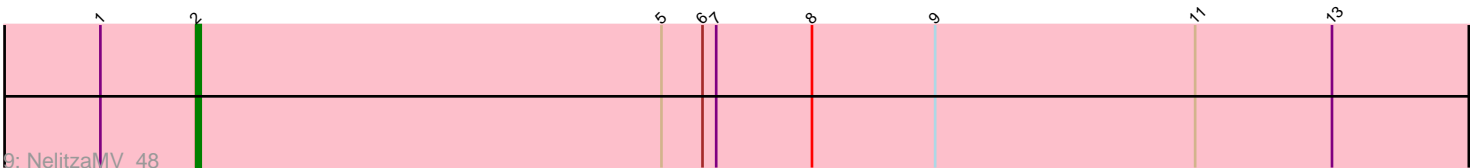
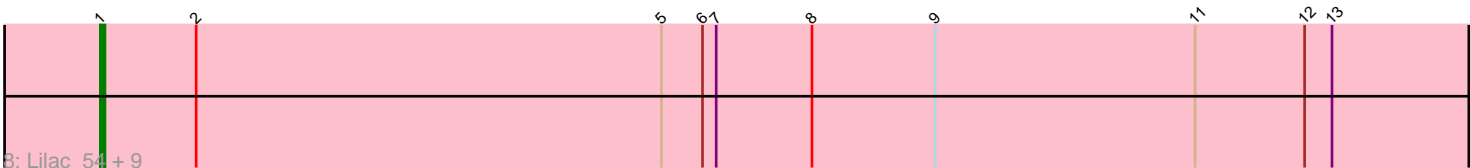
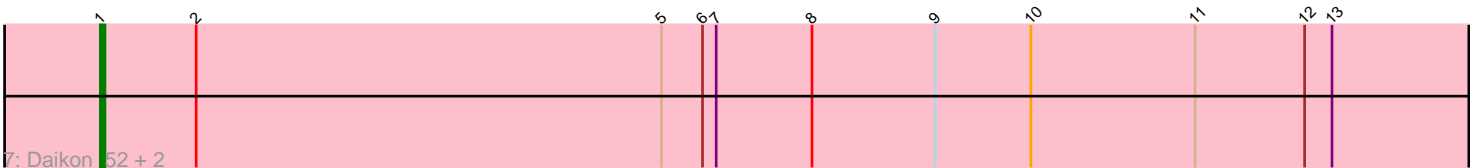
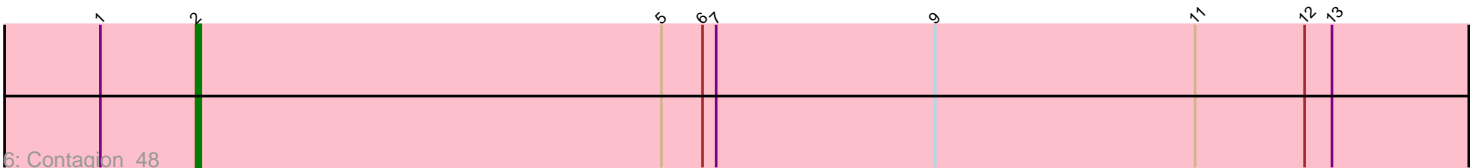
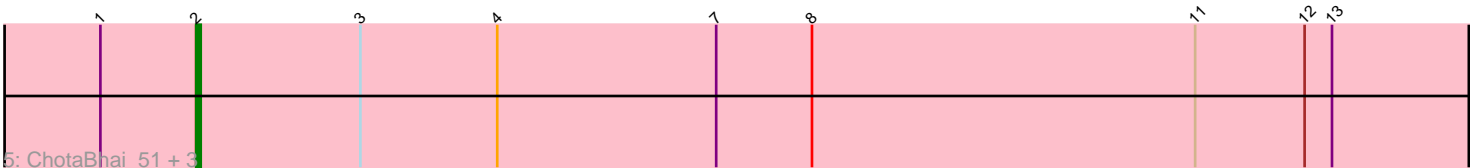
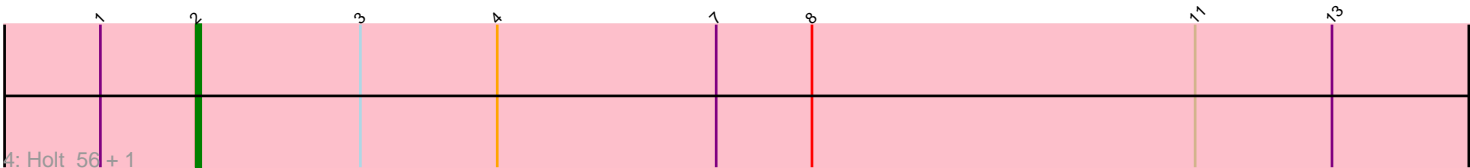
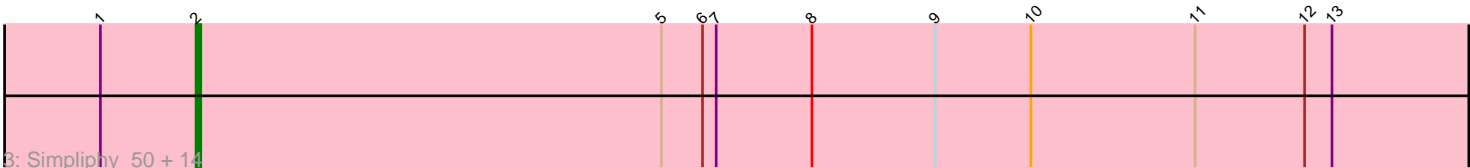
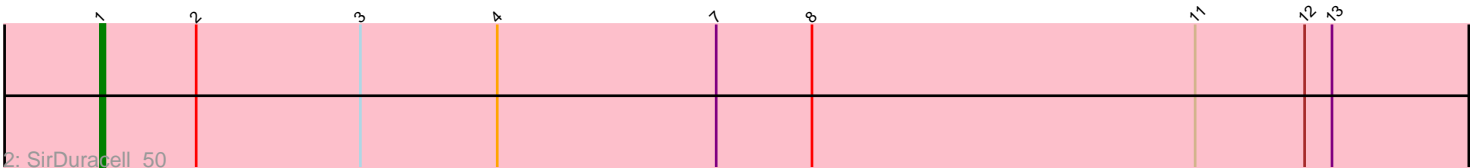
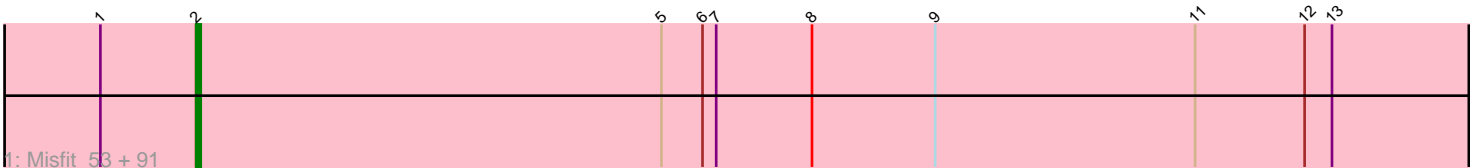


Pham 85144



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 85144 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85144 has 129 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Misfit_53, Henry_50, Elite2014_51, Argent26_54, Sassay_45, Bask21_52, Teaspoon_49, Wiggin_53, GooberAzure_54, SophKB_48, Youngblood_53, ABCat_49, Goldilocks_53, StolenFromERC_54, Elph10_51, Toto_50, Murica_53, Murphy_53, Policronamos_56, Cookies_48, BilboSwaggins_50, Stank_55, MadamMonkfish_51, Saints25_52, Barbarian_51, PhatBacter_54, Dumbo_51, Inca_48, Nimrod_54, JeTaime_52, BadStone_49, MISSy_51, Miniwave_48, Phaux_53, Tarkin_50, Gage_54, NoSleep_53, Kimchi_54, xkcd_55, Asriel_51, IHOP_49, Willez_45, Adnama_55, Petra64142_56, Lilpickle_51, Palpatine_54, BigBubba_52, FireRed_54, Lilizi_51, Xandras_51, HanKaySha_50, Thresher_54, OrionPax_50, Command613_53, Rakim_53, Gemini_55, Qualification_52, Terminus_53, AmericanBeauty_56, Bench_53, Buck_52, Paperbeatsrock_50, GoldenSpark_54, ShereKhan_49, Highbury_52, Easy2Say_52, 244_52, YassJohnny_47, CrystalP_51, Stark_52, Hoonter_54, Manda_51, Myrale_51, Dusk_49, TBrady12_54, Cjw1_51, Filch_52, Maxxinista_53, Marshmallow_50, MPhalcon_51, Pharsalus_49, Rimmer_52, TeardropMSU_47, ChosenOne_52, ShamWow_51, Moldemort_54, Phaja_49, Kostya_52, StellaBean_49, Pumpkin_53, Czyszczon1_52, BaboJay_47
- Track 2 : SirDuracell_50
- Track 3 : Simpliphy_50, Eureka_49, Icee_51, DrDrey_51, Tuco_52, Hopey_51, Traaww1_47, Harella_51, Balomoji_50, Goku_49, Gator_49, Kanye_47, Emmina_51, Flypotenuse_46, Cactus_53
- Track 4 : Holt_56, Amao_51
- Track 5 : ChotaBhai_51, DoctorDiddles_51, Pat3_49, Mindy_50
- Track 6 : Contagion_48
- Track 7 : Daikon_52, Glexan_49, Sotrice96_52
- Track 8 : Lilac_54, Phrux_49, Bruin_47, Nala_52, HufflyPuff_53, Mosby_47, BugsBunny_52, Tomaszewski_47, RiverMonster_52, Ukulele_48
- Track 9 : NelitzaMV_48

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

The start number called the most often in the published annotations is 2, it was called in 106 of the 118 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_52, ABCat_49, Adnama_55, Amao_51, AmericanBeauty_56, Argent26_54, Asriel_51, BaboJay_47, BadStone_49, Balomoji_50, Barbarian_51, Bask21_52, Bench_53, BigBubba_52, BilboSwaggins_50, Buck_52, Cactus_53, ChosenOne_52, ChotaBhai_51, Cjw1_51, Command613_53, Contagion_48, Cookies_48, CrystalP_51, Czyszczonek_52, DoctorDiddles_51, DrDrey_51, Dumbo_51, Dusk_49, Easy2Say_52, Elite2014_51, Elph10_51, Emmina_51, Eureka_49, Filch_52, FireRed_54, Flypotenuse_46, Gage_54, Gator_49, Gemini_55, Goku_49, GoldenSpark_54, Goldilocks_53, GooberAzure_54, HanKaySha_50, Harella_51, Henry_50, Highbury_52, Holt_56, Hoonter_54, Hopey_51, IHOP_49, Icee_51, Inca_48, JeTaime_52, Kanye_47, Kimchi_54, Kostya_52, Lilizi_51, Lilpickle_51, MISSy_51, MPhalcon_51, MadamMonkfish_51, Manda_51, Marshmallow_50, Maxxinista_53, Mindy_50, Miniwave_48, Misfit_53, Moldemort_54, Murica_53, Murphy_53, Myrale_51, NelitzaMV_48, Nimrod_54, NoSleep_53, OrionPax_50, Palpatine_54, Paperbeatsrock_50, Pat3_49, Petra64142_56, Phaja_49, Pharsalus_49, PhatBacter_54, Phaux_53, Policronamos_56, Pumpkin_53, Quallification_52, Rakim_53, Rimmer_52, Saints25_52, Sassay_45, ShamWow_51, ShereKhan_49, Simpliphy_50, SophKB_48, Stank_55, Stark_52, StellaBean_49, StolenFromERC_54, TBrady12_54, Tarkin_50, TeardropMSU_47, Teaspoon_49, Terminus_53, Thresher_54, Toto_50, Traaww1_47, Tuco_52, Wiggin_53, Willez_45, Xandras_51, YassJohnny_47, Youngblood_53, xkcd_55,

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

- Bruin_47, BugsBunny_52, Daikon_52, Glexan_49, HufflyPuff_53, Lilac_54, Mosby_47, Nala_52, Phrux_49, RiverMonster_52, SirDuracell_50, Sotrice96_52, Tomaszewski_47, Ukulele_48,

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

-

Summary by start number:

Start 1:

- Found in 129 of 129 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 118
- Called 10.9% of time when present
- Phage (with cluster) where this start called: Bruin_47 (E), BugsBunny_52 (E), Daikon_52 (E), Glexan_49 (E), HufflyPuff_53 (E), Lilac_54 (E), Mosby_47 (E), Nala_52 (E), Phrux_49 (E), RiverMonster_52 (E), SirDuracell_50 (E), Sotrice96_52 (E), Tomaszewski_47 (E), Ukulele_48 (E),

Start 2:

- Found in 129 of 129 (100.0%) of genes in pham
- Manual Annotations of this start: 106 of 118
- Called 89.1% of time when present
- Phage (with cluster) where this start called: 244_52 (E), ABCat_49 (E), Adnama_55 (E), Amao_51 (E), AmericanBeauty_56 (E), Argent26_54 (E), Asriel_51 (E), BaboJay_47 (E), BadStone_49 (E), Balomoji_50 (E), Barbarian_51 (E), Bask21_52 (E), Bench_53 (E), BigBubba_52 (E), BilboSwaggins_50 (E), Buck_52 (E), Cactus_53 (E), ChosenOne_52 (E), ChotaBhai_51 (E), Cjw1_51 (E), Command613_53 (E), Contagion_48 (E), Cookies_48 (E), CrystalP_51 (E), Czyszczonek_52 (E), DoctorDiddles_51 (E), DrDrey_51 (E), Dumbo_51 (E), Dusk_49 (E), Easy2Say_52 (E), Elite2014_51 (E), Elph10_51 (E), Emmina_51 (E), Eureka_49 (E), Filch_52 (E),

FireRed_54 (E), Flypotenuse_46 (E), Gage_54 (E), Gator_49 (E), Gemini_55 (E), Goku_49 (E), GoldenSpark_54 (E), Goldilocks_53 (E), GooberAzure_54 (E), HanKaySha_50 (E), Harella_51 (E), Henry_50 (E), Highbury_52 (E), Holt_56 (E), Hoonter_54 (E), Hopey_51 (E), IHOP_49 (E), Icee_51 (E), Inca_48 (E), JeTaime_52 (E), Kanye_47 (E), Kimchi_54 (E), Kostya_52 (E), Lilizi_51 (E), Lilpickle_51 (E), MISSy_51 (E), MPhalcon_51 (E), MadamMonkfish_51 (E), Manda_51 (E), Marshmallow_50 (E), Maxxinista_53 (E), Mindy_50 (E), Miniwave_48 (E), Misfit_53 (E), Moldemort_54 (E), Murica_53 (E), Murphy_53 (E), Myrale_51 (E), NelitzaMV_48 (E), Nimrod_54 (E), NoSleep_53 (E), OrionPax_50 (E), Palpatine_54 (E), Paperbeatsrock_50 (E), Pat3_49 (E), Petra64142_56 (E), Phaja_49 (E), Pharsalus_49 (E), PhatBacter_54 (E), Phaux_53 (E), Policronamos_56 (E), Pumpkin_53 (E), Qualification_52 (E), Rakim_53 (E), Rimmer_52 (E), Saints25_52 (E), Sassay_45 (E), ShamWow_51 (E), ShereKhan_49 (E), Simpliphy_50 (E), SophKB_48 (E), Stank_55 (E), Stark_52 (E), StellaBean_49 (E), StolenFromERC_54 (E), TBrady12_54 (E), Tarkin_50 (E), TeardropMSU_47 (E), Teaspoon_49 (E), Terminus_53 (E), Thresher_54 (E), Toto_50 (E), Traaww1_47 (E), Tuco_52 (E), Wiggin_53 (E), Willez_45 (E), Xandras_51 (E), YassJohnny_47 (E), Youngblood_53 (E), xkcd_55 (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 12 times for cluster E.
- Start number 2 was manually annotated 106 times for cluster E.

Gene Information:

Gene: 244_52 Start: 37460, Stop: 37158, Start Num: 2

Candidate Starts for 244_52:

(Start: 1 @37481 has 12 MA's), (Start: 2 @37460 has 106 MA's), (5, 37358), (6, 37349), (7, 37346), (8, 37325), (9, 37298), (11, 37241), (12, 37217), (13, 37211),

Gene: ABCat_49 Start: 38106, Stop: 37804, Start Num: 2

Candidate Starts for ABCat_49:

(Start: 1 @38127 has 12 MA's), (Start: 2 @38106 has 106 MA's), (5, 38004), (6, 37995), (7, 37992), (8, 37971), (9, 37944), (11, 37887), (12, 37863), (13, 37857),

Gene: Adnama_55 Start: 38129, Stop: 37827, Start Num: 2

Candidate Starts for Adnama_55:

(Start: 1 @38150 has 12 MA's), (Start: 2 @38129 has 106 MA's), (5, 38027), (6, 38018), (7, 38015), (8, 37994), (9, 37967), (11, 37910), (12, 37886), (13, 37880),

Gene: Amao_51 Start: 37224, Stop: 36922, Start Num: 2

Candidate Starts for Amao_51:

(Start: 1 @37245 has 12 MA's), (Start: 2 @37224 has 106 MA's), (3, 37188), (4, 37158), (7, 37110), (8, 37089), (11, 37005), (13, 36975),

Gene: AmericanBeauty_56 Start: 37974, Stop: 37672, Start Num: 2

Candidate Starts for AmericanBeauty_56:

(Start: 1 @37995 has 12 MA's), (Start: 2 @37974 has 106 MA's), (5, 37872), (6, 37863), (7, 37860), (8, 37839), (9, 37812), (11, 37755), (12, 37731), (13, 37725),

Gene: Argent26_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for Argent26_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: Asriel_51 Start: 36466, Stop: 36164, Start Num: 2

Candidate Starts for Asriel_51:

(Start: 1 @36487 has 12 MA's), (Start: 2 @36466 has 106 MA's), (5, 36364), (6, 36355), (7, 36352), (8, 36331), (9, 36304), (11, 36247), (12, 36223), (13, 36217),

Gene: BaboJay_47 Start: 37012, Stop: 36710, Start Num: 2

Candidate Starts for BaboJay_47:

(Start: 1 @37033 has 12 MA's), (Start: 2 @37012 has 106 MA's), (5, 36910), (6, 36901), (7, 36898), (8, 36877), (9, 36850), (11, 36793), (12, 36769), (13, 36763),

Gene: BadStone_49 Start: 37675, Stop: 37373, Start Num: 2

Candidate Starts for BadStone_49:

(Start: 1 @37696 has 12 MA's), (Start: 2 @37675 has 106 MA's), (5, 37573), (6, 37564), (7, 37561), (8, 37540), (9, 37513), (11, 37456), (12, 37432), (13, 37426),

Gene: Balomoji_50 Start: 37943, Stop: 37641, Start Num: 2

Candidate Starts for Balomoji_50:

(Start: 1 @37964 has 12 MA's), (Start: 2 @37943 has 106 MA's), (5, 37841), (6, 37832), (7, 37829), (8, 37808), (9, 37781), (10, 37760), (11, 37724), (12, 37700), (13, 37694),

Gene: Barbarian_51 Start: 36466, Stop: 36164, Start Num: 2

Candidate Starts for Barbarian_51:

(Start: 1 @36487 has 12 MA's), (Start: 2 @36466 has 106 MA's), (5, 36364), (6, 36355), (7, 36352), (8, 36331), (9, 36304), (11, 36247), (12, 36223), (13, 36217),

Gene: Bask21_52 Start: 36800, Stop: 36498, Start Num: 2

Candidate Starts for Bask21_52:

(Start: 1 @36821 has 12 MA's), (Start: 2 @36800 has 106 MA's), (5, 36698), (6, 36689), (7, 36686), (8, 36665), (9, 36638), (11, 36581), (12, 36557), (13, 36551),

Gene: Bench_53 Start: 37444, Stop: 37142, Start Num: 2

Candidate Starts for Bench_53:

(Start: 1 @37465 has 12 MA's), (Start: 2 @37444 has 106 MA's), (5, 37342), (6, 37333), (7, 37330), (8, 37309), (9, 37282), (11, 37225), (12, 37201), (13, 37195),

Gene: BigBubba_52 Start: 37485, Stop: 37183, Start Num: 2

Candidate Starts for BigBubba_52:

(Start: 1 @37506 has 12 MA's), (Start: 2 @37485 has 106 MA's), (5, 37383), (6, 37374), (7, 37371), (8, 37350), (9, 37323), (11, 37266), (12, 37242), (13, 37236),

Gene: BilboSwaggins_50 Start: 38114, Stop: 37812, Start Num: 2

Candidate Starts for BilboSwaggins_50:

(Start: 1 @38135 has 12 MA's), (Start: 2 @38114 has 106 MA's), (5, 38012), (6, 38003), (7, 38000), (8, 37979), (9, 37952), (11, 37895), (12, 37871), (13, 37865),

Gene: Bruin_47 Start: 36374, Stop: 36051, Start Num: 1

Candidate Starts for Bruin_47:

(Start: 1 @36374 has 12 MA's), (Start: 2 @36353 has 106 MA's), (5, 36251), (6, 36242), (7, 36239), (8, 36218), (9, 36191), (11, 36134), (12, 36110), (13, 36104),

Gene: Buck_52 Start: 38060, Stop: 37758, Start Num: 2

Candidate Starts for Buck_52:

(Start: 1 @38081 has 12 MA's), (Start: 2 @38060 has 106 MA's), (5, 37958), (6, 37949), (7, 37946), (8, 37925), (9, 37898), (11, 37841), (12, 37817), (13, 37811),

Gene: BugsBunny_52 Start: 37912, Stop: 37589, Start Num: 1

Candidate Starts for BugsBunny_52:

(Start: 1 @37912 has 12 MA's), (Start: 2 @37891 has 106 MA's), (5, 37789), (6, 37780), (7, 37777), (8, 37756), (9, 37729), (11, 37672), (12, 37648), (13, 37642),

Gene: Cactus_53 Start: 36833, Stop: 36531, Start Num: 2

Candidate Starts for Cactus_53:

(Start: 1 @36854 has 12 MA's), (Start: 2 @36833 has 106 MA's), (5, 36731), (6, 36722), (7, 36719), (8, 36698), (9, 36671), (10, 36650), (11, 36614), (12, 36590), (13, 36584),

Gene: ChosenOne_52 Start: 37133, Stop: 36831, Start Num: 2

Candidate Starts for ChosenOne_52:

(Start: 1 @37154 has 12 MA's), (Start: 2 @37133 has 106 MA's), (5, 37031), (6, 37022), (7, 37019), (8, 36998), (9, 36971), (11, 36914), (12, 36890), (13, 36884),

Gene: ChotaBhai_51 Start: 37155, Stop: 36853, Start Num: 2

Candidate Starts for ChotaBhai_51:

(Start: 1 @37176 has 12 MA's), (Start: 2 @37155 has 106 MA's), (3, 37119), (4, 37089), (7, 37041), (8, 37020), (11, 36936), (12, 36912), (13, 36906),

Gene: Cjw1_51 Start: 38534, Stop: 38232, Start Num: 2

Candidate Starts for Cjw1_51:

(Start: 1 @38555 has 12 MA's), (Start: 2 @38534 has 106 MA's), (5, 38432), (6, 38423), (7, 38420), (8, 38399), (9, 38372), (11, 38315), (12, 38291), (13, 38285),

Gene: Command613_53 Start: 37872, Stop: 37570, Start Num: 2

Candidate Starts for Command613_53:

(Start: 1 @37893 has 12 MA's), (Start: 2 @37872 has 106 MA's), (5, 37770), (6, 37761), (7, 37758), (8, 37737), (9, 37710), (11, 37653), (12, 37629), (13, 37623),

Gene: Contagion_48 Start: 36634, Stop: 36332, Start Num: 2

Candidate Starts for Contagion_48:

(Start: 1 @36655 has 12 MA's), (Start: 2 @36634 has 106 MA's), (5, 36532), (6, 36523), (7, 36520), (9, 36472), (11, 36415), (12, 36391), (13, 36385),

Gene: Cookies_48 Start: 37005, Stop: 36703, Start Num: 2

Candidate Starts for Cookies_48:

(Start: 1 @37026 has 12 MA's), (Start: 2 @37005 has 106 MA's), (5, 36903), (6, 36894), (7, 36891), (8, 36870), (9, 36843), (11, 36786), (12, 36762), (13, 36756),

Gene: CrystalP_51 Start: 38114, Stop: 37812, Start Num: 2

Candidate Starts for CrystalP_51:

(Start: 1 @38135 has 12 MA's), (Start: 2 @38114 has 106 MA's), (5, 38012), (6, 38003), (7, 38000), (8, 37979), (9, 37952), (11, 37895), (12, 37871), (13, 37865),

Gene: Czyszczone1_52 Start: 37343, Stop: 37041, Start Num: 2

Candidate Starts for Czyszczone1_52:

(Start: 1 @37364 has 12 MA's), (Start: 2 @37343 has 106 MA's), (5, 37241), (6, 37232), (7, 37229), (8, 37208), (9, 37181), (11, 37124), (12, 37100), (13, 37094),

Gene: Daikon_52 Start: 37985, Stop: 37662, Start Num: 1

Candidate Starts for Daikon_52:

(Start: 1 @37985 has 12 MA's), (Start: 2 @37964 has 106 MA's), (5, 37862), (6, 37853), (7, 37850), (8, 37829), (9, 37802), (10, 37781), (11, 37745), (12, 37721), (13, 37715),

Gene: DoctorDiddles_51 Start: 37191, Stop: 36889, Start Num: 2

Candidate Starts for DoctorDiddles_51:

(Start: 1 @37212 has 12 MA's), (Start: 2 @37191 has 106 MA's), (3, 37155), (4, 37125), (7, 37077), (8, 37056), (11, 36972), (12, 36948), (13, 36942),

Gene: DrDrey_51 Start: 38262, Stop: 37960, Start Num: 2

Candidate Starts for DrDrey_51:

(Start: 1 @38283 has 12 MA's), (Start: 2 @38262 has 106 MA's), (5, 38160), (6, 38151), (7, 38148), (8, 38127), (9, 38100), (10, 38079), (11, 38043), (12, 38019), (13, 38013),

Gene: Dumbo_51 Start: 37038, Stop: 36736, Start Num: 2

Candidate Starts for Dumbo_51:

(Start: 1 @37059 has 12 MA's), (Start: 2 @37038 has 106 MA's), (5, 36936), (6, 36927), (7, 36924), (8, 36903), (9, 36876), (11, 36819), (12, 36795), (13, 36789),

Gene: Dusk_49 Start: 37335, Stop: 37033, Start Num: 2

Candidate Starts for Dusk_49:

(Start: 1 @37356 has 12 MA's), (Start: 2 @37335 has 106 MA's), (5, 37233), (6, 37224), (7, 37221), (8, 37200), (9, 37173), (11, 37116), (12, 37092), (13, 37086),

Gene: Easy2Say_52 Start: 38576, Stop: 38274, Start Num: 2

Candidate Starts for Easy2Say_52:

(Start: 1 @38597 has 12 MA's), (Start: 2 @38576 has 106 MA's), (5, 38474), (6, 38465), (7, 38462), (8, 38441), (9, 38414), (11, 38357), (12, 38333), (13, 38327),

Gene: Elite2014_51 Start: 37132, Stop: 36830, Start Num: 2

Candidate Starts for Elite2014_51:

(Start: 1 @37153 has 12 MA's), (Start: 2 @37132 has 106 MA's), (5, 37030), (6, 37021), (7, 37018), (8, 36997), (9, 36970), (11, 36913), (12, 36889), (13, 36883),

Gene: Elph10_51 Start: 36841, Stop: 36539, Start Num: 2

Candidate Starts for Elph10_51:

(Start: 1 @36862 has 12 MA's), (Start: 2 @36841 has 106 MA's), (5, 36739), (6, 36730), (7, 36727), (8, 36706), (9, 36679), (11, 36622), (12, 36598), (13, 36592),

Gene: Emmina_51 Start: 37039, Stop: 36737, Start Num: 2

Candidate Starts for Emmina_51:

(Start: 1 @37060 has 12 MA's), (Start: 2 @37039 has 106 MA's), (5, 36937), (6, 36928), (7, 36925), (8, 36904), (9, 36877), (10, 36856), (11, 36820), (12, 36796), (13, 36790),

Gene: Eureka_49 Start: 37603, Stop: 37301, Start Num: 2

Candidate Starts for Eureka_49:

(Start: 1 @37624 has 12 MA's), (Start: 2 @37603 has 106 MA's), (5, 37501), (6, 37492), (7, 37489), (8, 37468), (9, 37441), (10, 37420), (11, 37384), (12, 37360), (13, 37354),

Gene: Filch_52 Start: 37064, Stop: 36762, Start Num: 2

Candidate Starts for Filch_52:

(Start: 1 @37085 has 12 MA's), (Start: 2 @37064 has 106 MA's), (5, 36962), (6, 36953), (7, 36950), (8, 36929), (9, 36902), (11, 36845), (12, 36821), (13, 36815),

Gene: FireRed_54 Start: 38330, Stop: 38028, Start Num: 2

Candidate Starts for FireRed_54:

(Start: 1 @38351 has 12 MA's), (Start: 2 @38330 has 106 MA's), (5, 38228), (6, 38219), (7, 38216), (8, 38195), (9, 38168), (11, 38111), (12, 38087), (13, 38081),

Gene: Flypotenuse_46 Start: 36827, Stop: 36525, Start Num: 2

Candidate Starts for Flypotenuse_46:

(Start: 1 @36848 has 12 MA's), (Start: 2 @36827 has 106 MA's), (5, 36725), (6, 36716), (7, 36713), (8, 36692), (9, 36665), (10, 36644), (11, 36608), (12, 36584), (13, 36578),

Gene: Gage_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for Gage_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: Gator_49 Start: 37966, Stop: 37664, Start Num: 2

Candidate Starts for Gator_49:

(Start: 1 @37987 has 12 MA's), (Start: 2 @37966 has 106 MA's), (5, 37864), (6, 37855), (7, 37852), (8, 37831), (9, 37804), (10, 37783), (11, 37747), (12, 37723), (13, 37717),

Gene: Gemini_55 Start: 38129, Stop: 37827, Start Num: 2

Candidate Starts for Gemini_55:

(Start: 1 @38150 has 12 MA's), (Start: 2 @38129 has 106 MA's), (5, 38027), (6, 38018), (7, 38015), (8, 37994), (9, 37967), (11, 37910), (12, 37886), (13, 37880),

Gene: Glexan_49 Start: 37975, Stop: 37652, Start Num: 1

Candidate Starts for Glexan_49:

(Start: 1 @37975 has 12 MA's), (Start: 2 @37954 has 106 MA's), (5, 37852), (6, 37843), (7, 37840), (8, 37819), (9, 37792), (10, 37771), (11, 37735), (12, 37711), (13, 37705),

Gene: Goku_49 Start: 37332, Stop: 37030, Start Num: 2

Candidate Starts for Goku_49:

(Start: 1 @37353 has 12 MA's), (Start: 2 @37332 has 106 MA's), (5, 37230), (6, 37221), (7, 37218), (8, 37197), (9, 37170), (10, 37149), (11, 37113), (12, 37089), (13, 37083),

Gene: GoldenSpark_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for GoldenSpark_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: Goldilocks_53 Start: 37114, Stop: 36812, Start Num: 2

Candidate Starts for Goldilocks_53:

(Start: 1 @37135 has 12 MA's), (Start: 2 @37114 has 106 MA's), (5, 37012), (6, 37003), (7, 37000), (8, 36979), (9, 36952), (11, 36895), (12, 36871), (13, 36865),

Gene: GooberAzure_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for GooberAzure_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: HanKaySha_50 Start: 36922, Stop: 36620, Start Num: 2

Candidate Starts for HanKaySha_50:

(Start: 1 @36943 has 12 MA's), (Start: 2 @36922 has 106 MA's), (5, 36820), (6, 36811), (7, 36808), (8, 36787), (9, 36760), (11, 36703), (12, 36679), (13, 36673),

Gene: Harella_51 Start: 38470, Stop: 38168, Start Num: 2

Candidate Starts for Harella_51:

(Start: 1 @38491 has 12 MA's), (Start: 2 @38470 has 106 MA's), (5, 38368), (6, 38359), (7, 38356), (8, 38335), (9, 38308), (10, 38287), (11, 38251), (12, 38227), (13, 38221),

Gene: Henry_50 Start: 37554, Stop: 37252, Start Num: 2

Candidate Starts for Henry_50:

(Start: 1 @37575 has 12 MA's), (Start: 2 @37554 has 106 MA's), (5, 37452), (6, 37443), (7, 37440), (8, 37419), (9, 37392), (11, 37335), (12, 37311), (13, 37305),

Gene: Highbury_52 Start: 37211, Stop: 36909, Start Num: 2

Candidate Starts for Highbury_52:

(Start: 1 @37232 has 12 MA's), (Start: 2 @37211 has 106 MA's), (5, 37109), (6, 37100), (7, 37097), (8, 37076), (9, 37049), (11, 36992), (12, 36968), (13, 36962),

Gene: Holt_56 Start: 38026, Stop: 37724, Start Num: 2

Candidate Starts for Holt_56:

(Start: 1 @38047 has 12 MA's), (Start: 2 @38026 has 106 MA's), (3, 37990), (4, 37960), (7, 37912), (8, 37891), (11, 37807), (13, 37777),

Gene: Hoonter_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for Hoonter_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: Hopey_51 Start: 37456, Stop: 37154, Start Num: 2

Candidate Starts for Hopey_51:

(Start: 1 @37477 has 12 MA's), (Start: 2 @37456 has 106 MA's), (5, 37354), (6, 37345), (7, 37342), (8, 37321), (9, 37294), (10, 37273), (11, 37237), (12, 37213), (13, 37207),

Gene: HuffyPuff_53 Start: 38307, Stop: 37984, Start Num: 1

Candidate Starts for HuffyPuff_53:

(Start: 1 @38307 has 12 MA's), (Start: 2 @38286 has 106 MA's), (5, 38184), (6, 38175), (7, 38172), (8, 38151), (9, 38124), (11, 38067), (12, 38043), (13, 38037),

Gene: IHOP_49 Start: 37678, Stop: 37376, Start Num: 2

Candidate Starts for IHOP_49:

(Start: 1 @37699 has 12 MA's), (Start: 2 @37678 has 106 MA's), (5, 37576), (6, 37567), (7, 37564), (8, 37543), (9, 37516), (11, 37459), (12, 37435), (13, 37429),

Gene: Icee_51 Start: 37280, Stop: 36978, Start Num: 2

Candidate Starts for Icee_51:

(Start: 1 @37301 has 12 MA's), (Start: 2 @37280 has 106 MA's), (5, 37178), (6, 37169), (7, 37166), (8, 37145), (9, 37118), (10, 37097), (11, 37061), (12, 37037), (13, 37031),

Gene: Inca_48 Start: 36203, Stop: 35901, Start Num: 2

Candidate Starts for Inca_48:

(Start: 1 @36224 has 12 MA's), (Start: 2 @36203 has 106 MA's), (5, 36101), (6, 36092), (7, 36089), (8, 36068), (9, 36041), (11, 35984), (12, 35960), (13, 35954),

Gene: JeTaime_52 Start: 38106, Stop: 37804, Start Num: 2

Candidate Starts for JeTaime_52:

(Start: 1 @38127 has 12 MA's), (Start: 2 @38106 has 106 MA's), (5, 38004), (6, 37995), (7, 37992), (8, 37971), (9, 37944), (11, 37887), (12, 37863), (13, 37857),

Gene: Kanye_47 Start: 36966, Stop: 36664, Start Num: 2

Candidate Starts for Kanye_47:

(Start: 1 @36987 has 12 MA's), (Start: 2 @36966 has 106 MA's), (5, 36864), (6, 36855), (7, 36852), (8, 36831), (9, 36804), (10, 36783), (11, 36747), (12, 36723), (13, 36717),

Gene: Kimchi_54 Start: 37615, Stop: 37313, Start Num: 2

Candidate Starts for Kimchi_54:

(Start: 1 @37636 has 12 MA's), (Start: 2 @37615 has 106 MA's), (5, 37513), (6, 37504), (7, 37501), (8, 37480), (9, 37453), (11, 37396), (12, 37372), (13, 37366),

Gene: Kostya_52 Start: 37777, Stop: 37475, Start Num: 2

Candidate Starts for Kostya_52:

(Start: 1 @37798 has 12 MA's), (Start: 2 @37777 has 106 MA's), (5, 37675), (6, 37666), (7, 37663), (8, 37642), (9, 37615), (11, 37558), (12, 37534), (13, 37528),

Gene: Lilac_54 Start: 37262, Stop: 36939, Start Num: 1

Candidate Starts for Lilac_54:

(Start: 1 @37262 has 12 MA's), (Start: 2 @37241 has 106 MA's), (5, 37139), (6, 37130), (7, 37127), (8, 37106), (9, 37079), (11, 37022), (12, 36998), (13, 36992),

Gene: Lilizi_51 Start: 36915, Stop: 36613, Start Num: 2

Candidate Starts for Lilizi_51:

(Start: 1 @36936 has 12 MA's), (Start: 2 @36915 has 106 MA's), (5, 36813), (6, 36804), (7, 36801), (8, 36780), (9, 36753), (11, 36696), (12, 36672), (13, 36666),

Gene: Lilpickle_51 Start: 37132, Stop: 36830, Start Num: 2

Candidate Starts for Lilpickle_51:

(Start: 1 @37153 has 12 MA's), (Start: 2 @37132 has 106 MA's), (5, 37030), (6, 37021), (7, 37018), (8, 36997), (9, 36970), (11, 36913), (12, 36889), (13, 36883),

Gene: MISSy_51 Start: 37339, Stop: 37037, Start Num: 2

Candidate Starts for MISSy_51:

(Start: 1 @37360 has 12 MA's), (Start: 2 @37339 has 106 MA's), (5, 37237), (6, 37228), (7, 37225), (8, 37204), (9, 37177), (11, 37120), (12, 37096), (13, 37090),

Gene: MPhalcon_51 Start: 37332, Stop: 37030, Start Num: 2

Candidate Starts for MPhalcon_51:

(Start: 1 @37353 has 12 MA's), (Start: 2 @37332 has 106 MA's), (5, 37230), (6, 37221), (7, 37218), (8, 37197), (9, 37170), (11, 37113), (12, 37089), (13, 37083),

Gene: MadamMonkfish_51 Start: 36856, Stop: 36554, Start Num: 2

Candidate Starts for MadamMonkfish_51:

(Start: 1 @36877 has 12 MA's), (Start: 2 @36856 has 106 MA's), (5, 36754), (6, 36745), (7, 36742), (8, 36721), (9, 36694), (11, 36637), (12, 36613), (13, 36607),

Gene: Manda_51 Start: 38137, Stop: 37835, Start Num: 2

Candidate Starts for Manda_51:

(Start: 1 @38158 has 12 MA's), (Start: 2 @38137 has 106 MA's), (5, 38035), (6, 38026), (7, 38023), (8, 38002), (9, 37975), (11, 37918), (12, 37894), (13, 37888),

Gene: Marshmallow_50 Start: 38112, Stop: 37810, Start Num: 2

Candidate Starts for Marshmallow_50:

(Start: 1 @38133 has 12 MA's), (Start: 2 @38112 has 106 MA's), (5, 38010), (6, 38001), (7, 37998), (8, 37977), (9, 37950), (11, 37893), (12, 37869), (13, 37863),

Gene: Maxxinista_53 Start: 37211, Stop: 36909, Start Num: 2

Candidate Starts for Maxxinista_53:

(Start: 1 @37232 has 12 MA's), (Start: 2 @37211 has 106 MA's), (5, 37109), (6, 37100), (7, 37097), (8, 37076), (9, 37049), (11, 36992), (12, 36968), (13, 36962),

Gene: Mindy_50 Start: 36720, Stop: 36418, Start Num: 2

Candidate Starts for Mindy_50:

(Start: 1 @36741 has 12 MA's), (Start: 2 @36720 has 106 MA's), (3, 36684), (4, 36654), (7, 36606), (8, 36585), (11, 36501), (12, 36477), (13, 36471),

Gene: Miniwave_48 Start: 37173, Stop: 36871, Start Num: 2

Candidate Starts for Miniwave_48:

(Start: 1 @37194 has 12 MA's), (Start: 2 @37173 has 106 MA's), (5, 37071), (6, 37062), (7, 37059), (8, 37038), (9, 37011), (11, 36954), (12, 36930), (13, 36924),

Gene: Misfit_53 Start: 38351, Stop: 38049, Start Num: 2

Candidate Starts for Misfit_53:

(Start: 1 @38372 has 12 MA's), (Start: 2 @38351 has 106 MA's), (5, 38249), (6, 38240), (7, 38237), (8, 38216), (9, 38189), (11, 38132), (12, 38108), (13, 38102),

Gene: Moldemort_54 Start: 37729, Stop: 37427, Start Num: 2

Candidate Starts for Moldemort_54:

(Start: 1 @37750 has 12 MA's), (Start: 2 @37729 has 106 MA's), (5, 37627), (6, 37618), (7, 37615), (8, 37594), (9, 37567), (11, 37510), (12, 37486), (13, 37480),

Gene: Mosby_47 Start: 36655, Stop: 36332, Start Num: 1

Candidate Starts for Mosby_47:

(Start: 1 @36655 has 12 MA's), (Start: 2 @36634 has 106 MA's), (5, 36532), (6, 36523), (7, 36520), (8, 36499), (9, 36472), (11, 36415), (12, 36391), (13, 36385),

Gene: Murica_53 Start: 38286, Stop: 37984, Start Num: 2

Candidate Starts for Murica_53:

(Start: 1 @38307 has 12 MA's), (Start: 2 @38286 has 106 MA's), (5, 38184), (6, 38175), (7, 38172), (8, 38151), (9, 38124), (11, 38067), (12, 38043), (13, 38037),

Gene: Murphy_53 Start: 37723, Stop: 37421, Start Num: 2

Candidate Starts for Murphy_53:

(Start: 1 @37744 has 12 MA's), (Start: 2 @37723 has 106 MA's), (5, 37621), (6, 37612), (7, 37609), (8, 37588), (9, 37561), (11, 37504), (12, 37480), (13, 37474),

Gene: Myrale_51 Start: 37977, Stop: 37675, Start Num: 2

Candidate Starts for Myrale_51:

(Start: 1 @37998 has 12 MA's), (Start: 2 @37977 has 106 MA's), (5, 37875), (6, 37866), (7, 37863), (8, 37842), (9, 37815), (11, 37758), (12, 37734), (13, 37728),

Gene: Nala_52 Start: 37865, Stop: 37542, Start Num: 1

Candidate Starts for Nala_52:

(Start: 1 @37865 has 12 MA's), (Start: 2 @37844 has 106 MA's), (5, 37742), (6, 37733), (7, 37730), (8, 37709), (9, 37682), (11, 37625), (12, 37601), (13, 37595),

Gene: NelitzaMV_48 Start: 36921, Stop: 36619, Start Num: 2

Candidate Starts for NelitzaMV_48:

(Start: 1 @36942 has 12 MA's), (Start: 2 @36921 has 106 MA's), (5, 36819), (6, 36810), (7, 36807), (8, 36786), (9, 36759), (11, 36702), (13, 36672),

Gene: Nimrod_54 Start: 38544, Stop: 38242, Start Num: 2

Candidate Starts for Nimrod_54:

(Start: 1 @38565 has 12 MA's), (Start: 2 @38544 has 106 MA's), (5, 38442), (6, 38433), (7, 38430), (8, 38409), (9, 38382), (11, 38325), (12, 38301), (13, 38295),

Gene: NoSleep_53 Start: 37483, Stop: 37181, Start Num: 2

Candidate Starts for NoSleep_53:

(Start: 1 @37504 has 12 MA's), (Start: 2 @37483 has 106 MA's), (5, 37381), (6, 37372), (7, 37369), (8, 37348), (9, 37321), (11, 37264), (12, 37240), (13, 37234),

Gene: OrionPax_50 Start: 36928, Stop: 36626, Start Num: 2

Candidate Starts for OrionPax_50:

(Start: 1 @36949 has 12 MA's), (Start: 2 @36928 has 106 MA's), (5, 36826), (6, 36817), (7, 36814), (8, 36793), (9, 36766), (11, 36709), (12, 36685), (13, 36679),

Gene: Palpatine_54 Start: 38316, Stop: 38014, Start Num: 2

Candidate Starts for Palpatine_54:

(Start: 1 @38337 has 12 MA's), (Start: 2 @38316 has 106 MA's), (5, 38214), (6, 38205), (7, 38202), (8, 38181), (9, 38154), (11, 38097), (12, 38073), (13, 38067),

Gene: Paperbeatsrock_50 Start: 37851, Stop: 37549, Start Num: 2

Candidate Starts for Paperbeatsrock_50:

(Start: 1 @37872 has 12 MA's), (Start: 2 @37851 has 106 MA's), (5, 37749), (6, 37740), (7, 37737), (8, 37716), (9, 37689), (11, 37632), (12, 37608), (13, 37602),

Gene: Pat3_49 Start: 36081, Stop: 35779, Start Num: 2

Candidate Starts for Pat3_49:

(Start: 1 @36102 has 12 MA's), (Start: 2 @36081 has 106 MA's), (3, 36045), (4, 36015), (7, 35967), (8, 35946), (11, 35862), (12, 35838), (13, 35832),

Gene: Petra64142_56 Start: 38780, Stop: 38478, Start Num: 2

Candidate Starts for Petra64142_56:

(Start: 1 @38801 has 12 MA's), (Start: 2 @38780 has 106 MA's), (5, 38678), (6, 38669), (7, 38666), (8, 38645), (9, 38618), (11, 38561), (12, 38537), (13, 38531),

Gene: Phaja_49 Start: 37677, Stop: 37375, Start Num: 2

Candidate Starts for Phaja_49:

(Start: 1 @37698 has 12 MA's), (Start: 2 @37677 has 106 MA's), (5, 37575), (6, 37566), (7, 37563), (8, 37542), (9, 37515), (11, 37458), (12, 37434), (13, 37428),

Gene: Pharsalus_49 Start: 37651, Stop: 37349, Start Num: 2

Candidate Starts for Pharsalus_49:

(Start: 1 @37672 has 12 MA's), (Start: 2 @37651 has 106 MA's), (5, 37549), (6, 37540), (7, 37537), (8, 37516), (9, 37489), (11, 37432), (12, 37408), (13, 37402),

Gene: PhatBacter_54 Start: 38330, Stop: 38028, Start Num: 2

Candidate Starts for PhatBacter_54:

(Start: 1 @38351 has 12 MA's), (Start: 2 @38330 has 106 MA's), (5, 38228), (6, 38219), (7, 38216), (8, 38195), (9, 38168), (11, 38111), (12, 38087), (13, 38081),

Gene: Phaux_53 Start: 38328, Stop: 38026, Start Num: 2

Candidate Starts for Phaux_53:

(Start: 1 @38349 has 12 MA's), (Start: 2 @38328 has 106 MA's), (5, 38226), (6, 38217), (7, 38214), (8, 38193), (9, 38166), (11, 38109), (12, 38085), (13, 38079),

Gene: Phrux_49 Start: 36942, Stop: 36619, Start Num: 1

Candidate Starts for Phrux_49:

(Start: 1 @36942 has 12 MA's), (Start: 2 @36921 has 106 MA's), (5, 36819), (6, 36810), (7, 36807), (8, 36786), (9, 36759), (11, 36702), (12, 36678), (13, 36672),

Gene: Policronamos_56 Start: 38328, Stop: 38026, Start Num: 2

Candidate Starts for Policronamos_56:

(Start: 1 @38349 has 12 MA's), (Start: 2 @38328 has 106 MA's), (5, 38226), (6, 38217), (7, 38214), (8, 38193), (9, 38166), (11, 38109), (12, 38085), (13, 38079),

Gene: Pumpkin_53 Start: 37978, Stop: 37676, Start Num: 2

Candidate Starts for Pumpkin_53:

(Start: 1 @37999 has 12 MA's), (Start: 2 @37978 has 106 MA's), (5, 37876), (6, 37867), (7, 37864), (8, 37843), (9, 37816), (11, 37759), (12, 37735), (13, 37729),

Gene: Quallification_52 Start: 37966, Stop: 37664, Start Num: 2

Candidate Starts for Quallification_52:

(Start: 1 @37987 has 12 MA's), (Start: 2 @37966 has 106 MA's), (5, 37864), (6, 37855), (7, 37852), (8, 37831), (9, 37804), (11, 37747), (12, 37723), (13, 37717),

Gene: Rakim_53 Start: 37728, Stop: 37426, Start Num: 2

Candidate Starts for Rakim_53:

(Start: 1 @37749 has 12 MA's), (Start: 2 @37728 has 106 MA's), (5, 37626), (6, 37617), (7, 37614), (8, 37593), (9, 37566), (11, 37509), (12, 37485), (13, 37479),

Gene: Rimmer_52 Start: 37670, Stop: 37368, Start Num: 2

Candidate Starts for Rimmer_52:

(Start: 1 @37691 has 12 MA's), (Start: 2 @37670 has 106 MA's), (5, 37568), (6, 37559), (7, 37556), (8, 37535), (9, 37508), (11, 37451), (12, 37427), (13, 37421),

Gene: RiverMonster_52 Start: 37520, Stop: 37197, Start Num: 1

Candidate Starts for RiverMonster_52:

(Start: 1 @37520 has 12 MA's), (Start: 2 @37499 has 106 MA's), (5, 37397), (6, 37388), (7, 37385), (8, 37364), (9, 37337), (11, 37280), (12, 37256), (13, 37250),

Gene: Saints25_52 Start: 37211, Stop: 36909, Start Num: 2

Candidate Starts for Saints25_52:

(Start: 1 @37232 has 12 MA's), (Start: 2 @37211 has 106 MA's), (5, 37109), (6, 37100), (7, 37097), (8, 37076), (9, 37049), (11, 36992), (12, 36968), (13, 36962),

Gene: Sassay_45 Start: 35598, Stop: 35296, Start Num: 2

Candidate Starts for Sassay_45:

(Start: 1 @35619 has 12 MA's), (Start: 2 @35598 has 106 MA's), (5, 35496), (6, 35487), (7, 35484), (8, 35463), (9, 35436), (11, 35379), (12, 35355), (13, 35349),

Gene: ShamWow_51 Start: 38114, Stop: 37812, Start Num: 2

Candidate Starts for ShamWow_51:

(Start: 1 @38135 has 12 MA's), (Start: 2 @38114 has 106 MA's), (5, 38012), (6, 38003), (7, 38000), (8, 37979), (9, 37952), (11, 37895), (12, 37871), (13, 37865),

Gene: ShereKhan_49 Start: 37890, Stop: 37588, Start Num: 2

Candidate Starts for ShereKhan_49:

(Start: 1 @37911 has 12 MA's), (Start: 2 @37890 has 106 MA's), (5, 37788), (6, 37779), (7, 37776), (8, 37755), (9, 37728), (11, 37671), (12, 37647), (13, 37641),

Gene: Simpliphy_50 Start: 37195, Stop: 36893, Start Num: 2

Candidate Starts for Simpliphy_50:

(Start: 1 @37216 has 12 MA's), (Start: 2 @37195 has 106 MA's), (5, 37093), (6, 37084), (7, 37081), (8, 37060), (9, 37033), (10, 37012), (11, 36976), (12, 36952), (13, 36946),

Gene: SirDuracell_50 Start: 36192, Stop: 35869, Start Num: 1

Candidate Starts for SirDuracell_50:

(Start: 1 @36192 has 12 MA's), (Start: 2 @36171 has 106 MA's), (3, 36135), (4, 36105), (7, 36057), (8, 36036), (11, 35952), (12, 35928), (13, 35922),

Gene: SophKB_48 Start: 36870, Stop: 36568, Start Num: 2

Candidate Starts for SophKB_48:

(Start: 1 @36891 has 12 MA's), (Start: 2 @36870 has 106 MA's), (5, 36768), (6, 36759), (7, 36756), (8, 36735), (9, 36708), (11, 36651), (12, 36627), (13, 36621),

Gene: Sotrice96_52 Start: 37597, Stop: 37274, Start Num: 1

Candidate Starts for Sotrice96_52:

(Start: 1 @37597 has 12 MA's), (Start: 2 @37576 has 106 MA's), (5, 37474), (6, 37465), (7, 37462), (8, 37441), (9, 37414), (10, 37393), (11, 37357), (12, 37333), (13, 37327),

Gene: Stank_55 Start: 38128, Stop: 37826, Start Num: 2

Candidate Starts for Stank_55:

(Start: 1 @38149 has 12 MA's), (Start: 2 @38128 has 106 MA's), (5, 38026), (6, 38017), (7, 38014), (8, 37993), (9, 37966), (11, 37909), (12, 37885), (13, 37879),

Gene: Stark_52 Start: 37383, Stop: 37081, Start Num: 2

Candidate Starts for Stark_52:

(Start: 1 @37404 has 12 MA's), (Start: 2 @37383 has 106 MA's), (5, 37281), (6, 37272), (7, 37269), (8, 37248), (9, 37221), (11, 37164), (12, 37140), (13, 37134),

Gene: StellaBean_49 Start: 37438, Stop: 37136, Start Num: 2

Candidate Starts for StellaBean_49:

(Start: 1 @37459 has 12 MA's), (Start: 2 @37438 has 106 MA's), (5, 37336), (6, 37327), (7, 37324), (8, 37303), (9, 37276), (11, 37219), (12, 37195), (13, 37189),

Gene: StolenFromERC_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for StolenFromERC_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: TBrady12_54 Start: 37612, Stop: 37310, Start Num: 2

Candidate Starts for TBrady12_54:

(Start: 1 @37633 has 12 MA's), (Start: 2 @37612 has 106 MA's), (5, 37510), (6, 37501), (7, 37498), (8, 37477), (9, 37450), (11, 37393), (12, 37369), (13, 37363),

Gene: Tarkin_50 Start: 37860, Stop: 37558, Start Num: 2

Candidate Starts for Tarkin_50:

(Start: 1 @37881 has 12 MA's), (Start: 2 @37860 has 106 MA's), (5, 37758), (6, 37749), (7, 37746), (8, 37725), (9, 37698), (11, 37641), (12, 37617), (13, 37611),

Gene: TeardropMSU_47 Start: 36860, Stop: 36558, Start Num: 2

Candidate Starts for TeardropMSU_47:

(Start: 1 @36881 has 12 MA's), (Start: 2 @36860 has 106 MA's), (5, 36758), (6, 36749), (7, 36746), (8, 36725), (9, 36698), (11, 36641), (12, 36617), (13, 36611),

Gene: Teaspoon_49 Start: 37754, Stop: 37452, Start Num: 2

Candidate Starts for Teaspoon_49:

(Start: 1 @37775 has 12 MA's), (Start: 2 @37754 has 106 MA's), (5, 37652), (6, 37643), (7, 37640), (8, 37619), (9, 37592), (11, 37535), (12, 37511), (13, 37505),

Gene: Terminus_53 Start: 38351, Stop: 38049, Start Num: 2

Candidate Starts for Terminus_53:

(Start: 1 @38372 has 12 MA's), (Start: 2 @38351 has 106 MA's), (5, 38249), (6, 38240), (7, 38237), (8, 38216), (9, 38189), (11, 38132), (12, 38108), (13, 38102),

Gene: Thresher_54 Start: 38737, Stop: 38435, Start Num: 2

Candidate Starts for Thresher_54:

(Start: 1 @38758 has 12 MA's), (Start: 2 @38737 has 106 MA's), (5, 38635), (6, 38626), (7, 38623), (8, 38602), (9, 38575), (11, 38518), (12, 38494), (13, 38488),

Gene: Tomaszewski_47 Start: 36754, Stop: 36431, Start Num: 1

Candidate Starts for Tomaszewski_47:

(Start: 1 @36754 has 12 MA's), (Start: 2 @36733 has 106 MA's), (5, 36631), (6, 36622), (7, 36619), (8, 36598), (9, 36571), (11, 36514), (12, 36490), (13, 36484),

Gene: Toto_50 Start: 38114, Stop: 37812, Start Num: 2

Candidate Starts for Toto_50:

(Start: 1 @38135 has 12 MA's), (Start: 2 @38114 has 106 MA's), (5, 38012), (6, 38003), (7, 38000), (8, 37979), (9, 37952), (11, 37895), (12, 37871), (13, 37865),

Gene: Traaww1_47 Start: 37295, Stop: 36993, Start Num: 2

Candidate Starts for Traaww1_47:

(Start: 1 @37316 has 12 MA's), (Start: 2 @37295 has 106 MA's), (5, 37193), (6, 37184), (7, 37181), (8, 37160), (9, 37133), (10, 37112), (11, 37076), (12, 37052), (13, 37046),

Gene: Tuco_52 Start: 38622, Stop: 38320, Start Num: 2

Candidate Starts for Tuco_52:

(Start: 1 @38643 has 12 MA's), (Start: 2 @38622 has 106 MA's), (5, 38520), (6, 38511), (7, 38508), (8, 38487), (9, 38460), (10, 38439), (11, 38403), (12, 38379), (13, 38373),

Gene: Ukulele_48 Start: 37029, Stop: 36706, Start Num: 1

Candidate Starts for Ukulele_48:

(Start: 1 @37029 has 12 MA's), (Start: 2 @37008 has 106 MA's), (5, 36906), (6, 36897), (7, 36894), (8, 36873), (9, 36846), (11, 36789), (12, 36765), (13, 36759),

Gene: Wiggin_53 Start: 37696, Stop: 37394, Start Num: 2

Candidate Starts for Wiggin_53:

(Start: 1 @37717 has 12 MA's), (Start: 2 @37696 has 106 MA's), (5, 37594), (6, 37585), (7, 37582), (8, 37561), (9, 37534), (11, 37477), (12, 37453), (13, 37447),

Gene: Willez_45 Start: 35598, Stop: 35296, Start Num: 2

Candidate Starts for Willez_45:

(Start: 1 @35619 has 12 MA's), (Start: 2 @35598 has 106 MA's), (5, 35496), (6, 35487), (7, 35484), (8, 35463), (9, 35436), (11, 35379), (12, 35355), (13, 35349),

Gene: Xandras_51 Start: 37107, Stop: 36805, Start Num: 2

Candidate Starts for Xandras_51:

(Start: 1 @37128 has 12 MA's), (Start: 2 @37107 has 106 MA's), (5, 37005), (6, 36996), (7, 36993), (8, 36972), (9, 36945), (11, 36888), (12, 36864), (13, 36858),

Gene: YassJohnny_47 Start: 36773, Stop: 36471, Start Num: 2

Candidate Starts for YassJohnny_47:

(Start: 1 @36794 has 12 MA's), (Start: 2 @36773 has 106 MA's), (5, 36671), (6, 36662), (7, 36659), (8, 36638), (9, 36611), (11, 36554), (12, 36530), (13, 36524),

Gene: Youngblood_53 Start: 38281, Stop: 37979, Start Num: 2

Candidate Starts for Youngblood_53:

(Start: 1 @38302 has 12 MA's), (Start: 2 @38281 has 106 MA's), (5, 38179), (6, 38170), (7, 38167), (8, 38146), (9, 38119), (11, 38062), (12, 38038), (13, 38032),

Gene: xkcd_55 Start: 38471, Stop: 38169, Start Num: 2

Candidate Starts for xkcd_55:

(Start: 1 @38492 has 12 MA's), (Start: 2 @38471 has 106 MA's), (5, 38369), (6, 38360), (7, 38357), (8, 38336), (9, 38309), (11, 38252), (12, 38228), (13, 38222),