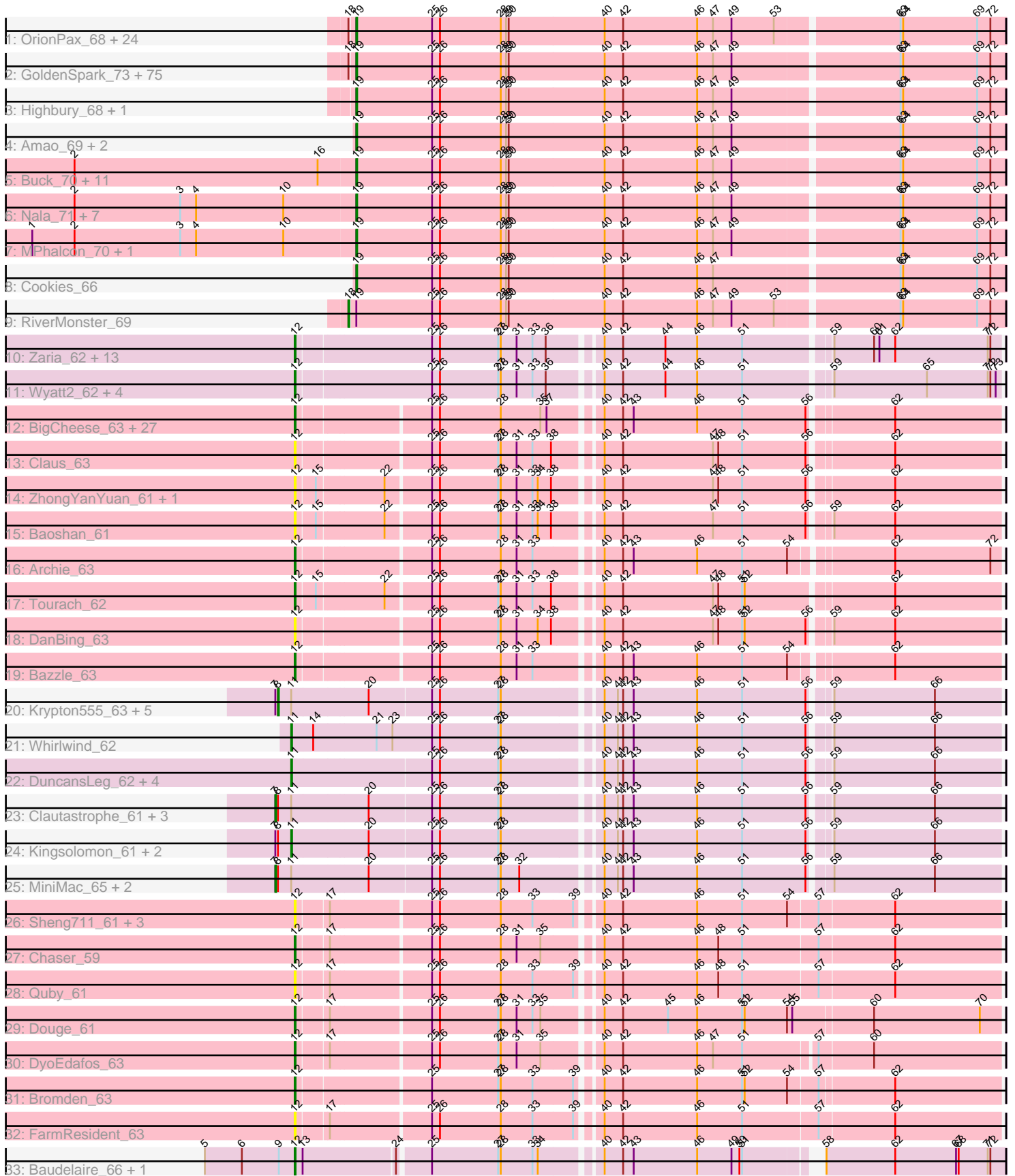


Pham 181978



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 181978 Report

This analysis was run 11/02/24 on database version 579.

Pham number 181978 has 219 members, 27 are drafts.

Phages represented in each track:

- Track 1 : OrionPax_68, Filch_70, BugsBunny_69, Phaux_71, Pumpkin_72, 244_70, BigBubba_69, Czyszczonek_70, Elph10_69, Lilizi_70, Thresher_71, Bench_72, Hopey_69, Lilac_71, Murphy_69, PhatBacter_73, Stark_70, Maxxinista_71, Phrux_66, Cjw1_69, JeTaime_69, HanKaySha_69, Palpatine_71, Policronamos_73, Xandras_68
- Track 2 : GoldenSpark_73, ShamWow_69, NelitzaMV_67, MadamMonkfish_69, TBrady12_72, Daikon_71, StellaBean_67, Easy2Say_70, BilboSwaggins_68, Marshmallow_67, Miniwave_64, Mindy_68, TeardropMSU_65, Teaspoon_70, Dumbo_69, NoSleep_70, Ukulele_64, Cactus_72, IHOP_67, xkcd_72, Adnama_73, Kostya_69, SophKB_66, Porky_68, Sotrice96_70, GooberAzure_72, Eureka_67, Kanye_66, Youngblood_72, Icee_70, Holt_74, Goldilocks_72, Hoonter_72, AmericanBeauty_73, Murica_72, CrystalP_68, Elite2014_68, Command613_71, Gemini_74, BaboJay_66, ChosenOne_69, Dusk_66, Goku_67, Inca_66, Pharsalus_66, Emmina_69, Gator_67, BadStone_66, Asriel_68, HuffyPuff_72, Moldemort_72, Gage_71, Kimchi_73, Tarkin_68, DrDrey_69, Argent26_73, Simpliphy_68, Traaww1_65, Toto_67, Wiggin_71, Rakim_70, StolenFromERC_72, Tuco_70, Barbarian_68, ABCat_66, Quallification_70, Henry_67, Flypotenuse_65, Lilpickle_68, Paperbeatsrock_68, Balomoji_69, Myrale_69, ShereKhan_68, Phaja_67, Manda_69, Stank_72
- Track 3 : Highbury_68, Saints25_68
- Track 4 : Amao_69, Pat3_67, ChotaBhai_69
- Track 5 : Buck_70, Tomaszewski_64, YassJohnny_66, Sassay_64, Glexan_68, Harella_69, Bask21_69, DoctorDiddles_68, SirDuracell_68, Petra64142_73, Rimmer_70, Willez_64
- Track 6 : Nala_71, Contagion_65, Terminus_72, Bruin_66, Misfit_70, Nimrod_70, FireRed_73, Mosby_65
- Track 7 : MPhalcon_70, MISSy_70
- Track 8 : Cookies_66
- Track 9 : RiverMonster_69
- Track 10 : Zaria_62, Calm_62, Enceladus_59, Acquire49_61, Appletree2_61, UPIE_61, OhShagHennessy_59, Silverleaf_61, DirkDirk_58, LeBron_60, AvadaKedavra_61, Halena_59, Wamburggrxpress_61, MAckerman_60
- Track 11 : Wyatt2_62, JoeDirt_60, Rose5_61, Tyson_61, CicholasNage_60
- Track 12 : BigCheese_63, Faith1_63, Miley16_63, Wigglewiggle_63, Gabriela_60, Zakai_64, DrSeegs_63, Lewan_64, Finemlucis_63, BobsGarage_63, GuuelaD_62, Nicholasp3_63, Gardann_64, MkaliMitinis3_64, Breezona_63, Sarshaun_63, Crossroads_63, Soap141_63, Itos_62, LilDestine_63, Rumpelstiltskin_62, Vetric_63,

- Netyap_64, Wilder_64, Hafay_64, Loadrie_62, Kahlid_63, Winky_63
- Track 13 : Claus_63
 - Track 14 : ZhongYanYuan_61, DHan_64
 - Track 15 : Baoshan_61
 - Track 16 : Archie_63
 - Track 17 : Tourach_62
 - Track 18 : DanBing_63
 - Track 19 : Bazzle_63
 - Track 20 : Krypton555_63, Moostard_61, Bellis_61, Jubie_61, MsGreen_62, Samty_62
 - Track 21 : Whirlwind_62
 - Track 22 : DuncansLeg_62, BourbonZero_62, Ellson_61, KirDoubleO7_60, LiyuLake_61
 - Track 23 : Clautastrophe_61, Jobypre_62, Snenia_61, Finnry_62
 - Track 24 : Kingsolomon_61, Lumos_63, Nicholas_61
 - Track 25 : MiniMac_65, MiniLon_65, Lolly9_61
 - Track 26 : Sheng711_61, BrainDrainer_61, PYPDinur_59, Douzhi_61
 - Track 27 : Chaser_59
 - Track 28 : Quby_61
 - Track 29 : Douge_61
 - Track 30 : DyoEdafos_63
 - Track 31 : Bromden_63
 - Track 32 : FarmResident_63
 - Track 33 : Baudelaire_66, Aegeus_66

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

The start number called the most often in the published annotations is 19, it was called in 122 of the 192 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_70, ABCat_66, Adnama_73, Amao_69, AmericanBeauty_73, Argent26_73, Asriel_68, BaboJay_66, BadStone_66, Balomoji_69, Barbarian_68, Bask21_69, Bench_72, BigBubba_69, BilboSwaggins_68, Bruin_66, Buck_70, BugsBunny_69, Cactus_72, ChosenOne_69, ChotaBhai_69, Cjw1_69, Command613_71, Contagion_65, Cookies_66, CrystalP_68, Czyszczonek_70, Daikon_71, DoctorDiddles_68, DrDrey_69, Dumbo_69, Dusk_66, Easy2Say_70, Elite2014_68, Elph10_69, Emmina_69, Eureka_67, Filch_70, FireRed_73, Flypotenuse_65, Gage_71, Gator_67, Gemini_74, Glexan_68, Goku_67, GoldenSpark_73, Goldilocks_72, GooberAzure_72, HanKaySha_69, Harella_69, Henry_67, Highbury_68, Holt_74, Hoonter_72, Hopey_69, HufflyPuff_72, IHOP_67, Icee_70, Inca_66, JeTaime_69, Kanye_66, Kimchi_73, Kostya_69, Lilac_71, Lilizi_70, Lilpickle_68, MISSy_70, MPhalcon_70, MadamMonkfish_69, Manda_69, Marshmallow_67, Maxxinista_71, Mindy_68, Miniwave_64, Misfit_70, Moldemort_72, Mosby_65, Murica_72, Murphy_69, Myrale_69, Nala_71, NelitzaMV_67, Nimrod_70, NoSleep_70, OrionPax_68, Palpatine_71, Paperbeatsrock_68, Pat3_67, Petra64142_73, Phaja_67, Pharsalus_66, PhatBacter_73, Phaux_71, Phrux_66, Policronamos_73, Porky_68, Pumpkin_72, Quallification_70, Rakim_70, Rimmer_70, Saints25_68, Sassay_64, ShamWow_69, ShereKhan_68, Simpliphy_68, SirDuracell_68, SophKB_66, Sotrice96_70, Stank_72, Stark_70, StellaBean_67,

StolenFromERC_72, TBrady12_72, Tarkin_68, TeardropMSU_65, Teaspoon_70, Terminus_72, Thresher_71, Tomaszewski_64, Toto_67, Traaww1_65, Tuco_70, Ukulele_64, Wiggin_71, Willez_64, Xandras_68, YassJohnny_66, Youngblood_72, xkcd_72,

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

- RiverMonster_69,

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

- Acquire49_61, Aegeus_66, Appletree2_61, Archie_63, AvadaKedavra_61, Baoshan_61, Baudelaire_66, Bazzle_63, Bellis_61, BigCheese_63, BobsGarage_63, BourbonZero_62, BrainDrainer_61, Breezona_63, Bromden_63, Calm_62, Chaser_59, CicholasNage_60, Claus_63, Clautastrophe_61, Crossroads_63, DHan_64, DanBing_63, DirkDirk_58, Douge_61, Douzhi_61, DrSeegs_63, DuncansLeg_62, DyoEdafos_63, Ellson_61, Enceladus_59, Faith1_63, FarmResident_63, Finemlucis_63, Finnry_62, Gabriela_60, Gardann_64, GuuelaD_62, Hafay_64, Halena_59, Itos_62, Jobypre_62, JoeDirt_60, Jubie_61, Kahlid_63, Kingsolomon_61, KirDoubleO7_60, Krypton555_63, LeBron_60, Lewan_64, LilDestine_63, LiyuLake_61, Loadrie_62, Lolly9_61, Lumos_63, MAckerman_60, Miley16_63, MiniLon_65, MiniMac_65, MkaliMitinis3_64, Moostard_61, MsGreen_62, Netyap_64, Nicholas_61, Nicholasp3_63, OhShagHennessy_59, PYPDinur_59, Quby_61, Rose5_61, Rumpelstiltskin_62, Samty_62, Sarshaun_63, Sheng711_61, Silverleaf_61, Snenia_61, Soap141_63, Tourach_62, Tyson_61, UPIE_61, Vetrrix_63, Wamburggrxpress_61, Whirlwind_62, Wigglewiggles_63, Wilder_64, Winky_63, Wyatt2_62, Zakai_64, Zaria_62, ZhongYanYuan_61,

Summary by start number:

Start 7:

- Found in 16 of 219 (7.3%) of genes in pham
- Manual Annotations of this start: 6 of 192
- Called 43.8% of time when present
- Phage (with cluster) where this start called: Clautastrophe_61 (L3), Finnry_62 (L3), Jobypre_62 (L3), Lolly9_61 (L3), MiniLon_65 (L3), MiniMac_65 (L3), Snenia_61 (L3),

Start 8:

- Found in 16 of 219 (7.3%) of genes in pham
- Manual Annotations of this start: 5 of 192
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Bellis_61 (L3), Jubie_61 (L3), Krypton555_63 (L3), Moostard_61 (L3), MsGreen_62 (L3), Samty_62 (L3),

Start 11:

- Found in 22 of 219 (10.0%) of genes in pham
- Manual Annotations of this start: 5 of 192
- Called 40.9% of time when present
- Phage (with cluster) where this start called: BourbonZero_62 (L3), DuncansLeg_62 (L3), Ellson_61 (L3), Kingsolomon_61 (L3), KirDoubleO7_60 (L3), LiyuLake_61 (L3), Lumos_63 (L3), Nicholas_61 (L3), Whirlwind_62 (L3),

Start 12:

- Found in 67 of 219 (30.6%) of genes in pham

- Manual Annotations of this start: 53 of 192
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_61 (L1), Aegeus_66 (L5), Appletree2_61 (L1), Archie_63 (L2), AvadaKedavra_61 (L1), Baoshan_61 (L2), Baudelaire_66 (L5), Bazzle_63 (L2), BigCheese_63 (L2), BobsGarage_63 (L2), BrainDrainer_61 (L4), Breezona_63 (L2), Bromden_63 (L4), Calm_62 (L1), Chaser_59 (L4), CicholasNage_60 (L1), Claus_63 (L2), Crossroads_63 (L2), DHan_64 (L2), DanBing_63 (L2), DirkDirk_58 (L1), Douge_61 (L4), Douzhi_61 (L4), DrSeegs_63 (L2), DyoEdafos_63 (L4), Enceladus_59 (L1), Faith1_63 (L2), FarmResident_63 (L4), Finemlucis_63 (L2), Gabriela_60 (L2), Gardann_64 (L2), GuuelaD_62 (L2), Hafay_64 (L2), Halena_59 (L1), Itos_62 (L2), JoeDirt_60 (L1), Kahlid_63 (L2), LeBron_60 (L1), Lewan_64 (L2), LilDestine_63 (L2), Loadrie_62 (L2), MAckerman_60 (L1), Miley16_63 (L2), MkaliMitinis3_64 (L2), Netyap_64 (L2), Nicholasp3_63 (L2), OhShagHennessy_59 (L1), PYPDinur_59 (L4), Quby_61 (L4), Rose5_61 (L1), Rumpelstiltskin_62 (L2), Sarshaun_63 (L2), Sheng711_61 (L4), Silverleaf_61 (L1), Soap141_63 (L2), Tourach_62 (L2), Tyson_61 (L1), UPIE_61 (L1), Vetric_63 (L2), Wamburggrxpress_61 (L1), Wigglewiggles_63 (L2), Wilder_64 (L2), Winky_63 (L2), Wyatt2_62 (L1), Zakai_64 (L2), Zaria_62 (L1), ZhongYanYuan_61 (L2),

Start 18:

- Found in 102 of 219 (46.6%) of genes in pham
- Manual Annotations of this start: 1 of 192
- Called 1.0% of time when present
- Phage (with cluster) where this start called: RiverMonster_69 (E),

Start 19:

- Found in 130 of 219 (59.4%) of genes in pham
- Manual Annotations of this start: 122 of 192
- Called 99.2% of time when present
- Phage (with cluster) where this start called: 244_70 (E), ABCat_66 (E), Adnama_73 (E), Amao_69 (E), AmericanBeauty_73 (E), Argent26_73 (E), Asriel_68 (E), BaboJay_66 (E), BadStone_66 (E), Balomoji_69 (E), Barbarian_68 (E), Bask21_69 (E), Bench_72 (E), BigBubba_69 (E), BilboSwaggins_68 (E), Bruin_66 (E), Buck_70 (E), BugsBunny_69 (E), Cactus_72 (E), ChosenOne_69 (E), ChotaBhai_69 (E), Cjw1_69 (E), Command613_71 (E), Contagion_65 (E), Cookies_66 (E), CrystalP_68 (E), Czyszczonek1_70 (E), Daikon_71 (E), DoctorDiddles_68 (E), DrDrey_69 (E), Dumbo_69 (E), Dusk_66 (E), Easy2Say_70 (E), Elite2014_68 (E), Elph10_69 (E), Emmina_69 (E), Eureka_67 (E), Filch_70 (E), FireRed_73 (E), Flypotenuse_65 (E), Gage_71 (E), Gator_67 (E), Gemini_74 (E), Glexan_68 (E), Goku_67 (E), GoldenSpark_73 (E), Goldilocks_72 (E), GooberAzure_72 (E), HanKaySha_69 (E), Harella_69 (E), Henry_67 (E), Highbury_68 (E), Holt_74 (E), Hoonter_72 (E), Hopey_69 (E), HufflyPuff_72 (E), IHOP_67 (E), Icee_70 (E), Inca_66 (E), JeTaime_69 (E), Kanye_66 (E), Kimchi_73 (E), Kostya_69 (E), Lilac_71 (E), Lilizi_70 (E), Lilpickle_68 (E), MISSy_70 (E), MPhalcon_70 (E), MadamMonkfish_69 (E), Manda_69 (E), Marshmallow_67 (E), Maxxinista_71 (E), Mindy_68 (E), Miniwave_64 (E), Misfit_70 (E), Moldemort_72 (E), Mosby_65 (E), Murica_72 (E), Murphy_69 (E), Myrale_69 (E), Nala_71 (E), NelitzaMV_67 (E), Nimrod_70 (E), NoSleep_70 (E), OrionPax_68 (E), Palpatine_71 (E), Paperbeatsrock_68 (E), Pat3_67 (E), Petra64142_73 (E), Phaja_67 (E), Pharsalus_66 (E), PhatBacter_73 (E), Phaux_71 (E), Phrux_66 (E), Policronamos_73 (E), Porky_68 (E), Pumpkin_72 (E), Quallification_70 (E), Rakim_70 (E), Rimmer_70 (E), Saints25_68 (E), Sassay_64 (E), ShamWow_69 (E), ShereKhan_68 (E), Simpliphy_68 (E), SirDuracell_68 (E),

SophKB_66 (E), Sotrice96_70 (E), Stank_72 (E), Stark_70 (E), StellaBean_67 (E), StolenFromERC_72 (E), TBrady12_72 (E), Tarkin_68 (E), TeardropMSU_65 (E), Teaspoon_70 (E), Terminus_72 (E), Thresher_71 (E), Tomaszewski_64 (E), Toto_67 (E), Traaww1_65 (E), Tuco_70 (E), Ukulele_64 (E), Wiggin_71 (E), Willez_64 (E), Xandras_68 (E), YassJohnny_66 (E), Youngblood_72 (E), xkcd_72 (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 18 was manually annotated 1 time for cluster E.
- Start number 19 was manually annotated 122 times for cluster E.

Info for manual annotations of cluster L1:

- Start number 12 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 12 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 7 was manually annotated 6 times for cluster L3.
- Start number 8 was manually annotated 5 times for cluster L3.
- Start number 11 was manually annotated 5 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 12 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 12 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: 244_70 Start: 45561, Stop: 46283, Start Num: 19

Candidate Starts for 244_70:

(Start: 18 @45555 has 1 MA's), (Start: 19 @45561 has 122 MA's), (25, 45645), (26, 45654), (28, 45723), (29, 45729), (30, 45732), (40, 45840), (42, 45861), (46, 45945), (47, 45963), (49, 45984), (53, 46032), (63, 46164), (64, 46167), (69, 46251), (72, 46266),

Gene: ABCat_66 Start: 45908, Stop: 46630, Start Num: 19

Candidate Starts for ABCat_66:

(Start: 18 @45902 has 1 MA's), (Start: 19 @45908 has 122 MA's), (25, 45992), (26, 46001), (28, 46070), (29, 46076), (30, 46079), (40, 46187), (42, 46208), (46, 46292), (47, 46310), (49, 46331), (63, 46511), (64, 46514), (69, 46598), (72, 46613),

Gene: Acquire49_61 Start: 43175, Stop: 43936, Start Num: 12

Candidate Starts for Acquire49_61:

(Start: 12 @43175 has 53 MA's), (25, 43322), (26, 43331), (27, 43397), (28, 43400), (31, 43418), (33, 43436), (36, 43451), (40, 43502), (42, 43523), (44, 43571), (46, 43607), (51, 43658), (59, 43748), (60, 43793), (61, 43799), (62, 43817), (71, 43922), (72, 43925),

Gene: Adnama_73 Start: 45931, Stop: 46653, Start Num: 19

Candidate Starts for Adnama_73:

(Start: 18 @45925 has 1 MA's), (Start: 19 @45931 has 122 MA's), (25, 46015), (26, 46024), (28, 46093), (29, 46099), (30, 46102), (40, 46210), (42, 46231), (46, 46315), (47, 46333), (49, 46354), (63, 46534), (64, 46537), (69, 46621), (72, 46636),

Gene: Aegeus_66 Start: 44762, Stop: 45514, Start Num: 12

Candidate Starts for Aegeus_66:

(5, 44660), (6, 44702), (9, 44744), (Start: 12 @44762 has 53 MA's), (13, 44771), (24, 44873), (25, 44906), (27, 44981), (28, 44984), (33, 45020), (34, 45026), (40, 45086), (42, 45107), (43, 45119), (46, 45191), (49, 45230), (50, 45239), (51, 45242), (58, 45311), (62, 45389), (67, 45458), (68, 45461), (71, 45494), (72, 45497),

Gene: Amao_69 Start: 45319, Stop: 46041, Start Num: 19

Candidate Starts for Amao_69:

(Start: 19 @45319 has 122 MA's), (25, 45403), (26, 45412), (28, 45481), (29, 45487), (30, 45490), (40, 45598), (42, 45619), (46, 45703), (47, 45721), (49, 45742), (63, 45922), (64, 45925), (69, 46009), (72, 46024),

Gene: AmericanBeauty_73 Start: 46074, Stop: 46796, Start Num: 19

Candidate Starts for AmericanBeauty_73:

(Start: 18 @46068 has 1 MA's), (Start: 19 @46074 has 122 MA's), (25, 46158), (26, 46167), (28, 46236), (29, 46242), (30, 46245), (40, 46353), (42, 46374), (46, 46458), (47, 46476), (49, 46497), (63, 46677), (64, 46680), (69, 46764), (72, 46779),

Gene: Appletree2_61 Start: 42996, Stop: 43757, Start Num: 12

Candidate Starts for Appletree2_61:

(Start: 12 @42996 has 53 MA's), (25, 43143), (26, 43152), (27, 43218), (28, 43221), (31, 43239), (33, 43257), (36, 43272), (40, 43323), (42, 43344), (44, 43392), (46, 43428), (51, 43479), (59, 43569), (60, 43614), (61, 43620), (62, 43638), (71, 43743), (72, 43746),

Gene: Archie_63 Start: 44968, Stop: 45720, Start Num: 12

Candidate Starts for Archie_63:

(Start: 12 @44968 has 53 MA's), (25, 45109), (26, 45118), (28, 45187), (31, 45205), (33, 45223), (40, 45289), (42, 45310), (43, 45322), (46, 45394), (51, 45445), (54, 45496), (62, 45601), (72, 45709),

Gene: Argent26_73 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for Argent26_73:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: Asriel_68 Start: 44268, Stop: 44990, Start Num: 19

Candidate Starts for Asriel_68:

(Start: 18 @44262 has 1 MA's), (Start: 19 @44268 has 122 MA's), (25, 44352), (26, 44361), (28, 44430), (29, 44436), (30, 44439), (40, 44547), (42, 44568), (46, 44652), (47, 44670), (49, 44691), (63, 44871), (64, 44874), (69, 44958), (72, 44973),

Gene: AvadaKedavra_61 Start: 43248, Stop: 44009, Start Num: 12

Candidate Starts for AvadaKedavra_61:

(Start: 12 @43248 has 53 MA's), (25, 43395), (26, 43404), (27, 43470), (28, 43473), (31, 43491), (33, 43509), (36, 43524), (40, 43575), (42, 43596), (44, 43644), (46, 43680), (51, 43731), (59, 43821), (60, 43866), (61, 43872), (62, 43890), (71, 43995), (72, 43998),

Gene: BaboJay_66 Start: 45105, Stop: 45827, Start Num: 19

Candidate Starts for BaboJay_66:

(Start: 18 @45099 has 1 MA's), (Start: 19 @45105 has 122 MA's), (25, 45189), (26, 45198), (28, 45267), (29, 45273), (30, 45276), (40, 45384), (42, 45405), (46, 45489), (47, 45507), (49, 45528), (63, 45708), (64, 45711), (69, 45795), (72, 45810),

Gene: BadStone_66 Start: 45477, Stop: 46199, Start Num: 19

Candidate Starts for BadStone_66:

(Start: 18 @45471 has 1 MA's), (Start: 19 @45477 has 122 MA's), (25, 45561), (26, 45570), (28, 45639), (29, 45645), (30, 45648), (40, 45756), (42, 45777), (46, 45861), (47, 45879), (49, 45900), (63, 46080), (64, 46083), (69, 46167), (72, 46182),

Gene: Balomoji_69 Start: 46038, Stop: 46760, Start Num: 19

Candidate Starts for Balomoji_69:

(Start: 18 @46032 has 1 MA's), (Start: 19 @46038 has 122 MA's), (25, 46122), (26, 46131), (28, 46200), (29, 46206), (30, 46209), (40, 46317), (42, 46338), (46, 46422), (47, 46440), (49, 46461), (63, 46641), (64, 46644), (69, 46728), (72, 46743),

Gene: Baoshan_61 Start: 44667, Stop: 45422, Start Num: 12

Candidate Starts for Baoshan_61:

(Start: 12 @44667 has 53 MA's), (15, 44688), (22, 44760), (25, 44808), (26, 44817), (27, 44883), (28, 44886), (31, 44904), (33, 44922), (34, 44928), (38, 44943), (40, 44988), (42, 45009), (47, 45111), (51, 45144), (56, 45216), (59, 45234), (62, 45303),

Gene: Barbarian_68 Start: 44268, Stop: 44990, Start Num: 19

Candidate Starts for Barbarian_68:

(Start: 18 @44262 has 1 MA's), (Start: 19 @44268 has 122 MA's), (25, 44352), (26, 44361), (28, 44430), (29, 44436), (30, 44439), (40, 44547), (42, 44568), (46, 44652), (47, 44670), (49, 44691), (63, 44871), (64, 44874), (69, 44958), (72, 44973),

Gene: Bask21_69 Start: 44882, Stop: 45604, Start Num: 19

Candidate Starts for Bask21_69:

(2, 44564), (16, 44840), (Start: 19 @44882 has 122 MA's), (25, 44966), (26, 44975), (28, 45044), (29, 45050), (30, 45053), (40, 45161), (42, 45182), (46, 45266), (47, 45284), (49, 45305), (63, 45485), (64, 45488), (69, 45572), (72, 45587),

Gene: Baudelaire_66 Start: 44762, Stop: 45514, Start Num: 12

Candidate Starts for Baudelaire_66:

(5, 44660), (6, 44702), (9, 44744), (Start: 12 @44762 has 53 MA's), (13, 44771), (24, 44873), (25, 44906), (27, 44981), (28, 44984), (33, 45020), (34, 45026), (40, 45086), (42, 45107), (43, 45119), (46, 45191), (49, 45230), (50, 45239), (51, 45242), (58, 45311), (62, 45389), (67, 45458), (68, 45461), (71, 45494), (72, 45497),

Gene: Bazzle_63 Start: 45038, Stop: 45790, Start Num: 12

Candidate Starts for Bazzle_63:

(Start: 12 @45038 has 53 MA's), (25, 45179), (26, 45188), (28, 45257), (31, 45275), (33, 45293), (40, 45359), (42, 45380), (43, 45392), (46, 45464), (51, 45515), (54, 45566), (62, 45671),

Gene: Bellis_61 Start: 44751, Stop: 45533, Start Num: 8

Candidate Starts for Bellis_61:

(Start: 7 @44748 has 6 MA's), (Start: 8 @44751 has 5 MA's), (Start: 11 @44766 has 5 MA's), (20, 44850), (25, 44919), (26, 44928), (27, 44994), (28, 44997), (40, 45099), (41, 45114), (42, 45120), (43,

45132), (46, 45204), (51, 45255), (56, 45327), (59, 45345), (66, 45459),

Gene: Bench_72 Start: 45578, Stop: 46300, Start Num: 19

Candidate Starts for Bench_72:

(Start: 18 @45572 has 1 MA's), (Start: 19 @45578 has 122 MA's), (25, 45662), (26, 45671), (28, 45740), (29, 45746), (30, 45749), (40, 45857), (42, 45878), (46, 45962), (47, 45980), (49, 46001), (53, 46049), (63, 46181), (64, 46184), (69, 46268), (72, 46283),

Gene: BigBubba_69 Start: 45287, Stop: 46009, Start Num: 19

Candidate Starts for BigBubba_69:

(Start: 18 @45281 has 1 MA's), (Start: 19 @45287 has 122 MA's), (25, 45371), (26, 45380), (28, 45449), (29, 45455), (30, 45458), (40, 45566), (42, 45587), (46, 45671), (47, 45689), (49, 45710), (53, 45758), (63, 45890), (64, 45893), (69, 45977), (72, 45992),

Gene: BigCheese_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for BigCheese_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: BilboSwaggins_68 Start: 45916, Stop: 46638, Start Num: 19

Candidate Starts for BilboSwaggins_68:

(Start: 18 @45910 has 1 MA's), (Start: 19 @45916 has 122 MA's), (25, 46000), (26, 46009), (28, 46078), (29, 46084), (30, 46087), (40, 46195), (42, 46216), (46, 46300), (47, 46318), (49, 46339), (63, 46519), (64, 46522), (69, 46606), (72, 46621),

Gene: BobsGarage_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for BobsGarage_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: BourbonZero_62 Start: 44811, Stop: 45578, Start Num: 11

Candidate Starts for BourbonZero_62:

(Start: 11 @44811 has 5 MA's), (25, 44964), (26, 44973), (27, 45039), (28, 45042), (40, 45144), (41, 45159), (42, 45165), (43, 45177), (46, 45249), (51, 45300), (56, 45372), (59, 45390), (66, 45504),

Gene: BrainDrainer_61 Start: 43584, Stop: 44348, Start Num: 12

Candidate Starts for BrainDrainer_61:

(Start: 12 @43584 has 53 MA's), (17, 43617), (25, 43725), (26, 43734), (28, 43803), (33, 43839), (39, 43884), (40, 43905), (42, 43926), (46, 44010), (51, 44061), (54, 44112), (57, 44145), (62, 44229),

Gene: Breezona_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for Breezona_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: Bromden_63 Start: 44697, Stop: 45458, Start Num: 12

Candidate Starts for Bromden_63:

(Start: 12 @44697 has 53 MA's), (25, 44838), (27, 44913), (28, 44916), (33, 44952), (39, 44997), (40, 45018), (42, 45039), (46, 45123), (51, 45174), (52, 45177), (54, 45225), (57, 45258), (62, 45339),

Gene: Bruin_66 Start: 44454, Stop: 45176, Start Num: 19

Candidate Starts for Bruin_66:

(2, 44136), (3, 44256), (4, 44274), (10, 44373), (Start: 19 @44454 has 122 MA's), (25, 44538), (26, 44547), (28, 44616), (29, 44622), (30, 44625), (40, 44733), (42, 44754), (46, 44838), (47, 44856), (49, 44877), (63, 45057), (64, 45060), (69, 45144), (72, 45159),

Gene: Buck_70 Start: 46162, Stop: 46884, Start Num: 19

Candidate Starts for Buck_70:

(2, 45844), (16, 46120), (Start: 19 @46162 has 122 MA's), (25, 46246), (26, 46255), (28, 46324), (29, 46330), (30, 46333), (40, 46441), (42, 46462), (46, 46546), (47, 46564), (49, 46585), (63, 46765), (64, 46768), (69, 46852), (72, 46867),

Gene: BugsBunny_69 Start: 45986, Stop: 46708, Start Num: 19

Candidate Starts for BugsBunny_69:

(Start: 18 @45980 has 1 MA's), (Start: 19 @45986 has 122 MA's), (25, 46070), (26, 46079), (28, 46148), (29, 46154), (30, 46157), (40, 46265), (42, 46286), (46, 46370), (47, 46388), (49, 46409), (53, 46457), (63, 46589), (64, 46592), (69, 46676), (72, 46691),

Gene: Cactus_72 Start: 44932, Stop: 45654, Start Num: 19

Candidate Starts for Cactus_72:

(Start: 18 @44926 has 1 MA's), (Start: 19 @44932 has 122 MA's), (25, 45016), (26, 45025), (28, 45094), (29, 45100), (30, 45103), (40, 45211), (42, 45232), (46, 45316), (47, 45334), (49, 45355), (63, 45535), (64, 45538), (69, 45622), (72, 45637),

Gene: Calm_62 Start: 43175, Stop: 43936, Start Num: 12

Candidate Starts for Calm_62:

(Start: 12 @43175 has 53 MA's), (25, 43322), (26, 43331), (27, 43397), (28, 43400), (31, 43418), (33, 43436), (36, 43451), (40, 43502), (42, 43523), (44, 43571), (46, 43607), (51, 43658), (59, 43748), (60, 43793), (61, 43799), (62, 43817), (71, 43922), (72, 43925),

Gene: Chaser_59 Start: 43356, Stop: 44120, Start Num: 12

Candidate Starts for Chaser_59:

(Start: 12 @43356 has 53 MA's), (17, 43389), (25, 43497), (26, 43506), (28, 43575), (31, 43593), (35, 43620), (40, 43677), (42, 43698), (46, 43782), (48, 43806), (51, 43833), (57, 43917), (62, 44001),

Gene: ChosenOne_69 Start: 44935, Stop: 45657, Start Num: 19

Candidate Starts for ChosenOne_69:

(Start: 18 @44929 has 1 MA's), (Start: 19 @44935 has 122 MA's), (25, 45019), (26, 45028), (28, 45097), (29, 45103), (30, 45106), (40, 45214), (42, 45235), (46, 45319), (47, 45337), (49, 45358), (63, 45538), (64, 45541), (69, 45625), (72, 45640),

Gene: ChotaBhai_69 Start: 45250, Stop: 45972, Start Num: 19

Candidate Starts for ChotaBhai_69:

(Start: 19 @45250 has 122 MA's), (25, 45334), (26, 45343), (28, 45412), (29, 45418), (30, 45421), (40, 45529), (42, 45550), (46, 45634), (47, 45652), (49, 45673), (63, 45853), (64, 45856), (69, 45940), (72, 45955),

Gene: CicholasNage_60 Start: 43211, Stop: 43972, Start Num: 12

Candidate Starts for CicholasNage_60:

(Start: 12 @43211 has 53 MA's), (25, 43358), (26, 43367), (27, 43433), (28, 43436), (31, 43454), (33, 43472), (36, 43487), (40, 43538), (42, 43559), (44, 43607), (46, 43643), (51, 43694), (59, 43784), (65, 43889), (71, 43958), (72, 43961), (73, 43967),

Gene: Cjw1_69 Start: 46632, Stop: 47354, Start Num: 19

Candidate Starts for Cjw1_69:

(Start: 18 @46626 has 1 MA's), (Start: 19 @46632 has 122 MA's), (25, 46716), (26, 46725), (28, 46794), (29, 46800), (30, 46803), (40, 46911), (42, 46932), (46, 47016), (47, 47034), (49, 47055), (53, 47103), (63, 47235), (64, 47238), (69, 47322), (72, 47337),

Gene: Claus_63 Start: 44805, Stop: 45560, Start Num: 12

Candidate Starts for Claus_63:

(Start: 12 @44805 has 53 MA's), (25, 44946), (26, 44955), (27, 45021), (28, 45024), (31, 45042), (33, 45060), (38, 45081), (40, 45126), (42, 45147), (47, 45249), (48, 45255), (51, 45282), (56, 45354), (62, 45441),

Gene: Clautastrophe_61 Start: 44745, Stop: 45530, Start Num: 7

Candidate Starts for Clautastrophe_61:

(Start: 7 @44745 has 6 MA's), (Start: 8 @44748 has 5 MA's), (Start: 11 @44763 has 5 MA's), (20, 44847), (25, 44916), (26, 44925), (27, 44991), (28, 44994), (40, 45096), (41, 45111), (42, 45117), (43, 45129), (46, 45201), (51, 45252), (56, 45324), (59, 45342), (66, 45456),

Gene: Command613_71 Start: 45971, Stop: 46693, Start Num: 19

Candidate Starts for Command613_71:

(Start: 18 @45965 has 1 MA's), (Start: 19 @45971 has 122 MA's), (25, 46055), (26, 46064), (28, 46133), (29, 46139), (30, 46142), (40, 46250), (42, 46271), (46, 46355), (47, 46373), (49, 46394), (63, 46574), (64, 46577), (69, 46661), (72, 46676),

Gene: Contagion_65 Start: 44735, Stop: 45457, Start Num: 19

Candidate Starts for Contagion_65:

(2, 44417), (3, 44537), (4, 44555), (10, 44654), (Start: 19 @44735 has 122 MA's), (25, 44819), (26, 44828), (28, 44897), (29, 44903), (30, 44906), (40, 45014), (42, 45035), (46, 45119), (47, 45137), (49, 45158), (63, 45338), (64, 45341), (69, 45425), (72, 45440),

Gene: Cookies_66 Start: 45104, Stop: 45826, Start Num: 19

Candidate Starts for Cookies_66:

(Start: 19 @45104 has 122 MA's), (25, 45188), (26, 45197), (28, 45266), (29, 45272), (30, 45275), (40, 45383), (42, 45404), (46, 45488), (47, 45506), (63, 45707), (64, 45710), (69, 45794), (72, 45809),

Gene: Crossroads_63 Start: 44802, Stop: 45557, Start Num: 12

Candidate Starts for Crossroads_63:

(Start: 12 @44802 has 53 MA's), (25, 44943), (26, 44952), (28, 45021), (35, 45066), (37, 45072), (40, 45123), (42, 45144), (43, 45156), (46, 45228), (51, 45279), (56, 45351), (62, 45438),

Gene: CrystalP_68 Start: 45916, Stop: 46638, Start Num: 19

Candidate Starts for CrystalP_68:

(Start: 18 @45910 has 1 MA's), (Start: 19 @45916 has 122 MA's), (25, 46000), (26, 46009), (28, 46078), (29, 46084), (30, 46087), (40, 46195), (42, 46216), (46, 46300), (47, 46318), (49, 46339), (63, 46519), (64, 46522), (69, 46606), (72, 46621),

Gene: Czyszczone1_70 Start: 45441, Stop: 46163, Start Num: 19

Candidate Starts for Czyszczone1_70:

(Start: 18 @45435 has 1 MA's), (Start: 19 @45441 has 122 MA's), (25, 45525), (26, 45534), (28, 45603), (29, 45609), (30, 45612), (40, 45720), (42, 45741), (46, 45825), (47, 45843), (49, 45864), (53, 45912), (63, 46044), (64, 46047), (69, 46131), (72, 46146),

Gene: DHan_64 Start: 44705, Stop: 45460, Start Num: 12

Candidate Starts for DHan_64:

(Start: 12 @44705 has 53 MA's), (15, 44726), (22, 44798), (25, 44846), (26, 44855), (27, 44921), (28, 44924), (31, 44942), (33, 44960), (34, 44966), (38, 44981), (40, 45026), (42, 45047), (47, 45149), (48, 45155), (51, 45182), (56, 45254), (62, 45341),

Gene: Daikon_71 Start: 46059, Stop: 46781, Start Num: 19

Candidate Starts for Daikon_71:

(Start: 18 @46053 has 1 MA's), (Start: 19 @46059 has 122 MA's), (25, 46143), (26, 46152), (28, 46221), (29, 46227), (30, 46230), (40, 46338), (42, 46359), (46, 46443), (47, 46461), (49, 46482), (63, 46662), (64, 46665), (69, 46749), (72, 46764),

Gene: DanBing_63 Start: 44674, Stop: 45429, Start Num: 12

Candidate Starts for DanBing_63:

(Start: 12 @44674 has 53 MA's), (25, 44815), (26, 44824), (27, 44890), (28, 44893), (31, 44911), (34, 44935), (38, 44950), (40, 44995), (42, 45016), (47, 45118), (48, 45124), (51, 45151), (52, 45154), (56, 45223), (59, 45241), (62, 45310),

Gene: DirkDirk_58 Start: 42582, Stop: 43343, Start Num: 12

Candidate Starts for DirkDirk_58:

(Start: 12 @42582 has 53 MA's), (25, 42729), (26, 42738), (27, 42804), (28, 42807), (31, 42825), (33, 42843), (36, 42858), (40, 42909), (42, 42930), (44, 42978), (46, 43014), (51, 43065), (59, 43155), (60, 43200), (61, 43206), (62, 43224), (71, 43329), (72, 43332),

Gene: DoctorDiddles_68 Start: 45294, Stop: 46016, Start Num: 19

Candidate Starts for DoctorDiddles_68:

(2, 44976), (16, 45252), (Start: 19 @45294 has 122 MA's), (25, 45378), (26, 45387), (28, 45456), (29, 45462), (30, 45465), (40, 45573), (42, 45594), (46, 45678), (47, 45696), (49, 45717), (63, 45897), (64, 45900), (69, 45984), (72, 45999),

Gene: Douge_61 Start: 43362, Stop: 44126, Start Num: 12

Candidate Starts for Douge_61:

(Start: 12 @43362 has 53 MA's), (17, 43395), (25, 43503), (26, 43512), (27, 43578), (28, 43581), (31, 43599), (33, 43617), (35, 43626), (40, 43683), (42, 43704), (45, 43755), (46, 43788), (51, 43839), (52, 43842), (54, 43890), (55, 43896), (60, 43983), (70, 44103),

Gene: Douzhi_61 Start: 43412, Stop: 44179, Start Num: 12

Candidate Starts for Douzhi_61:

(Start: 12 @43412 has 53 MA's), (17, 43445), (25, 43553), (26, 43562), (28, 43631), (33, 43667), (39, 43712), (40, 43733), (42, 43754), (46, 43838), (51, 43889), (54, 43940), (57, 43976), (62, 44060),

Gene: DrDrey_69 Start: 46357, Stop: 47079, Start Num: 19

Candidate Starts for DrDrey_69:

(Start: 18 @46351 has 1 MA's), (Start: 19 @46357 has 122 MA's), (25, 46441), (26, 46450), (28, 46519), (29, 46525), (30, 46528), (40, 46636), (42, 46657), (46, 46741), (47, 46759), (49, 46780), (63, 46960), (64, 46963), (69, 47047), (72, 47062),

Gene: DrSeegs_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for DrSeegs_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: Dumbo_69 Start: 44840, Stop: 45562, Start Num: 19

Candidate Starts for Dumbo_69:

(Start: 18 @44834 has 1 MA's), (Start: 19 @44840 has 122 MA's), (25, 44924), (26, 44933), (28, 45002), (29, 45008), (30, 45011), (40, 45119), (42, 45140), (46, 45224), (47, 45242), (49, 45263), (63, 45443), (64, 45446), (69, 45530), (72, 45545),

Gene: DuncansLeg_62 Start: 44799, Stop: 45566, Start Num: 11

Candidate Starts for DuncansLeg_62:

(Start: 11 @44799 has 5 MA's), (25, 44952), (26, 44961), (27, 45027), (28, 45030), (40, 45132), (41, 45147), (42, 45153), (43, 45165), (46, 45237), (51, 45288), (56, 45360), (59, 45378), (66, 45492),

Gene: Dusk_66 Start: 45137, Stop: 45859, Start Num: 19

Candidate Starts for Dusk_66:

(Start: 18 @45131 has 1 MA's), (Start: 19 @45137 has 122 MA's), (25, 45221), (26, 45230), (28, 45299), (29, 45305), (30, 45308), (40, 45416), (42, 45437), (46, 45521), (47, 45539), (49, 45560), (63, 45740), (64, 45743), (69, 45827), (72, 45842),

Gene: DyoEdafos_63 Start: 43641, Stop: 44399, Start Num: 12

Candidate Starts for DyoEdafos_63:

(Start: 12 @43641 has 53 MA's), (17, 43674), (25, 43782), (26, 43791), (27, 43857), (28, 43860), (31, 43878), (35, 43905), (40, 43962), (42, 43983), (46, 44067), (47, 44085), (51, 44118), (57, 44196), (60, 44256),

Gene: Easy2Say_70 Start: 46378, Stop: 47100, Start Num: 19

Candidate Starts for Easy2Say_70:

(Start: 18 @46372 has 1 MA's), (Start: 19 @46378 has 122 MA's), (25, 46462), (26, 46471), (28, 46540), (29, 46546), (30, 46549), (40, 46657), (42, 46678), (46, 46762), (47, 46780), (49, 46801), (63, 46981), (64, 46984), (69, 47068), (72, 47083),

Gene: Elite2014_68 Start: 44934, Stop: 45656, Start Num: 19

Candidate Starts for Elite2014_68:

(Start: 18 @44928 has 1 MA's), (Start: 19 @44934 has 122 MA's), (25, 45018), (26, 45027), (28, 45096), (29, 45102), (30, 45105), (40, 45213), (42, 45234), (46, 45318), (47, 45336), (49, 45357), (63, 45537), (64, 45540), (69, 45624), (72, 45639),

Gene: Ellson_61 Start: 44827, Stop: 45594, Start Num: 11

Candidate Starts for Ellson_61:

(Start: 11 @44827 has 5 MA's), (25, 44980), (26, 44989), (27, 45055), (28, 45058), (40, 45160), (41, 45175), (42, 45181), (43, 45193), (46, 45265), (51, 45316), (56, 45388), (59, 45406), (66, 45520),

Gene: Elph10_69 Start: 44939, Stop: 45661, Start Num: 19

Candidate Starts for Elph10_69:

(Start: 18 @44933 has 1 MA's), (Start: 19 @44939 has 122 MA's), (25, 45023), (26, 45032), (28, 45101), (29, 45107), (30, 45110), (40, 45218), (42, 45239), (46, 45323), (47, 45341), (49, 45362), (53, 45410), (63, 45542), (64, 45545), (69, 45629), (72, 45644),

Gene: Emmina_69 Start: 44841, Stop: 45563, Start Num: 19

Candidate Starts for Emmina_69:

(Start: 18 @44835 has 1 MA's), (Start: 19 @44841 has 122 MA's), (25, 44925), (26, 44934), (28, 45003), (29, 45009), (30, 45012), (40, 45120), (42, 45141), (46, 45225), (47, 45243), (49, 45264), (63, 45444), (64, 45447), (69, 45531), (72, 45546),

Gene: Enceladus_59 Start: 43057, Stop: 43818, Start Num: 12

Candidate Starts for Enceladus_59:

(Start: 12 @43057 has 53 MA's), (25, 43204), (26, 43213), (27, 43279), (28, 43282), (31, 43300), (33, 43318), (36, 43333), (40, 43384), (42, 43405), (44, 43453), (46, 43489), (51, 43540), (59, 43630), (60, 43675), (61, 43681), (62, 43699), (71, 43804), (72, 43807),

Gene: Eureka_67 Start: 45405, Stop: 46127, Start Num: 19

Candidate Starts for Eureka_67:

(Start: 18 @45399 has 1 MA's), (Start: 19 @45405 has 122 MA's), (25, 45489), (26, 45498), (28, 45567), (29, 45573), (30, 45576), (40, 45684), (42, 45705), (46, 45789), (47, 45807), (49, 45828), (63, 46008), (64, 46011), (69, 46095), (72, 46110),

Gene: Faith1_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for Faith1_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: FarmResident_63 Start: 43378, Stop: 44142, Start Num: 12

Candidate Starts for FarmResident_63:

(Start: 12 @43378 has 53 MA's), (17, 43411), (25, 43519), (26, 43528), (28, 43597), (33, 43633), (39, 43678), (40, 43699), (42, 43720), (46, 43804), (51, 43855), (57, 43939), (62, 44023),

Gene: Filch_70 Start: 44866, Stop: 45588, Start Num: 19

Candidate Starts for Filch_70:

(Start: 18 @44860 has 1 MA's), (Start: 19 @44866 has 122 MA's), (25, 44950), (26, 44959), (28, 45028), (29, 45034), (30, 45037), (40, 45145), (42, 45166), (46, 45250), (47, 45268), (49, 45289), (53, 45337), (63, 45469), (64, 45472), (69, 45556), (72, 45571),

Gene: Finemlucis_63 Start: 45045, Stop: 45800, Start Num: 12

Candidate Starts for Finemlucis_63:

(Start: 12 @45045 has 53 MA's), (25, 45186), (26, 45195), (28, 45264), (35, 45309), (37, 45315), (40, 45366), (42, 45387), (43, 45399), (46, 45471), (51, 45522), (56, 45594), (62, 45681),

Gene: Finnry_62 Start: 45009, Stop: 45794, Start Num: 7

Candidate Starts for Finnry_62:

(Start: 7 @45009 has 6 MA's), (Start: 8 @45012 has 5 MA's), (Start: 11 @45027 has 5 MA's), (20, 45111), (25, 45180), (26, 45189), (27, 45255), (28, 45258), (40, 45360), (41, 45375), (42, 45381), (43, 45393), (46, 45465), (51, 45516), (56, 45588), (59, 45606), (66, 45720),

Gene: FireRed_73 Start: 46431, Stop: 47153, Start Num: 19

Candidate Starts for FireRed_73:

(2, 46113), (3, 46233), (4, 46251), (10, 46350), (Start: 19 @46431 has 122 MA's), (25, 46515), (26, 46524), (28, 46593), (29, 46599), (30, 46602), (40, 46710), (42, 46731), (46, 46815), (47, 46833), (49, 46854), (63, 47034), (64, 47037), (69, 47121), (72, 47136),

Gene: Flypotenuse_65 Start: 44922, Stop: 45644, Start Num: 19

Candidate Starts for Flypotenuse_65:

(Start: 18 @44916 has 1 MA's), (Start: 19 @44922 has 122 MA's), (25, 45006), (26, 45015), (28, 45084), (29, 45090), (30, 45093), (40, 45201), (42, 45222), (46, 45306), (47, 45324), (49, 45345), (63, 45525), (64, 45528), (69, 45612), (72, 45627),

Gene: Gabriela_60 Start: 43174, Stop: 43929, Start Num: 12

Candidate Starts for Gabriela_60:

(Start: 12 @43174 has 53 MA's), (25, 43315), (26, 43324), (28, 43393), (35, 43438), (37, 43444), (40, 43495), (42, 43516), (43, 43528), (46, 43600), (51, 43651), (56, 43723), (62, 43810),

Gene: Gage_71 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for Gage_71:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: Gardann_64 Start: 44760, Stop: 45515, Start Num: 12

Candidate Starts for Gardann_64:

(Start: 12 @44760 has 53 MA's), (25, 44901), (26, 44910), (28, 44979), (35, 45024), (37, 45030), (40, 45081), (42, 45102), (43, 45114), (46, 45186), (51, 45237), (56, 45309), (62, 45396),

Gene: Gator_67 Start: 45768, Stop: 46490, Start Num: 19

Candidate Starts for Gator_67:

(Start: 18 @45762 has 1 MA's), (Start: 19 @45768 has 122 MA's), (25, 45852), (26, 45861), (28, 45930), (29, 45936), (30, 45939), (40, 46047), (42, 46068), (46, 46152), (47, 46170), (49, 46191), (63, 46371), (64, 46374), (69, 46458), (72, 46473),

Gene: Gemini_74 Start: 46229, Stop: 46951, Start Num: 19

Candidate Starts for Gemini_74:

(Start: 18 @46223 has 1 MA's), (Start: 19 @46229 has 122 MA's), (25, 46313), (26, 46322), (28, 46391), (29, 46397), (30, 46400), (40, 46508), (42, 46529), (46, 46613), (47, 46631), (49, 46652), (63, 46832), (64, 46835), (69, 46919), (72, 46934),

Gene: Glexan_68 Start: 46052, Stop: 46774, Start Num: 19

Candidate Starts for Glexan_68:

(2, 45734), (16, 46010), (Start: 19 @46052 has 122 MA's), (25, 46136), (26, 46145), (28, 46214), (29, 46220), (30, 46223), (40, 46331), (42, 46352), (46, 46436), (47, 46454), (49, 46475), (63, 46655), (64, 46658), (69, 46742), (72, 46757),

Gene: Goku_67 Start: 45134, Stop: 45856, Start Num: 19

Candidate Starts for Goku_67:

(Start: 18 @45128 has 1 MA's), (Start: 19 @45134 has 122 MA's), (25, 45218), (26, 45227), (28, 45296), (29, 45302), (30, 45305), (40, 45413), (42, 45434), (46, 45518), (47, 45536), (49, 45557), (63, 45737), (64, 45740), (69, 45824), (72, 45839),

Gene: GoldenSpark_73 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for GoldenSpark_73:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: Goldilocks_72 Start: 45213, Stop: 45935, Start Num: 19

Candidate Starts for Goldilocks_72:

(Start: 18 @45207 has 1 MA's), (Start: 19 @45213 has 122 MA's), (25, 45297), (26, 45306), (28, 45375), (29, 45381), (30, 45384), (40, 45492), (42, 45513), (46, 45597), (47, 45615), (49, 45636), (63, 45816), (64, 45819), (69, 45903), (72, 45918),

Gene: GooberAzure_72 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for GooberAzure_72:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: GuuelaD_62 Start: 44839, Stop: 45594, Start Num: 12

Candidate Starts for GuuelaD_62:

(Start: 12 @44839 has 53 MA's), (25, 44980), (26, 44989), (28, 45058), (35, 45103), (37, 45109), (40, 45160), (42, 45181), (43, 45193), (46, 45265), (51, 45316), (56, 45388), (62, 45475),

Gene: Hafay_64 Start: 44828, Stop: 45583, Start Num: 12

Candidate Starts for Hafay_64:

(Start: 12 @44828 has 53 MA's), (25, 44969), (26, 44978), (28, 45047), (35, 45092), (37, 45098), (40, 45149), (42, 45170), (43, 45182), (46, 45254), (51, 45305), (56, 45377), (62, 45464),

Gene: Halena_59 Start: 42619, Stop: 43380, Start Num: 12

Candidate Starts for Halena_59:

(Start: 12 @42619 has 53 MA's), (25, 42766), (26, 42775), (27, 42841), (28, 42844), (31, 42862), (33, 42880), (36, 42895), (40, 42946), (42, 42967), (44, 43015), (46, 43051), (51, 43102), (59, 43192), (60, 43237), (61, 43243), (62, 43261), (71, 43366), (72, 43369),

Gene: HanKaySha_69 Start: 45019, Stop: 45741, Start Num: 19

Candidate Starts for HanKaySha_69:

(Start: 18 @45013 has 1 MA's), (Start: 19 @45019 has 122 MA's), (25, 45103), (26, 45112), (28, 45181), (29, 45187), (30, 45190), (40, 45298), (42, 45319), (46, 45403), (47, 45421), (49, 45442), (53, 45490), (63, 45622), (64, 45625), (69, 45709), (72, 45724),

Gene: Harella_69 Start: 46568, Stop: 47290, Start Num: 19

Candidate Starts for Harella_69:

(2, 46250), (16, 46526), (Start: 19 @46568 has 122 MA's), (25, 46652), (26, 46661), (28, 46730), (29, 46736), (30, 46739), (40, 46847), (42, 46868), (46, 46952), (47, 46970), (49, 46991), (63, 47171), (64, 47174), (69, 47258), (72, 47273),

Gene: Henry_67 Start: 45356, Stop: 46078, Start Num: 19

Candidate Starts for Henry_67:

(Start: 18 @45350 has 1 MA's), (Start: 19 @45356 has 122 MA's), (25, 45440), (26, 45449), (28, 45518), (29, 45524), (30, 45527), (40, 45635), (42, 45656), (46, 45740), (47, 45758), (49, 45779), (63, 45959), (64, 45962), (69, 46046), (72, 46061),

Gene: Highbury_68 Start: 45007, Stop: 45729, Start Num: 19

Candidate Starts for Highbury_68:

(Start: 19 @45007 has 122 MA's), (25, 45091), (26, 45100), (28, 45169), (29, 45175), (30, 45178), (40, 45286), (42, 45307), (46, 45391), (47, 45409), (49, 45430), (63, 45610), (64, 45613), (69, 45697), (72, 45712),

Gene: Holt_74 Start: 46126, Stop: 46848, Start Num: 19

Candidate Starts for Holt_74:

(Start: 18 @46120 has 1 MA's), (Start: 19 @46126 has 122 MA's), (25, 46210), (26, 46219), (28, 46288), (29, 46294), (30, 46297), (40, 46405), (42, 46426), (46, 46510), (47, 46528), (49, 46549), (63, 46729), (64, 46732), (69, 46816), (72, 46831),

Gene: Hoonter_72 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for Hoonter_72:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: Hopey_69 Start: 45551, Stop: 46273, Start Num: 19

Candidate Starts for Hopey_69:

(Start: 18 @45545 has 1 MA's), (Start: 19 @45551 has 122 MA's), (25, 45635), (26, 45644), (28, 45713), (29, 45719), (30, 45722), (40, 45830), (42, 45851), (46, 45935), (47, 45953), (49, 45974), (53, 46022), (63, 46154), (64, 46157), (69, 46241), (72, 46256),

Gene: HufflyPuff_72 Start: 46384, Stop: 47106, Start Num: 19

Candidate Starts for HufflyPuff_72:

(Start: 18 @46378 has 1 MA's), (Start: 19 @46384 has 122 MA's), (25, 46468), (26, 46477), (28, 46546), (29, 46552), (30, 46555), (40, 46663), (42, 46684), (46, 46768), (47, 46786), (49, 46807), (63, 46987), (64, 46990), (69, 47074), (72, 47089),

Gene: IHOP_67 Start: 45480, Stop: 46202, Start Num: 19

Candidate Starts for IHOP_67:

(Start: 18 @45474 has 1 MA's), (Start: 19 @45480 has 122 MA's), (25, 45564), (26, 45573), (28, 45642), (29, 45648), (30, 45651), (40, 45759), (42, 45780), (46, 45864), (47, 45882), (49, 45903), (63, 46083), (64, 46086), (69, 46170), (72, 46185),

Gene: Icee_70 Start: 45379, Stop: 46101, Start Num: 19

Candidate Starts for Icee_70:

(Start: 18 @45373 has 1 MA's), (Start: 19 @45379 has 122 MA's), (25, 45463), (26, 45472), (28, 45541), (29, 45547), (30, 45550), (40, 45658), (42, 45679), (46, 45763), (47, 45781), (49, 45802), (63, 45982), (64, 45985), (69, 46069), (72, 46084),

Gene: Inca_66 Start: 44005, Stop: 44727, Start Num: 19

Candidate Starts for Inca_66:

(Start: 18 @43999 has 1 MA's), (Start: 19 @44005 has 122 MA's), (25, 44089), (26, 44098), (28, 44167), (29, 44173), (30, 44176), (40, 44284), (42, 44305), (46, 44389), (47, 44407), (49, 44428), (63, 44608), (64, 44611), (69, 44695), (72, 44710),

Gene: Itos_62 Start: 43630, Stop: 44385, Start Num: 12

Candidate Starts for Itos_62:

(Start: 12 @43630 has 53 MA's), (25, 43771), (26, 43780), (28, 43849), (35, 43894), (37, 43900), (40, 43951), (42, 43972), (43, 43984), (46, 44056), (51, 44107), (56, 44179), (62, 44266),

Gene: JeTaime_69 Start: 46203, Stop: 46925, Start Num: 19

Candidate Starts for JeTaime_69:

(Start: 18 @46197 has 1 MA's), (Start: 19 @46203 has 122 MA's), (25, 46287), (26, 46296), (28, 46365), (29, 46371), (30, 46374), (40, 46482), (42, 46503), (46, 46587), (47, 46605), (49, 46626), (53, 46674), (63, 46806), (64, 46809), (69, 46893), (72, 46908),

Gene: Jobypre_62 Start: 44745, Stop: 45530, Start Num: 7

Candidate Starts for Jobypre_62:

(Start: 7 @44745 has 6 MA's), (Start: 8 @44748 has 5 MA's), (Start: 11 @44763 has 5 MA's), (20, 44847), (25, 44916), (26, 44925), (27, 44991), (28, 44994), (40, 45096), (41, 45111), (42, 45117), (43, 45129), (46, 45201), (51, 45252), (56, 45324), (59, 45342), (66, 45456),

Gene: JoeDirt_60 Start: 43490, Stop: 44251, Start Num: 12

Candidate Starts for JoeDirt_60:

(Start: 12 @43490 has 53 MA's), (25, 43637), (26, 43646), (27, 43712), (28, 43715), (31, 43733), (33, 43751), (36, 43766), (40, 43817), (42, 43838), (44, 43886), (46, 43922), (51, 43973), (59, 44063), (65, 44168), (71, 44237), (72, 44240), (73, 44246),

Gene: Jubie_61 Start: 44883, Stop: 45665, Start Num: 8

Candidate Starts for Jubie_61:

(Start: 7 @44880 has 6 MA's), (Start: 8 @44883 has 5 MA's), (Start: 11 @44898 has 5 MA's), (20, 44982), (25, 45051), (26, 45060), (27, 45126), (28, 45129), (40, 45231), (41, 45246), (42, 45252), (43, 45264), (46, 45336), (51, 45387), (56, 45459), (59, 45477), (66, 45591),

Gene: Kahlid_63 Start: 44730, Stop: 45485, Start Num: 12

Candidate Starts for Kahlid_63:

(Start: 12 @44730 has 53 MA's), (25, 44871), (26, 44880), (28, 44949), (35, 44994), (37, 45000), (40, 45051), (42, 45072), (43, 45084), (46, 45156), (51, 45207), (56, 45279), (62, 45366),

Gene: Kanye_66 Start: 45061, Stop: 45783, Start Num: 19

Candidate Starts for Kanye_66:

(Start: 18 @45055 has 1 MA's), (Start: 19 @45061 has 122 MA's), (25, 45145), (26, 45154), (28, 45223), (29, 45229), (30, 45232), (40, 45340), (42, 45361), (46, 45445), (47, 45463), (49, 45484), (63, 45664), (64, 45667), (69, 45751), (72, 45766),

Gene: Kimchi_73 Start: 45715, Stop: 46437, Start Num: 19

Candidate Starts for Kimchi_73:

(Start: 18 @45709 has 1 MA's), (Start: 19 @45715 has 122 MA's), (25, 45799), (26, 45808), (28, 45877), (29, 45883), (30, 45886), (40, 45994), (42, 46015), (46, 46099), (47, 46117), (49, 46138), (63, 46318), (64, 46321), (69, 46405), (72, 46420),

Gene: Kingsolomon_61 Start: 44770, Stop: 45537, Start Num: 11

Candidate Starts for Kingsolomon_61:

(Start: 7 @44752 has 6 MA's), (Start: 8 @44755 has 5 MA's), (Start: 11 @44770 has 5 MA's), (20, 44854), (25, 44923), (26, 44932), (27, 44998), (28, 45001), (40, 45103), (41, 45118), (42, 45124), (43, 45136), (46, 45208), (51, 45259), (56, 45331), (59, 45349), (66, 45463),

Gene: KirDoubleO7_60 Start: 44801, Stop: 45568, Start Num: 11

Candidate Starts for KirDoubleO7_60:

(Start: 11 @44801 has 5 MA's), (25, 44954), (26, 44963), (27, 45029), (28, 45032), (40, 45134), (41, 45149), (42, 45155), (43, 45167), (46, 45239), (51, 45290), (56, 45362), (59, 45380), (66, 45494),

Gene: Kostya_69 Start: 45579, Stop: 46301, Start Num: 19

Candidate Starts for Kostya_69:

(Start: 18 @45573 has 1 MA's), (Start: 19 @45579 has 122 MA's), (25, 45663), (26, 45672), (28, 45741), (29, 45747), (30, 45750), (40, 45858), (42, 45879), (46, 45963), (47, 45981), (49, 46002), (63, 46182), (64, 46185), (69, 46269), (72, 46284),

Gene: Krypton555_63 Start: 44980, Stop: 45762, Start Num: 8

Candidate Starts for Krypton555_63:

(Start: 7 @44977 has 6 MA's), (Start: 8 @44980 has 5 MA's), (Start: 11 @44995 has 5 MA's), (20, 45079), (25, 45148), (26, 45157), (27, 45223), (28, 45226), (40, 45328), (41, 45343), (42, 45349), (43, 45361), (46, 45433), (51, 45484), (56, 45556), (59, 45574), (66, 45688),

Gene: LeBron_60 Start: 42622, Stop: 43383, Start Num: 12

Candidate Starts for LeBron_60:

(Start: 12 @42622 has 53 MA's), (25, 42769), (26, 42778), (27, 42844), (28, 42847), (31, 42865), (33, 42883), (36, 42898), (40, 42949), (42, 42970), (44, 43018), (46, 43054), (51, 43105), (59, 43195), (60, 43240), (61, 43246), (62, 43264), (71, 43369), (72, 43372),

Gene: Lewan_64 Start: 44784, Stop: 45539, Start Num: 12

Candidate Starts for Lewan_64:

(Start: 12 @44784 has 53 MA's), (25, 44925), (26, 44934), (28, 45003), (35, 45048), (37, 45054), (40, 45105), (42, 45126), (43, 45138), (46, 45210), (51, 45261), (56, 45333), (62, 45420),

Gene: LilDestine_63 Start: 44757, Stop: 45512, Start Num: 12

Candidate Starts for LilDestine_63:

(Start: 12 @44757 has 53 MA's), (25, 44898), (26, 44907), (28, 44976), (35, 45021), (37, 45027), (40, 45078), (42, 45099), (43, 45111), (46, 45183), (51, 45234), (56, 45306), (62, 45393),

Gene: Lilac_71 Start: 45336, Stop: 46058, Start Num: 19

Candidate Starts for Lilac_71:

(Start: 18 @45330 has 1 MA's), (Start: 19 @45336 has 122 MA's), (25, 45420), (26, 45429), (28, 45498), (29, 45504), (30, 45507), (40, 45615), (42, 45636), (46, 45720), (47, 45738), (49, 45759), (53, 45807), (63, 45939), (64, 45942), (69, 46026), (72, 46041),

Gene: Lilizi_70 Start: 45049, Stop: 45771, Start Num: 19

Candidate Starts for Lilizi_70:

(Start: 18 @45043 has 1 MA's), (Start: 19 @45049 has 122 MA's), (25, 45133), (26, 45142), (28, 45211), (29, 45217), (30, 45220), (40, 45328), (42, 45349), (46, 45433), (47, 45451), (49, 45472), (53, 45520), (63, 45652), (64, 45655), (69, 45739), (72, 45754),

Gene: Lilpickle_68 Start: 44934, Stop: 45656, Start Num: 19

Candidate Starts for Lilpickle_68:

(Start: 18 @44928 has 1 MA's), (Start: 19 @44934 has 122 MA's), (25, 45018), (26, 45027), (28, 45096), (29, 45102), (30, 45105), (40, 45213), (42, 45234), (46, 45318), (47, 45336), (49, 45357), (63, 45537), (64, 45540), (69, 45624), (72, 45639),

Gene: LiyuLake_61 Start: 44817, Stop: 45584, Start Num: 11

Candidate Starts for LiyuLake_61:

(Start: 11 @44817 has 5 MA's), (25, 44970), (26, 44979), (27, 45045), (28, 45048), (40, 45150), (41, 45165), (42, 45171), (43, 45183), (46, 45255), (51, 45306), (56, 45378), (59, 45396), (66, 45510),

Gene: Loadrie_62 Start: 44812, Stop: 45567, Start Num: 12

Candidate Starts for Loadrie_62:

(Start: 12 @44812 has 53 MA's), (25, 44953), (26, 44962), (28, 45031), (35, 45076), (37, 45082), (40, 45133), (42, 45154), (43, 45166), (46, 45238), (51, 45289), (56, 45361), (62, 45448),

Gene: Lolly9_61 Start: 44570, Stop: 45358, Start Num: 7

Candidate Starts for Lolly9_61:

(Start: 7 @44570 has 6 MA's), (Start: 8 @44573 has 5 MA's), (Start: 11 @44588 has 5 MA's), (20, 44672), (25, 44741), (26, 44750), (27, 44816), (28, 44819), (32, 44840), (40, 44921), (41, 44936), (42, 44942), (43, 44954), (46, 45026), (51, 45077), (56, 45149), (59, 45170), (66, 45284),

Gene: Lumos_63 Start: 44760, Stop: 45527, Start Num: 11

Candidate Starts for Lumos_63:

(Start: 7 @44742 has 6 MA's), (Start: 8 @44745 has 5 MA's), (Start: 11 @44760 has 5 MA's), (20, 44844), (25, 44913), (26, 44922), (27, 44988), (28, 44991), (40, 45093), (41, 45108), (42, 45114), (43, 45126), (46, 45198), (51, 45249), (56, 45321), (59, 45339), (66, 45453),

Gene: MAckerman_60 Start: 42612, Stop: 43373, Start Num: 12

Candidate Starts for MAckerman_60:

(Start: 12 @42612 has 53 MA's), (25, 42759), (26, 42768), (27, 42834), (28, 42837), (31, 42855), (33, 42873), (36, 42888), (40, 42939), (42, 42960), (44, 43008), (46, 43044), (51, 43095), (59, 43185), (60,

43230), (61, 43236), (62, 43254), (71, 43359), (72, 43362),

Gene: MISSy_70 Start: 45440, Stop: 46162, Start Num: 19

Candidate Starts for MISSy_70:

(1, 45074), (2, 45122), (3, 45242), (4, 45260), (10, 45359), (Start: 19 @45440 has 122 MA's), (25, 45524), (26, 45533), (28, 45602), (29, 45608), (30, 45611), (40, 45719), (42, 45740), (46, 45824), (47, 45842), (49, 45863), (63, 46043), (64, 46046), (69, 46130), (72, 46145),

Gene: MPhalcon_70 Start: 45433, Stop: 46155, Start Num: 19

Candidate Starts for MPhalcon_70:

(1, 45067), (2, 45115), (3, 45235), (4, 45253), (10, 45352), (Start: 19 @45433 has 122 MA's), (25, 45517), (26, 45526), (28, 45595), (29, 45601), (30, 45604), (40, 45712), (42, 45733), (46, 45817), (47, 45835), (49, 45856), (63, 46036), (64, 46039), (69, 46123), (72, 46138),

Gene: MadamMonkfish_69 Start: 44658, Stop: 45380, Start Num: 19

Candidate Starts for MadamMonkfish_69:

(Start: 18 @44652 has 1 MA's), (Start: 19 @44658 has 122 MA's), (25, 44742), (26, 44751), (28, 44820), (29, 44826), (30, 44829), (40, 44937), (42, 44958), (46, 45042), (47, 45060), (49, 45081), (63, 45261), (64, 45264), (69, 45348), (72, 45363),

Gene: Manda_69 Start: 45939, Stop: 46661, Start Num: 19

Candidate Starts for Manda_69:

(Start: 18 @45933 has 1 MA's), (Start: 19 @45939 has 122 MA's), (25, 46023), (26, 46032), (28, 46101), (29, 46107), (30, 46110), (40, 46218), (42, 46239), (46, 46323), (47, 46341), (49, 46362), (63, 46542), (64, 46545), (69, 46629), (72, 46644),

Gene: Marshmallow_67 Start: 46207, Stop: 46929, Start Num: 19

Candidate Starts for Marshmallow_67:

(Start: 18 @46201 has 1 MA's), (Start: 19 @46207 has 122 MA's), (25, 46291), (26, 46300), (28, 46369), (29, 46375), (30, 46378), (40, 46486), (42, 46507), (46, 46591), (47, 46609), (49, 46630), (63, 46810), (64, 46813), (69, 46897), (72, 46912),

Gene: Maxxinista_71 Start: 45309, Stop: 46031, Start Num: 19

Candidate Starts for Maxxinista_71:

(Start: 18 @45303 has 1 MA's), (Start: 19 @45309 has 122 MA's), (25, 45393), (26, 45402), (28, 45471), (29, 45477), (30, 45480), (40, 45588), (42, 45609), (46, 45693), (47, 45711), (49, 45732), (53, 45780), (63, 45912), (64, 45915), (69, 45999), (72, 46014),

Gene: Miley16_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for Miley16_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: Mindy_68 Start: 44522, Stop: 45244, Start Num: 19

Candidate Starts for Mindy_68:

(Start: 18 @44516 has 1 MA's), (Start: 19 @44522 has 122 MA's), (25, 44606), (26, 44615), (28, 44684), (29, 44690), (30, 44693), (40, 44801), (42, 44822), (46, 44906), (47, 44924), (49, 44945), (63, 45125), (64, 45128), (69, 45212), (72, 45227),

Gene: MiniLon_65 Start: 44571, Stop: 45359, Start Num: 7

Candidate Starts for MiniLon_65:

(Start: 7 @44571 has 6 MA's), (Start: 8 @44574 has 5 MA's), (Start: 11 @44589 has 5 MA's), (20, 44673), (25, 44742), (26, 44751), (27, 44817), (28, 44820), (32, 44841), (40, 44922), (41, 44937), (42,

44943), (43, 44955), (46, 45027), (51, 45078), (56, 45150), (59, 45171), (66, 45285),

Gene: MiniMac_65 Start: 44569, Stop: 45357, Start Num: 7

Candidate Starts for MiniMac_65:

(Start: 7 @44569 has 6 MA's), (Start: 8 @44572 has 5 MA's), (Start: 11 @44587 has 5 MA's), (20, 44671), (25, 44740), (26, 44749), (27, 44815), (28, 44818), (32, 44839), (40, 44920), (41, 44935), (42, 44941), (43, 44953), (46, 45025), (51, 45076), (56, 45148), (59, 45169), (66, 45283),

Gene: Miniwave_64 Start: 44975, Stop: 45697, Start Num: 19

Candidate Starts for Miniwave_64:

(Start: 18 @44969 has 1 MA's), (Start: 19 @44975 has 122 MA's), (25, 45059), (26, 45068), (28, 45137), (29, 45143), (30, 45146), (40, 45254), (42, 45275), (46, 45359), (47, 45377), (49, 45398), (63, 45578), (64, 45581), (69, 45665), (72, 45680),

Gene: Misfit_70 Start: 46452, Stop: 47174, Start Num: 19

Candidate Starts for Misfit_70:

(2, 46134), (3, 46254), (4, 46272), (10, 46371), (Start: 19 @46452 has 122 MA's), (25, 46536), (26, 46545), (28, 46614), (29, 46620), (30, 46623), (40, 46731), (42, 46752), (46, 46836), (47, 46854), (49, 46875), (63, 47055), (64, 47058), (69, 47142), (72, 47157),

Gene: MkaliMitinis3_64 Start: 44796, Stop: 45551, Start Num: 12

Candidate Starts for MkaliMitinis3_64:

(Start: 12 @44796 has 53 MA's), (25, 44937), (26, 44946), (28, 45015), (35, 45060), (37, 45066), (40, 45117), (42, 45138), (43, 45150), (46, 45222), (51, 45273), (56, 45345), (62, 45432),

Gene: Moldemort_72 Start: 45531, Stop: 46253, Start Num: 19

Candidate Starts for Moldemort_72:

(Start: 18 @45525 has 1 MA's), (Start: 19 @45531 has 122 MA's), (25, 45615), (26, 45624), (28, 45693), (29, 45699), (30, 45702), (40, 45810), (42, 45831), (46, 45915), (47, 45933), (49, 45954), (63, 46134), (64, 46137), (69, 46221), (72, 46236),

Gene: Moostard_61 Start: 44751, Stop: 45533, Start Num: 8

Candidate Starts for Moostard_61:

(Start: 7 @44748 has 6 MA's), (Start: 8 @44751 has 5 MA's), (Start: 11 @44766 has 5 MA's), (20, 44850), (25, 44919), (26, 44928), (27, 44994), (28, 44997), (40, 45099), (41, 45114), (42, 45120), (43, 45132), (46, 45204), (51, 45255), (56, 45327), (59, 45345), (66, 45459),

Gene: Mosby_65 Start: 44735, Stop: 45457, Start Num: 19

Candidate Starts for Mosby_65:

(2, 44417), (3, 44537), (4, 44555), (10, 44654), (Start: 19 @44735 has 122 MA's), (25, 44819), (26, 44828), (28, 44897), (29, 44903), (30, 44906), (40, 45014), (42, 45035), (46, 45119), (47, 45137), (49, 45158), (63, 45338), (64, 45341), (69, 45425), (72, 45440),

Gene: MsGreen_62 Start: 44748, Stop: 45530, Start Num: 8

Candidate Starts for MsGreen_62:

(Start: 7 @44745 has 6 MA's), (Start: 8 @44748 has 5 MA's), (Start: 11 @44763 has 5 MA's), (20, 44847), (25, 44916), (26, 44925), (27, 44991), (28, 44994), (40, 45096), (41, 45111), (42, 45117), (43, 45129), (46, 45201), (51, 45252), (56, 45324), (59, 45342), (66, 45456),

Gene: Murica_72 Start: 46384, Stop: 47106, Start Num: 19

Candidate Starts for Murica_72:

(Start: 18 @46378 has 1 MA's), (Start: 19 @46384 has 122 MA's), (25, 46468), (26, 46477), (28, 46546), (29, 46552), (30, 46555), (40, 46663), (42, 46684), (46, 46768), (47, 46786), (49, 46807), (63,

46987), (64, 46990), (69, 47074), (72, 47089),

Gene: Murphy_69 Start: 45821, Stop: 46543, Start Num: 19

Candidate Starts for Murphy_69:

(Start: 18 @45815 has 1 MA's), (Start: 19 @45821 has 122 MA's), (25, 45905), (26, 45914), (28, 45983), (29, 45989), (30, 45992), (40, 46100), (42, 46121), (46, 46205), (47, 46223), (49, 46244), (53, 46292), (63, 46424), (64, 46427), (69, 46511), (72, 46526),

Gene: Myrale_69 Start: 46072, Stop: 46794, Start Num: 19

Candidate Starts for Myrale_69:

(Start: 18 @46066 has 1 MA's), (Start: 19 @46072 has 122 MA's), (25, 46156), (26, 46165), (28, 46234), (29, 46240), (30, 46243), (40, 46351), (42, 46372), (46, 46456), (47, 46474), (49, 46495), (63, 46675), (64, 46678), (69, 46762), (72, 46777),

Gene: Nala_71 Start: 45945, Stop: 46667, Start Num: 19

Candidate Starts for Nala_71:

(2, 45627), (3, 45747), (4, 45765), (10, 45864), (Start: 19 @45945 has 122 MA's), (25, 46029), (26, 46038), (28, 46107), (29, 46113), (30, 46116), (40, 46224), (42, 46245), (46, 46329), (47, 46347), (49, 46368), (63, 46548), (64, 46551), (69, 46635), (72, 46650),

Gene: NelitzaMV_67 Start: 45021, Stop: 45743, Start Num: 19

Candidate Starts for NelitzaMV_67:

(Start: 18 @45015 has 1 MA's), (Start: 19 @45021 has 122 MA's), (25, 45105), (26, 45114), (28, 45183), (29, 45189), (30, 45192), (40, 45300), (42, 45321), (46, 45405), (47, 45423), (49, 45444), (63, 45624), (64, 45627), (69, 45711), (72, 45726),

Gene: Netyap_64 Start: 44725, Stop: 45480, Start Num: 12

Candidate Starts for Netyap_64:

(Start: 12 @44725 has 53 MA's), (25, 44866), (26, 44875), (28, 44944), (35, 44989), (37, 44995), (40, 45046), (42, 45067), (43, 45079), (46, 45151), (51, 45202), (56, 45274), (62, 45361),

Gene: Nicholas_61 Start: 44770, Stop: 45537, Start Num: 11

Candidate Starts for Nicholas_61:

(Start: 7 @44752 has 6 MA's), (Start: 8 @44755 has 5 MA's), (Start: 11 @44770 has 5 MA's), (20, 44854), (25, 44923), (26, 44932), (27, 44998), (28, 45001), (40, 45103), (41, 45118), (42, 45124), (43, 45136), (46, 45208), (51, 45259), (56, 45331), (59, 45349), (66, 45463),

Gene: Nicholasp3_63 Start: 44760, Stop: 45515, Start Num: 12

Candidate Starts for Nicholasp3_63:

(Start: 12 @44760 has 53 MA's), (25, 44901), (26, 44910), (28, 44979), (35, 45024), (37, 45030), (40, 45081), (42, 45102), (43, 45114), (46, 45186), (51, 45237), (56, 45309), (62, 45396),

Gene: Nimrod_70 Start: 46642, Stop: 47364, Start Num: 19

Candidate Starts for Nimrod_70:

(2, 46324), (3, 46444), (4, 46462), (10, 46561), (Start: 19 @46642 has 122 MA's), (25, 46726), (26, 46735), (28, 46804), (29, 46810), (30, 46813), (40, 46921), (42, 46942), (46, 47026), (47, 47044), (49, 47065), (63, 47245), (64, 47248), (69, 47332), (72, 47347),

Gene: NoSleep_70 Start: 45279, Stop: 46001, Start Num: 19

Candidate Starts for NoSleep_70:

(Start: 18 @45273 has 1 MA's), (Start: 19 @45279 has 122 MA's), (25, 45363), (26, 45372), (28, 45441), (29, 45447), (30, 45450), (40, 45558), (42, 45579), (46, 45663), (47, 45681), (49, 45702), (63, 45882), (64, 45885), (69, 45969), (72, 45984),

Gene: OhShagHennessy_59 Start: 42063, Stop: 42824, Start Num: 12

Candidate Starts for OhShagHennessy_59:

(Start: 12 @42063 has 53 MA's), (25, 42210), (26, 42219), (27, 42285), (28, 42288), (31, 42306), (33, 42324), (36, 42339), (40, 42390), (42, 42411), (44, 42459), (46, 42495), (51, 42546), (59, 42636), (60, 42681), (61, 42687), (62, 42705), (71, 42810), (72, 42813),

Gene: OrionPax_68 Start: 45027, Stop: 45749, Start Num: 19

Candidate Starts for OrionPax_68:

(Start: 18 @45021 has 1 MA's), (Start: 19 @45027 has 122 MA's), (25, 45111), (26, 45120), (28, 45189), (29, 45195), (30, 45198), (40, 45306), (42, 45327), (46, 45411), (47, 45429), (49, 45450), (53, 45498), (63, 45630), (64, 45633), (69, 45717), (72, 45732),

Gene: PYPDinur_59 Start: 43445, Stop: 44209, Start Num: 12

Candidate Starts for PYPDinur_59:

(Start: 12 @43445 has 53 MA's), (17, 43478), (25, 43586), (26, 43595), (28, 43664), (33, 43700), (39, 43745), (40, 43766), (42, 43787), (46, 43871), (51, 43922), (54, 43973), (57, 44006), (62, 44090),

Gene: Palpatine_71 Start: 46411, Stop: 47133, Start Num: 19

Candidate Starts for Palpatine_71:

(Start: 18 @46405 has 1 MA's), (Start: 19 @46411 has 122 MA's), (25, 46495), (26, 46504), (28, 46573), (29, 46579), (30, 46582), (40, 46690), (42, 46711), (46, 46795), (47, 46813), (49, 46834), (53, 46882), (63, 47014), (64, 47017), (69, 47101), (72, 47116),

Gene: Paperbeatsrock_68 Start: 45653, Stop: 46375, Start Num: 19

Candidate Starts for Paperbeatsrock_68:

(Start: 18 @45647 has 1 MA's), (Start: 19 @45653 has 122 MA's), (25, 45737), (26, 45746), (28, 45815), (29, 45821), (30, 45824), (40, 45932), (42, 45953), (46, 46037), (47, 46055), (49, 46076), (63, 46256), (64, 46259), (69, 46343), (72, 46358),

Gene: Pat3_67 Start: 44179, Stop: 44901, Start Num: 19

Candidate Starts for Pat3_67:

(Start: 19 @44179 has 122 MA's), (25, 44263), (26, 44272), (28, 44341), (29, 44347), (30, 44350), (40, 44458), (42, 44479), (46, 44563), (47, 44581), (49, 44602), (63, 44782), (64, 44785), (69, 44869), (72, 44884),

Gene: Petra64142_73 Start: 46878, Stop: 47600, Start Num: 19

Candidate Starts for Petra64142_73:

(2, 46560), (16, 46836), (Start: 19 @46878 has 122 MA's), (25, 46962), (26, 46971), (28, 47040), (29, 47046), (30, 47049), (40, 47157), (42, 47178), (46, 47262), (47, 47280), (49, 47301), (63, 47481), (64, 47484), (69, 47568), (72, 47583),

Gene: Phaja_67 Start: 45479, Stop: 46201, Start Num: 19

Candidate Starts for Phaja_67:

(Start: 18 @45473 has 1 MA's), (Start: 19 @45479 has 122 MA's), (25, 45563), (26, 45572), (28, 45641), (29, 45647), (30, 45650), (40, 45758), (42, 45779), (46, 45863), (47, 45881), (49, 45902), (63, 46082), (64, 46085), (69, 46169), (72, 46184),

Gene: Pharsalus_66 Start: 45453, Stop: 46175, Start Num: 19

Candidate Starts for Pharsalus_66:

(Start: 18 @45447 has 1 MA's), (Start: 19 @45453 has 122 MA's), (25, 45537), (26, 45546), (28, 45615), (29, 45621), (30, 45624), (40, 45732), (42, 45753), (46, 45837), (47, 45855), (49, 45876), (63, 46056), (64, 46059), (69, 46143), (72, 46158),

Gene: PhatBacter_73 Start: 46428, Stop: 47150, Start Num: 19

Candidate Starts for PhatBacter_73:

(Start: 18 @46422 has 1 MA's), (Start: 19 @46428 has 122 MA's), (25, 46512), (26, 46521), (28, 46590), (29, 46596), (30, 46599), (40, 46707), (42, 46728), (46, 46812), (47, 46830), (49, 46851), (53, 46899), (63, 47031), (64, 47034), (69, 47118), (72, 47133),

Gene: Phaux_71 Start: 46423, Stop: 47145, Start Num: 19

Candidate Starts for Phaux_71:

(Start: 18 @46417 has 1 MA's), (Start: 19 @46423 has 122 MA's), (25, 46507), (26, 46516), (28, 46585), (29, 46591), (30, 46594), (40, 46702), (42, 46723), (46, 46807), (47, 46825), (49, 46846), (53, 46894), (63, 47026), (64, 47029), (69, 47113), (72, 47128),

Gene: Phrux_66 Start: 45019, Stop: 45741, Start Num: 19

Candidate Starts for Phrux_66:

(Start: 18 @45013 has 1 MA's), (Start: 19 @45019 has 122 MA's), (25, 45103), (26, 45112), (28, 45181), (29, 45187), (30, 45190), (40, 45298), (42, 45319), (46, 45403), (47, 45421), (49, 45442), (53, 45490), (63, 45622), (64, 45625), (69, 45709), (72, 45724),

Gene: Policronamos_73 Start: 46423, Stop: 47145, Start Num: 19

Candidate Starts for Policronamos_73:

(Start: 18 @46417 has 1 MA's), (Start: 19 @46423 has 122 MA's), (25, 46507), (26, 46516), (28, 46585), (29, 46591), (30, 46594), (40, 46702), (42, 46723), (46, 46807), (47, 46825), (49, 46846), (53, 46894), (63, 47026), (64, 47029), (69, 47113), (72, 47128),

Gene: Porky_68 Start: 44849, Stop: 45571, Start Num: 19

Candidate Starts for Porky_68:

(Start: 18 @44843 has 1 MA's), (Start: 19 @44849 has 122 MA's), (25, 44933), (26, 44942), (28, 45011), (29, 45017), (30, 45020), (40, 45128), (42, 45149), (46, 45233), (47, 45251), (49, 45272), (63, 45452), (64, 45455), (69, 45539), (72, 45554),

Gene: Pumpkin_72 Start: 46077, Stop: 46799, Start Num: 19

Candidate Starts for Pumpkin_72:

(Start: 18 @46071 has 1 MA's), (Start: 19 @46077 has 122 MA's), (25, 46161), (26, 46170), (28, 46239), (29, 46245), (30, 46248), (40, 46356), (42, 46377), (46, 46461), (47, 46479), (49, 46500), (53, 46548), (63, 46680), (64, 46683), (69, 46767), (72, 46782),

Gene: Quallification_70 Start: 46061, Stop: 46783, Start Num: 19

Candidate Starts for Quallification_70:

(Start: 18 @46055 has 1 MA's), (Start: 19 @46061 has 122 MA's), (25, 46145), (26, 46154), (28, 46223), (29, 46229), (30, 46232), (40, 46340), (42, 46361), (46, 46445), (47, 46463), (49, 46484), (63, 46664), (64, 46667), (69, 46751), (72, 46766),

Gene: Quby_61 Start: 43343, Stop: 44107, Start Num: 12

Candidate Starts for Quby_61:

(Start: 12 @43343 has 53 MA's), (17, 43376), (25, 43484), (26, 43493), (28, 43562), (33, 43598), (39, 43643), (40, 43664), (42, 43685), (46, 43769), (48, 43793), (51, 43820), (57, 43904), (62, 43988),

Gene: Rakim_70 Start: 45530, Stop: 46252, Start Num: 19

Candidate Starts for Rakim_70:

(Start: 18 @45524 has 1 MA's), (Start: 19 @45530 has 122 MA's), (25, 45614), (26, 45623), (28, 45692), (29, 45698), (30, 45701), (40, 45809), (42, 45830), (46, 45914), (47, 45932), (49, 45953), (63, 46133), (64, 46136), (69, 46220), (72, 46235),

Gene: Rimmer_70 Start: 45772, Stop: 46494, Start Num: 19

Candidate Starts for Rimmer_70:

(2, 45454), (16, 45730), (Start: 19 @45772 has 122 MA's), (25, 45856), (26, 45865), (28, 45934), (29, 45940), (30, 45943), (40, 46051), (42, 46072), (46, 46156), (47, 46174), (49, 46195), (63, 46375), (64, 46378), (69, 46462), (72, 46477),

Gene: RiverMonster_69 Start: 45591, Stop: 46319, Start Num: 18

Candidate Starts for RiverMonster_69:

(Start: 18 @45591 has 1 MA's), (Start: 19 @45597 has 122 MA's), (25, 45681), (26, 45690), (28, 45759), (29, 45765), (30, 45768), (40, 45876), (42, 45897), (46, 45981), (47, 45999), (49, 46020), (53, 46068), (63, 46200), (64, 46203), (69, 46287), (72, 46302),

Gene: Rose5_61 Start: 43510, Stop: 44271, Start Num: 12

Candidate Starts for Rose5_61:

(Start: 12 @43510 has 53 MA's), (25, 43657), (26, 43666), (27, 43732), (28, 43735), (31, 43753), (33, 43771), (36, 43786), (40, 43837), (42, 43858), (44, 43906), (46, 43942), (51, 43993), (59, 44083), (65, 44188), (71, 44257), (72, 44260), (73, 44266),

Gene: Rumpelstiltskin_62 Start: 44153, Stop: 44908, Start Num: 12

Candidate Starts for Rumpelstiltskin_62:

(Start: 12 @44153 has 53 MA's), (25, 44294), (26, 44303), (28, 44372), (35, 44417), (37, 44423), (40, 44474), (42, 44495), (43, 44507), (46, 44579), (51, 44630), (56, 44702), (62, 44789),

Gene: Saints25_68 Start: 45007, Stop: 45729, Start Num: 19

Candidate Starts for Saints25_68:

(Start: 19 @45007 has 122 MA's), (25, 45091), (26, 45100), (28, 45169), (29, 45175), (30, 45178), (40, 45286), (42, 45307), (46, 45391), (47, 45409), (49, 45430), (63, 45610), (64, 45613), (69, 45697), (72, 45712),

Gene: Samty_62 Start: 44756, Stop: 45538, Start Num: 8

Candidate Starts for Samty_62:

(Start: 7 @44753 has 6 MA's), (Start: 8 @44756 has 5 MA's), (Start: 11 @44771 has 5 MA's), (20, 44855), (25, 44924), (26, 44933), (27, 44999), (28, 45002), (40, 45104), (41, 45119), (42, 45125), (43, 45137), (46, 45209), (51, 45260), (56, 45332), (59, 45350), (66, 45464),

Gene: Sarshaun_63 Start: 44820, Stop: 45575, Start Num: 12

Candidate Starts for Sarshaun_63:

(Start: 12 @44820 has 53 MA's), (25, 44961), (26, 44970), (28, 45039), (35, 45084), (37, 45090), (40, 45141), (42, 45162), (43, 45174), (46, 45246), (51, 45297), (56, 45369), (62, 45456),

Gene: Sassay_64 Start: 43697, Stop: 44419, Start Num: 19

Candidate Starts for Sassay_64:

(2, 43379), (16, 43655), (Start: 19 @43697 has 122 MA's), (25, 43781), (26, 43790), (28, 43859), (29, 43865), (30, 43868), (40, 43976), (42, 43997), (46, 44081), (47, 44099), (49, 44120), (63, 44300), (64, 44303), (69, 44387), (72, 44402),

Gene: ShamWow_69 Start: 45916, Stop: 46638, Start Num: 19

Candidate Starts for ShamWow_69:

(Start: 18 @45910 has 1 MA's), (Start: 19 @45916 has 122 MA's), (25, 46000), (26, 46009), (28, 46078), (29, 46084), (30, 46087), (40, 46195), (42, 46216), (46, 46300), (47, 46318), (49, 46339), (63, 46519), (64, 46522), (69, 46606), (72, 46621),

Gene: Sheng711_61 Start: 43422, Stop: 44186, Start Num: 12

Candidate Starts for Sheng711_61:

(Start: 12 @43422 has 53 MA's), (17, 43455), (25, 43563), (26, 43572), (28, 43641), (33, 43677), (39, 43722), (40, 43743), (42, 43764), (46, 43848), (51, 43899), (54, 43950), (57, 43983), (62, 44067),

Gene: ShereKhan_68 Start: 45985, Stop: 46707, Start Num: 19

Candidate Starts for ShereKhan_68:

(Start: 18 @45979 has 1 MA's), (Start: 19 @45985 has 122 MA's), (25, 46069), (26, 46078), (28, 46147), (29, 46153), (30, 46156), (40, 46264), (42, 46285), (46, 46369), (47, 46387), (49, 46408), (63, 46588), (64, 46591), (69, 46675), (72, 46690),

Gene: Silverleaf_61 Start: 43245, Stop: 44006, Start Num: 12

Candidate Starts for Silverleaf_61:

(Start: 12 @43245 has 53 MA's), (25, 43392), (26, 43401), (27, 43467), (28, 43470), (31, 43488), (33, 43506), (36, 43521), (40, 43572), (42, 43593), (44, 43641), (46, 43677), (51, 43728), (59, 43818), (60, 43863), (61, 43869), (62, 43887), (71, 43992), (72, 43995),

Gene: Simpliphy_68 Start: 44997, Stop: 45719, Start Num: 19

Candidate Starts for Simpliphy_68:

(Start: 18 @44991 has 1 MA's), (Start: 19 @44997 has 122 MA's), (25, 45081), (26, 45090), (28, 45159), (29, 45165), (30, 45168), (40, 45276), (42, 45297), (46, 45381), (47, 45399), (49, 45420), (63, 45600), (64, 45603), (69, 45687), (72, 45702),

Gene: SirDuracell_68 Start: 44271, Stop: 44993, Start Num: 19

Candidate Starts for SirDuracell_68:

(2, 43953), (16, 44229), (Start: 19 @44271 has 122 MA's), (25, 44355), (26, 44364), (28, 44433), (29, 44439), (30, 44442), (40, 44550), (42, 44571), (46, 44655), (47, 44673), (49, 44694), (63, 44874), (64, 44877), (69, 44961), (72, 44976),

Gene: Snenia_61 Start: 44746, Stop: 45531, Start Num: 7

Candidate Starts for Snenia_61:

(Start: 7 @44746 has 6 MA's), (Start: 8 @44749 has 5 MA's), (Start: 11 @44764 has 5 MA's), (20, 44848), (25, 44917), (26, 44926), (27, 44992), (28, 44995), (40, 45097), (41, 45112), (42, 45118), (43, 45130), (46, 45202), (51, 45253), (56, 45325), (59, 45343), (66, 45457),

Gene: Soap141_63 Start: 44820, Stop: 45575, Start Num: 12

Candidate Starts for Soap141_63:

(Start: 12 @44820 has 53 MA's), (25, 44961), (26, 44970), (28, 45039), (35, 45084), (37, 45090), (40, 45141), (42, 45162), (43, 45174), (46, 45246), (51, 45297), (56, 45369), (62, 45456),

Gene: SophKB_66 Start: 44672, Stop: 45394, Start Num: 19

Candidate Starts for SophKB_66:

(Start: 18 @44666 has 1 MA's), (Start: 19 @44672 has 122 MA's), (25, 44756), (26, 44765), (28, 44834), (29, 44840), (30, 44843), (40, 44951), (42, 44972), (46, 45056), (47, 45074), (49, 45095), (63, 45275), (64, 45278), (69, 45362), (72, 45377),

Gene: Sotrice96_70 Start: 45675, Stop: 46397, Start Num: 19

Candidate Starts for Sotrice96_70:

(Start: 18 @45669 has 1 MA's), (Start: 19 @45675 has 122 MA's), (25, 45759), (26, 45768), (28, 45837), (29, 45843), (30, 45846), (40, 45954), (42, 45975), (46, 46059), (47, 46077), (49, 46098), (63, 46278), (64, 46281), (69, 46365), (72, 46380),

Gene: Stank_72 Start: 45930, Stop: 46652, Start Num: 19

Candidate Starts for Stank_72:

(Start: 18 @45924 has 1 MA's), (Start: 19 @45930 has 122 MA's), (25, 46014), (26, 46023), (28, 46092), (29, 46098), (30, 46101), (40, 46209), (42, 46230), (46, 46314), (47, 46332), (49, 46353), (63, 46533), (64, 46536), (69, 46620), (72, 46635),

Gene: Stark_70 Start: 45480, Stop: 46202, Start Num: 19

Candidate Starts for Stark_70:

(Start: 18 @45474 has 1 MA's), (Start: 19 @45480 has 122 MA's), (25, 45564), (26, 45573), (28, 45642), (29, 45648), (30, 45651), (40, 45759), (42, 45780), (46, 45864), (47, 45882), (49, 45903), (53, 45951), (63, 46083), (64, 46086), (69, 46170), (72, 46185),

Gene: StellaBean_67 Start: 45240, Stop: 45962, Start Num: 19

Candidate Starts for StellaBean_67:

(Start: 18 @45234 has 1 MA's), (Start: 19 @45240 has 122 MA's), (25, 45324), (26, 45333), (28, 45402), (29, 45408), (30, 45411), (40, 45519), (42, 45540), (46, 45624), (47, 45642), (49, 45663), (63, 45843), (64, 45846), (69, 45930), (72, 45945),

Gene: StolenFromERC_72 Start: 45712, Stop: 46434, Start Num: 19

Candidate Starts for StolenFromERC_72:

(Start: 18 @45706 has 1 MA's), (Start: 19 @45712 has 122 MA's), (25, 45796), (26, 45805), (28, 45874), (29, 45880), (30, 45883), (40, 45991), (42, 46012), (46, 46096), (47, 46114), (49, 46135), (63, 46315), (64, 46318), (69, 46402), (72, 46417),

Gene: TBrady12_72 Start: 45414, Stop: 46136, Start Num: 19

Candidate Starts for TBrady12_72:

(Start: 18 @45408 has 1 MA's), (Start: 19 @45414 has 122 MA's), (25, 45498), (26, 45507), (28, 45576), (29, 45582), (30, 45585), (40, 45693), (42, 45714), (46, 45798), (47, 45816), (49, 45837), (63, 46017), (64, 46020), (69, 46104), (72, 46119),

Gene: Tarkin_68 Start: 45662, Stop: 46384, Start Num: 19

Candidate Starts for Tarkin_68:

(Start: 18 @45656 has 1 MA's), (Start: 19 @45662 has 122 MA's), (25, 45746), (26, 45755), (28, 45824), (29, 45830), (30, 45833), (40, 45941), (42, 45962), (46, 46046), (47, 46064), (49, 46085), (63, 46265), (64, 46268), (69, 46352), (72, 46367),

Gene: TeardropMSU_65 Start: 44662, Stop: 45384, Start Num: 19

Candidate Starts for TeardropMSU_65:

(Start: 18 @44656 has 1 MA's), (Start: 19 @44662 has 122 MA's), (25, 44746), (26, 44755), (28, 44824), (29, 44830), (30, 44833), (40, 44941), (42, 44962), (46, 45046), (47, 45064), (49, 45085), (63, 45265), (64, 45268), (69, 45352), (72, 45367),

Gene: Teaspoon_70 Start: 45556, Stop: 46278, Start Num: 19

Candidate Starts for Teaspoon_70:

(Start: 18 @45550 has 1 MA's), (Start: 19 @45556 has 122 MA's), (25, 45640), (26, 45649), (28, 45718), (29, 45724), (30, 45727), (40, 45835), (42, 45856), (46, 45940), (47, 45958), (49, 45979), (63, 46159), (64, 46162), (69, 46246), (72, 46261),

Gene: Terminus_72 Start: 46452, Stop: 47174, Start Num: 19

Candidate Starts for Terminus_72:

(2, 46134), (3, 46254), (4, 46272), (10, 46371), (Start: 19 @46452 has 122 MA's), (25, 46536), (26, 46545), (28, 46614), (29, 46620), (30, 46623), (40, 46731), (42, 46752), (46, 46836), (47, 46854), (49, 46875), (63, 47055), (64, 47058), (69, 47142), (72, 47157),

Gene: Thresher_71 Start: 46539, Stop: 47261, Start Num: 19

Candidate Starts for Thresher_71:

(Start: 18 @46533 has 1 MA's), (Start: 19 @46539 has 122 MA's), (25, 46623), (26, 46632), (28, 46701), (29, 46707), (30, 46710), (40, 46818), (42, 46839), (46, 46923), (47, 46941), (49, 46962), (53, 47010), (63, 47142), (64, 47145), (69, 47229), (72, 47244),

Gene: Tomaszewski_64 Start: 44831, Stop: 45553, Start Num: 19

Candidate Starts for Tomaszewski_64:

(2, 44513), (16, 44789), (Start: 19 @44831 has 122 MA's), (25, 44915), (26, 44924), (28, 44993), (29, 44999), (30, 45002), (40, 45110), (42, 45131), (46, 45215), (47, 45233), (49, 45254), (63, 45434), (64, 45437), (69, 45521), (72, 45536),

Gene: Toto_67 Start: 45916, Stop: 46638, Start Num: 19

Candidate Starts for Toto_67:

(Start: 18 @45910 has 1 MA's), (Start: 19 @45916 has 122 MA's), (25, 46000), (26, 46009), (28, 46078), (29, 46084), (30, 46087), (40, 46195), (42, 46216), (46, 46300), (47, 46318), (49, 46339), (63, 46519), (64, 46522), (69, 46606), (72, 46621),

Gene: Tourach_62 Start: 44809, Stop: 45564, Start Num: 12

Candidate Starts for Tourach_62:

(Start: 12 @44809 has 53 MA's), (15, 44830), (22, 44902), (25, 44950), (26, 44959), (27, 45025), (28, 45028), (31, 45046), (33, 45064), (38, 45085), (40, 45130), (42, 45151), (47, 45253), (48, 45259), (51, 45286), (52, 45289), (62, 45445),

Gene: Traaww1_65 Start: 45097, Stop: 45819, Start Num: 19

Candidate Starts for Traaww1_65:

(Start: 18 @45091 has 1 MA's), (Start: 19 @45097 has 122 MA's), (25, 45181), (26, 45190), (28, 45259), (29, 45265), (30, 45268), (40, 45376), (42, 45397), (46, 45481), (47, 45499), (49, 45520), (63, 45700), (64, 45703), (69, 45787), (72, 45802),

Gene: Tuco_70 Start: 46424, Stop: 47146, Start Num: 19

Candidate Starts for Tuco_70:

(Start: 18 @46418 has 1 MA's), (Start: 19 @46424 has 122 MA's), (25, 46508), (26, 46517), (28, 46586), (29, 46592), (30, 46595), (40, 46703), (42, 46724), (46, 46808), (47, 46826), (49, 46847), (63, 47027), (64, 47030), (69, 47114), (72, 47129),

Gene: Tyson_61 Start: 43512, Stop: 44273, Start Num: 12

Candidate Starts for Tyson_61:

(Start: 12 @43512 has 53 MA's), (25, 43659), (26, 43668), (27, 43734), (28, 43737), (31, 43755), (33, 43773), (36, 43788), (40, 43839), (42, 43860), (44, 43908), (46, 43944), (51, 43995), (59, 44085), (65, 44190), (71, 44259), (72, 44262), (73, 44268),

Gene: UPIE_61 Start: 43033, Stop: 43794, Start Num: 12

Candidate Starts for UPIE_61:

(Start: 12 @43033 has 53 MA's), (25, 43180), (26, 43189), (27, 43255), (28, 43258), (31, 43276), (33, 43294), (36, 43309), (40, 43360), (42, 43381), (44, 43429), (46, 43465), (51, 43516), (59, 43606), (60, 43651), (61, 43657), (62, 43675), (71, 43780), (72, 43783),

Gene: Ukulele_64 Start: 44810, Stop: 45532, Start Num: 19

Candidate Starts for Ukulele_64:

(Start: 18 @44804 has 1 MA's), (Start: 19 @44810 has 122 MA's), (25, 44894), (26, 44903), (28, 44972), (29, 44978), (30, 44981), (40, 45089), (42, 45110), (46, 45194), (47, 45212), (49, 45233), (63, 45413), (64, 45416), (69, 45500), (72, 45515),

Gene: Vetrrix_63 Start: 44764, Stop: 45519, Start Num: 12

Candidate Starts for Vetrrix_63:

(Start: 12 @44764 has 53 MA's), (25, 44905), (26, 44914), (28, 44983), (35, 45028), (37, 45034), (40, 45085), (42, 45106), (43, 45118), (46, 45190), (51, 45241), (56, 45313), (62, 45400),

Gene: Wamburgrxpress_61 Start: 43063, Stop: 43824, Start Num: 12

Candidate Starts for Wamburgrxpress_61:

(Start: 12 @43063 has 53 MA's), (25, 43210), (26, 43219), (27, 43285), (28, 43288), (31, 43306), (33, 43324), (36, 43339), (40, 43390), (42, 43411), (44, 43459), (46, 43495), (51, 43546), (59, 43636), (60, 43681), (61, 43687), (62, 43705), (71, 43810), (72, 43813),

Gene: Whirlwind_62 Start: 44582, Stop: 45352, Start Num: 11

Candidate Starts for Whirlwind_62:

(Start: 11 @44582 has 5 MA's), (14, 44606), (21, 44675), (23, 44693), (25, 44738), (26, 44747), (27, 44813), (28, 44816), (40, 44918), (41, 44933), (42, 44939), (43, 44951), (46, 45023), (51, 45074), (56, 45146), (59, 45164), (66, 45278),

Gene: Wiggin_71 Start: 45498, Stop: 46220, Start Num: 19

Candidate Starts for Wiggin_71:

(Start: 18 @45492 has 1 MA's), (Start: 19 @45498 has 122 MA's), (25, 45582), (26, 45591), (28, 45660), (29, 45666), (30, 45669), (40, 45777), (42, 45798), (46, 45882), (47, 45900), (49, 45921), (63, 46101), (64, 46104), (69, 46188), (72, 46203),

Gene: Wigglewigggle_63 Start: 44784, Stop: 45539, Start Num: 12

Candidate Starts for Wigglewigggle_63:

(Start: 12 @44784 has 53 MA's), (25, 44925), (26, 44934), (28, 45003), (35, 45048), (37, 45054), (40, 45105), (42, 45126), (43, 45138), (46, 45210), (51, 45261), (56, 45333), (62, 45420),

Gene: Wilder_64 Start: 44730, Stop: 45485, Start Num: 12

Candidate Starts for Wilder_64:

(Start: 12 @44730 has 53 MA's), (25, 44871), (26, 44880), (28, 44949), (35, 44994), (37, 45000), (40, 45051), (42, 45072), (43, 45084), (46, 45156), (51, 45207), (56, 45279), (62, 45366),

Gene: Willez_64 Start: 43697, Stop: 44419, Start Num: 19

Candidate Starts for Willez_64:

(2, 43379), (16, 43655), (Start: 19 @43697 has 122 MA's), (25, 43781), (26, 43790), (28, 43859), (29, 43865), (30, 43868), (40, 43976), (42, 43997), (46, 44081), (47, 44099), (49, 44120), (63, 44300), (64, 44303), (69, 44387), (72, 44402),

Gene: Winky_63 Start: 44724, Stop: 45479, Start Num: 12

Candidate Starts for Winky_63:

(Start: 12 @44724 has 53 MA's), (25, 44865), (26, 44874), (28, 44943), (35, 44988), (37, 44994), (40, 45045), (42, 45066), (43, 45078), (46, 45150), (51, 45201), (56, 45273), (62, 45360),

Gene: Wyatt2_62 Start: 43510, Stop: 44271, Start Num: 12

Candidate Starts for Wyatt2_62:

(Start: 12 @43510 has 53 MA's), (25, 43657), (26, 43666), (27, 43732), (28, 43735), (31, 43753), (33, 43771), (36, 43786), (40, 43837), (42, 43858), (44, 43906), (46, 43942), (51, 43993), (59, 44083), (65, 44188), (71, 44257), (72, 44260), (73, 44266),

Gene: Xandras_68 Start: 44909, Stop: 45631, Start Num: 19

Candidate Starts for Xandras_68:

(Start: 18 @44903 has 1 MA's), (Start: 19 @44909 has 122 MA's), (25, 44993), (26, 45002), (28, 45071), (29, 45077), (30, 45080), (40, 45188), (42, 45209), (46, 45293), (47, 45311), (49, 45332), (53, 45380), (63, 45512), (64, 45515), (69, 45599), (72, 45614),

Gene: YassJohnny_66 Start: 44870, Stop: 45592, Start Num: 19

Candidate Starts for YassJohnny_66:

(2, 44552), (16, 44828), (Start: 19 @44870 has 122 MA's), (25, 44954), (26, 44963), (28, 45032), (29, 45038), (30, 45041), (40, 45149), (42, 45170), (46, 45254), (47, 45272), (49, 45293), (63, 45473), (64, 45476), (69, 45560), (72, 45575),

Gene: Youngblood_72 Start: 46379, Stop: 47101, Start Num: 19

Candidate Starts for Youngblood_72:

(Start: 18 @46373 has 1 MA's), (Start: 19 @46379 has 122 MA's), (25, 46463), (26, 46472), (28, 46541), (29, 46547), (30, 46550), (40, 46658), (42, 46679), (46, 46763), (47, 46781), (49, 46802), (63, 46982), (64, 46985), (69, 47069), (72, 47084),

Gene: Zakai_64 Start: 45050, Stop: 45805, Start Num: 12

Candidate Starts for Zakai_64:

(Start: 12 @45050 has 53 MA's), (25, 45191), (26, 45200), (28, 45269), (35, 45314), (37, 45320), (40, 45371), (42, 45392), (43, 45404), (46, 45476), (51, 45527), (56, 45599), (62, 45686),

Gene: Zaria_62 Start: 43175, Stop: 43936, Start Num: 12

Candidate Starts for Zaria_62:

(Start: 12 @43175 has 53 MA's), (25, 43322), (26, 43331), (27, 43397), (28, 43400), (31, 43418), (33, 43436), (36, 43451), (40, 43502), (42, 43523), (44, 43571), (46, 43607), (51, 43658), (59, 43748), (60, 43793), (61, 43799), (62, 43817), (71, 43922), (72, 43925),

Gene: ZhongYanYuan_61 Start: 44619, Stop: 45374, Start Num: 12

Candidate Starts for ZhongYanYuan_61:

(Start: 12 @44619 has 53 MA's), (15, 44640), (22, 44712), (25, 44760), (26, 44769), (27, 44835), (28, 44838), (31, 44856), (33, 44874), (34, 44880), (38, 44895), (40, 44940), (42, 44961), (47, 45063), (48, 45069), (51, 45096), (56, 45168), (62, 45255),

Gene: xkcd_72 Start: 46569, Stop: 47291, Start Num: 19

Candidate Starts for xkcd_72:

(Start: 18 @46563 has 1 MA's), (Start: 19 @46569 has 122 MA's), (25, 46653), (26, 46662), (28, 46731), (29, 46737), (30, 46740), (40, 46848), (42, 46869), (46, 46953), (47, 46971), (49, 46992), (63, 47172), (64, 47175), (69, 47259), (72, 47274),