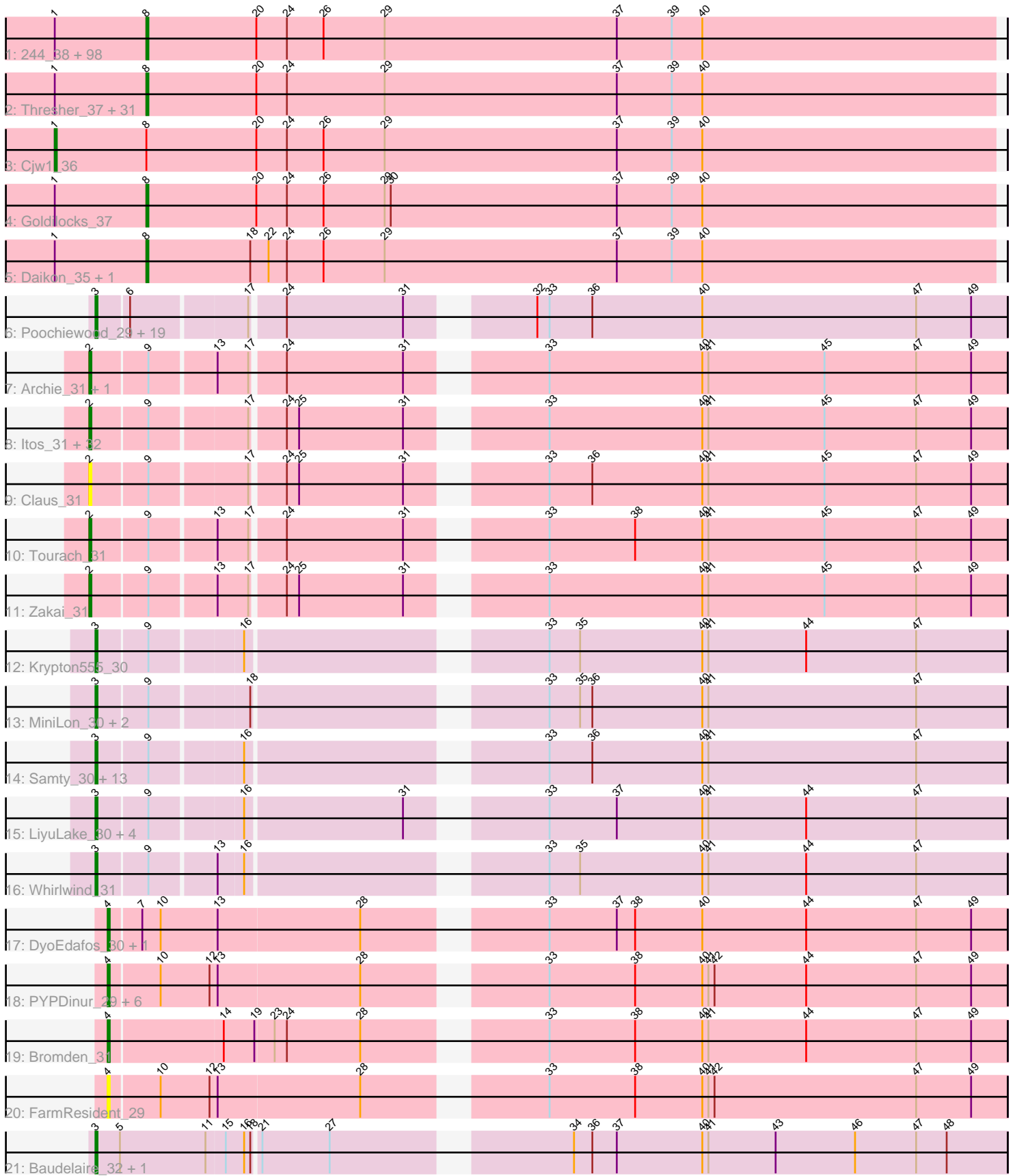


Pham 215807



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 215807 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215807 has 230 members, 35 are drafts.

Phages represented in each track:

- Track 1 : 244_38, ShamWow_36, Phrux_36, CrystalP_36, Stark_37, Gemini_39, Becksu_36, BugsBunny_34, MISSy_35, Misfit_36, Icee_35, MPhalcon_35, Elph10_37, Tarkin_38, Goku_36, Simpliphy_37, StormChicken_36, Eureka_36, Asriel_35, Nimrod_36, HanKaySha_37, Gator_34, DoctorDiddles_36, Petra64142_38, FireRed_36, Bask21_36, PhatBacter_36, Bruin_36, Xandras_38, Wiggin_39, Paperbeatsrock_38, HufflyPuff_35, Argent26_38, Willez_35, Kimchi_38, StolenFromERC_38, Easy2Say_38, Qualification_37, Rakim_37, Contagion_35, Dumbo_36, JeTaime_38, StellaBean_36, MadamMonkfish_36, Palpatine_36, Cactus_37, Thimble_36, FairyPath_36, BilboSwaggins_36, Hoonter_38, Saints25_37, Nala_36, Tomaszewski_35, Traaww1_34, Manda_37, Mosby_35, Lilac_38, NelitzaMV_36, Maxxinsta_37, TBrady12_38, Filch_37, Barbarian_35, Bench_38, Adnama_39, Rimmer_35, Policronamos_36, Phaux_35, SophKB_36, Pumpkin_38, Teaspoon_37, Sotrice96_36, Buck_35, Balomoji_35, Highbury_37, FoghornLeghorn_35, NoSleep_37, xkcd_37, Czyszczonek1_37, Kanye_38, RiverMonster_36, TeardropMSU_35, GoldenSpark_38, Moldemort_37, GooberAzure_38, Hopey_38, Lilizi_38, OrionPax_37, Toto_36, Terminus_36, AmericanBeauty_38, Sassay_35, YassJohnny_37, Murica_35, Pharsalus_37, Murphy_37, Gage_38, Inca_35, Command613_37, Miniwave_36
- Track 2 : Thresher_37, ChotaBhai_36, Emmina_37, BaboJay_35, BadStone_35, ChosenOne_36, Lilpickle_35, ShereKhan_38, Henry_37, Phaja_36, ABCat_35, DrDrey_37, Tuco_37, Holt_37, Elite2014_35, Mindy_36, Flypotenuse_34, Myrale_36, Dusk_35, Ukulele_36, Marshmallow_36, Cookies_36, Stank_39, Glexan_34, Amao_36, Harella_35, Youngblood_36, SirDuracell_35, IHOP_36, BigBubba_37, Porky_36, Pat3_35
- Track 3 : Cjw1_36
- Track 4 : Goldilocks_37
- Track 5 : Daikon_35, Kostya_37
- Track 6 : Poochiewood_29, AvadaKedavra_29, OhShagHennessy_29, Calm_29, UPIE_29, Tyson_29, Wamburggrxpress_29, CicholasNage_29, Halena_29, Wyatt2_29, MAckerman_29, Zaria_29, Enceladus_29, Appletree2_29, Acquire49_29, DirkDirk_29, Rose5_29, Silverleaf_29, JoeDirt_29, LeBron_29
- Track 7 : Archie_31, Bazzle_31
- Track 8 : Itos_31, Wilder_31, Netyap_31, SoJulia_32, Loadrie_31, Underpass_31, Kahlid_31, Rumpelstiltskin_31, Hafay_31, Baoshan_30, Lewan_31, Breezona_31, Winky_31, DHan_31, Vetrix_31, Gabriela_31, Soap141_31, Faith1_31, BigCheese_31, Finemlucis_31, BobsGarage_31, GuuelaD_31, DrSeegs_31, Gardann_31, ZhongYanYuan_30, Miley16_31, Sarshaun_31, Wigglewiggle_31,

DanBing_30, LilDestine_31, MkaliMitinis3_31, Nicholasp3_31, Crossroads_31

- Track 9 : Claus_31
- Track 10 : Tourach_31
- Track 11 : Zakai_31
- Track 12 : Krypton555_30
- Track 13 : MiniLon_30, MiniMac_30, Lolly9_30
- Track 14 : Samty_30, Nicholas_30, Lumos_30, Finnry_30, Snenia_30, Red305_30, Jubie_30, Moostard_30, Clautastrophe_30, Bellis_30, Jobypre_30, Kingsolomon_30, TriFive_30, MsGreen_30
- Track 15 : LiyuLake_30, Ellson_30, BourbonZero_29, KirDoubleO7_28, DuncansLeg_30
- Track 16 : Whirlwind_31
- Track 17 : DyoEdafos_30, Kropertea_29
- Track 18 : PYPDinur_29, Douzhi_29, Sheng711_29, Quby_29, Douge_29, Chaser_29, BrainDrainer_30
- Track 19 : Bromden_31
- Track 20 : FarmResident_29
- Track 21 : Baudelaire_32, Aegeus_32

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

The start number called the most often in the published annotations is 8, it was called in 124 of the 195 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_38, ABCat_35, Adnama_39, Amao_36, AmericanBeauty_38, Argent26_38, Asriel_35, BaboJay_35, BadStone_35, Balomoji_35, Barbarian_35, Bask21_36, Becksu_36, Bench_38, BigBubba_37, BilboSwaggins_36, Bruin_36, Buck_35, BugsBunny_34, Cactus_37, ChosenOne_36, ChotaBhai_36, Command613_37, Contagion_35, Cookies_36, CrystalP_36, Czystczon1_37, Daikon_35, DoctorDiddles_36, DrDrey_37, Dumbo_36, Dusk_35, Easy2Say_38, Elite2014_35, Elph10_37, Emmina_37, Eureka_36, FairyPath_36, Filch_37, FireRed_36, Flypotenuse_34, FoghornLeghorn_35, Gage_38, Gator_34, Gemini_39, Glexan_34, Goku_36, GoldenSpark_38, Goldilocks_37, GooberAzure_38, HanKaySha_37, Harella_35, Henry_37, Highbury_37, Holt_37, Hoonter_38, Hopey_38, HufflyPuff_35, IHOP_36, Icee_35, Inca_35, JeTaime_38, Kanye_38, Kimchi_38, Kostya_37, Lilac_38, Lilizi_38, Lilpickle_35, MISSy_35, MPhalcon_35, MadamMonkfish_36, Manda_37, Marshmallow_36, Maxxinista_37, Mindy_36, Miniwave_36, Misfit_36, Moldemort_37, Mosby_35, Murica_35, Murphy_37, Myrale_36, Nala_36, NelitzaMV_36, Nimrod_36, NoSleep_37, OrionPax_37, Palpatine_36, Paperbeatsrock_38, Pat3_35, Petra64142_38, Phaja_36, Pharsalus_37, PhatBacter_36, Phaux_35, Phrux_36, Policronamos_36, Porky_36, Pumpkin_38, Quallification_37, Rakim_37, Rimmer_35, RiverMonster_36, Saints25_37, Sassay_35, ShamWow_36, ShereKhan_38, Simpliphy_37, SirDuracell_35, SophKB_36, Sotrice96_36, Stank_39, Stark_37, StellaBean_36, StolenFromERC_38, StormChicken_36, TBrady12_38, Tarkin_38, TeardropMSU_35, Teaspoon_37, Terminus_36, Thimble_36, Thresher_37, Tomaszewski_35, Toto_36, Traaww1_34, Tuco_37, Ukulele_36, WiggIn_39, Willez_35, Xandras_38, YassJohnny_37, Youngblood_36, xkcd_37,

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

- Cjw1_36,

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

- Acquire49_29, Aegeus_32, Appletree2_29, Archie_31, AvadaKedavra_29, Baoshan_30, Baudelaire_32, Bazzle_31, Bellis_30, BigCheese_31, BobsGarage_31, BourbonZero_29, BrainDrainer_30, Breezona_31, Bromden_31, Calm_29, Chaser_29, CicholasNage_29, Claus_31, Clautastrophe_30, Crossroads_31, DHan_31, DanBing_30, DirkDirk_29, Douge_29, Douzhi_29, DrSeegs_31, DuncansLeg_30, DyoEdafos_30, Ellson_30, Enceladus_29, Faith1_31, FarmResident_29, Finemlucis_31, Finnry_30, Gabriela_31, Gardann_31, GuuelaD_31, Hafay_31, Halena_29, Itos_31, Jobypre_30, JoeDirt_29, Jubie_30, Kahlid_31, Kingsolomon_30, KirDoubleO7_28, Kropertea_29, Krypton555_30, LeBron_29, Lewan_31, LilDestine_31, LiyuLake_30, Loadrie_31, Lolly9_30, Lumos_30, MAckerman_29, Miley16_31, MiniLon_30, MiniMac_30, MkaliMitinis3_31, Moostard_30, MsGreen_30, Netyap_31, Nicholas_30, Nicholasp3_31, OhShagHennessy_29, PYPDinur_29, Poochiewood_29, Quby_29, Red305_30, Rose5_29, Rumpelstiltskin_31, Samty_30, Sarshaun_31, Sheng711_29, Silverleaf_29, Snenia_30, SoJulia_32, Soap141_31, Tourach_31, TriFive_30, Tyson_29, UPIE_29, Underpass_31, Vetrix_31, Wamburggrxpress_29, Whirlwind_31, Wigglewiggles_31, Wilder_31, Winky_31, Wyatt2_29, Zakai_31, Zaria_29, ZhongYanYuan_30,

Summary by start number:

Start 1:

- Found in 135 of 230 (58.7%) of genes in pham
- Manual Annotations of this start: 1 of 195
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Cjw1_36 (E),

Start 2:

- Found in 38 of 230 (16.5%) of genes in pham
- Manual Annotations of this start: 28 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archie_31 (L2), Baoshan_30 (L2), Bazzle_31 (L2), BigCheese_31 (L2), BobsGarage_31 (L2), Breezona_31 (L2), Claus_31 (L2), Crossroads_31 (L2), DHan_31 (L2), DanBing_30 (L2), DrSeegs_31 (L2), Faith1_31 (L2), Finemlucis_31 (L2), Gabriela_31 (L2), Gardann_31 (L2), GuuelaD_31 (L2), Hafay_31 (L2), Itos_31 (L2), Kahlid_31 (L2), Lewan_31 (L2), LilDestine_31 (L2), Loadrie_31 (L2), Miley16_31 (L2), MkaliMitinis3_31 (L2), Netyap_31 (L2), Nicholasp3_31 (L2), Rumpelstiltskin_31 (L2), Sarshaun_31 (L2), SoJulia_32 (L2), Soap141_31 (L2), Tourach_31 (L2), Underpass_31 (L2), Vetrix_31 (L2), Wigglewiggles_31 (L2), Wilder_31 (L2), Winky_31 (L2), Zakai_31 (L2), ZhongYanYuan_30 (L2),

Start 3:

- Found in 46 of 230 (20.0%) of genes in pham
- Manual Annotations of this start: 38 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_29 (L1), Aegeus_32 (L5), Appletree2_29 (L1), AvadaKedavra_29 (L1), Baudelaire_32 (L5), Bellis_30 (L3), BourbonZero_29 (L3), Calm_29 (L1), CicholasNage_29 (L1), Clautastrophe_30 (L3),

DirkDirk_29 (L1), DuncansLeg_30 (L3), Ellson_30 (L3), Enceladus_29 (L1), Finnry_30 (L3), Halena_29 (L1), Jobypre_30 (L3), JoeDirt_29 (L1), Jubie_30 (L3), Kingsolomon_30 (L3), KirDoubleO7_28 (L3), Krypton555_30 (L3), LeBron_29 (L1), LiyuLake_30 (L3), Lolly9_30 (L3), Lumos_30 (L3), MAckerman_29 (L1), MiniLon_30 (L3), MiniMac_30 (L3), Moostard_30 (L3), MsGreen_30 (L3), Nicholas_30 (L3), OhShagHennessy_29 (L1), Poochiewood_29 (L1), Red305_30 (L3), Rose5_29 (L1), Samty_30 (L3), Silverleaf_29 (L1), Snenia_30 (L3), TriFive_30 (L3), Tyson_29 (L1), UPIE_29 (L1), Wamburgxpress_29 (L1), Whirlwind_31 (L3), Wyatt2_29 (L1), Zaria_29 (L1),

Start 4:

- Found in 11 of 230 (4.8%) of genes in pham
- Manual Annotations of this start: 4 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrainDrainer_30 (L4), Bromden_31 (L4), Chaser_29 (L4), Douge_29 (L4), Douzhi_29 (L4), DyoEdafos_30 (L4), FarmResident_29 (L4), Kropertea_29 (L4), PYPDinur_29 (L4), Quby_29 (L4), Sheng711_29 (L4),

Start 8:

- Found in 135 of 230 (58.7%) of genes in pham
- Manual Annotations of this start: 124 of 195
- Called 99.3% of time when present
- Phage (with cluster) where this start called: 244_38 (E), ABCat_35 (E), Adnama_39 (E), Amao_36 (E), AmericanBeauty_38 (E), Argent26_38 (E), Asriel_35 (E), BaboJay_35 (E), BadStone_35 (E), Balomoji_35 (E), Barbarian_35 (E), Bask21_36 (E), Becksu_36 (E), Bench_38 (E), BigBubba_37 (E), BilboSwaggins_36 (E), Bruin_36 (E), Buck_35 (E), BugsBunny_34 (E), Cactus_37 (E), ChosenOne_36 (E), ChotaBhai_36 (E), Command613_37 (E), Contagion_35 (E), Cookies_36 (E), CrystalP_36 (E), Czyszczonek_37 (E), Daikon_35 (E), DoctorDiddles_36 (E), DrDrey_37 (E), Dumbo_36 (E), Dusk_35 (E), Easy2Say_38 (E), Elite2014_35 (E), Elph10_37 (E), Emmina_37 (E), Eureka_36 (E), FairyPath_36 (E), Filch_37 (E), FireRed_36 (E), Flypotenuse_34 (E), FoghornLeghorn_35 (E), Gage_38 (E), Gator_34 (E), Gemini_39 (E), Glexan_34 (E), Goku_36 (E), GoldenSpark_38 (E), Goldilocks_37 (E), GooberAzure_38 (E), HanKaySha_37 (E), Harella_35 (E), Henry_37 (E), Highbury_37 (E), Holt_37 (E), Hoonter_38 (E), Hopey_38 (E), HufflyPuff_35 (E), IHOP_36 (E), Icee_35 (E), Inca_35 (E), JeTaime_38 (E), Kanye_38 (E), Kimchi_38 (E), Kostya_37 (E), Lilac_38 (E), Lilizi_38 (E), Lilpickle_35 (E), MISSy_35 (E), MPhalcon_35 (E), MadamMonkfish_36 (E), Manda_37 (E), Marshmallow_36 (E), Maxxinista_37 (E), Mindy_36 (E), Miniwave_36 (E), Misfit_36 (E), Moldemort_37 (E), Mosby_35 (E), Murica_35 (E), Murphy_37 (E), Myrale_36 (E), Nala_36 (E), NelitzaMV_36 (E), Nimrod_36 (E), NoSleep_37 (E), OrionPax_37 (E), Palpatine_36 (E), Paperbeatsrock_38 (E), Pat3_35 (E), Petra64142_38 (E), Phaja_36 (E), Pharsalus_37 (E), PhatBacter_36 (E), Phaux_35 (E), Phrux_36 (E), Policronamos_36 (E), Porky_36 (E), Pumpkin_38 (E), Quallification_37 (E), Rakim_37 (E), Rimmer_35 (E), RiverMonster_36 (E), Saints25_37 (E), Sassay_35 (E), ShamWow_36 (E), ShereKhan_38 (E), Simpliphy_37 (E), SirDuracell_35 (E), SophKB_36 (E), Sotrice96_36 (E), Stank_39 (E), Stark_37 (E), StellaBean_36 (E), StolenFromERC_38 (E), StormChicken_36 (E), TBrady12_38 (E), Tarkin_38 (E), TeardropMSU_35 (E), Teaspoon_37 (E), Terminus_36 (E), Thimble_36 (E), Thresher_37 (E), Tomaszewski_35 (E), Toto_36 (E), Traaww1_34 (E), Tuco_37 (E), Ukulele_36 (E), Wiggin_39 (E), Willez_35 (E), Xandras_38 (E), YassJohnny_37 (E), Youngblood_36 (E), xkcd_37 (E),

Summary by clusters:

There are 6 clusters represented in this pham: E, L4, L5, L2, L3, L1,

Info for manual annotations of cluster E:

- Start number 1 was manually annotated 1 time for cluster E.
- Start number 8 was manually annotated 124 times for cluster E.

Info for manual annotations of cluster L1:

- Start number 3 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 2 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 3 was manually annotated 17 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 4 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 3 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: 244_38 Start: 32992, Stop: 33408, Start Num: 8

Candidate Starts for 244_38:

(Start: 1 @32947 has 1 MA's), (Start: 8 @32992 has 124 MA's), (20, 33046), (24, 33061), (26, 33079), (29, 33109), (37, 33223), (39, 33250), (40, 33265),

Gene: ABCat_35 Start: 32704, Stop: 33120, Start Num: 8

Candidate Starts for ABCat_35:

(Start: 1 @32659 has 1 MA's), (Start: 8 @32704 has 124 MA's), (20, 32758), (24, 32773), (29, 32821), (37, 32935), (39, 32962), (40, 32977),

Gene: Acquire49_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Acquire49_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: Adnama_39 Start: 33219, Stop: 33635, Start Num: 8

Candidate Starts for Adnama_39:

(Start: 1 @33174 has 1 MA's), (Start: 8 @33219 has 124 MA's), (20, 33273), (24, 33288), (26, 33306), (29, 33336), (37, 33450), (39, 33477), (40, 33492),

Gene: Aegeus_32 Start: 27373, Stop: 27798, Start Num: 3

Candidate Starts for Aegeus_32:

(Start: 3 @27373 has 38 MA's), (5, 27385), (11, 27427), (15, 27436), (16, 27445), (18, 27448), (21, 27451), (27, 27484), (34, 27586), (36, 27595), (37, 27607), (40, 27649), (41, 27652), (43, 27685), (46, 27724), (47, 27754), (48, 27769),

Gene: Amao_36 Start: 31916, Stop: 32332, Start Num: 8

Candidate Starts for Amao_36:

(Start: 1 @31871 has 1 MA's), (Start: 8 @31916 has 124 MA's), (20, 31970), (24, 31985), (29, 32033), (37, 32147), (39, 32174), (40, 32189),

Gene: AmericanBeauty_38 Start: 32699, Stop: 33115, Start Num: 8

Candidate Starts for AmericanBeauty_38:

(Start: 1 @32654 has 1 MA's), (Start: 8 @32699 has 124 MA's), (20, 32753), (24, 32768), (26, 32786), (29, 32816), (37, 32930), (39, 32957), (40, 32972),

Gene: Appletree2_29 Start: 27223, Stop: 27642, Start Num: 3

Candidate Starts for Appletree2_29:

(Start: 3 @27223 has 38 MA's), (6, 27238), (17, 27292), (24, 27307), (31, 27364), (32, 27412), (33, 27418), (36, 27439), (40, 27493), (47, 27598), (49, 27625),

Gene: Archie_31 Start: 28498, Stop: 28920, Start Num: 2

Candidate Starts for Archie_31:

(Start: 2 @28498 has 28 MA's), (9, 28525), (13, 28555), (17, 28570), (24, 28585), (31, 28642), (33, 28696), (40, 28771), (41, 28774), (45, 28831), (47, 28876), (49, 28903),

Gene: Argent26_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for Argent26_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: Asriel_35 Start: 31573, Stop: 31989, Start Num: 8

Candidate Starts for Asriel_35:

(Start: 1 @31528 has 1 MA's), (Start: 8 @31573 has 124 MA's), (20, 31627), (24, 31642), (26, 31660), (29, 31690), (37, 31804), (39, 31831), (40, 31846),

Gene: AvadaKedavra_29 Start: 27290, Stop: 27709, Start Num: 3

Candidate Starts for AvadaKedavra_29:

(Start: 3 @27290 has 38 MA's), (6, 27305), (17, 27359), (24, 27374), (31, 27431), (32, 27479), (33, 27485), (36, 27506), (40, 27560), (47, 27665), (49, 27692),

Gene: BaboJay_35 Start: 32262, Stop: 32678, Start Num: 8

Candidate Starts for BaboJay_35:

(Start: 1 @32217 has 1 MA's), (Start: 8 @32262 has 124 MA's), (20, 32316), (24, 32331), (29, 32379), (37, 32493), (39, 32520), (40, 32535),

Gene: BadStone_35 Start: 32704, Stop: 33120, Start Num: 8

Candidate Starts for BadStone_35:

(Start: 1 @32659 has 1 MA's), (Start: 8 @32704 has 124 MA's), (20, 32758), (24, 32773), (29, 32821), (37, 32935), (39, 32962), (40, 32977),

Gene: Balomoji_35 Start: 32438, Stop: 32854, Start Num: 8

Candidate Starts for Balomoji_35:

(Start: 1 @32393 has 1 MA's), (Start: 8 @32438 has 124 MA's), (20, 32492), (24, 32507), (26, 32525), (29, 32555), (37, 32669), (39, 32696), (40, 32711),

Gene: Baoshan_30 Start: 27830, Stop: 28252, Start Num: 2

Candidate Starts for Baoshan_30:

(Start: 2 @27830 has 28 MA's), (9, 27857), (17, 27902), (24, 27917), (25, 27923), (31, 27974), (33, 28028), (40, 28103), (41, 28106), (45, 28163), (47, 28208), (49, 28235),

Gene: Barbarian_35 Start: 31573, Stop: 31989, Start Num: 8

Candidate Starts for Barbarian_35:

(Start: 1 @31528 has 1 MA's), (Start: 8 @31573 has 124 MA's), (20, 31627), (24, 31642), (26, 31660), (29, 31690), (37, 31804), (39, 31831), (40, 31846),

Gene: Bask21_36 Start: 31890, Stop: 32306, Start Num: 8

Candidate Starts for Bask21_36:

(Start: 1 @31845 has 1 MA's), (Start: 8 @31890 has 124 MA's), (20, 31944), (24, 31959), (26, 31977), (29, 32007), (37, 32121), (39, 32148), (40, 32163),

Gene: Baudelaire_32 Start: 27373, Stop: 27798, Start Num: 3

Candidate Starts for Baudelaire_32:

(Start: 3 @27373 has 38 MA's), (5, 27385), (11, 27427), (15, 27436), (16, 27445), (18, 27448), (21, 27451), (27, 27484), (34, 27586), (36, 27595), (37, 27607), (40, 27649), (41, 27652), (43, 27685), (46, 27724), (47, 27754), (48, 27769),

Gene: Bazzle_31 Start: 28247, Stop: 28669, Start Num: 2

Candidate Starts for Bazzle_31:

(Start: 2 @28247 has 28 MA's), (9, 28274), (13, 28304), (17, 28319), (24, 28334), (31, 28391), (33, 28445), (40, 28520), (41, 28523), (45, 28580), (47, 28625), (49, 28652),

Gene: Becksu_36 Start: 32895, Stop: 33311, Start Num: 8

Candidate Starts for Becksu_36:

(Start: 1 @32850 has 1 MA's), (Start: 8 @32895 has 124 MA's), (20, 32949), (24, 32964), (26, 32982), (29, 33012), (37, 33126), (39, 33153), (40, 33168),

Gene: Bellis_30 Start: 28377, Stop: 28796, Start Num: 3

Candidate Starts for Bellis_30:

(Start: 3 @28377 has 38 MA's), (9, 28401), (16, 28443), (33, 28572), (36, 28593), (40, 28647), (41, 28650), (47, 28752),

Gene: Bench_38 Start: 32572, Stop: 32988, Start Num: 8

Candidate Starts for Bench_38:

(Start: 1 @32527 has 1 MA's), (Start: 8 @32572 has 124 MA's), (20, 32626), (24, 32641), (26, 32659), (29, 32689), (37, 32803), (39, 32830), (40, 32845),

Gene: BigBubba_37 Start: 32475, Stop: 32891, Start Num: 8

Candidate Starts for BigBubba_37:

(Start: 1 @32430 has 1 MA's), (Start: 8 @32475 has 124 MA's), (20, 32529), (24, 32544), (29, 32592), (37, 32706), (39, 32733), (40, 32748),

Gene: BigCheese_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for BigCheese_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: BilboSwaggins_36 Start: 32712, Stop: 33128, Start Num: 8

Candidate Starts for BilboSwaggins_36:

(Start: 1 @32667 has 1 MA's), (Start: 8 @32712 has 124 MA's), (20, 32766), (24, 32781), (26, 32799), (29, 32829), (37, 32943), (39, 32970), (40, 32985),

Gene: BobsGarage_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for BobsGarage_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: BourbonZero_29 Start: 28325, Stop: 28744, Start Num: 3

Candidate Starts for BourbonZero_29:

(Start: 3 @28325 has 38 MA's), (9, 28349), (16, 28391), (31, 28466), (33, 28520), (37, 28553), (40, 28595), (41, 28598), (44, 28646), (47, 28700),

Gene: BrainDrainer_30 Start: 27308, Stop: 27727, Start Num: 4

Candidate Starts for BrainDrainer_30:

(Start: 4 @27308 has 4 MA's), (10, 27332), (12, 27356), (13, 27359), (28, 27428), (33, 27503), (38, 27545), (40, 27578), (41, 27581), (42, 27584), (44, 27629), (47, 27683), (49, 27710),

Gene: Breezona_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Breezona_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Bromden_31 Start: 27727, Stop: 28146, Start Num: 4

Candidate Starts for Bromden_31:

(Start: 4 @27727 has 4 MA's), (14, 27781), (19, 27796), (23, 27805), (24, 27811), (28, 27847), (33, 27922), (38, 27964), (40, 27997), (41, 28000), (44, 28048), (47, 28102), (49, 28129),

Gene: Bruin_36 Start: 32732, Stop: 33148, Start Num: 8

Candidate Starts for Bruin_36:

(Start: 1 @32687 has 1 MA's), (Start: 8 @32732 has 124 MA's), (20, 32786), (24, 32801), (26, 32819), (29, 32849), (37, 32963), (39, 32990), (40, 33005),

Gene: Buck_35 Start: 32668, Stop: 33084, Start Num: 8

Candidate Starts for Buck_35:

(Start: 1 @32623 has 1 MA's), (Start: 8 @32668 has 124 MA's), (20, 32722), (24, 32737), (26, 32755), (29, 32785), (37, 32899), (39, 32926), (40, 32941),

Gene: BugsBunny_34 Start: 32301, Stop: 32717, Start Num: 8

Candidate Starts for BugsBunny_34:

(Start: 1 @32256 has 1 MA's), (Start: 8 @32301 has 124 MA's), (20, 32355), (24, 32370), (26, 32388), (29, 32418), (37, 32532), (39, 32559), (40, 32574),

Gene: Cactus_37 Start: 31923, Stop: 32339, Start Num: 8

Candidate Starts for Cactus_37:

(Start: 1 @31878 has 1 MA's), (Start: 8 @31923 has 124 MA's), (20, 31977), (24, 31992), (26, 32010), (29, 32040), (37, 32154), (39, 32181), (40, 32196),

Gene: Calm_29 Start: 27294, Stop: 27713, Start Num: 3

Candidate Starts for Calm_29:

(Start: 3 @27294 has 38 MA's), (6, 27309), (17, 27363), (24, 27378), (31, 27435), (32, 27483), (33, 27489), (36, 27510), (40, 27564), (47, 27669), (49, 27696),

Gene: Chaser_29 Start: 27126, Stop: 27545, Start Num: 4

Candidate Starts for Chaser_29:

(Start: 4 @27126 has 4 MA's), (10, 27150), (12, 27174), (13, 27177), (28, 27246), (33, 27321), (38, 27363), (40, 27396), (41, 27399), (42, 27402), (44, 27447), (47, 27501), (49, 27528),

Gene: ChosenOne_36 Start: 31920, Stop: 32336, Start Num: 8

Candidate Starts for ChosenOne_36:

(Start: 1 @31875 has 1 MA's), (Start: 8 @31920 has 124 MA's), (20, 31974), (24, 31989), (29, 32037), (37, 32151), (39, 32178), (40, 32193),

Gene: ChotaBhai_36 Start: 31958, Stop: 32374, Start Num: 8

Candidate Starts for ChotaBhai_36:

(Start: 1 @31913 has 1 MA's), (Start: 8 @31958 has 124 MA's), (20, 32012), (24, 32027), (29, 32075), (37, 32189), (39, 32216), (40, 32231),

Gene: CicholasNage_29 Start: 27282, Stop: 27701, Start Num: 3

Candidate Starts for CicholasNage_29:

(Start: 3 @27282 has 38 MA's), (6, 27297), (17, 27351), (24, 27366), (31, 27423), (32, 27471), (33, 27477), (36, 27498), (40, 27552), (47, 27657), (49, 27684),

Gene: Cjw1_36 Start: 33427, Stop: 33888, Start Num: 1

Candidate Starts for Cjw1_36:

(Start: 1 @33427 has 1 MA's), (Start: 8 @33472 has 124 MA's), (20, 33526), (24, 33541), (26, 33559), (29, 33589), (37, 33703), (39, 33730), (40, 33745),

Gene: Claus_31 Start: 27986, Stop: 28408, Start Num: 2

Candidate Starts for Claus_31:

(Start: 2 @27986 has 28 MA's), (9, 28013), (17, 28058), (24, 28073), (25, 28079), (31, 28130), (33, 28184), (36, 28205), (40, 28259), (41, 28262), (45, 28319), (47, 28364), (49, 28391),

Gene: Clautastrophe_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for Clautastrophe_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: Command613_37 Start: 32979, Stop: 33395, Start Num: 8

Candidate Starts for Command613_37:

(Start: 1 @32934 has 1 MA's), (Start: 8 @32979 has 124 MA's), (20, 33033), (24, 33048), (26, 33066), (29, 33096), (37, 33210), (39, 33237), (40, 33252),

Gene: Contagion_35 Start: 32216, Stop: 32632, Start Num: 8

Candidate Starts for Contagion_35:

(Start: 1 @32171 has 1 MA's), (Start: 8 @32216 has 124 MA's), (20, 32270), (24, 32285), (26, 32303), (29, 32333), (37, 32447), (39, 32474), (40, 32489),

Gene: Cookies_36 Start: 32581, Stop: 32997, Start Num: 8

Candidate Starts for Cookies_36:

(Start: 1 @32536 has 1 MA's), (Start: 8 @32581 has 124 MA's), (20, 32635), (24, 32650), (29, 32698), (37, 32812), (39, 32839), (40, 32854),

Gene: Crossroads_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Crossroads_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: CrystalP_36 Start: 32712, Stop: 33128, Start Num: 8

Candidate Starts for CrystalP_36:

(Start: 1 @32667 has 1 MA's), (Start: 8 @32712 has 124 MA's), (20, 32766), (24, 32781), (26, 32799), (29, 32829), (37, 32943), (39, 32970), (40, 32985),

Gene: Czyszczone1_37 Start: 32457, Stop: 32873, Start Num: 8

Candidate Starts for Czyszczone1_37:

(Start: 1 @32412 has 1 MA's), (Start: 8 @32457 has 124 MA's), (20, 32511), (24, 32526), (26, 32544), (29, 32574), (37, 32688), (39, 32715), (40, 32730),

Gene: DHan_31 Start: 27922, Stop: 28344, Start Num: 2

Candidate Starts for DHan_31:

(Start: 2 @27922 has 28 MA's), (9, 27949), (17, 27994), (24, 28009), (25, 28015), (31, 28066), (33, 28120), (40, 28195), (41, 28198), (45, 28255), (47, 28300), (49, 28327),

Gene: Daikon_35 Start: 32450, Stop: 32866, Start Num: 8

Candidate Starts for Daikon_35:

(Start: 1 @32405 has 1 MA's), (Start: 8 @32450 has 124 MA's), (18, 32501), (22, 32510), (24, 32519), (26, 32537), (29, 32567), (37, 32681), (39, 32708), (40, 32723),

Gene: DanBing_30 Start: 27826, Stop: 28248, Start Num: 2

Candidate Starts for DanBing_30:

(Start: 2 @27826 has 28 MA's), (9, 27853), (17, 27898), (24, 27913), (25, 27919), (31, 27970), (33, 28024), (40, 28099), (41, 28102), (45, 28159), (47, 28204), (49, 28231),

Gene: DirkDirk_29 Start: 27263, Stop: 27682, Start Num: 3

Candidate Starts for DirkDirk_29:

(Start: 3 @27263 has 38 MA's), (6, 27278), (17, 27332), (24, 27347), (31, 27404), (32, 27452), (33, 27458), (36, 27479), (40, 27533), (47, 27638), (49, 27665),

Gene: DoctorDiddles_36 Start: 31874, Stop: 32290, Start Num: 8

Candidate Starts for DoctorDiddles_36:

(Start: 1 @31829 has 1 MA's), (Start: 8 @31874 has 124 MA's), (20, 31928), (24, 31943), (26, 31961), (29, 31991), (37, 32105), (39, 32132), (40, 32147),

Gene: Douge_29 Start: 27064, Stop: 27483, Start Num: 4

Candidate Starts for Douge_29:

(Start: 4 @27064 has 4 MA's), (10, 27088), (12, 27112), (13, 27115), (28, 27184), (33, 27259), (38, 27301), (40, 27334), (41, 27337), (42, 27340), (44, 27385), (47, 27439), (49, 27466),

Gene: Douzhi_29 Start: 27169, Stop: 27588, Start Num: 4

Candidate Starts for Douzhi_29:

(Start: 4 @27169 has 4 MA's), (10, 27193), (12, 27217), (13, 27220), (28, 27289), (33, 27364), (38, 27406), (40, 27439), (41, 27442), (42, 27445), (44, 27490), (47, 27544), (49, 27571),

Gene: DrDrey_37 Start: 33204, Stop: 33620, Start Num: 8

Candidate Starts for DrDrey_37:

(Start: 1 @33159 has 1 MA's), (Start: 8 @33204 has 124 MA's), (20, 33258), (24, 33273), (29, 33321), (37, 33435), (39, 33462), (40, 33477),

Gene: DrSeegs_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for DrSeegs_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Dumbo_36 Start: 32179, Stop: 32595, Start Num: 8

Candidate Starts for Dumbo_36:

(Start: 1 @32134 has 1 MA's), (Start: 8 @32179 has 124 MA's), (20, 32233), (24, 32248), (26, 32266), (29, 32296), (37, 32410), (39, 32437), (40, 32452),

Gene: DuncansLeg_30 Start: 28348, Stop: 28767, Start Num: 3

Candidate Starts for DuncansLeg_30:

(Start: 3 @28348 has 38 MA's), (9, 28372), (16, 28414), (31, 28489), (33, 28543), (37, 28576), (40, 28618), (41, 28621), (44, 28669), (47, 28723),

Gene: Dusk_35 Start: 32364, Stop: 32780, Start Num: 8

Candidate Starts for Dusk_35:

(Start: 1 @32319 has 1 MA's), (Start: 8 @32364 has 124 MA's), (20, 32418), (24, 32433), (29, 32481), (37, 32595), (39, 32622), (40, 32637),

Gene: DyoEdafos_30 Start: 27265, Stop: 27684, Start Num: 4

Candidate Starts for DyoEdafos_30:

(Start: 4 @27265 has 4 MA's), (7, 27280), (10, 27289), (13, 27316), (28, 27385), (33, 27460), (37, 27493), (38, 27502), (40, 27535), (44, 27586), (47, 27640), (49, 27667),

Gene: Easy2Say_38 Start: 33962, Stop: 34378, Start Num: 8

Candidate Starts for Easy2Say_38:

(Start: 1 @33917 has 1 MA's), (Start: 8 @33962 has 124 MA's), (20, 34016), (24, 34031), (26, 34049), (29, 34079), (37, 34193), (39, 34220), (40, 34235),

Gene: Elite2014_35 Start: 31919, Stop: 32335, Start Num: 8

Candidate Starts for Elite2014_35:

(Start: 1 @31874 has 1 MA's), (Start: 8 @31919 has 124 MA's), (20, 31973), (24, 31988), (29, 32036), (37, 32150), (39, 32177), (40, 32192),

Gene: Ellson_30 Start: 28335, Stop: 28754, Start Num: 3

Candidate Starts for Ellson_30:

(Start: 3 @28335 has 38 MA's), (9, 28359), (16, 28401), (31, 28476), (33, 28530), (37, 28563), (40, 28605), (41, 28608), (44, 28656), (47, 28710),

Gene: Elph10_37 Start: 32182, Stop: 32598, Start Num: 8

Candidate Starts for Elph10_37:

(Start: 1 @32137 has 1 MA's), (Start: 8 @32182 has 124 MA's), (20, 32236), (24, 32251), (26, 32269), (29, 32299), (37, 32413), (39, 32440), (40, 32455),

Gene: Emmina_37 Start: 32540, Stop: 32956, Start Num: 8

Candidate Starts for Emmina_37:

(Start: 1 @32495 has 1 MA's), (Start: 8 @32540 has 124 MA's), (20, 32594), (24, 32609), (29, 32657), (37, 32771), (39, 32798), (40, 32813),

Gene: Enceladus_29 Start: 27264, Stop: 27683, Start Num: 3

Candidate Starts for Enceladus_29:

(Start: 3 @27264 has 38 MA's), (6, 27279), (17, 27333), (24, 27348), (31, 27405), (32, 27453), (33, 27459), (36, 27480), (40, 27534), (47, 27639), (49, 27666),

Gene: Eureka_36 Start: 32695, Stop: 33111, Start Num: 8

Candidate Starts for Eureka_36:

(Start: 1 @32650 has 1 MA's), (Start: 8 @32695 has 124 MA's), (20, 32749), (24, 32764), (26, 32782), (29, 32812), (37, 32926), (39, 32953), (40, 32968),

Gene: FairyPath_36 Start: 32907, Stop: 33323, Start Num: 8

Candidate Starts for FairyPath_36:

(Start: 1 @32862 has 1 MA's), (Start: 8 @32907 has 124 MA's), (20, 32961), (24, 32976), (26, 32994), (29, 33024), (37, 33138), (39, 33165), (40, 33180),

Gene: Faith1_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Faith1_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: FarmResident_29 Start: 27108, Stop: 27527, Start Num: 4

Candidate Starts for FarmResident_29:

(Start: 4 @27108 has 4 MA's), (10, 27132), (12, 27156), (13, 27159), (28, 27228), (33, 27303), (38, 27345), (40, 27378), (41, 27381), (42, 27384), (47, 27483), (49, 27510),

Gene: Filch_37 Start: 32470, Stop: 32886, Start Num: 8

Candidate Starts for Filch_37:

(Start: 1 @32425 has 1 MA's), (Start: 8 @32470 has 124 MA's), (20, 32524), (24, 32539), (26, 32557), (29, 32587), (37, 32701), (39, 32728), (40, 32743),

Gene: Finemlucis_31 Start: 28285, Stop: 28707, Start Num: 2

Candidate Starts for Finemlucis_31:

(Start: 2 @28285 has 28 MA's), (9, 28312), (17, 28357), (24, 28372), (25, 28378), (31, 28429), (33, 28483), (40, 28558), (41, 28561), (45, 28618), (47, 28663), (49, 28690),

Gene: Finnry_30 Start: 28378, Stop: 28797, Start Num: 3

Candidate Starts for Finnry_30:

(Start: 3 @28378 has 38 MA's), (9, 28402), (16, 28444), (33, 28573), (36, 28594), (40, 28648), (41, 28651), (47, 28753),

Gene: FireRed_36 Start: 32740, Stop: 33156, Start Num: 8

Candidate Starts for FireRed_36:

(Start: 1 @32695 has 1 MA's), (Start: 8 @32740 has 124 MA's), (20, 32794), (24, 32809), (26, 32827), (29, 32857), (37, 32971), (39, 32998), (40, 33013),

Gene: Flypotenuse_34 Start: 32308, Stop: 32724, Start Num: 8

Candidate Starts for Flypotenuse_34:

(Start: 1 @32263 has 1 MA's), (Start: 8 @32308 has 124 MA's), (20, 32362), (24, 32377), (29, 32425), (37, 32539), (39, 32566), (40, 32581),

Gene: FoghornLeghorn_35 Start: 32216, Stop: 32632, Start Num: 8

Candidate Starts for FoghornLeghorn_35:

(Start: 1 @32171 has 1 MA's), (Start: 8 @32216 has 124 MA's), (20, 32270), (24, 32285), (26, 32303), (29, 32333), (37, 32447), (39, 32474), (40, 32489),

Gene: Gabriela_31 Start: 28271, Stop: 28693, Start Num: 2

Candidate Starts for Gabriela_31:

(Start: 2 @28271 has 28 MA's), (9, 28298), (17, 28343), (24, 28358), (25, 28364), (31, 28415), (33, 28469), (40, 28544), (41, 28547), (45, 28604), (47, 28649), (49, 28676),

Gene: Gage_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for Gage_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: Gardann_31 Start: 28011, Stop: 28433, Start Num: 2

Candidate Starts for Gardann_31:

(Start: 2 @28011 has 28 MA's), (9, 28038), (17, 28083), (24, 28098), (25, 28104), (31, 28155), (33, 28209), (40, 28284), (41, 28287), (45, 28344), (47, 28389), (49, 28416),

Gene: Gator_34 Start: 32320, Stop: 32736, Start Num: 8

Candidate Starts for Gator_34:

(Start: 1 @32275 has 1 MA's), (Start: 8 @32320 has 124 MA's), (20, 32374), (24, 32389), (26, 32407), (29, 32437), (37, 32551), (39, 32578), (40, 32593),

Gene: Gemini_39 Start: 33219, Stop: 33635, Start Num: 8

Candidate Starts for Gemini_39:

(Start: 1 @33174 has 1 MA's), (Start: 8 @33219 has 124 MA's), (20, 33273), (24, 33288), (26, 33306), (29, 33336), (37, 33450), (39, 33477), (40, 33492),

Gene: Glexan_34 Start: 32308, Stop: 32724, Start Num: 8

Candidate Starts for Glexan_34:

(Start: 1 @32263 has 1 MA's), (Start: 8 @32308 has 124 MA's), (20, 32362), (24, 32377), (29, 32425), (37, 32539), (39, 32566), (40, 32581),

Gene: Goku_36 Start: 32424, Stop: 32840, Start Num: 8

Candidate Starts for Goku_36:

(Start: 1 @32379 has 1 MA's), (Start: 8 @32424 has 124 MA's), (20, 32478), (24, 32493), (26, 32511), (29, 32541), (37, 32655), (39, 32682), (40, 32697),

Gene: GoldenSpark_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for GoldenSpark_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: Goldilocks_37 Start: 32122, Stop: 32538, Start Num: 8

Candidate Starts for Goldilocks_37:

(Start: 1 @32077 has 1 MA's), (Start: 8 @32122 has 124 MA's), (20, 32176), (24, 32191), (26, 32209), (29, 32239), (30, 32242), (37, 32353), (39, 32380), (40, 32395),

Gene: GooberAzure_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for GooberAzure_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: GuuelaD_31 Start: 28043, Stop: 28465, Start Num: 2

Candidate Starts for GuuelaD_31:

(Start: 2 @28043 has 28 MA's), (9, 28070), (17, 28115), (24, 28130), (25, 28136), (31, 28187), (33, 28241), (40, 28316), (41, 28319), (45, 28376), (47, 28421), (49, 28448),

Gene: Hafay_31 Start: 28042, Stop: 28464, Start Num: 2

Candidate Starts for Hafay_31:

(Start: 2 @28042 has 28 MA's), (9, 28069), (17, 28114), (24, 28129), (25, 28135), (31, 28186), (33, 28240), (40, 28315), (41, 28318), (45, 28375), (47, 28420), (49, 28447),

Gene: Halena_29 Start: 27291, Stop: 27710, Start Num: 3

Candidate Starts for Halena_29:

(Start: 3 @27291 has 38 MA's), (6, 27306), (17, 27360), (24, 27375), (31, 27432), (32, 27480), (33, 27486), (36, 27507), (40, 27561), (47, 27666), (49, 27693),

Gene: HanKaySha_37 Start: 32454, Stop: 32870, Start Num: 8

Candidate Starts for HanKaySha_37:

(Start: 1 @32409 has 1 MA's), (Start: 8 @32454 has 124 MA's), (20, 32508), (24, 32523), (26, 32541), (29, 32571), (37, 32685), (39, 32712), (40, 32727),

Gene: Harella_35 Start: 32824, Stop: 33240, Start Num: 8

Candidate Starts for Harella_35:

(Start: 1 @32779 has 1 MA's), (Start: 8 @32824 has 124 MA's), (20, 32878), (24, 32893), (29, 32941), (37, 33055), (39, 33082), (40, 33097),

Gene: Henry_37 Start: 32712, Stop: 33128, Start Num: 8

Candidate Starts for Henry_37:

(Start: 1 @32667 has 1 MA's), (Start: 8 @32712 has 124 MA's), (20, 32766), (24, 32781), (29, 32829), (37, 32943), (39, 32970), (40, 32985),

Gene: Highbury_37 Start: 32370, Stop: 32786, Start Num: 8

Candidate Starts for Highbury_37:

(Start: 1 @32325 has 1 MA's), (Start: 8 @32370 has 124 MA's), (20, 32424), (24, 32439), (26, 32457), (29, 32487), (37, 32601), (39, 32628), (40, 32643),

Gene: Holt_37 Start: 31989, Stop: 32405, Start Num: 8

Candidate Starts for Holt_37:

(Start: 1 @31944 has 1 MA's), (Start: 8 @31989 has 124 MA's), (20, 32043), (24, 32058), (29, 32106), (37, 32220), (39, 32247), (40, 32262),

Gene: Hoonter_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for Hoonter_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: Hohey_38 Start: 32989, Stop: 33405, Start Num: 8

Candidate Starts for Hohey_38:

(Start: 1 @32944 has 1 MA's), (Start: 8 @32989 has 124 MA's), (20, 33043), (24, 33058), (26, 33076), (29, 33106), (37, 33220), (39, 33247), (40, 33262),

Gene: HufflyPuff_35 Start: 32696, Stop: 33112, Start Num: 8

Candidate Starts for HufflyPuff_35:

(Start: 1 @32651 has 1 MA's), (Start: 8 @32696 has 124 MA's), (20, 32750), (24, 32765), (26, 32783), (29, 32813), (37, 32927), (39, 32954), (40, 32969),

Gene: IHOP_36 Start: 32889, Stop: 33305, Start Num: 8

Candidate Starts for IHOP_36:

(Start: 1 @32844 has 1 MA's), (Start: 8 @32889 has 124 MA's), (20, 32943), (24, 32958), (29, 33006), (37, 33120), (39, 33147), (40, 33162),

Gene: Icee_35 Start: 32370, Stop: 32786, Start Num: 8

Candidate Starts for Icee_35:

(Start: 1 @32325 has 1 MA's), (Start: 8 @32370 has 124 MA's), (20, 32424), (24, 32439), (26, 32457), (29, 32487), (37, 32601), (39, 32628), (40, 32643),

Gene: Inca_35 Start: 31391, Stop: 31807, Start Num: 8

Candidate Starts for Inca_35:

(Start: 1 @31346 has 1 MA's), (Start: 8 @31391 has 124 MA's), (20, 31445), (24, 31460), (26, 31478), (29, 31508), (37, 31622), (39, 31649), (40, 31664),

Gene: Itos_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Itos_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: JeTaime_38 Start: 33513, Stop: 33929, Start Num: 8

Candidate Starts for JeTaime_38:

(Start: 1 @33468 has 1 MA's), (Start: 8 @33513 has 124 MA's), (20, 33567), (24, 33582), (26, 33600), (29, 33630), (37, 33744), (39, 33771), (40, 33786),

Gene: Jobypre_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for Jobypre_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: JoeDirt_29 Start: 27262, Stop: 27681, Start Num: 3

Candidate Starts for JoeDirt_29:

(Start: 3 @27262 has 38 MA's), (6, 27277), (17, 27331), (24, 27346), (31, 27403), (32, 27451), (33, 27457), (36, 27478), (40, 27532), (47, 27637), (49, 27664),

Gene: Jubie_30 Start: 28375, Stop: 28794, Start Num: 3

Candidate Starts for Jubie_30:

(Start: 3 @28375 has 38 MA's), (9, 28399), (16, 28441), (33, 28570), (36, 28591), (40, 28645), (41, 28648), (47, 28750),

Gene: Kahlid_31 Start: 28014, Stop: 28436, Start Num: 2

Candidate Starts for Kahlid_31:

(Start: 2 @28014 has 28 MA's), (9, 28041), (17, 28086), (24, 28101), (25, 28107), (31, 28158), (33, 28212), (40, 28287), (41, 28290), (45, 28347), (47, 28392), (49, 28419),

Gene: Kanye_38 Start: 33698, Stop: 34114, Start Num: 8

Candidate Starts for Kanye_38:

(Start: 1 @33653 has 1 MA's), (Start: 8 @33698 has 124 MA's), (20, 33752), (24, 33767), (26, 33785), (29, 33815), (37, 33929), (39, 33956), (40, 33971),

Gene: Kimchi_38 Start: 32705, Stop: 33121, Start Num: 8

Candidate Starts for Kimchi_38:

(Start: 1 @32660 has 1 MA's), (Start: 8 @32705 has 124 MA's), (20, 32759), (24, 32774), (26, 32792), (29, 32822), (37, 32936), (39, 32963), (40, 32978),

Gene: Kingsolomon_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for Kingsolomon_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: KirDoubleO7_28 Start: 28357, Stop: 28776, Start Num: 3

Candidate Starts for KirDoubleO7_28:

(Start: 3 @28357 has 38 MA's), (9, 28381), (16, 28423), (31, 28498), (33, 28552), (37, 28585), (40, 28627), (41, 28630), (44, 28678), (47, 28732),

Gene: Kostya_37 Start: 32713, Stop: 33129, Start Num: 8

Candidate Starts for Kostya_37:

(Start: 1 @32668 has 1 MA's), (Start: 8 @32713 has 124 MA's), (18, 32764), (22, 32773), (24, 32782), (26, 32800), (29, 32830), (37, 32944), (39, 32971), (40, 32986),

Gene: Kropertea_29 Start: 27072, Stop: 27491, Start Num: 4

Candidate Starts for Kropertea_29:

(Start: 4 @27072 has 4 MA's), (7, 27087), (10, 27096), (13, 27123), (28, 27192), (33, 27267), (37, 27300), (38, 27309), (40, 27342), (44, 27393), (47, 27447), (49, 27474),

Gene: Krypton555_30 Start: 28272, Stop: 28691, Start Num: 3

Candidate Starts for Krypton555_30:

(Start: 3 @28272 has 38 MA's), (9, 28296), (16, 28338), (33, 28467), (35, 28482), (40, 28542), (41, 28545), (44, 28593), (47, 28647),

Gene: LeBron_29 Start: 27306, Stop: 27725, Start Num: 3

Candidate Starts for LeBron_29:

(Start: 3 @27306 has 38 MA's), (6, 27321), (17, 27375), (24, 27390), (31, 27447), (32, 27495), (33, 27501), (36, 27522), (40, 27576), (47, 27681), (49, 27708),

Gene: Lewan_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Lewan_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: LilDestine_31 Start: 28008, Stop: 28430, Start Num: 2

Candidate Starts for LilDestine_31:

(Start: 2 @28008 has 28 MA's), (9, 28035), (17, 28080), (24, 28095), (25, 28101), (31, 28152), (33, 28206), (40, 28281), (41, 28284), (45, 28341), (47, 28386), (49, 28413),

Gene: Lilac_38 Start: 32209, Stop: 32625, Start Num: 8

Candidate Starts for Lilac_38:

(Start: 1 @32164 has 1 MA's), (Start: 8 @32209 has 124 MA's), (20, 32263), (24, 32278), (26, 32296), (29, 32326), (37, 32440), (39, 32467), (40, 32482),

Gene: Lilizi_38 Start: 32417, Stop: 32833, Start Num: 8

Candidate Starts for Lilizi_38:

(Start: 1 @32372 has 1 MA's), (Start: 8 @32417 has 124 MA's), (20, 32471), (24, 32486), (26, 32504), (29, 32534), (37, 32648), (39, 32675), (40, 32690),

Gene: Lilpickle_35 Start: 31919, Stop: 32335, Start Num: 8

Candidate Starts for Lilpickle_35:

(Start: 1 @31874 has 1 MA's), (Start: 8 @31919 has 124 MA's), (20, 31973), (24, 31988), (29, 32036), (37, 32150), (39, 32177), (40, 32192),

Gene: LiyuLake_30 Start: 28327, Stop: 28746, Start Num: 3

Candidate Starts for LiyuLake_30:

(Start: 3 @28327 has 38 MA's), (9, 28351), (16, 28393), (31, 28468), (33, 28522), (37, 28555), (40, 28597), (41, 28600), (44, 28648), (47, 28702),

Gene: Loadrie_31 Start: 28041, Stop: 28463, Start Num: 2

Candidate Starts for Loadrie_31:

(Start: 2 @28041 has 28 MA's), (9, 28068), (17, 28113), (24, 28128), (25, 28134), (31, 28185), (33, 28239), (40, 28314), (41, 28317), (45, 28374), (47, 28419), (49, 28446),

Gene: Lolly9_30 Start: 28138, Stop: 28557, Start Num: 3

Candidate Starts for Lolly9_30:

(Start: 3 @28138 has 38 MA's), (9, 28162), (18, 28207), (33, 28333), (35, 28348), (36, 28354), (40, 28408), (41, 28411), (47, 28513),

Gene: Lumos_30 Start: 28371, Stop: 28790, Start Num: 3

Candidate Starts for Lumos_30:

(Start: 3 @28371 has 38 MA's), (9, 28395), (16, 28437), (33, 28566), (36, 28587), (40, 28641), (41, 28644), (47, 28746),

Gene: MAckerman_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for MAckerman_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: MISSy_35 Start: 32225, Stop: 32641, Start Num: 8

Candidate Starts for MISSy_35:

(Start: 1 @32180 has 1 MA's), (Start: 8 @32225 has 124 MA's), (20, 32279), (24, 32294), (26, 32312), (29, 32342), (37, 32456), (39, 32483), (40, 32498),

Gene: MPhalcon_35 Start: 32218, Stop: 32634, Start Num: 8

Candidate Starts for MPhalcon_35:

(Start: 1 @32173 has 1 MA's), (Start: 8 @32218 has 124 MA's), (20, 32272), (24, 32287), (26, 32305), (29, 32335), (37, 32449), (39, 32476), (40, 32491),

Gene: MadamMonkfish_36 Start: 32130, Stop: 32546, Start Num: 8

Candidate Starts for MadamMonkfish_36:

(Start: 1 @32085 has 1 MA's), (Start: 8 @32130 has 124 MA's), (20, 32184), (24, 32199), (26, 32217), (29, 32247), (37, 32361), (39, 32388), (40, 32403),

Gene: Manda_37 Start: 33197, Stop: 33613, Start Num: 8

Candidate Starts for Manda_37:

(Start: 1 @33152 has 1 MA's), (Start: 8 @33197 has 124 MA's), (20, 33251), (24, 33266), (26, 33284), (29, 33314), (37, 33428), (39, 33455), (40, 33470),

Gene: Marshmallow_36 Start: 32710, Stop: 33126, Start Num: 8

Candidate Starts for Marshmallow_36:

(Start: 1 @32665 has 1 MA's), (Start: 8 @32710 has 124 MA's), (20, 32764), (24, 32779), (29, 32827), (37, 32941), (39, 32968), (40, 32983),

Gene: Maxxinista_37 Start: 32179, Stop: 32595, Start Num: 8

Candidate Starts for Maxxinista_37:

(Start: 1 @32134 has 1 MA's), (Start: 8 @32179 has 124 MA's), (20, 32233), (24, 32248), (26, 32266), (29, 32296), (37, 32410), (39, 32437), (40, 32452),

Gene: Miley16_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Miley16_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Mindy_36 Start: 32490, Stop: 32906, Start Num: 8

Candidate Starts for Mindy_36:

(Start: 1 @32445 has 1 MA's), (Start: 8 @32490 has 124 MA's), (20, 32544), (24, 32559), (29, 32607), (37, 32721), (39, 32748), (40, 32763),

Gene: MiniLon_30 Start: 28138, Stop: 28557, Start Num: 3

Candidate Starts for MiniLon_30:

(Start: 3 @28138 has 38 MA's), (9, 28162), (18, 28207), (33, 28333), (35, 28348), (36, 28354), (40, 28408), (41, 28411), (47, 28513),

Gene: MiniMac_30 Start: 28139, Stop: 28558, Start Num: 3

Candidate Starts for MiniMac_30:

(Start: 3 @28139 has 38 MA's), (9, 28163), (18, 28208), (33, 28334), (35, 28349), (36, 28355), (40, 28409), (41, 28412), (47, 28514),

Gene: Miniwave_36 Start: 32909, Stop: 33325, Start Num: 8

Candidate Starts for Miniwave_36:

(Start: 1 @32864 has 1 MA's), (Start: 8 @32909 has 124 MA's), (20, 32963), (24, 32978), (26, 32996), (29, 33026), (37, 33140), (39, 33167), (40, 33182),

Gene: Misfit_36 Start: 32799, Stop: 33215, Start Num: 8

Candidate Starts for Misfit_36:

(Start: 1 @32754 has 1 MA's), (Start: 8 @32799 has 124 MA's), (20, 32853), (24, 32868), (26, 32886), (29, 32916), (37, 33030), (39, 33057), (40, 33072),

Gene: MkaliMitinis3_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for MkaliMitinis3_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Moldemort_37 Start: 32454, Stop: 32870, Start Num: 8

Candidate Starts for Moldemort_37:

(Start: 1 @32409 has 1 MA's), (Start: 8 @32454 has 124 MA's), (20, 32508), (24, 32523), (26, 32541), (29, 32571), (37, 32685), (39, 32712), (40, 32727),

Gene: Moostard_30 Start: 28377, Stop: 28796, Start Num: 3

Candidate Starts for Moostard_30:

(Start: 3 @28377 has 38 MA's), (9, 28401), (16, 28443), (33, 28572), (36, 28593), (40, 28647), (41, 28650), (47, 28752),

Gene: Mosby_35 Start: 32216, Stop: 32632, Start Num: 8

Candidate Starts for Mosby_35:

(Start: 1 @32171 has 1 MA's), (Start: 8 @32216 has 124 MA's), (20, 32270), (24, 32285), (26, 32303), (29, 32333), (37, 32447), (39, 32474), (40, 32489),

Gene: MsGreen_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for MsGreen_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: Murica_35 Start: 32696, Stop: 33112, Start Num: 8

Candidate Starts for Murica_35:

(Start: 1 @32651 has 1 MA's), (Start: 8 @32696 has 124 MA's), (20, 32750), (24, 32765), (26, 32783), (29, 32813), (37, 32927), (39, 32954), (40, 32969),

Gene: Murphy_37 Start: 32691, Stop: 33107, Start Num: 8

Candidate Starts for Murphy_37:

(Start: 1 @32646 has 1 MA's), (Start: 8 @32691 has 124 MA's), (20, 32745), (24, 32760), (26, 32778), (29, 32808), (37, 32922), (39, 32949), (40, 32964),

Gene: Myrale_36 Start: 32575, Stop: 32991, Start Num: 8

Candidate Starts for Myrale_36:

(Start: 1 @32530 has 1 MA's), (Start: 8 @32575 has 124 MA's), (20, 32629), (24, 32644), (29, 32692), (37, 32806), (39, 32833), (40, 32848),

Gene: Nala_36 Start: 32730, Stop: 33146, Start Num: 8

Candidate Starts for Nala_36:

(Start: 1 @32685 has 1 MA's), (Start: 8 @32730 has 124 MA's), (20, 32784), (24, 32799), (26, 32817), (29, 32847), (37, 32961), (39, 32988), (40, 33003),

Gene: NelitzaMV_36 Start: 32780, Stop: 33196, Start Num: 8

Candidate Starts for NelitzaMV_36:

(Start: 1 @32735 has 1 MA's), (Start: 8 @32780 has 124 MA's), (20, 32834), (24, 32849), (26, 32867), (29, 32897), (37, 33011), (39, 33038), (40, 33053),

Gene: Netyap_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Netyap_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Nicholas_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for Nicholas_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: Nicholasp3_31 Start: 28011, Stop: 28433, Start Num: 2

Candidate Starts for Nicholasp3_31:

(Start: 2 @28011 has 28 MA's), (9, 28038), (17, 28083), (24, 28098), (25, 28104), (31, 28155), (33, 28209), (40, 28284), (41, 28287), (45, 28344), (47, 28389), (49, 28416),

Gene: Nimrod_36 Start: 32954, Stop: 33370, Start Num: 8

Candidate Starts for Nimrod_36:

(Start: 1 @32909 has 1 MA's), (Start: 8 @32954 has 124 MA's), (20, 33008), (24, 33023), (26, 33041), (29, 33071), (37, 33185), (39, 33212), (40, 33227),

Gene: NoSleep_37 Start: 32451, Stop: 32867, Start Num: 8

Candidate Starts for NoSleep_37:

(Start: 1 @32406 has 1 MA's), (Start: 8 @32451 has 124 MA's), (20, 32505), (24, 32520), (26, 32538), (29, 32568), (37, 32682), (39, 32709), (40, 32724),

Gene: OhShagHennessy_29 Start: 27245, Stop: 27664, Start Num: 3

Candidate Starts for OhShagHennessy_29:

(Start: 3 @27245 has 38 MA's), (6, 27260), (17, 27314), (24, 27329), (31, 27386), (32, 27434), (33, 27440), (36, 27461), (40, 27515), (47, 27620), (49, 27647),

Gene: OrionPax_37 Start: 32457, Stop: 32873, Start Num: 8

Candidate Starts for OrionPax_37:

(Start: 1 @32412 has 1 MA's), (Start: 8 @32457 has 124 MA's), (20, 32511), (24, 32526), (26, 32544), (29, 32574), (37, 32688), (39, 32715), (40, 32730),

Gene: PYPDinur_29 Start: 27169, Stop: 27588, Start Num: 4

Candidate Starts for PYPDinur_29:

(Start: 4 @27169 has 4 MA's), (10, 27193), (12, 27217), (13, 27220), (28, 27289), (33, 27364), (38, 27406), (40, 27439), (41, 27442), (42, 27445), (44, 27490), (47, 27544), (49, 27571),

Gene: Palpatine_36 Start: 32726, Stop: 33142, Start Num: 8

Candidate Starts for Palpatine_36:

(Start: 1 @32681 has 1 MA's), (Start: 8 @32726 has 124 MA's), (20, 32780), (24, 32795), (26, 32813), (29, 32843), (37, 32957), (39, 32984), (40, 32999),

Gene: Paperbeatsrock_38 Start: 33692, Stop: 34108, Start Num: 8

Candidate Starts for Paperbeatsrock_38:

(Start: 1 @33647 has 1 MA's), (Start: 8 @33692 has 124 MA's), (20, 33746), (24, 33761), (26, 33779), (29, 33809), (37, 33923), (39, 33950), (40, 33965),

Gene: Pat3_35 Start: 31438, Stop: 31854, Start Num: 8

Candidate Starts for Pat3_35:

(Start: 1 @31393 has 1 MA's), (Start: 8 @31438 has 124 MA's), (20, 31492), (24, 31507), (29, 31555), (37, 31669), (39, 31696), (40, 31711),

Gene: Petra64142_38 Start: 33172, Stop: 33588, Start Num: 8

Candidate Starts for Petra64142_38:

(Start: 1 @33127 has 1 MA's), (Start: 8 @33172 has 124 MA's), (20, 33226), (24, 33241), (26, 33259), (29, 33289), (37, 33403), (39, 33430), (40, 33445),

Gene: Phaja_36 Start: 32888, Stop: 33304, Start Num: 8

Candidate Starts for Phaja_36:

(Start: 1 @32843 has 1 MA's), (Start: 8 @32888 has 124 MA's), (20, 32942), (24, 32957), (29, 33005), (37, 33119), (39, 33146), (40, 33161),

Gene: Pharsalus_37 Start: 33492, Stop: 33908, Start Num: 8

Candidate Starts for Pharsalus_37:

(Start: 1 @33447 has 1 MA's), (Start: 8 @33492 has 124 MA's), (20, 33546), (24, 33561), (26, 33579), (29, 33609), (37, 33723), (39, 33750), (40, 33765),

Gene: PhatBacter_36 Start: 32740, Stop: 33156, Start Num: 8

Candidate Starts for PhatBacter_36:

(Start: 1 @32695 has 1 MA's), (Start: 8 @32740 has 124 MA's), (20, 32794), (24, 32809), (26, 32827), (29, 32857), (37, 32971), (39, 32998), (40, 33013),

Gene: Phaux_35 Start: 32738, Stop: 33154, Start Num: 8

Candidate Starts for Phaux_35:

(Start: 1 @32693 has 1 MA's), (Start: 8 @32738 has 124 MA's), (20, 32792), (24, 32807), (26, 32825), (29, 32855), (37, 32969), (39, 32996), (40, 33011),

Gene: Phrux_36 Start: 32453, Stop: 32869, Start Num: 8

Candidate Starts for Phrux_36:

(Start: 1 @32408 has 1 MA's), (Start: 8 @32453 has 124 MA's), (20, 32507), (24, 32522), (26, 32540), (29, 32570), (37, 32684), (39, 32711), (40, 32726),

Gene: Policronamos_36 Start: 32738, Stop: 33154, Start Num: 8

Candidate Starts for Policronamos_36:

(Start: 1 @32693 has 1 MA's), (Start: 8 @32738 has 124 MA's), (20, 32792), (24, 32807), (26, 32825), (29, 32855), (37, 32969), (39, 32996), (40, 33011),

Gene: Poochiewood_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Poochiewood_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: Porky_36 Start: 32549, Stop: 32965, Start Num: 8

Candidate Starts for Porky_36:

(Start: 1 @32504 has 1 MA's), (Start: 8 @32549 has 124 MA's), (20, 32603), (24, 32618), (29, 32666), (37, 32780), (39, 32807), (40, 32822),

Gene: Pumpkin_38 Start: 32789, Stop: 33205, Start Num: 8

Candidate Starts for Pumpkin_38:

(Start: 1 @32744 has 1 MA's), (Start: 8 @32789 has 124 MA's), (20, 32843), (24, 32858), (26, 32876), (29, 32906), (37, 33020), (39, 33047), (40, 33062),

Gene: Quallification_37 Start: 32918, Stop: 33334, Start Num: 8

Candidate Starts for Quallification_37:

(Start: 1 @32873 has 1 MA's), (Start: 8 @32918 has 124 MA's), (20, 32972), (24, 32987), (26, 33005), (29, 33035), (37, 33149), (39, 33176), (40, 33191),

Gene: Quby_29 Start: 27063, Stop: 27482, Start Num: 4

Candidate Starts for Quby_29:

(Start: 4 @27063 has 4 MA's), (10, 27087), (12, 27111), (13, 27114), (28, 27183), (33, 27258), (38, 27300), (40, 27333), (41, 27336), (42, 27339), (44, 27384), (47, 27438), (49, 27465),

Gene: Rakim_37 Start: 32818, Stop: 33234, Start Num: 8

Candidate Starts for Rakim_37:

(Start: 1 @32773 has 1 MA's), (Start: 8 @32818 has 124 MA's), (20, 32872), (24, 32887), (26, 32905), (29, 32935), (37, 33049), (39, 33076), (40, 33091),

Gene: Red305_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for Red305_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: Rimmer_35 Start: 32278, Stop: 32694, Start Num: 8

Candidate Starts for Rimmer_35:

(Start: 1 @32233 has 1 MA's), (Start: 8 @32278 has 124 MA's), (20, 32332), (24, 32347), (26, 32365), (29, 32395), (37, 32509), (39, 32536), (40, 32551),

Gene: RiverMonster_36 Start: 32467, Stop: 32883, Start Num: 8

Candidate Starts for RiverMonster_36:

(Start: 1 @32422 has 1 MA's), (Start: 8 @32467 has 124 MA's), (20, 32521), (24, 32536), (26, 32554), (29, 32584), (37, 32698), (39, 32725), (40, 32740),

Gene: Rose5_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Rose5_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: Rumpelstiltskin_31 Start: 28277, Stop: 28699, Start Num: 2

Candidate Starts for Rumpelstiltskin_31:

(Start: 2 @28277 has 28 MA's), (9, 28304), (17, 28349), (24, 28364), (25, 28370), (31, 28421), (33, 28475), (40, 28550), (41, 28553), (45, 28610), (47, 28655), (49, 28682),

Gene: Saints25_37 Start: 32370, Stop: 32786, Start Num: 8

Candidate Starts for Saints25_37:

(Start: 1 @32325 has 1 MA's), (Start: 8 @32370 has 124 MA's), (20, 32424), (24, 32439), (26, 32457), (29, 32487), (37, 32601), (39, 32628), (40, 32643),

Gene: Samty_30 Start: 28377, Stop: 28796, Start Num: 3

Candidate Starts for Samty_30:

(Start: 3 @28377 has 38 MA's), (9, 28401), (16, 28443), (33, 28572), (36, 28593), (40, 28647), (41, 28650), (47, 28752),

Gene: Sarshaun_31 Start: 28042, Stop: 28464, Start Num: 2

Candidate Starts for Sarshaun_31:

(Start: 2 @28042 has 28 MA's), (9, 28069), (17, 28114), (24, 28129), (25, 28135), (31, 28186), (33, 28240), (40, 28315), (41, 28318), (45, 28375), (47, 28420), (49, 28447),

Gene: Sassay_35 Start: 32216, Stop: 32632, Start Num: 8

Candidate Starts for Sassay_35:

(Start: 1 @32171 has 1 MA's), (Start: 8 @32216 has 124 MA's), (20, 32270), (24, 32285), (26, 32303), (29, 32333), (37, 32447), (39, 32474), (40, 32489),

Gene: ShamWow_36 Start: 32712, Stop: 33128, Start Num: 8

Candidate Starts for ShamWow_36:

(Start: 1 @32667 has 1 MA's), (Start: 8 @32712 has 124 MA's), (20, 32766), (24, 32781), (26, 32799), (29, 32829), (37, 32943), (39, 32970), (40, 32985),

Gene: Sheng711_29 Start: 27169, Stop: 27588, Start Num: 4

Candidate Starts for Sheng711_29:

(Start: 4 @27169 has 4 MA's), (10, 27193), (12, 27217), (13, 27220), (28, 27289), (33, 27364), (38, 27406), (40, 27439), (41, 27442), (42, 27445), (44, 27490), (47, 27544), (49, 27571),

Gene: ShereKhan_38 Start: 33695, Stop: 34111, Start Num: 8

Candidate Starts for ShereKhan_38:

(Start: 1 @33650 has 1 MA's), (Start: 8 @33695 has 124 MA's), (20, 33749), (24, 33764), (29, 33812), (37, 33926), (39, 33953), (40, 33968),

Gene: Silverleaf_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Silverleaf_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: Simpliphy_37 Start: 32457, Stop: 32873, Start Num: 8

Candidate Starts for Simpliphy_37:

(Start: 1 @32412 has 1 MA's), (Start: 8 @32457 has 124 MA's), (20, 32511), (24, 32526), (26, 32544), (29, 32574), (37, 32688), (39, 32715), (40, 32730),

Gene: SirDuracell_35 Start: 31377, Stop: 31793, Start Num: 8

Candidate Starts for SirDuracell_35:

(Start: 1 @31332 has 1 MA's), (Start: 8 @31377 has 124 MA's), (20, 31431), (24, 31446), (29, 31494), (37, 31608), (39, 31635), (40, 31650),

Gene: Snenia_30 Start: 28375, Stop: 28794, Start Num: 3

Candidate Starts for Snenia_30:

(Start: 3 @28375 has 38 MA's), (9, 28399), (16, 28441), (33, 28570), (36, 28591), (40, 28645), (41, 28648), (47, 28750),

Gene: SoJulia_32 Start: 28270, Stop: 28692, Start Num: 2

Candidate Starts for SoJulia_32:

(Start: 2 @28270 has 28 MA's), (9, 28297), (17, 28342), (24, 28357), (25, 28363), (31, 28414), (33, 28468), (40, 28543), (41, 28546), (45, 28603), (47, 28648), (49, 28675),

Gene: Soap141_31 Start: 28042, Stop: 28464, Start Num: 2

Candidate Starts for Soap141_31:

(Start: 2 @28042 has 28 MA's), (9, 28069), (17, 28114), (24, 28129), (25, 28135), (31, 28186), (33, 28240), (40, 28315), (41, 28318), (45, 28375), (47, 28420), (49, 28447),

Gene: SophKB_36 Start: 32711, Stop: 33127, Start Num: 8

Candidate Starts for SophKB_36:

(Start: 1 @32666 has 1 MA's), (Start: 8 @32711 has 124 MA's), (20, 32765), (24, 32780), (26, 32798), (29, 32828), (37, 32942), (39, 32969), (40, 32984),

Gene: Sotrice96_36 Start: 32666, Stop: 33082, Start Num: 8

Candidate Starts for Sotrice96_36:

(Start: 1 @32621 has 1 MA's), (Start: 8 @32666 has 124 MA's), (20, 32720), (24, 32735), (26, 32753), (29, 32783), (37, 32897), (39, 32924), (40, 32939),

Gene: Stank_39 Start: 33218, Stop: 33634, Start Num: 8

Candidate Starts for Stank_39:

(Start: 1 @33173 has 1 MA's), (Start: 8 @33218 has 124 MA's), (20, 33272), (24, 33287), (29, 33335), (37, 33449), (39, 33476), (40, 33491),

Gene: Stark_37 Start: 32470, Stop: 32886, Start Num: 8

Candidate Starts for Stark_37:

(Start: 1 @32425 has 1 MA's), (Start: 8 @32470 has 124 MA's), (20, 32524), (24, 32539), (26, 32557), (29, 32587), (37, 32701), (39, 32728), (40, 32743),

Gene: StellaBean_36 Start: 32711, Stop: 33127, Start Num: 8

Candidate Starts for StellaBean_36:

(Start: 1 @32666 has 1 MA's), (Start: 8 @32711 has 124 MA's), (20, 32765), (24, 32780), (26, 32798), (29, 32828), (37, 32942), (39, 32969), (40, 32984),

Gene: StolenFromERC_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for StolenFromERC_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: StormChicken_36 Start: 32886, Stop: 33302, Start Num: 8

Candidate Starts for StormChicken_36:

(Start: 1 @32841 has 1 MA's), (Start: 8 @32886 has 124 MA's), (20, 32940), (24, 32955), (26, 32973), (29, 33003), (37, 33117), (39, 33144), (40, 33159),

Gene: TBrady12_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for TBrady12_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: Tarkin_38 Start: 33701, Stop: 34117, Start Num: 8

Candidate Starts for Tarkin_38:

(Start: 1 @33656 has 1 MA's), (Start: 8 @33701 has 124 MA's), (20, 33755), (24, 33770), (26, 33788), (29, 33818), (37, 33932), (39, 33959), (40, 33974),

Gene: TeardropMSU_35 Start: 32612, Stop: 33028, Start Num: 8

Candidate Starts for TeardropMSU_35:

(Start: 1 @32567 has 1 MA's), (Start: 8 @32612 has 124 MA's), (20, 32666), (24, 32681), (26, 32699), (29, 32729), (37, 32843), (39, 32870), (40, 32885),

Gene: Teaspoon_37 Start: 32665, Stop: 33081, Start Num: 8

Candidate Starts for Teaspoon_37:

(Start: 1 @32620 has 1 MA's), (Start: 8 @32665 has 124 MA's), (20, 32719), (24, 32734), (26, 32752), (29, 32782), (37, 32896), (39, 32923), (40, 32938),

Gene: Terminus_36 Start: 32799, Stop: 33215, Start Num: 8

Candidate Starts for Terminus_36:

(Start: 1 @32754 has 1 MA's), (Start: 8 @32799 has 124 MA's), (20, 32853), (24, 32868), (26, 32886), (29, 32916), (37, 33030), (39, 33057), (40, 33072),

Gene: Thimble_36 Start: 31662, Stop: 32078, Start Num: 8

Candidate Starts for Thimble_36:

(Start: 1 @31617 has 1 MA's), (Start: 8 @31662 has 124 MA's), (20, 31716), (24, 31731), (26, 31749), (29, 31779), (37, 31893), (39, 31920), (40, 31935),

Gene: Thresher_37 Start: 33466, Stop: 33882, Start Num: 8

Candidate Starts for Thresher_37:

(Start: 1 @33421 has 1 MA's), (Start: 8 @33466 has 124 MA's), (20, 33520), (24, 33535), (29, 33583), (37, 33697), (39, 33724), (40, 33739),

Gene: Tomaszewski_35 Start: 32309, Stop: 32725, Start Num: 8

Candidate Starts for Tomaszewski_35:

(Start: 1 @32264 has 1 MA's), (Start: 8 @32309 has 124 MA's), (20, 32363), (24, 32378), (26, 32396), (29, 32426), (37, 32540), (39, 32567), (40, 32582),

Gene: Toto_36 Start: 32712, Stop: 33128, Start Num: 8

Candidate Starts for Toto_36:

(Start: 1 @32667 has 1 MA's), (Start: 8 @32712 has 124 MA's), (20, 32766), (24, 32781), (26, 32799), (29, 32829), (37, 32943), (39, 32970), (40, 32985),

Gene: Tourach_31 Start: 28000, Stop: 28422, Start Num: 2

Candidate Starts for Tourach_31:

(Start: 2 @28000 has 28 MA's), (9, 28027), (13, 28057), (17, 28072), (24, 28087), (31, 28144), (33, 28198), (38, 28240), (40, 28273), (41, 28276), (45, 28333), (47, 28378), (49, 28405),

Gene: Traaww1_34 Start: 32350, Stop: 32766, Start Num: 8

Candidate Starts for Traaww1_34:

(Start: 1 @32305 has 1 MA's), (Start: 8 @32350 has 124 MA's), (20, 32404), (24, 32419), (26, 32437), (29, 32467), (37, 32581), (39, 32608), (40, 32623),

Gene: TriFive_30 Start: 28374, Stop: 28793, Start Num: 3

Candidate Starts for TriFive_30:

(Start: 3 @28374 has 38 MA's), (9, 28398), (16, 28440), (33, 28569), (36, 28590), (40, 28644), (41, 28647), (47, 28749),

Gene: Tuco_37 Start: 33220, Stop: 33636, Start Num: 8

Candidate Starts for Tuco_37:

(Start: 1 @33175 has 1 MA's), (Start: 8 @33220 has 124 MA's), (20, 33274), (24, 33289), (29, 33337), (37, 33451), (39, 33478), (40, 33493),

Gene: Tyson_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Tyson_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: UPIE_29 Start: 27278, Stop: 27697, Start Num: 3

Candidate Starts for UPIE_29:

(Start: 3 @27278 has 38 MA's), (6, 27293), (17, 27347), (24, 27362), (31, 27419), (32, 27467), (33, 27473), (36, 27494), (40, 27548), (47, 27653), (49, 27680),

Gene: Ukulele_36 Start: 32470, Stop: 32886, Start Num: 8

Candidate Starts for Ukulele_36:

(Start: 1 @32425 has 1 MA's), (Start: 8 @32470 has 124 MA's), (20, 32524), (24, 32539), (29, 32587), (37, 32701), (39, 32728), (40, 32743),

Gene: Underpass_31 Start: 28011, Stop: 28433, Start Num: 2

Candidate Starts for Underpass_31:

(Start: 2 @28011 has 28 MA's), (9, 28038), (17, 28083), (24, 28098), (25, 28104), (31, 28155), (33, 28209), (40, 28284), (41, 28287), (45, 28344), (47, 28389), (49, 28416),

Gene: Vetrix_31 Start: 28015, Stop: 28437, Start Num: 2

Candidate Starts for Vetrix_31:

(Start: 2 @28015 has 28 MA's), (9, 28042), (17, 28087), (24, 28102), (25, 28108), (31, 28159), (33, 28213), (40, 28288), (41, 28291), (45, 28348), (47, 28393), (49, 28420),

Gene: Wamburgexpress_29 Start: 27293, Stop: 27712, Start Num: 3

Candidate Starts for Wamburgexpress_29:

(Start: 3 @27293 has 38 MA's), (6, 27308), (17, 27362), (24, 27377), (31, 27434), (32, 27482), (33, 27488), (36, 27509), (40, 27563), (47, 27668), (49, 27695),

Gene: Whirlwind_31 Start: 28115, Stop: 28534, Start Num: 3

Candidate Starts for Whirlwind_31:

(Start: 3 @28115 has 38 MA's), (9, 28139), (13, 28169), (16, 28181), (33, 28310), (35, 28325), (40, 28385), (41, 28388), (44, 28436), (47, 28490),

Gene: Wiggin_39 Start: 33216, Stop: 33632, Start Num: 8

Candidate Starts for Wiggin_39:

(Start: 1 @33171 has 1 MA's), (Start: 8 @33216 has 124 MA's), (20, 33270), (24, 33285), (26, 33303), (29, 33333), (37, 33447), (39, 33474), (40, 33489),

Gene: Wigglewigggle_31 Start: 28041, Stop: 28463, Start Num: 2

Candidate Starts for Wigglewigggle_31:

(Start: 2 @28041 has 28 MA's), (9, 28068), (17, 28113), (24, 28128), (25, 28134), (31, 28185), (33, 28239), (40, 28314), (41, 28317), (45, 28374), (47, 28419), (49, 28446),

Gene: Wilder_31 Start: 28014, Stop: 28436, Start Num: 2

Candidate Starts for Wilder_31:

(Start: 2 @28014 has 28 MA's), (9, 28041), (17, 28086), (24, 28101), (25, 28107), (31, 28158), (33, 28212), (40, 28287), (41, 28290), (45, 28347), (47, 28392), (49, 28419),

Gene: Willez_35 Start: 32216, Stop: 32632, Start Num: 8

Candidate Starts for Willez_35:

(Start: 1 @32171 has 1 MA's), (Start: 8 @32216 has 124 MA's), (20, 32270), (24, 32285), (26, 32303), (29, 32333), (37, 32447), (39, 32474), (40, 32489),

Gene: Winky_31 Start: 28009, Stop: 28431, Start Num: 2

Candidate Starts for Winky_31:

(Start: 2 @28009 has 28 MA's), (9, 28036), (17, 28081), (24, 28096), (25, 28102), (31, 28153), (33, 28207), (40, 28282), (41, 28285), (45, 28342), (47, 28387), (49, 28414),

Gene: Wyatt2_29 Start: 27280, Stop: 27699, Start Num: 3

Candidate Starts for Wyatt2_29:

(Start: 3 @27280 has 38 MA's), (6, 27295), (17, 27349), (24, 27364), (31, 27421), (32, 27469), (33, 27475), (36, 27496), (40, 27550), (47, 27655), (49, 27682),

Gene: Xandras_38 Start: 32702, Stop: 33118, Start Num: 8

Candidate Starts for Xandras_38:

(Start: 1 @32657 has 1 MA's), (Start: 8 @32702 has 124 MA's), (20, 32756), (24, 32771), (26, 32789), (29, 32819), (37, 32933), (39, 32960), (40, 32975),

Gene: YassJohnny_37 Start: 33227, Stop: 33643, Start Num: 8

Candidate Starts for YassJohnny_37:

(Start: 1 @33182 has 1 MA's), (Start: 8 @33227 has 124 MA's), (20, 33281), (24, 33296), (26, 33314), (29, 33344), (37, 33458), (39, 33485), (40, 33500),

Gene: Youngblood_36 Start: 32872, Stop: 33288, Start Num: 8

Candidate Starts for Youngblood_36:

(Start: 1 @32827 has 1 MA's), (Start: 8 @32872 has 124 MA's), (20, 32926), (24, 32941), (29, 32989), (37, 33103), (39, 33130), (40, 33145),

Gene: Zakai_31 Start: 28265, Stop: 28687, Start Num: 2

Candidate Starts for Zakai_31:

(Start: 2 @28265 has 28 MA's), (9, 28292), (13, 28322), (17, 28337), (24, 28352), (25, 28358), (31, 28409), (33, 28463), (40, 28538), (41, 28541), (45, 28598), (47, 28643), (49, 28670),

Gene: Zaria_29 Start: 27294, Stop: 27713, Start Num: 3

Candidate Starts for Zaria_29:

(Start: 3 @27294 has 38 MA's), (6, 27309), (17, 27363), (24, 27378), (31, 27435), (32, 27483), (33, 27489), (36, 27510), (40, 27564), (47, 27669), (49, 27696),

Gene: ZhongYanYuan_30 Start: 27830, Stop: 28252, Start Num: 2

Candidate Starts for ZhongYanYuan_30:

(Start: 2 @27830 has 28 MA's), (9, 27857), (17, 27902), (24, 27917), (25, 27923), (31, 27974), (33, 28028), (40, 28103), (41, 28106), (45, 28163), (47, 28208), (49, 28235),

Gene: xkcd_37 Start: 32881, Stop: 33297, Start Num: 8

Candidate Starts for xkcd_37:

(Start: 1 @32836 has 1 MA's), (Start: 8 @32881 has 124 MA's), (20, 32935), (24, 32950), (26, 32968), (29, 32998), (37, 33112), (39, 33139), (40, 33154),