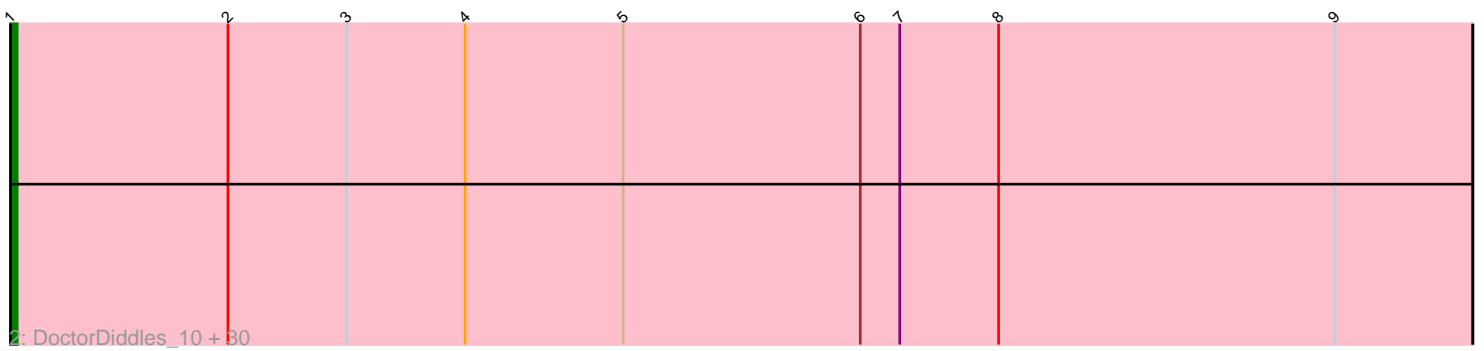
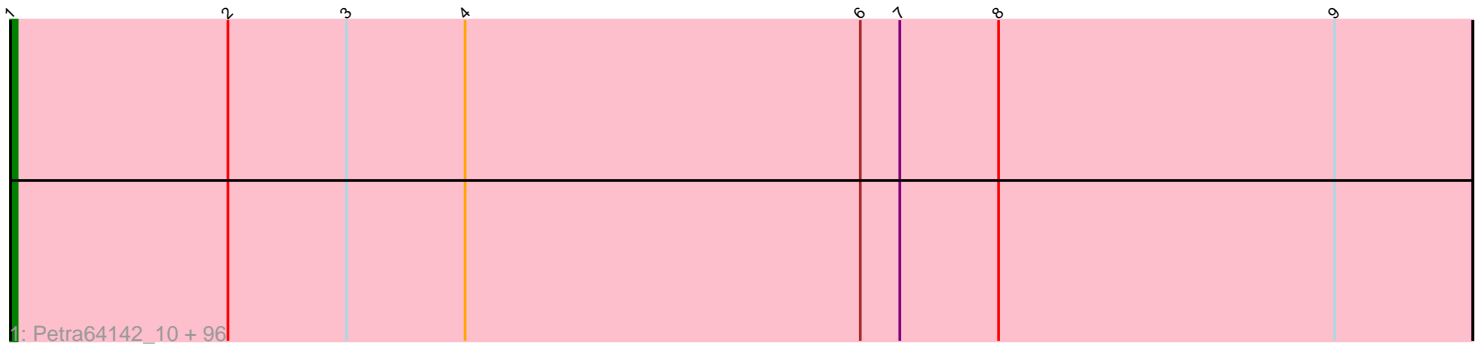


Pham 834



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 834 Report

This analysis was run 07/09/24 on database version 566.

Pham number 834 has 130 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Petra64142_10, Adnama_11, BaboJay_9, Glexan_8, IHOP_9, Tomaszewski_9, GoldenSpark_11, Dumbo_9, Hopey_10, Rimmer_9, HanKaySha_10, Qualification_11, Filch_10, Buck_9, Flypotenuse_8, ChosenOne_8, SirDuracell_9, Palpatine_9, Rakim_11, Bench_11, MadamMonkfish_9, StellaBean_10, Sassay_9, Elite2014_8, Pharsalus_10, Murphy_9, Phaja_9, CrystalP_10, Mindy_10, Manda_9, Hoonter_11, Myrale_10, Cookies_10, Miniwave_10, Marshmallow_10, TBrady12_11, ShamWow_10, Phaux_8, YassJohnny_10, Moldemort_10, BigBubba_9, Sotrice96_10, Simpliphy_10, SophKB_10, Contagion_9, BadStone_9, ABCat_9, RiverMonster_9, Czyszczone1_10, NelitzaMV_10, Balomoji_9, ChotaBhai_9, Highbury_10, Bruin_9, Terminus_9, Wiggin_11, Henry_10, Stank_11, Kanye_11, Inca_9, Argent26_11, Xandras_11, Nimrod_9, Policronamos_9, Gator_8, DrDrey_10, BilboSwaggins_10, Tuco_10, BugsBunny_7, Paperbeatsrock_11, Lilpickle_8, ShereKhan_11, Bask21_9, Porky_8, Gemini_11, Willez_9, Nala_9, Harella_8, Misfit_9, Dusk_9, Tarkin_11, Pat3_9, Murica_8, Mosby_9, Emmina_9, Ukulele_9, Easy2Say_10, Amao_10, TeardropMSU_9, HufflyPuff_8, Youngblood_9, xkcd_10, NoSleep_10, Daikon_8, Toto_10, Saints25_10, Kimchi_11
- Track 2 : DoctorDiddles_10, Thresher_10, OrionPax_10, Barbarian_9, Cjw1_9, Command613_11, Maxxinista_10, Stark_10, 244_10, Goku_10, Phrux_9, MPhalcon_9, Cactus_11, FireRed_9, Traaww1_8, GooberAzure_11, Asriel_9, Elph10_10, Lilizi_11, Pumpkin_10, Goldilocks_11, Holt_11, StolenFromERC_11, PhatBacter_9, Eureka_9, Icee_9, Lilac_11, Teaspoon_9, MISSy_9, JeTaimie_11, Gage_11
- Track 3 : AmericanBeauty_11
- Track 4 : Kostya_10

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

The start number called the most often in the published annotations is 1, it was called in 121 of the 122 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_10, ABCat_9, Adnama_11, Amao_10, Argent26_11, Asriel_9, BaboJay_9, BadStone_9, Balomoji_9, Barbarian_9, Bask21_9, Bench_11, BigBubba_9,

BilboSwaggins_10, Bruin_9, Buck_9, BugsBunny_7, Cactus_11, ChosenOne_8, ChotaBhai_9, Cjw1_9, Command613_11, Contagion_9, Cookies_10, CrystalP_10, Czyszczone1_10, Daikon_8, DoctorDiddles_10, DrDrey_10, Dumbo_9, Dusk_9, Easy2Say_10, Elite2014_8, Elph10_10, Emmina_9, Eureka_9, Filch_10, FireRed_9, Flypotenuse_8, Gage_11, Gator_8, Gemini_11, Glexan_8, Goku_10, GoldenSpark_11, Goldilocks_11, GooberAzure_11, HanKaySha_10, Harella_8, Henry_10, Highbury_10, Holt_11, Hoonter_11, Hopey_10, HufflyPuff_8, IHOP_9, Icee_9, Inca_9, JeTaime_11, Kanye_11, Kimchi_11, Lilac_11, Lilizi_11, Lilpickle_8, MISSy_9, MPhalcon_9, MadamMonkfish_9, Manda_9, Marshmallow_10, Maxxinista_10, Mindy_10, Miniwave_10, Misfit_9, Moldemort_10, Mosby_9, Murica_8, Murphy_9, Myrale_10, Nala_9, NelitzaMV_10, Nimrod_9, NoSleep_10, OrionPax_10, Palpatine_9, Paperbeatsrock_11, Pat3_9, Petra64142_10, Phaja_9, Pharsalus_10, PhatBacter_9, Phaux_8, Phrux_9, Policronamos_9, Porky_8, Pumpkin_10, Quallification_11, Rakim_11, Rimmer_9, RiverMonster_9, Saints25_10, Sassay_9, ShamWow_10, ShereKhan_11, Simpliphy_10, SirDuracell_9, SophKB_10, Sotrice96_10, Stank_11, Stark_10, StellaBean_10, StolenFromERC_11, TBrady12_11, Tarkin_11, TeardropMSU_9, Teaspoon_9, Terminus_9, Thresher_10, Tomaszewski_9, Toto_10, Traaww1_8, Tuco_10, Ukulele_9, Wigginn_11, Willez_9, Xandras_11, YassJohnny_10, Youngblood_9, xkcd_10,

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

- AmericanBeauty_11, Kostya_10,

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

-

Summary by start number:

Start 1:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 121 of 122
- Called 98.5% of time when present
- Phage (with cluster) where this start called: 244_10 (E), ABCat_9 (E), Adnama_11 (E), Amao_10 (E), Argent26_11 (E), Asriel_9 (E), BaboJay_9 (E), BadStone_9 (E), Balomoji_9 (E), Barbarian_9 (E), Bask21_9 (E), Bench_11 (E), BigBubba_9 (E), BilboSwaggins_10 (E), Bruin_9 (E), Buck_9 (E), BugsBunny_7 (E), Cactus_11 (E), ChosenOne_8 (E), ChotaBhai_9 (E), Cjw1_9 (E), Command613_11 (E), Contagion_9 (E), Cookies_10 (E), CrystalP_10 (E), Czyszczone1_10 (E), Daikon_8 (E), DoctorDiddles_10 (E), DrDrey_10 (E), Dumbo_9 (E), Dusk_9 (E), Easy2Say_10 (E), Elite2014_8 (E), Elph10_10 (E), Emmina_9 (E), Eureka_9 (E), Filch_10 (E), FireRed_9 (E), Flypotenuse_8 (E), Gage_11 (E), Gator_8 (E), Gemini_11 (E), Glexan_8 (E), Goku_10 (E), GoldenSpark_11 (E), Goldilocks_11 (E), GooberAzure_11 (E), HanKaySha_10 (E), Harella_8 (E), Henry_10 (E), Highbury_10 (E), Holt_11 (E), Hoonter_11 (E), Hopey_10 (E), HufflyPuff_8 (E), IHOP_9 (E), Icee_9 (E), Inca_9 (E), JeTaime_11 (E), Kanye_11 (E), Kimchi_11 (E), Lilac_11 (E), Lilizi_11 (E), Lilpickle_8 (E), MISSy_9 (E), MPhalcon_9 (E), MadamMonkfish_9 (E), Manda_9 (E), Marshmallow_10 (E), Maxxinista_10 (E), Mindy_10 (E), Miniwave_10 (E), Misfit_9 (E), Moldemort_10 (E), Mosby_9 (E), Murica_8 (E), Murphy_9 (E), Myrale_10 (E), Nala_9 (E), NelitzaMV_10 (E), Nimrod_9 (E), NoSleep_10 (E), OrionPax_10 (E), Palpatine_9 (E), Paperbeatsrock_11 (E), Pat3_9 (E), Petra64142_10 (E), Phaja_9 (E), Pharsalus_10 (E), PhatBacter_9 (E), Phaux_8 (E), Phrux_9 (E), Policronamos_9 (E), Porky_8 (E), Pumpkin_10 (E), Quallification_11 (E), Rakim_11 (E), Rimmer_9 (E), RiverMonster_9 (E), Saints25_10 (E), Sassay_9 (E), ShamWow_10 (E),

ShereKhan_11 (E), Simpliphy_10 (E), SirDuracell_9 (E), SophKB_10 (E), Sotrice96_10 (E), Stank_11 (E), Stark_10 (E), StellaBean_10 (E), StolenFromERC_11 (E), TBrady12_11 (E), Tarkin_11 (E), TeardropMSU_9 (E), Teaspoon_9 (E), Terminus_9 (E), Thresher_10 (E), Tomaszewski_9 (E), Toto_10 (E), Traaww1_8 (E), Tuco_10 (E), Ukulele_9 (E), Wiggin_11 (E), Willez_9 (E), Xandras_11 (E), YassJohnny_10 (E), Youngblood_9 (E), xkcd_10 (E),

Start 2:

- Found in 130 of 130 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 0.8% of time when present
- Phage (with cluster) where this start called: AmericanBeauty_11 (E),

Start 3:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Kostya_10 (E),

Summary by clusters:

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

- Start number 1 was manually annotated 121 times for cluster E.
- Start number 3 was manually annotated 1 time for cluster E.

Gene Information:

Gene: 244_10 Start: 3959, Stop: 4180, Start Num: 1

Candidate Starts for 244_10:

(Start: 1 @3959 has 121 MA's), (2, 3992), (Start: 3 @4010 has 1 MA's), (4, 4028), (5, 4052), (6, 4088), (7, 4094), (8, 4109), (9, 4160),

Gene: ABCat_9 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for ABCat_9:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Adnama_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Adnama_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Amao_10 Start: 3985, Stop: 4206, Start Num: 1

Candidate Starts for Amao_10:

(Start: 1 @3985 has 121 MA's), (2, 4018), (Start: 3 @4036 has 1 MA's), (4, 4054), (6, 4114), (7, 4120), (8, 4135), (9, 4186),

Gene: AmericanBeauty_11 Start: 4221, Stop: 4409, Start Num: 2

Candidate Starts for AmericanBeauty_11:

(Start: 1 @4188 has 121 MA's), (2, 4221), (Start: 3 @4239 has 1 MA's), (4, 4257), (6, 4317), (7, 4323), (8, 4338), (9, 4389),

Gene: Argent26_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Argent26_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Asriel_9 Start: 3850, Stop: 4071, Start Num: 1

Candidate Starts for Asriel_9:

(Start: 1 @3850 has 121 MA's), (2, 3883), (Start: 3 @3901 has 1 MA's), (4, 3919), (5, 3943), (6, 3979), (7, 3985), (8, 4000), (9, 4051),

Gene: BaboJay_9 Start: 4509, Stop: 4730, Start Num: 1

Candidate Starts for BaboJay_9:

(Start: 1 @4509 has 121 MA's), (2, 4542), (Start: 3 @4560 has 1 MA's), (4, 4578), (6, 4638), (7, 4644), (8, 4659), (9, 4710),

Gene: BadStone_9 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for BadStone_9:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Balomoji_9 Start: 4712, Stop: 4933, Start Num: 1

Candidate Starts for Balomoji_9:

(Start: 1 @4712 has 121 MA's), (2, 4745), (Start: 3 @4763 has 1 MA's), (4, 4781), (6, 4841), (7, 4847), (8, 4862), (9, 4913),

Gene: Barbarian_9 Start: 3850, Stop: 4071, Start Num: 1

Candidate Starts for Barbarian_9:

(Start: 1 @3850 has 121 MA's), (2, 3883), (Start: 3 @3901 has 1 MA's), (4, 3919), (5, 3943), (6, 3979), (7, 3985), (8, 4000), (9, 4051),

Gene: Bask21_9 Start: 3645, Stop: 3866, Start Num: 1

Candidate Starts for Bask21_9:

(Start: 1 @3645 has 121 MA's), (2, 3678), (Start: 3 @3696 has 1 MA's), (4, 3714), (6, 3774), (7, 3780), (8, 3795), (9, 3846),

Gene: Bench_11 Start: 4265, Stop: 4486, Start Num: 1

Candidate Starts for Bench_11:

(Start: 1 @4265 has 121 MA's), (2, 4298), (Start: 3 @4316 has 1 MA's), (4, 4334), (6, 4394), (7, 4400), (8, 4415), (9, 4466),

Gene: BigBubba_9 Start: 3645, Stop: 3866, Start Num: 1

Candidate Starts for BigBubba_9:

(Start: 1 @3645 has 121 MA's), (2, 3678), (Start: 3 @3696 has 1 MA's), (4, 3714), (6, 3774), (7, 3780), (8, 3795), (9, 3846),

Gene: BilboSwaggins_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for BilboSwaggins_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Bruin_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Bruin_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Buck_9 Start: 4644, Stop: 4865, Start Num: 1

Candidate Starts for Buck_9:

(Start: 1 @4644 has 121 MA's), (2, 4677), (Start: 3 @4695 has 1 MA's), (4, 4713), (6, 4773), (7, 4779), (8, 4794), (9, 4845),

Gene: BugsBunny_7 Start: 4145, Stop: 4366, Start Num: 1

Candidate Starts for BugsBunny_7:

(Start: 1 @4145 has 121 MA's), (2, 4178), (Start: 3 @4196 has 1 MA's), (4, 4214), (6, 4274), (7, 4280), (8, 4295), (9, 4346),

Gene: Cactus_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Cactus_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (5, 4284), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: ChosenOne_8 Start: 3411, Stop: 3632, Start Num: 1

Candidate Starts for ChosenOne_8:

(Start: 1 @3411 has 121 MA's), (2, 3444), (Start: 3 @3462 has 1 MA's), (4, 3480), (6, 3540), (7, 3546), (8, 3561), (9, 3612),

Gene: ChotaBhai_9 Start: 3645, Stop: 3866, Start Num: 1

Candidate Starts for ChotaBhai_9:

(Start: 1 @3645 has 121 MA's), (2, 3678), (Start: 3 @3696 has 1 MA's), (4, 3714), (6, 3774), (7, 3780), (8, 3795), (9, 3846),

Gene: Cjw1_9 Start: 4961, Stop: 5182, Start Num: 1

Candidate Starts for Cjw1_9:

(Start: 1 @4961 has 121 MA's), (2, 4994), (Start: 3 @5012 has 1 MA's), (4, 5030), (5, 5054), (6, 5090), (7, 5096), (8, 5111), (9, 5162),

Gene: Command613_11 Start: 5049, Stop: 5270, Start Num: 1

Candidate Starts for Command613_11:

(Start: 1 @5049 has 121 MA's), (2, 5082), (Start: 3 @5100 has 1 MA's), (4, 5118), (5, 5142), (6, 5178), (7, 5184), (8, 5199), (9, 5250),

Gene: Contagion_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Contagion_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Cookies_10 Start: 4851, Stop: 5072, Start Num: 1

Candidate Starts for Cookies_10:

(Start: 1 @4851 has 121 MA's), (2, 4884), (Start: 3 @4902 has 1 MA's), (4, 4920), (6, 4980), (7, 4986), (8, 5001), (9, 5052),

Gene: CrystalP_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for CrystalP_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Czyszczone1_10 Start: 4147, Stop: 4368, Start Num: 1

Candidate Starts for Czyszczone1_10:

(Start: 1 @4147 has 121 MA's), (2, 4180), (Start: 3 @4198 has 1 MA's), (4, 4216), (6, 4276), (7, 4282), (8, 4297), (9, 4348),

Gene: Daikon_8 Start: 4712, Stop: 4933, Start Num: 1

Candidate Starts for Daikon_8:

(Start: 1 @4712 has 121 MA's), (2, 4745), (Start: 3 @4763 has 1 MA's), (4, 4781), (6, 4841), (7, 4847), (8, 4862), (9, 4913),

Gene: DoctorDiddles_10 Start: 4144, Stop: 4365, Start Num: 1

Candidate Starts for DoctorDiddles_10:

(Start: 1 @4144 has 121 MA's), (2, 4177), (Start: 3 @4195 has 1 MA's), (4, 4213), (5, 4237), (6, 4273), (7, 4279), (8, 4294), (9, 4345),

Gene: DrDrey_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for DrDrey_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Dumbo_9 Start: 3959, Stop: 4180, Start Num: 1

Candidate Starts for Dumbo_9:

(Start: 1 @3959 has 121 MA's), (2, 3992), (Start: 3 @4010 has 1 MA's), (4, 4028), (6, 4088), (7, 4094), (8, 4109), (9, 4160),

Gene: Dusk_9 Start: 4638, Stop: 4859, Start Num: 1

Candidate Starts for Dusk_9:

(Start: 1 @4638 has 121 MA's), (2, 4671), (Start: 3 @4689 has 1 MA's), (4, 4707), (6, 4767), (7, 4773), (8, 4788), (9, 4839),

Gene: Easy2Say_10 Start: 4934, Stop: 5155, Start Num: 1

Candidate Starts for Easy2Say_10:

(Start: 1 @4934 has 121 MA's), (2, 4967), (Start: 3 @4985 has 1 MA's), (4, 5003), (6, 5063), (7, 5069), (8, 5084), (9, 5135),

Gene: Elite2014_8 Start: 3411, Stop: 3632, Start Num: 1

Candidate Starts for Elite2014_8:

(Start: 1 @3411 has 121 MA's), (2, 3444), (Start: 3 @3462 has 1 MA's), (4, 3480), (6, 3540), (7, 3546), (8, 3561), (9, 3612),

Gene: Elph10_10 Start: 3962, Stop: 4183, Start Num: 1

Candidate Starts for Elph10_10:

(Start: 1 @3962 has 121 MA's), (2, 3995), (Start: 3 @4013 has 1 MA's), (4, 4031), (5, 4055), (6, 4091), (7, 4097), (8, 4112), (9, 4163),

Gene: Emmina_9 Start: 3516, Stop: 3737, Start Num: 1

Candidate Starts for Emmina_9:

(Start: 1 @3516 has 121 MA's), (2, 3549), (Start: 3 @3567 has 1 MA's), (4, 3585), (6, 3645), (7, 3651), (8, 3666), (9, 3717),

Gene: Eureka_9 Start: 4682, Stop: 4903, Start Num: 1

Candidate Starts for Eureka_9:

(Start: 1 @4682 has 121 MA's), (2, 4715), (Start: 3 @4733 has 1 MA's), (4, 4751), (5, 4775), (6, 4811), (7, 4817), (8, 4832), (9, 4883),

Gene: Filch_10 Start: 3956, Stop: 4177, Start Num: 1

Candidate Starts for Filch_10:

(Start: 1 @3956 has 121 MA's), (2, 3989), (Start: 3 @4007 has 1 MA's), (4, 4025), (6, 4085), (7, 4091), (8, 4106), (9, 4157),

Gene: FireRed_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for FireRed_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (5, 4672), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Flypotenuse_8 Start: 4594, Stop: 4815, Start Num: 1

Candidate Starts for Flypotenuse_8:

(Start: 1 @4594 has 121 MA's), (2, 4627), (Start: 3 @4645 has 1 MA's), (4, 4663), (6, 4723), (7, 4729), (8, 4744), (9, 4795),

Gene: Gage_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Gage_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (5, 4284), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Gator_8 Start: 4594, Stop: 4815, Start Num: 1

Candidate Starts for Gator_8:

(Start: 1 @4594 has 121 MA's), (2, 4627), (Start: 3 @4645 has 1 MA's), (4, 4663), (6, 4723), (7, 4729), (8, 4744), (9, 4795),

Gene: Gemini_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Gemini_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Glexan_8 Start: 4594, Stop: 4815, Start Num: 1

Candidate Starts for Glexan_8:

(Start: 1 @4594 has 121 MA's), (2, 4627), (Start: 3 @4645 has 1 MA's), (4, 4663), (6, 4723), (7, 4729), (8, 4744), (9, 4795),

Gene: Goku_10 Start: 4682, Stop: 4903, Start Num: 1

Candidate Starts for Goku_10:

(Start: 1 @4682 has 121 MA's), (2, 4715), (Start: 3 @4733 has 1 MA's), (4, 4751), (5, 4775), (6, 4811), (7, 4817), (8, 4832), (9, 4883),

Gene: GoldenSpark_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for GoldenSpark_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Goldilocks_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Goldilocks_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (5, 4284), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: GooberAzure_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for GooberAzure_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (5, 4284), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: HanKaySha_10 Start: 4147, Stop: 4368, Start Num: 1

Candidate Starts for HanKaySha_10:

(Start: 1 @4147 has 121 MA's), (2, 4180), (Start: 3 @4198 has 1 MA's), (4, 4216), (6, 4276), (7, 4282), (8, 4297), (9, 4348),

Gene: Harella_8 Start: 4594, Stop: 4815, Start Num: 1

Candidate Starts for Harella_8:

(Start: 1 @4594 has 121 MA's), (2, 4627), (Start: 3 @4645 has 1 MA's), (4, 4663), (6, 4723), (7, 4729), (8, 4744), (9, 4795),

Gene: Henry_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Henry_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Highbury_10 Start: 4156, Stop: 4377, Start Num: 1

Candidate Starts for Highbury_10:

(Start: 1 @4156 has 121 MA's), (2, 4189), (Start: 3 @4207 has 1 MA's), (4, 4225), (6, 4285), (7, 4291), (8, 4306), (9, 4357),

Gene: Holt_11 Start: 4262, Stop: 4483, Start Num: 1

Candidate Starts for Holt_11:

(Start: 1 @4262 has 121 MA's), (2, 4295), (Start: 3 @4313 has 1 MA's), (4, 4331), (5, 4355), (6, 4391), (7, 4397), (8, 4412), (9, 4463),

Gene: Hoonter_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Hoonter_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Hokey_10 Start: 3956, Stop: 4177, Start Num: 1

Candidate Starts for Hokey_10:

(Start: 1 @3956 has 121 MA's), (2, 3989), (Start: 3 @4007 has 1 MA's), (4, 4025), (6, 4085), (7, 4091), (8, 4106), (9, 4157),

Gene: HufflyPuff_8 Start: 4535, Stop: 4756, Start Num: 1

Candidate Starts for HufflyPuff_8:

(Start: 1 @4535 has 121 MA's), (2, 4568), (Start: 3 @4586 has 1 MA's), (4, 4604), (6, 4664), (7, 4670), (8, 4685), (9, 4736),

Gene: IHOP_9 Start: 4638, Stop: 4859, Start Num: 1

Candidate Starts for IHOP_9:

(Start: 1 @4638 has 121 MA's), (2, 4671), (Start: 3 @4689 has 1 MA's), (4, 4707), (6, 4767), (7, 4773), (8, 4788), (9, 4839),

Gene: Icee_9 Start: 4638, Stop: 4859, Start Num: 1
Candidate Starts for Icee_9:
(Start: 1 @4638 has 121 MA's), (2, 4671), (Start: 3 @4689 has 1 MA's), (4, 4707), (5, 4731), (6, 4767),
(7, 4773), (8, 4788), (9, 4839),

Gene: Inca_9 Start: 3658, Stop: 3879, Start Num: 1
Candidate Starts for Inca_9:
(Start: 1 @3658 has 121 MA's), (2, 3691), (Start: 3 @3709 has 1 MA's), (4, 3727), (6, 3787), (7, 3793),
(8, 3808), (9, 3859),

Gene: JeTaime_11 Start: 4996, Stop: 5217, Start Num: 1
Candidate Starts for JeTaime_11:
(Start: 1 @4996 has 121 MA's), (2, 5029), (Start: 3 @5047 has 1 MA's), (4, 5065), (5, 5089), (6, 5125),
(7, 5131), (8, 5146), (9, 5197),

Gene: Kanye_11 Start: 5184, Stop: 5405, Start Num: 1
Candidate Starts for Kanye_11:
(Start: 1 @5184 has 121 MA's), (2, 5217), (Start: 3 @5235 has 1 MA's), (4, 5253), (6, 5313), (7, 5319),
(8, 5334), (9, 5385),

Gene: Kimchi_11 Start: 4191, Stop: 4412, Start Num: 1
Candidate Starts for Kimchi_11:
(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326),
(8, 4341), (9, 4392),

Gene: Kostya_10 Start: 5029, Stop: 5199, Start Num: 3
Candidate Starts for Kostya_10:
(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113),
(8, 5128), (9, 5179),

Gene: Lilac_11 Start: 3983, Stop: 4204, Start Num: 1
Candidate Starts for Lilac_11:
(Start: 1 @3983 has 121 MA's), (2, 4016), (Start: 3 @4034 has 1 MA's), (4, 4052), (5, 4076), (6, 4112),
(7, 4118), (8, 4133), (9, 4184),

Gene: Lilizi_11 Start: 4194, Stop: 4415, Start Num: 1
Candidate Starts for Lilizi_11:
(Start: 1 @4194 has 121 MA's), (2, 4227), (Start: 3 @4245 has 1 MA's), (4, 4263), (5, 4287), (6, 4323),
(7, 4329), (8, 4344), (9, 4395),

Gene: Lilpickle_8 Start: 3411, Stop: 3632, Start Num: 1
Candidate Starts for Lilpickle_8:
(Start: 1 @3411 has 121 MA's), (2, 3444), (Start: 3 @3462 has 1 MA's), (4, 3480), (6, 3540), (7, 3546),
(8, 3561), (9, 3612),

Gene: MISSy_9 Start: 4579, Stop: 4800, Start Num: 1
Candidate Starts for MISSy_9:
(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (5, 4672), (6, 4708),
(7, 4714), (8, 4729), (9, 4780),

Gene: MPhalcon_9 Start: 4579, Stop: 4800, Start Num: 1
Candidate Starts for MPhalcon_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (5, 4672), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: MadamMonkfish_9 Start: 3823, Stop: 4044, Start Num: 1

Candidate Starts for MadamMonkfish_9:

(Start: 1 @3823 has 121 MA's), (2, 3856), (Start: 3 @3874 has 1 MA's), (4, 3892), (6, 3952), (7, 3958), (8, 3973), (9, 4024),

Gene: Manda_9 Start: 4474, Stop: 4695, Start Num: 1

Candidate Starts for Manda_9:

(Start: 1 @4474 has 121 MA's), (2, 4507), (Start: 3 @4525 has 1 MA's), (4, 4543), (6, 4603), (7, 4609), (8, 4624), (9, 4675),

Gene: Marshmallow_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Marshmallow_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Maxxinista_10 Start: 3962, Stop: 4183, Start Num: 1

Candidate Starts for Maxxinista_10:

(Start: 1 @3962 has 121 MA's), (2, 3995), (Start: 3 @4013 has 1 MA's), (4, 4031), (5, 4055), (6, 4091), (7, 4097), (8, 4112), (9, 4163),

Gene: Mindy_10 Start: 4849, Stop: 5070, Start Num: 1

Candidate Starts for Mindy_10:

(Start: 1 @4849 has 121 MA's), (2, 4882), (Start: 3 @4900 has 1 MA's), (4, 4918), (6, 4978), (7, 4984), (8, 4999), (9, 5050),

Gene: Miniwave_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Miniwave_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Misfit_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Misfit_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Moldemort_10 Start: 4147, Stop: 4368, Start Num: 1

Candidate Starts for Moldemort_10:

(Start: 1 @4147 has 121 MA's), (2, 4180), (Start: 3 @4198 has 1 MA's), (4, 4216), (6, 4276), (7, 4282), (8, 4297), (9, 4348),

Gene: Mosby_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Mosby_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Murica_8 Start: 4535, Stop: 4756, Start Num: 1

Candidate Starts for Murica_8:

(Start: 1 @4535 has 121 MA's), (2, 4568), (Start: 3 @4586 has 1 MA's), (4, 4604), (6, 4664), (7, 4670), (8, 4685), (9, 4736),

Gene: Murphy_9 Start: 3864, Stop: 4085, Start Num: 1

Candidate Starts for Murphy_9:

(Start: 1 @3864 has 121 MA's), (2, 3897), (Start: 3 @3915 has 1 MA's), (4, 3933), (6, 3993), (7, 3999), (8, 4014), (9, 4065),

Gene: Myrale_10 Start: 4849, Stop: 5070, Start Num: 1

Candidate Starts for Myrale_10:

(Start: 1 @4849 has 121 MA's), (2, 4882), (Start: 3 @4900 has 1 MA's), (4, 4918), (6, 4978), (7, 4984), (8, 4999), (9, 5050),

Gene: Nala_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Nala_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: NelitzaMV_10 Start: 4849, Stop: 5070, Start Num: 1

Candidate Starts for NelitzaMV_10:

(Start: 1 @4849 has 121 MA's), (2, 4882), (Start: 3 @4900 has 1 MA's), (4, 4918), (6, 4978), (7, 4984), (8, 4999), (9, 5050),

Gene: Nimrod_9 Start: 4644, Stop: 4865, Start Num: 1

Candidate Starts for Nimrod_9:

(Start: 1 @4644 has 121 MA's), (2, 4677), (Start: 3 @4695 has 1 MA's), (4, 4713), (6, 4773), (7, 4779), (8, 4794), (9, 4845),

Gene: NoSleep_10 Start: 4144, Stop: 4365, Start Num: 1

Candidate Starts for NoSleep_10:

(Start: 1 @4144 has 121 MA's), (2, 4177), (Start: 3 @4195 has 1 MA's), (4, 4213), (6, 4273), (7, 4279), (8, 4294), (9, 4345),

Gene: OrionPax_10 Start: 4147, Stop: 4368, Start Num: 1

Candidate Starts for OrionPax_10:

(Start: 1 @4147 has 121 MA's), (2, 4180), (Start: 3 @4198 has 1 MA's), (4, 4216), (5, 4240), (6, 4276), (7, 4282), (8, 4297), (9, 4348),

Gene: Palpatine_9 Start: 4576, Stop: 4797, Start Num: 1

Candidate Starts for Palpatine_9:

(Start: 1 @4576 has 121 MA's), (2, 4609), (Start: 3 @4627 has 1 MA's), (4, 4645), (6, 4705), (7, 4711), (8, 4726), (9, 4777),

Gene: Paperbeatsrock_11 Start: 5178, Stop: 5399, Start Num: 1

Candidate Starts for Paperbeatsrock_11:

(Start: 1 @5178 has 121 MA's), (2, 5211), (Start: 3 @5229 has 1 MA's), (4, 5247), (6, 5307), (7, 5313), (8, 5328), (9, 5379),

Gene: Pat3_9 Start: 3685, Stop: 3906, Start Num: 1

Candidate Starts for Pat3_9:

(Start: 1 @3685 has 121 MA's), (2, 3718), (Start: 3 @3736 has 1 MA's), (4, 3754), (6, 3814), (7, 3820), (8, 3835), (9, 3886),

Gene: Petra64142_10 Start: 4860, Stop: 5081, Start Num: 1

Candidate Starts for Petra64142_10:

(Start: 1 @4860 has 121 MA's), (2, 4893), (Start: 3 @4911 has 1 MA's), (4, 4929), (6, 4989), (7, 4995), (8, 5010), (9, 5061),

Gene: Phaja_9 Start: 4638, Stop: 4859, Start Num: 1

Candidate Starts for Phaja_9:

(Start: 1 @4638 has 121 MA's), (2, 4671), (Start: 3 @4689 has 1 MA's), (4, 4707), (6, 4767), (7, 4773), (8, 4788), (9, 4839),

Gene: Pharsalus_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Pharsalus_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: PhatBacter_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for PhatBacter_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (5, 4672), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Phaux_8 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Phaux_8:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Phrux_9 Start: 3942, Stop: 4163, Start Num: 1

Candidate Starts for Phrux_9:

(Start: 1 @3942 has 121 MA's), (2, 3975), (Start: 3 @3993 has 1 MA's), (4, 4011), (5, 4035), (6, 4071), (7, 4077), (8, 4092), (9, 4143),

Gene: Policronamos_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Policronamos_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Porky_8 Start: 3516, Stop: 3737, Start Num: 1

Candidate Starts for Porky_8:

(Start: 1 @3516 has 121 MA's), (2, 3549), (Start: 3 @3567 has 1 MA's), (4, 3585), (6, 3645), (7, 3651), (8, 3666), (9, 3717),

Gene: Pumpkin_10 Start: 3960, Stop: 4181, Start Num: 1

Candidate Starts for Pumpkin_10:

(Start: 1 @3960 has 121 MA's), (2, 3993), (Start: 3 @4011 has 1 MA's), (4, 4029), (5, 4053), (6, 4089), (7, 4095), (8, 4110), (9, 4161),

Gene: Quallification_11 Start: 5184, Stop: 5405, Start Num: 1

Candidate Starts for Quallification_11:

(Start: 1 @5184 has 121 MA's), (2, 5217), (Start: 3 @5235 has 1 MA's), (4, 5253), (6, 5313), (7, 5319), (8, 5334), (9, 5385),

Gene: Rakim_11 Start: 5184, Stop: 5405, Start Num: 1

Candidate Starts for Rakim_11:

(Start: 1 @5184 has 121 MA's), (2, 5217), (Start: 3 @5235 has 1 MA's), (4, 5253), (6, 5313), (7, 5319), (8, 5334), (9, 5385),

Gene: Rimmer_9 Start: 4638, Stop: 4859, Start Num: 1

Candidate Starts for Rimmer_9:

(Start: 1 @4638 has 121 MA's), (2, 4671), (Start: 3 @4689 has 1 MA's), (4, 4707), (6, 4767), (7, 4773), (8, 4788), (9, 4839),

Gene: RiverMonster_9 Start: 3956, Stop: 4177, Start Num: 1

Candidate Starts for RiverMonster_9:

(Start: 1 @3956 has 121 MA's), (2, 3989), (Start: 3 @4007 has 1 MA's), (4, 4025), (6, 4085), (7, 4091), (8, 4106), (9, 4157),

Gene: Saints25_10 Start: 4156, Stop: 4377, Start Num: 1

Candidate Starts for Saints25_10:

(Start: 1 @4156 has 121 MA's), (2, 4189), (Start: 3 @4207 has 1 MA's), (4, 4225), (6, 4285), (7, 4291), (8, 4306), (9, 4357),

Gene: Sassay_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Sassay_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: ShamWow_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for ShamWow_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: ShereKhan_11 Start: 5184, Stop: 5405, Start Num: 1

Candidate Starts for ShereKhan_11:

(Start: 1 @5184 has 121 MA's), (2, 5217), (Start: 3 @5235 has 1 MA's), (4, 5253), (6, 5313), (7, 5319), (8, 5334), (9, 5385),

Gene: Simpliphy_10 Start: 4147, Stop: 4368, Start Num: 1

Candidate Starts for Simpliphy_10:

(Start: 1 @4147 has 121 MA's), (2, 4180), (Start: 3 @4198 has 1 MA's), (4, 4216), (6, 4276), (7, 4282), (8, 4297), (9, 4348),

Gene: SirDuracell_9 Start: 3645, Stop: 3866, Start Num: 1

Candidate Starts for SirDuracell_9:

(Start: 1 @3645 has 121 MA's), (2, 3678), (Start: 3 @3696 has 1 MA's), (4, 3714), (6, 3774), (7, 3780), (8, 3795), (9, 3846),

Gene: SophKB_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for SophKB_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Sotrice96_10 Start: 4934, Stop: 5155, Start Num: 1

Candidate Starts for Sotrice96_10:

(Start: 1 @4934 has 121 MA's), (2, 4967), (Start: 3 @4985 has 1 MA's), (4, 5003), (6, 5063), (7, 5069), (8, 5084), (9, 5135),

Gene: Stank_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Stank_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Stark_10 Start: 3959, Stop: 4180, Start Num: 1

Candidate Starts for Stark_10:

(Start: 1 @3959 has 121 MA's), (2, 3992), (Start: 3 @4010 has 1 MA's), (4, 4028), (5, 4052), (6, 4088), (7, 4094), (8, 4109), (9, 4160),

Gene: StellaBean_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for StellaBean_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: StolenFromERC_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for StolenFromERC_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (5, 4284), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: TBrady12_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for TBrady12_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Tarkin_11 Start: 5187, Stop: 5408, Start Num: 1

Candidate Starts for Tarkin_11:

(Start: 1 @5187 has 121 MA's), (2, 5220), (Start: 3 @5238 has 1 MA's), (4, 5256), (6, 5316), (7, 5322), (8, 5337), (9, 5388),

Gene: TeardropMSU_9 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for TeardropMSU_9:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Teaspoon_9 Start: 3685, Stop: 3906, Start Num: 1

Candidate Starts for Teaspoon_9:

(Start: 1 @3685 has 121 MA's), (2, 3718), (Start: 3 @3736 has 1 MA's), (4, 3754), (5, 3778), (6, 3814), (7, 3820), (8, 3835), (9, 3886),

Gene: Terminus_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Terminus_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Thresher_10 Start: 4949, Stop: 5170, Start Num: 1

Candidate Starts for Thresher_10:

(Start: 1 @4949 has 121 MA's), (2, 4982), (Start: 3 @5000 has 1 MA's), (4, 5018), (5, 5042), (6, 5078), (7, 5084), (8, 5099), (9, 5150),

Gene: Tomaszewski_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Tomaszewski_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Toto_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Toto_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Traaww1_8 Start: 4624, Stop: 4845, Start Num: 1

Candidate Starts for Traaww1_8:

(Start: 1 @4624 has 121 MA's), (2, 4657), (Start: 3 @4675 has 1 MA's), (4, 4693), (5, 4717), (6, 4753), (7, 4759), (8, 4774), (9, 4825),

Gene: Tuco_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for Tuco_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Ukulele_9 Start: 3959, Stop: 4180, Start Num: 1

Candidate Starts for Ukulele_9:

(Start: 1 @3959 has 121 MA's), (2, 3992), (Start: 3 @4010 has 1 MA's), (4, 4028), (6, 4088), (7, 4094), (8, 4109), (9, 4160),

Gene: Wiggin_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Wiggin_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: Willez_9 Start: 4579, Stop: 4800, Start Num: 1

Candidate Starts for Willez_9:

(Start: 1 @4579 has 121 MA's), (2, 4612), (Start: 3 @4630 has 1 MA's), (4, 4648), (6, 4708), (7, 4714), (8, 4729), (9, 4780),

Gene: Xandras_11 Start: 4191, Stop: 4412, Start Num: 1

Candidate Starts for Xandras_11:

(Start: 1 @4191 has 121 MA's), (2, 4224), (Start: 3 @4242 has 1 MA's), (4, 4260), (6, 4320), (7, 4326), (8, 4341), (9, 4392),

Gene: YassJohnny_10 Start: 4978, Stop: 5199, Start Num: 1

Candidate Starts for YassJohnny_10:

(Start: 1 @4978 has 121 MA's), (2, 5011), (Start: 3 @5029 has 1 MA's), (4, 5047), (6, 5107), (7, 5113), (8, 5128), (9, 5179),

Gene: Youngblood_9 Start: 4570, Stop: 4791, Start Num: 1

Candidate Starts for Youngblood_9:

(Start: 1 @4570 has 121 MA's), (2, 4603), (Start: 3 @4621 has 1 MA's), (4, 4639), (6, 4699), (7, 4705), (8, 4720), (9, 4771),

Gene: xkcd_10 Start: 4731, Stop: 4952, Start Num: 1

Candidate Starts for xkcd_10:

(Start: 1 @4731 has 121 MA's), (2, 4764), (Start: 3 @4782 has 1 MA's), (4, 4800), (6, 4860), (7, 4866), (8, 4881), (9, 4932),