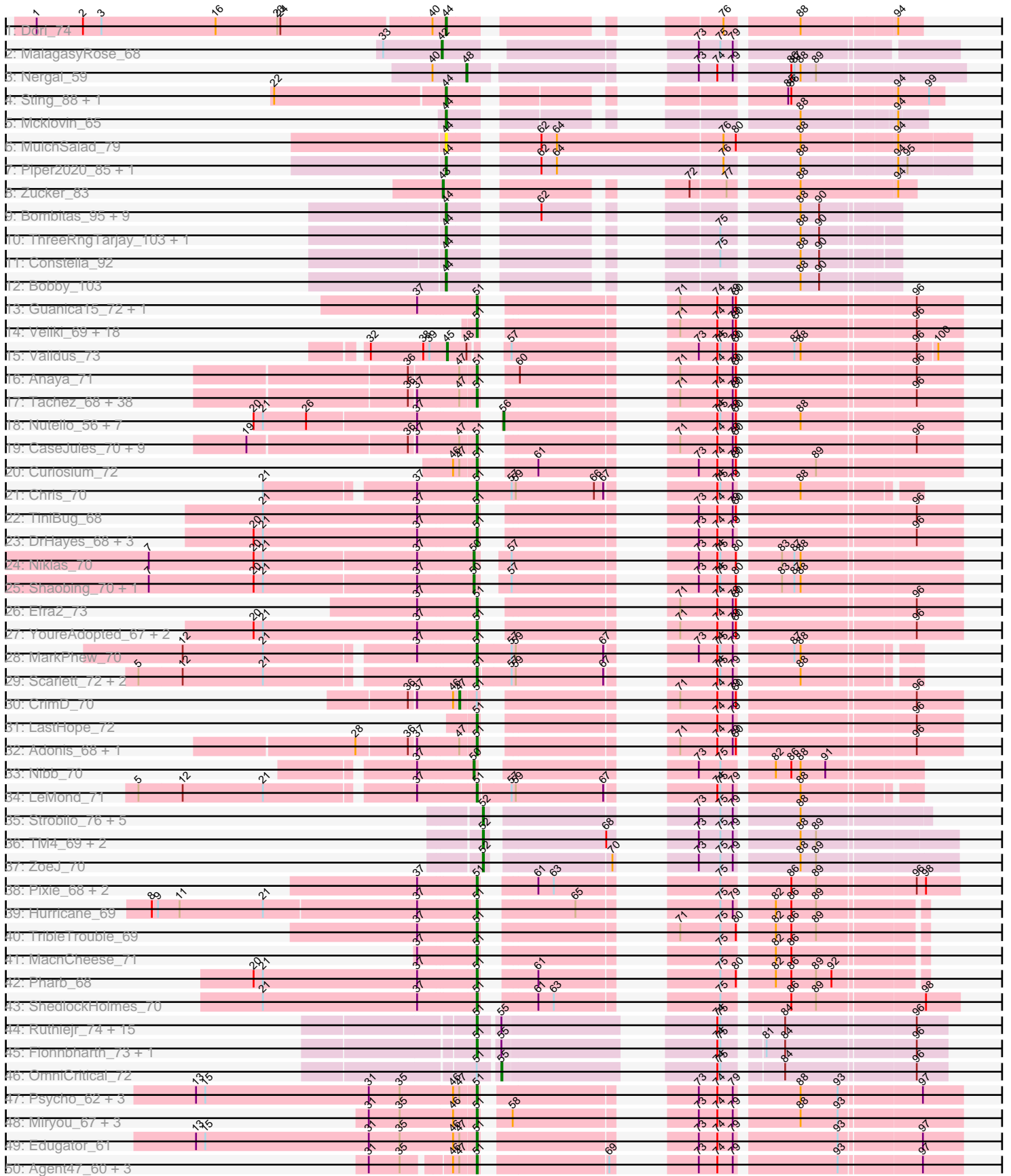
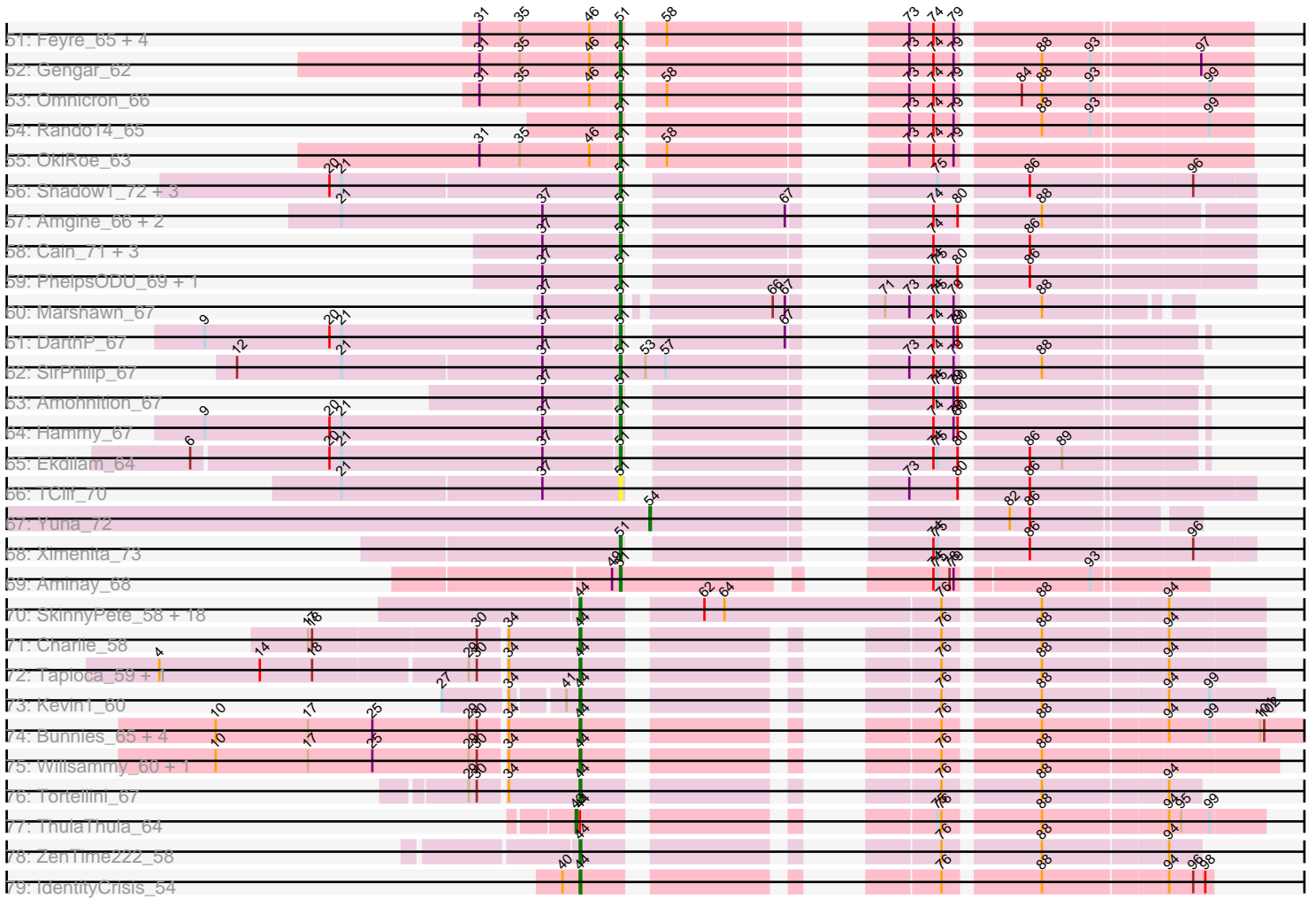


Pham 163328



Pham 163328



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 163328 Report

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

Pham number 163328 has 244 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Dori_74
- Track 2 : MalagasyRose_68
- Track 3 : Nergal_59
- Track 4 : Sting_88, Soos_83
- Track 5 : Mcklovin_65
- Track 6 : MulchSalad_79
- Track 7 : Piper2020_85, Frankie_79
- Track 8 : Zucker_83
- Track 9 : Bombitas_95, Ejimix_100, JuicyJay_103, Halley_108, Beem_108, Minerva_106, Schatzie_101, HokkenD_96, Redno2_98, NihilNomen_108
- Track 10 : ThreeRngTarjay_103, Optimus_100
- Track 11 : Constella_92
- Track 12 : Bobby_103
- Track 13 : Guanica15_72, Yunkel11_72
- Track 14 : Veliki_69, LaterM_68, Apocalypse_70, JAWS_68, Devera_75, Ageofdapage_71, Prithvi_69, Stinson_69, Deby_68, Megsy_70, TaiwanKao_70, BaghaKamala_67, Murucutumbu_69, Dole_73, CheetoDust_67, Illumine_73, LindNT_67, Tiri_68, TreyKay_69
- Track 15 : Validus_73
- Track 16 : Anaya_71
- Track 17 : Tachez_68, BGIlluviae_68, Jarvi_68, Emerson_70, Zabiza_64, Padpat_71, Adephagia_68, Twitch_68, Ramen_69, Pokerus_68, Homura_68, BarrelRoll_69, Rapunzel97_70, TruffulaTree_69, Atiba_69, Beezoo_70, Spock_68, Inky_68, QuincyRose_66, Jeckyll_68, ActinUp_68, Joy99_68, Slimphazie_69, Zavala_71, Ganymede_68, Peel_68, Belladonna_68, Rosmarinus_68, HedwigODU_68, Topper_68, Dalmuri_68, Jayhawk_70, Lunahalos_68, Capricorn_68, Llorens_68, MeaningOfLife_69, AlishaPH_68, Mynx_70, CREW_68
- Track 18 : Nutello_56, LilPharaoh_57, Nikao_59, Binglebops_56, Mdavu_57, Enkosi_58, Amelie_56, SgtBeansprout_57
- Track 19 : CaseJules_70, Blizzard_68, Boiiii_68, Durfee_68, Piatt_68, Hyperbowlee_68, Padfoot_68, Asayake_68, BEEST_68, ShiaSurprise_69
- Track 20 : Curiosium_72
- Track 21 : Chris_70
- Track 22 : TiniBug_68
- Track 23 : DrHayes_68, Urkel_68, Bella96_68, SamuelLPlaqson_68
- Track 24 : Niklas_70
- Track 25 : Shaobing_70, Peanam_70

- Track 26 : Efra2_73
- Track 27 : YoureAdopted_67, Sulley_67, Angelica_67
- Track 28 : MarkPhew_70
- Track 29 : Scarlett_72, Oscar_71, KiSi_72
- Track 30 : CrimD_70
- Track 31 : LastHope_72
- Track 32 : Adonis_68, Geraldini_71
- Track 33 : Nibb_70
- Track 34 : LeMond_71
- Track 35 : Strobilo_76, DismalFunk_71, Milly_71, DismalStressor_71, Marcoliusprime_71, Findley_71
- Track 36 : TM4_69, BoostSeason_71, Mufasa_71
- Track 37 : ZoeJ_70
- Track 38 : Pixie_68, Keshu_71, TBond007_65
- Track 39 : Hurricane_69
- Track 40 : TribbleTrouble_69
- Track 41 : MacnCheese_71
- Track 42 : Pharb_68
- Track 43 : ShedlockHolmes_70
- Track 44 : Ruthiejr_74, Patt_69, JF1_73, Cheetobro_73, Reptar3000_70, Malthus_74, Y10_70, Y2_70, Mitti_73, Juliette_75, Taquito_72, Chancellor_73, MissDaisy_70, Slarp_73, Wintermute_73, SamScheppers_71
- Track 45 : Fionnbharth_73, Eponine_75
- Track 46 : OmniCritical_72
- Track 47 : Psycho_62, Dadosky_64, AlleyCat_64, Larva_63
- Track 48 : Miryou_67, Leston_62, Guillsminger_63, Paola_62
- Track 49 : Edugator_61
- Track 50 : Agent47_60, Kratio_60, Collard_60, InvictusManeo_60
- Track 51 : Feyre_65, Waterfoul_64, SoSeph_63, Heftyboy_63, Thyatira_65
- Track 52 : Gengar_62
- Track 53 : Omnicron_66
- Track 54 : Rando14_65
- Track 55 : OkiRoe_63
- Track 56 : Shadow1_72, Sunflower1121_73, Krueger_72, Syra333_71
- Track 57 : Amgine_66, Fefferhead_65, Ellie_63
- Track 58 : Cain_71, Phrank_71, Bryler_71, Tierra_71
- Track 59 : PhelpsODU_69, Unicorn_69
- Track 60 : Marshawn_67
- Track 61 : DARTH_P_67
- Track 62 : SirPhilip_67
- Track 63 : Amohnition_67
- Track 64 : Hammy_67
- Track 65 : Ekdilam_64
- Track 66 : TClif_70
- Track 67 : Yuna_72
- Track 68 : Ximenita_73
- Track 69 : Aminay_68
- Track 70 : SkinnyPete_58, FirstPlacePfu_63, Pipsqueaks_62, Smurph_61, Fulbright_59, Carcharodon_61, Silvy_62, Magsby_60, Phloss_59, Chewbacca_64, Schnauzer_62, Duplicity_59, Philonius_61, Silvafighter_63, Parmesanjohn_61, Xerxes_61, Melville_66, Aggie_57, Gex_62
- Track 71 : Charlie_58
- Track 72 : Tapioca_59, Andies_55

- Track 73 : Kevin1_60
- Track 74 : Bunnies_65, Glaske_59, CactusJack_60, KilKor_60, Phalm_60
- Track 75 : Willsammy_60, Ksquared_63
- Track 76 : Tortellini_67
- Track 77 : ThulaThula_64
- Track 78 : ZenTime222_58
- Track 79 : IdentityCrisis_54

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

The start number called the most often in the published annotations is 51, it was called in 152 of the 231 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_68, Adephegia_68, Adonis_68, Agent47_60, Ageofdapage_71, AlishaPH_68, AlleyCat_64, Amgine_66, Aminay_68, Amohnition_67, Anaya_71, Angelica_67, Apocalypse_70, Asayake_68, Atiba_69, BEEST_68, BGIlluviae_68, BaghaKamala_67, BarrelRoll_69, Beezoo_70, Bella96_68, Belladonna_68, Blizzard_68, Boiiii_68, Bryler_71, CREW_68, Cain_71, Capricorn_68, CaseJules_70, Chancellor_73, CheetoDust_67, Cheetobro_73, Chris_70, Collard_60, Curiosium_72, Dadosky_64, Dalmuri_68, DarthP_67, Deby_68, Devera_75, Dole_73, DrHayes_68, Durfee_68, Edugator_61, Efra2_73, Ekdilam_64, Ellie_63, Emerson_70, Eponine_75, Fefferhead_65, Feyre_65, Fionnbharth_73, Ganymede_68, Gengar_62, Geraldini_71, Guanica15_72, Guillsminger_63, Hammy_67, HedwigODU_68, Heftyboy_63, Homura_68, Hurricane_69, Hyperbowlee_68, Illumine_73, Inky_68, InvictusManeo_60, JAWS_68, JF1_73, Jarvi_68, Jayhawk_70, Jeckyll_68, Joy99_68, Juliette_75, Keshu_71, KiSi_72, Kratio_60, Krueger_72, Larva_63, LastHope_72, LaterM_68, LeMond_71, Leston_62, LindNT_67, Llorens_68, Lunahalos_68, MacnCheese_71, Malthus_74, MarkPhew_70, Marshawn_67, MeaningOfLife_69, Megsy_70, Miryou_67, MissDaisy_70, Mitti_73, Murucutumbu_69, Mynx_70, OkiRoe_63, Omnicron_66, Oscar_71, Padfoot_68, Padpat_71, Paola_62, Patt_69, Peel_68, Pharb_68, PhelpsODU_69, Phrank_71, Piatt_68, Pixie_68, Pokerus_68, Prithvi_69, Psycho_62, QuincyRose_66, Ramen_69, Rando14_65, Rapunzel97_70, Reptar3000_70, Rosmarinus_68, Ruthiejr_74, SamScheppers_71, SamuelLPlaqson_68, Scarlett_72, Shadow1_72, ShedlockHolmes_70, ShiaSurprise_69, SirPhilip_67, Slarp_73, Slimphazie_69, SoSeph_63, Spock_68, Stinson_69, Sulley_67, Sunflower1121_73, Syra333_71, TBond007_65, TClif_70, Tachez_68, TaiwanKao_70, Taquito_72, Thyatira_65, Tierra_71, TiniBug_68, Tiri_68, Topper_68, TreyKay_69, TripleTrouble_69, TruffulaTree_69, Twitch_68, Unicorn_69, Urkel_68, Veliki_69, Waterfoul_64, Wintermute_73, Ximenita_73, Y10_70, Y2_70, YoureAdopted_67, Yunkel11_72, Zabiza_64, Zavala_71,

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

- CrimD_70, OmniCritical_72,

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

- Aggie_57, Amelie_56, Andies_55, Beem_108, Biglebops_56, Bobby_103, Bombitas_95, BoostSeason_71, Bunnies_65, CactusJack_60, Carcharodon_61, Charlie_58, Chewbacca_64, Constella_92, DismalFunk_71, DismalStressor_71, Dori_74, Duplicity_59, Ejimix_100, Enkosi_58, Findley_71, FirstPlacePfu_63,

Frankie_79, Fulbright_59, Gex_62, Glaske_59, Halley_108, HokkenD_96, IdentityCrisis_54, JuicyJay_103, Kevin1_60, KilKor_60, Ksquared_63, LilPharaoh_57, Magsby_60, MalagasyRose_68, Marcoliusprime_71, Mcklovin_65, Mdavu_57, Melville_66, Milly_71, Minerva_106, Mufasa_71, MulchSalad_79, Nergal_59, Nibb_70, NihilNomen_108, Nikao_59, Niklas_70, Nutello_56, Optimus_100, Parmesanjohn_61, Peanam_70, Phalm_60, Philonius_61, Phloss_59, Piper2020_85, Pipsqueaks_62, Redno2_98, Schatzie_101, Schnauzer_62, SgtBeansprout_57, Shaobing_70, Silvafighter_63, Silvy_62, SkinnyPete_58, Smurph_61, Soos_83, Sting_88, Strobilo_76, TM4_69, Tapioca_59, ThreeRngTarjay_103, ThulaThula_64, Tortellini_67, Validus_73, Willsammy_60, Xerxes_61, Yuna_72, ZenTime222_58, ZoeJ_70, Zucker_83,

Summary by start number:

Start 42:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_68 (AG),

Start 43:

- Found in 2 of 244 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThulaThula_64 (P5), Zucker_83 (FN),

Start 44:

- Found in 55 of 244 (22.5%) of genes in pham
- Manual Annotations of this start: 50 of 231
- Called 98.2% of time when present
- Phage (with cluster) where this start called: Aggie_57 (N), Andies_55 (N), Beem_108 (J), Bobby_103 (J), Bombitas_95 (J), Bunnies_65 (P1), CactusJack_60 (P1), Carcharodon_61 (N), Charlie_58 (N), Chewbacca_64 (N), Constella_92 (J), Dori_74 (AD), Duplicity_59 (N), Ejimix_100 (J), FirstPlacePfu_63 (P1), Frankie_79 (F1), Fulbright_59 (N), Gex_62 (N), Glaske_59 (P1), Halley_108 (J), HokkenD_96 (J), IdentityCrisis_54 (singleton), JuicyJay_103 (J), Kevin1_60 (N), KilKor_60 (P1), Ksquared_63 (P1), Magsby_60 (N), Mcklovin_65 (CZ4), Melville_66 (N), Minerva_106 (J), MulchSalad_79 (F), NihilNomen_108 (J), Optimus_100 (J), Parmesanjohn_61 (N), Phalm_60 (P1), Philonius_61 (N), Phloss_59 (N), Piper2020_85 (F1), Pipsqueaks_62 (N), Redno2_98 (J), Schatzie_101 (J), Schnauzer_62 (N), Silvafighter_63 (N), Silvy_62 (N), SkinnyPete_58 (N), Smurph_61 (N), Soos_83 (CP), Sting_88 (CP), Tapioca_59 (N), ThreeRngTarjay_103 (J), Tortellini_67 (P2), Willsammy_60 (P1), Xerxes_61 (N), ZenTime222_58 (T),

Start 45:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Validus_73 (K1),

Start 47:

- Found in 63 of 244 (25.8%) of genes in pham
- Manual Annotations of this start: 1 of 231

- Called 1.6% of time when present
- Phage (with cluster) where this start called: CrimD_70 (K1),

Start 48:

- Found in 2 of 244 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Nergal_59 (AG),

Start 50:

- Found in 4 of 244 (1.6%) of genes in pham
- Manual Annotations of this start: 4 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nibb_70 (K1), Niklas_70 (K1), Peanam_70 (K1), Shaobing_70 (K1),

Start 51:

- Found in 162 of 244 (66.4%) of genes in pham
- Manual Annotations of this start: 152 of 231
- Called 98.8% of time when present
- Phage (with cluster) where this start called: ActinUp_68 (K1), Adephagia_68 (K1), Adonis_68 (K1), Agent47_60 (K5), Ageofdapage_71 (K1), AlishaPH_68 (K1), AlleyCat_64 (K5), Amgine_66 (K6), Aminay_68 (K7), Amohnition_67 (K6), Anaya_71 (K1), Angelica_67 (K1), Apocalypse_70 (K1), Asayake_68 (K1), Atiba_69 (K1), BEEST_68 (K1), BGlluviae_68 (K1), BaghaKamala_67 (K1), BarrelRoll_69 (K1), Beezoo_70 (K1), Bella96_68 (K1), Belladonna_68 (K1), Blizzard_68 (K1), Boiiii_68 (K1), Bryler_71 (K6), CREW_68 (K1), Cain_71 (K6), Capricorn_68 (K1), CaseJules_70 (K1), Chancellor_73 (K4), CheetoDust_67 (K1), Cheetobro_73 (K4), Chris_70 (K1), Collard_60 (K5), Curiosium_72 (K1), Dadosky_64 (K5), Dalmuri_68 (K1), DARTH_67 (K6), Deby_68 (K1), Devera_75 (K1), Dole_73 (K1), DrHayes_68 (K1), Durfee_68 (K1), Edugator_61 (K5), Efra2_73 (K1), Ekdilam_64 (K6), Ellie_63 (K6), Emerson_70 (K1), Eponine_75 (K4), Fefferhead_65 (K6), Feyre_65 (K5), Fionnbharth_73 (K4), Ganymede_68 (K1), Gengar_62 (K5), Geraldini_71 (K1), Guanica15_72 (K1), Guillsminger_63 (K5), Hammy_67 (K6), HedwigODU_68 (K1), Heftyboy_63 (K5), Homura_68 (K1), Hurricane_69 (K3), Hyperbowlee_68 (K1), Illumine_73 (K1), Inky_68 (K1), InvictusManeo_60 (K5), JAWS_68 (K1), JF1_73 (K4), Jarvi_68 (K1), Jayhawk_70 (K1), Jeckyll_68 (K1), Joy99_68 (K1), Juliette_75 (K4), Keshu_71 (K3), KiSi_72 (K1), Kratio_60 (K5), Krueger_72 (K6), Larva_63 (K5), LastHope_72 (K1), LaterM_68 (K1), LeMond_71 (K1), Leston_62 (K5), LindNT_67 (K1), Llorens_68 (K1), Lunahalos_68 (K1), MacnCheese_71 (K3), Malthus_74 (K4), MarkPhew_70 (K1), Marshawn_67 (K6), MeaningOfLife_69 (K1), Megsy_70 (K1), Miryou_67 (K5), MissDaisy_70 (K4), Mitti_73 (K4), Murucutumbu_69 (K1), Mynx_70 (K1), OkiRoe_63 (K5), Omnicron_66 (K5), Oscar_71 (K1), Padfoot_68 (K1), Padpat_71 (K1), Paola_62 (K5), Patt_69 (K4), Peel_68 (K1), Pharb_68 (K3), PhelpsODU_69 (K6), Phrank_71 (K6), Piatt_68 (K1), Pixie_68 (K3), Pokerus_68 (K1), Prithvi_69 (K1), Psycho_62 (K5), QuincyRose_66 (K1), Ramen_69 (K1), Rando14_65 (K5), Rapunzel97_70 (K1), Reptar3000_70 (K4), Rosmarinus_68 (K1), Ruthiejr_74 (K4), SamScheppers_71 (K4), SamuelLPlaqson_68 (K1), Scarlett_72 (K1), Shadow1_72 (K6), ShedlockHolmes_70 (K3), ShiaSurprise_69 (K1), SirPhilip_67 (K6), Slarp_73 (K4), Slimphazie_69 (K1), SoSeph_63 (K5), Spock_68 (K1), Stinson_69 (K1), Sulley_67 (K1), Sunflower1121_73 (K6), Syra333_71 (K6), TBond007_65 (K3), TClif_70 (K6), Tachez_68 (K1), TaiwanKao_70 (K1), Taquito_72 (K4), Thyatira_65 (K5), Tierra_71 (K6), TiniBug_68 (K1), Tiri_68 (K1), Topper_68

(K1), TreyKay_69 (K1), TribbleTrouble_69 (K3), TruffulaTree_69 (K1), Twitch_68 (K1), Unicorn_69 (K6), Urkel_68 (K1), Veliki_69 (K1), Waterfoul_64 (K5), Wintermute_73 (K4), Ximenita_73 (K6), Y10_70 (K4), Y2_70 (K4), YoureAdopted_67 (K1), Yunkel11_72 (K1), Zabiza_64 (K1), Zavala_71 (K1),

Start 52:

- Found in 10 of 244 (4.1%) of genes in pham
- Manual Annotations of this start: 9 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_71 (K2), DismalFunk_71 (K2), DismalStressor_71 (K2), Findley_71 (K2), Marcoliusprime_71 (K2), Milly_71 (K2), Mufasa_71 (K2), Strobilo_76 (K2), TM4_69 (K2), ZoeJ_70 (K2),

Start 54:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yuna_72 (K6),

Start 55:

- Found in 19 of 244 (7.8%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 5.3% of time when present
- Phage (with cluster) where this start called: OmniCritical_72 (K4),

Start 56:

- Found in 8 of 244 (3.3%) of genes in pham
- Manual Annotations of this start: 8 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelie_56 (K1), Binglebops_56 (K1), Enkosi_58 (K1), LilPharaoh_57 (K1), Mdavu_57 (K1), Nikao_59 (K1), Nutello_56 (K1), SgtBeansprout_57 (K1),

Summary by clusters:

There are 21 clusters represented in this pham: P2, F1, singleton, P1, AD, AG, F, J, CZ4, N, K3, K2, K1, K7, K6, K5, K4, CP, P5, FN, T,

Info for manual annotations of cluster AD:

- Start number 44 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AG:

- Start number 42 was manually annotated 1 time for cluster AG.
- Start number 48 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CP:

- Start number 44 was manually annotated 1 time for cluster CP.

Info for manual annotations of cluster CZ4:

- Start number 44 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster F1:

- Start number 44 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FN:

- Start number 43 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster J:

- Start number 44 was manually annotated 14 times for cluster J.

Info for manual annotations of cluster K1:

- Start number 45 was manually annotated 1 time for cluster K1.
- Start number 47 was manually annotated 1 time for cluster K1.
- Start number 50 was manually annotated 4 times for cluster K1.
- Start number 51 was manually annotated 85 times for cluster K1.
- Start number 56 was manually annotated 8 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 52 was manually annotated 9 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 51 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 51 was manually annotated 18 times for cluster K4.
- Start number 55 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K5:

- Start number 51 was manually annotated 20 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 51 was manually annotated 20 times for cluster K6.
- Start number 54 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K7:

- Start number 51 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster N:

- Start number 44 was manually annotated 20 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 44 was manually annotated 8 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 44 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P5:

- Start number 43 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster T:

- Start number 44 was manually annotated 1 time for cluster T.

Gene Information:

Gene: ActinUp_68 Start: 43942, Stop: 44313, Start Num: 51

Candidate Starts for ActinUp_68:

(36, 43882), (37, 43888), (Start: 47 @43927 has 1 MA's), (Start: 51 @43942 has 152 MA's), (71, 44059), (74, 44095), (79, 44110), (80, 44113), (96, 44269),

Gene: Adephagia_68 Start: 43979, Stop: 44350, Start Num: 51

Candidate Starts for Adephagia_68:

(36, 43919), (37, 43925), (Start: 47 @43964 has 1 MA's), (Start: 51 @43979 has 152 MA's), (71, 44096), (74, 44132), (79, 44147), (80, 44150), (96, 44306),

Gene: Adonis_68 Start: 44214, Stop: 44585, Start Num: 51

Candidate Starts for Adonis_68:

(28, 44106), (36, 44154), (37, 44160), (Start: 47 @44199 has 1 MA's), (Start: 51 @44214 has 152 MA's), (71, 44331), (74, 44367), (79, 44382), (80, 44385), (96, 44541),

Gene: Agent47_60 Start: 41490, Stop: 41870, Start Num: 51

Candidate Starts for Agent47_60:

(31, 41400), (35, 41430), (46, 41469), (Start: 47 @41475 has 1 MA's), (Start: 51 @41490 has 152 MA's), (69, 41598), (73, 41634), (74, 41652), (79, 41667), (93, 41757), (97, 41832),

Gene: Ageofdapage_71 Start: 45137, Stop: 45508, Start Num: 51

Candidate Starts for Ageofdapage_71:

(Start: 51 @45137 has 152 MA's), (71, 45254), (74, 45290), (79, 45305), (80, 45308), (96, 45464),

Gene: Aggie_57 Start: 39395, Stop: 39856, Start Num: 44

Candidate Starts for Aggie_57:

(Start: 44 @39395 has 50 MA's), (62, 39467), (64, 39482), (76, 39641), (88, 39704), (94, 39791),

Gene: AlishaPH_68 Start: 44240, Stop: 44611, Start Num: 51

Candidate Starts for AlishaPH_68:

(36, 44180), (37, 44186), (Start: 47 @44225 has 1 MA's), (Start: 51 @44240 has 152 MA's), (71, 44357), (74, 44393), (79, 44408), (80, 44411), (96, 44567),

Gene: AlleyCat_64 Start: 41814, Stop: 42194, Start Num: 51

Candidate Starts for AlleyCat_64:

(13, 41544), (15, 41553), (31, 41712), (35, 41742), (46, 41793), (Start: 47 @41799 has 1 MA's), (Start: 51 @41814 has 152 MA's), (73, 41958), (74, 41976), (79, 41991), (88, 42045), (93, 42081), (97, 42156),

Gene: Amelie_56 Start: 41183, Stop: 41554, Start Num: 56

Candidate Starts for Amelie_56:

(20, 40970), (21, 40979), (26, 41021), (37, 41126), (Start: 56 @41183 has 8 MA's), (74, 41336), (75, 41339), (79, 41351), (80, 41354), (88, 41405),

Gene: Amgine_66 Start: 44807, Stop: 45178, Start Num: 51

Candidate Starts for Amgine_66:

(21, 44603), (37, 44753), (Start: 51 @44807 has 152 MA's), (67, 44906), (74, 44963), (80, 44981), (88, 45032),

Gene: Aminay_68 Start: 43564, Stop: 43917, Start Num: 51

Candidate Starts for Aminay_68:

(49, 43558), (Start: 51 @43564 has 152 MA's), (74, 43735), (75, 43738), (78, 43747), (79, 43750), (93, 43837),

Gene: Amohnition_67 Start: 44352, Stop: 44687, Start Num: 51
Candidate Starts for Amohnition_67:
(37, 44301), (Start: 51 @44352 has 152 MA's), (74, 44508), (75, 44511), (79, 44523), (80, 44526),

Gene: Anaya_71 Start: 44933, Stop: 45304, Start Num: 51
Candidate Starts for Anaya_71:
(36, 44873), (Start: 47 @44918 has 1 MA's), (Start: 51 @44933 has 152 MA's), (60, 44948), (71, 45050), (74, 45086), (79, 45101), (80, 45104), (96, 45260),

Gene: Andies_55 Start: 38900, Stop: 39301, Start Num: 44
Candidate Starts for Andies_55:
(4, 38603), (14, 38678), (18, 38717), (29, 38825), (30, 38831), (34, 38849), (Start: 44 @38900 has 50 MA's), (76, 39083), (88, 39146), (94, 39233),

Gene: Angelica_67 Start: 43899, Stop: 44270, Start Num: 51
Candidate Starts for Angelica_67:
(20, 43686), (21, 43695), (37, 43845), (Start: 51 @43899 has 152 MA's), (71, 44016), (74, 44052), (79, 44067), (80, 44070), (96, 44226),

Gene: Apocalypse_70 Start: 44662, Stop: 45033, Start Num: 51
Candidate Starts for Apocalypse_70:
(Start: 51 @44662 has 152 MA's), (71, 44779), (74, 44815), (79, 44830), (80, 44833), (96, 44989),

Gene: Asayake_68 Start: 44294, Stop: 44665, Start Num: 51
Candidate Starts for Asayake_68:
(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Atiba_69 Start: 43942, Stop: 44313, Start Num: 51
Candidate Starts for Atiba_69:
(36, 43882), (37, 43888), (Start: 47 @43927 has 1 MA's), (Start: 51 @43942 has 152 MA's), (71, 44059), (74, 44095), (79, 44110), (80, 44113), (96, 44269),

Gene: BEEST_68 Start: 44294, Stop: 44665, Start Num: 51
Candidate Starts for BEEST_68:
(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: BGlluviae_68 Start: 44097, Stop: 44468, Start Num: 51
Candidate Starts for BGlluviae_68:
(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: BaghaKamala_67 Start: 43528, Stop: 43899, Start Num: 51
Candidate Starts for BaghaKamala_67:
(Start: 51 @43528 has 152 MA's), (71, 43645), (74, 43681), (79, 43696), (80, 43699), (96, 43855),

Gene: BarrelRoll_69 Start: 44380, Stop: 44751, Start Num: 51
Candidate Starts for BarrelRoll_69:
(36, 44320), (37, 44326), (Start: 47 @44365 has 1 MA's), (Start: 51 @44380 has 152 MA's), (71, 44497), (74, 44533), (79, 44548), (80, 44551), (96, 44707),

Gene: Beem_108 Start: 62992, Stop: 63327, Start Num: 44
Candidate Starts for Beem_108:
(Start: 44 @62992 has 50 MA's), (62, 63064), (88, 63238), (90, 63256),

Gene: Beezoo_70 Start: 44892, Stop: 45263, Start Num: 51
Candidate Starts for Beezoo_70:
(36, 44832), (37, 44838), (Start: 47 @44877 has 1 MA's), (Start: 51 @44892 has 152 MA's), (71, 45009), (74, 45045), (79, 45060), (80, 45063), (96, 45219),

Gene: Bella96_68 Start: 44450, Stop: 44821, Start Num: 51
Candidate Starts for Bella96_68:
(20, 44237), (21, 44246), (37, 44396), (Start: 51 @44450 has 152 MA's), (73, 44585), (74, 44603), (79, 44618), (96, 44777),

Gene: Belladonna_68 Start: 44097, Stop: 44468, Start Num: 51
Candidate Starts for Belladonna_68:
(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Biglebops_56 Start: 41183, Stop: 41554, Start Num: 56
Candidate Starts for Biglebops_56:
(20, 40970), (21, 40979), (26, 41021), (37, 41126), (Start: 56 @41183 has 8 MA's), (74, 41336), (75, 41339), (79, 41351), (80, 41354), (88, 41405),

Gene: Blizzard_68 Start: 44294, Stop: 44665, Start Num: 51
Candidate Starts for Blizzard_68:
(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Bobby_103 Start: 64857, Stop: 65192, Start Num: 44
Candidate Starts for Bobby_103:
(Start: 44 @64857 has 50 MA's), (88, 65103), (90, 65121),

Gene: Boiiii_68 Start: 44296, Stop: 44667, Start Num: 51
Candidate Starts for Boiiii_68:
(19, 44086), (36, 44236), (37, 44242), (Start: 47 @44281 has 1 MA's), (Start: 51 @44296 has 152 MA's), (71, 44413), (74, 44449), (79, 44464), (80, 44467), (96, 44623),

Gene: Bombitas_95 Start: 60155, Stop: 60490, Start Num: 44
Candidate Starts for Bombitas_95:
(Start: 44 @60155 has 50 MA's), (62, 60227), (88, 60401), (90, 60419),

Gene: BoostSeason_71 Start: 46076, Stop: 46420, Start Num: 52
Candidate Starts for BoostSeason_71:
(Start: 52 @46076 has 9 MA's), (68, 46181), (73, 46220), (75, 46241), (79, 46253), (88, 46307), (89, 46322),

Gene: Bryler_71 Start: 43715, Stop: 44089, Start Num: 51
Candidate Starts for Bryler_71:
(37, 43661), (Start: 51 @43715 has 152 MA's), (74, 43871), (86, 43931),

Gene: Bunnies_65 Start: 41638, Stop: 42144, Start Num: 44
Candidate Starts for Bunnies_65:

(10, 41374), (17, 41443), (25, 41491), (29, 41563), (30, 41569), (34, 41587), (Start: 44 @41638 has 50 MA's), (76, 41821), (88, 41884), (94, 41971), (99, 42001), (101, 42037), (102, 42040),

Gene: CREW_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for CREW_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: CactusJack_60 Start: 40506, Stop: 41012, Start Num: 44

Candidate Starts for CactusJack_60:

(10, 40242), (17, 40311), (25, 40359), (29, 40431), (30, 40437), (34, 40455), (Start: 44 @40506 has 50 MA's), (76, 40689), (88, 40752), (94, 40839), (99, 40869), (101, 40905), (102, 40908),

Gene: Cain_71 Start: 43703, Stop: 44077, Start Num: 51

Candidate Starts for Cain_71:

(37, 43649), (Start: 51 @43703 has 152 MA's), (74, 43859), (86, 43919),

Gene: Capricorn_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Capricorn_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Carcharodon_61 Start: 38739, Stop: 39203, Start Num: 44

Candidate Starts for Carcharodon_61:

(Start: 44 @38739 has 50 MA's), (62, 38811), (64, 38826), (76, 38985), (88, 39048), (94, 39135),

Gene: CaseJules_70 Start: 44294, Stop: 44665, Start Num: 51

Candidate Starts for CaseJules_70:

(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Chancellor_73 Start: 44642, Stop: 45022, Start Num: 51

Candidate Starts for Chancellor_73:

(Start: 51 @44642 has 152 MA's), (Start: 55 @44660 has 1 MA's), (74, 44822), (75, 44825), (84, 44873), (96, 44993),

Gene: Charlie_58 Start: 38128, Stop: 38529, Start Num: 44

Candidate Starts for Charlie_58:

(17, 37939), (18, 37942), (30, 38059), (34, 38077), (Start: 44 @38128 has 50 MA's), (76, 38311), (88, 38374), (94, 38461),

Gene: CheetoDust_67 Start: 43575, Stop: 43946, Start Num: 51

Candidate Starts for CheetoDust_67:

(Start: 51 @43575 has 152 MA's), (71, 43692), (74, 43728), (79, 43743), (80, 43746), (96, 43902),

Gene: Cheetobro_73 Start: 44639, Stop: 45019, Start Num: 51

Candidate Starts for Cheetobro_73:

(Start: 51 @44639 has 152 MA's), (Start: 55 @44657 has 1 MA's), (74, 44819), (75, 44822), (84, 44870), (96, 44990),

Gene: Chewbacca_64 Start: 38634, Stop: 39098, Start Num: 44

Candidate Starts for Chewbacca_64:

(Start: 44 @38634 has 50 MA's), (62, 38706), (64, 38721), (76, 38880), (88, 38943), (94, 39030),

Gene: Chris_70 Start: 44892, Stop: 45239, Start Num: 51

Candidate Starts for Chris_70:

(21, 44703), (37, 44838), (Start: 51 @44892 has 152 MA's), (57, 44925), (59, 44928), (66, 45003), (67, 45012), (74, 45069), (75, 45072), (79, 45084), (88, 45138),

Gene: Collard_60 Start: 41451, Stop: 41831, Start Num: 51

Candidate Starts for Collard_60:

(31, 41361), (35, 41391), (46, 41430), (Start: 47 @41436 has 1 MA's), (Start: 51 @41451 has 152 MA's), (69, 41559), (73, 41595), (74, 41613), (79, 41628), (93, 41718), (97, 41793),

Gene: Constella_92 Start: 57167, Stop: 57499, Start Num: 44

Candidate Starts for Constella_92:

(Start: 44 @57167 has 50 MA's), (75, 57347), (88, 57413), (90, 57431),

Gene: CrimD_70 Start: 44874, Stop: 45260, Start Num: 47

Candidate Starts for CrimD_70:

(36, 44829), (37, 44835), (46, 44868), (Start: 47 @44874 has 1 MA's), (Start: 51 @44889 has 152 MA's), (71, 45006), (74, 45042), (79, 45057), (80, 45060), (96, 45216),

Gene: Curiosium_72 Start: 43619, Stop: 43990, Start Num: 51

Candidate Starts for Curiosium_72:

(46, 43598), (Start: 47 @43604 has 1 MA's), (Start: 51 @43619 has 152 MA's), (61, 43652), (73, 43754), (74, 43772), (79, 43787), (80, 43790), (89, 43856),

Gene: Dadosky_64 Start: 41816, Stop: 42196, Start Num: 51

Candidate Starts for Dadosky_64:

(13, 41546), (15, 41555), (31, 41714), (35, 41744), (46, 41795), (Start: 47 @41801 has 1 MA's), (Start: 51 @41816 has 152 MA's), (73, 41960), (74, 41978), (79, 41993), (88, 42047), (93, 42083), (97, 42158),

Gene: Dalmuri_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Dalmuri_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: DarthP_67 Start: 44206, Stop: 44541, Start Num: 51

Candidate Starts for DarthP_67:

(9, 43903), (20, 43996), (21, 44005), (37, 44155), (Start: 51 @44206 has 152 MA's), (67, 44305), (74, 44362), (79, 44377), (80, 44380),

Gene: Deby_68 Start: 44347, Stop: 44718, Start Num: 51

Candidate Starts for Deby_68:

(Start: 51 @44347 has 152 MA's), (71, 44464), (74, 44500), (79, 44515), (80, 44518), (96, 44674),

Gene: Devera_75 Start: 45700, Stop: 46071, Start Num: 51

Candidate Starts for Devera_75:

(Start: 51 @45700 has 152 MA's), (71, 45817), (74, 45853), (79, 45868), (80, 45871), (96, 46027),

Gene: DismalFunk_71 Start: 46501, Stop: 46845, Start Num: 52

Candidate Starts for DismalFunk_71:

(Start: 52 @46501 has 9 MA's), (73, 46642), (75, 46663), (79, 46675), (88, 46729),

Gene: DismalStressor_71 Start: 46501, Stop: 46845, Start Num: 52
Candidate Starts for DismalStressor_71:
(Start: 52 @46501 has 9 MA's), (73, 46642), (75, 46663), (79, 46675), (88, 46729),

Gene: Dole_73 Start: 45703, Stop: 46074, Start Num: 51
Candidate Starts for Dole_73:
(Start: 51 @45703 has 152 MA's), (71, 45820), (74, 45856), (79, 45871), (80, 45874), (96, 46030),

Gene: Dori_74 Start: 55849, Stop: 56205, Start Num: 44
Candidate Starts for Dori_74:
(1, 55459), (2, 55504), (3, 55522), (16, 55633), (23, 55693), (24, 55696), (40, 55837), (Start: 44 @55849 has 50 MA's), (76, 56032), (88, 56095), (94, 56182),

Gene: DrHayes_68 Start: 44604, Stop: 44975, Start Num: 51
Candidate Starts for DrHayes_68:
(20, 44391), (21, 44400), (37, 44550), (Start: 51 @44604 has 152 MA's), (73, 44739), (74, 44757), (79, 44772), (96, 44931),

Gene: Duplicity_59 Start: 37996, Stop: 38460, Start Num: 44
Candidate Starts for Duplicity_59:
(Start: 44 @37996 has 50 MA's), (62, 38068), (64, 38083), (76, 38242), (88, 38305), (94, 38392),

Gene: Durfee_68 Start: 44294, Stop: 44665, Start Num: 51
Candidate Starts for Durfee_68:
(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Edugator_61 Start: 43237, Stop: 43617, Start Num: 51
Candidate Starts for Edugator_61:
(13, 42967), (15, 42976), (31, 43135), (35, 43165), (46, 43216), (Start: 47 @43222 has 1 MA's), (Start: 51 @43237 has 152 MA's), (73, 43381), (74, 43399), (79, 43414), (93, 43504), (97, 43579),

Gene: Efra2_73 Start: 44448, Stop: 44819, Start Num: 51
Candidate Starts for Efra2_73:
(37, 44394), (Start: 51 @44448 has 152 MA's), (71, 44565), (74, 44601), (79, 44616), (80, 44619), (96, 44775),

Gene: Ejimix_100 Start: 62719, Stop: 63054, Start Num: 44
Candidate Starts for Ejimix_100:
(Start: 44 @62719 has 50 MA's), (62, 62791), (88, 62965), (90, 62983),

Gene: Ekdilam_64 Start: 44431, Stop: 44766, Start Num: 51
Candidate Starts for Ekdilam_64:
(6, 44122), (20, 44221), (21, 44230), (37, 44380), (Start: 51 @44431 has 152 MA's), (74, 44587), (75, 44590), (80, 44605), (86, 44647), (89, 44671),

Gene: Ellie_63 Start: 43667, Stop: 44038, Start Num: 51
Candidate Starts for Ellie_63:
(21, 43463), (37, 43613), (Start: 51 @43667 has 152 MA's), (67, 43766), (74, 43823), (80, 43841), (88, 43892),

Gene: Emerson_70 Start: 44414, Stop: 44785, Start Num: 51
Candidate Starts for Emerson_70:

(36, 44354), (37, 44360), (Start: 47 @44399 has 1 MA's), (Start: 51 @44414 has 152 MA's), (71, 44531), (74, 44567), (79, 44582), (80, 44585), (96, 44741),

Gene: Enkosi_58 Start: 43796, Stop: 44167, Start Num: 56

Candidate Starts for Enkosi_58:

(20, 43583), (21, 43592), (26, 43634), (37, 43739), (Start: 56 @43796 has 8 MA's), (74, 43949), (75, 43952), (79, 43964), (80, 43967), (88, 44018),

Gene: Eponine_75 Start: 45485, Stop: 45865, Start Num: 51

Candidate Starts for Eponine_75:

(Start: 51 @45485 has 152 MA's), (Start: 55 @45503 has 1 MA's), (74, 45665), (75, 45668), (81, 45698), (84, 45716), (96, 45836),

Gene: Fefferhead_65 Start: 43576, Stop: 43947, Start Num: 51

Candidate Starts for Fefferhead_65:

(21, 43372), (37, 43522), (Start: 51 @43576 has 152 MA's), (67, 43675), (74, 43732), (80, 43750), (88, 43801),

Gene: Feyre_65 Start: 45225, Stop: 45605, Start Num: 51

Candidate Starts for Feyre_65:

(31, 45123), (35, 45153), (46, 45204), (Start: 51 @45225 has 152 MA's), (58, 45243), (73, 45369), (74, 45387), (79, 45402),

Gene: Findley_71 Start: 46495, Stop: 46839, Start Num: 52

Candidate Starts for Findley_71:

(Start: 52 @46495 has 9 MA's), (73, 46636), (75, 46657), (79, 46669), (88, 46723),

Gene: Fionnbharth_73 Start: 44883, Stop: 45263, Start Num: 51

Candidate Starts for Fionnbharth_73:

(Start: 51 @44883 has 152 MA's), (Start: 55 @44901 has 1 MA's), (74, 45063), (75, 45066), (81, 45096), (84, 45114), (96, 45234),

Gene: FirstPlacePfu_63 Start: 38539, Stop: 39003, Start Num: 44

Candidate Starts for FirstPlacePfu_63:

(Start: 44 @38539 has 50 MA's), (62, 38611), (64, 38626), (76, 38785), (88, 38848), (94, 38935),

Gene: Frankie_79 Start: 47128, Stop: 47547, Start Num: 44

Candidate Starts for Frankie_79:

(Start: 44 @47128 has 50 MA's), (62, 47200), (64, 47215), (76, 47374), (88, 47437), (94, 47524), (95, 47533),

Gene: Fulbright_59 Start: 37433, Stop: 37897, Start Num: 44

Candidate Starts for Fulbright_59:

(Start: 44 @37433 has 50 MA's), (62, 37505), (64, 37520), (76, 37679), (88, 37742), (94, 37829),

Gene: Ganymede_68 Start: 44320, Stop: 44691, Start Num: 51

Candidate Starts for Ganymede_68:

(36, 44260), (37, 44266), (Start: 47 @44305 has 1 MA's), (Start: 51 @44320 has 152 MA's), (71, 44437), (74, 44473), (79, 44488), (80, 44491), (96, 44647),

Gene: Gengar_62 Start: 43211, Stop: 43591, Start Num: 51

Candidate Starts for Gengar_62:

(31, 43109), (35, 43139), (46, 43190), (Start: 51 @43211 has 152 MA's), (73, 43355), (74, 43373), (79, 43388), (88, 43442), (93, 43478), (97, 43553),

Gene: Geraldini_71 Start: 44976, Stop: 45347, Start Num: 51

Candidate Starts for Geraldini_71:

(28, 44868), (36, 44916), (37, 44922), (Start: 47 @44961 has 1 MA's), (Start: 51 @44976 has 152 MA's), (71, 45093), (74, 45129), (79, 45144), (80, 45147), (96, 45303),

Gene: Gex_62 Start: 38755, Stop: 39219, Start Num: 44

Candidate Starts for Gex_62:

(Start: 44 @38755 has 50 MA's), (62, 38827), (64, 38842), (76, 39001), (88, 39064), (94, 39151),

Gene: Glaske_59 Start: 40506, Stop: 41012, Start Num: 44

Candidate Starts for Glaske_59:

(10, 40242), (17, 40311), (25, 40359), (29, 40431), (30, 40437), (34, 40455), (Start: 44 @40506 has 50 MA's), (76, 40689), (88, 40752), (94, 40839), (99, 40869), (101, 40905), (102, 40908),

Gene: Guanica15_72 Start: 44186, Stop: 44557, Start Num: 51

Candidate Starts for Guanica15_72:

(37, 44132), (Start: 51 @44186 has 152 MA's), (71, 44303), (74, 44339), (79, 44354), (80, 44357), (96, 44513),

Gene: Guillsminger_63 Start: 43165, Stop: 43545, Start Num: 51

Candidate Starts for Guillsminger_63:

(31, 43063), (35, 43093), (46, 43144), (Start: 51 @43165 has 152 MA's), (58, 43183), (73, 43309), (74, 43327), (79, 43342), (88, 43396), (93, 43432),

Gene: Halley_108 Start: 62993, Stop: 63328, Start Num: 44

Candidate Starts for Halley_108:

(Start: 44 @62993 has 50 MA's), (62, 63065), (88, 63239), (90, 63257),

Gene: Hammy_67 Start: 44194, Stop: 44529, Start Num: 51

Candidate Starts for Hammy_67:

(9, 43891), (20, 43984), (21, 43993), (37, 44143), (Start: 51 @44194 has 152 MA's), (74, 44350), (79, 44365), (80, 44368),

Gene: HedwigODU_68 Start: 43942, Stop: 44313, Start Num: 51

Candidate Starts for HedwigODU_68:

(36, 43882), (37, 43888), (Start: 47 @43927 has 1 MA's), (Start: 51 @43942 has 152 MA's), (71, 44059), (74, 44095), (79, 44110), (80, 44113), (96, 44269),

Gene: Heftyboy_63 Start: 43532, Stop: 43912, Start Num: 51

Candidate Starts for Heftyboy_63:

(31, 43430), (35, 43460), (46, 43511), (Start: 51 @43532 has 152 MA's), (58, 43550), (73, 43676), (74, 43694), (79, 43709),

Gene: HokkenD_96 Start: 61261, Stop: 61596, Start Num: 44

Candidate Starts for HokkenD_96:

(Start: 44 @61261 has 50 MA's), (62, 61333), (88, 61507), (90, 61525),

Gene: Homura_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Homura_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Hurricane_69 Start: 44340, Stop: 44675, Start Num: 51

Candidate Starts for Hurricane_69:

(8, 44031), (9, 44037), (11, 44058), (21, 44139), (37, 44286), (Start: 51 @44340 has 152 MA's), (65, 44412), (75, 44499), (79, 44511), (82, 44541), (86, 44556), (89, 44580),

Gene: Hyperbowlee_68 Start: 44294, Stop: 44665, Start Num: 51

Candidate Starts for Hyperbowlee_68:

(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: IdentityCrisis_54 Start: 33602, Stop: 33967, Start Num: 44

Candidate Starts for IdentityCrisis_54:

(40, 33590), (Start: 44 @33602 has 50 MA's), (76, 33785), (88, 33848), (94, 33935), (96, 33953), (98, 33962),

Gene: Illumine_73 Start: 45702, Stop: 46073, Start Num: 51

Candidate Starts for Illumine_73:

(Start: 51 @45702 has 152 MA's), (71, 45819), (74, 45855), (79, 45870), (80, 45873), (96, 46029),

Gene: Inky_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Inky_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: InvictusManeo_60 Start: 41494, Stop: 41874, Start Num: 51

Candidate Starts for InvictusManeo_60:

(31, 41404), (35, 41434), (46, 41473), (Start: 47 @41479 has 1 MA's), (Start: 51 @41494 has 152 MA's), (69, 41602), (73, 41638), (74, 41656), (79, 41671), (93, 41761), (97, 41836),

Gene: JAWS_68 Start: 44140, Stop: 44511, Start Num: 51

Candidate Starts for JAWS_68:

(Start: 51 @44140 has 152 MA's), (71, 44257), (74, 44293), (79, 44308), (80, 44311), (96, 44467),

Gene: JF1_73 Start: 44849, Stop: 45229, Start Num: 51

Candidate Starts for JF1_73:

(Start: 51 @44849 has 152 MA's), (Start: 55 @44867 has 1 MA's), (74, 45029), (75, 45032), (84, 45080), (96, 45200),

Gene: Jarvi_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Jarvi_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Jayhawk_70 Start: 44440, Stop: 44811, Start Num: 51

Candidate Starts for Jayhawk_70:

(36, 44380), (37, 44386), (Start: 47 @44425 has 1 MA's), (Start: 51 @44440 has 152 MA's), (71, 44557), (74, 44593), (79, 44608), (80, 44611), (96, 44767),

Gene: Jeckyll_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Jeckyll_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Joy99_68 Start: 44026, Stop: 44397, Start Num: 51

Candidate Starts for Joy99_68:

(36, 43966), (37, 43972), (Start: 47 @44011 has 1 MA's), (Start: 51 @44026 has 152 MA's), (71, 44143), (74, 44179), (79, 44194), (80, 44197), (96, 44353),

Gene: JuicyJay_103 Start: 64127, Stop: 64462, Start Num: 44

Candidate Starts for JuicyJay_103:

(Start: 44 @64127 has 50 MA's), (62, 64199), (88, 64373), (90, 64391),

Gene: Juliette_75 Start: 44947, Stop: 45327, Start Num: 51

Candidate Starts for Juliette_75:

(Start: 51 @44947 has 152 MA's), (Start: 55 @44965 has 1 MA's), (74, 45127), (75, 45130), (84, 45178), (96, 45298),

Gene: Keshu_71 Start: 44440, Stop: 44811, Start Num: 51

Candidate Starts for Keshu_71:

(37, 44386), (Start: 51 @44440 has 152 MA's), (61, 44476), (63, 44491), (75, 44599), (86, 44656), (89, 44680), (96, 44770), (98, 44779),

Gene: Kevin1_60 Start: 37027, Stop: 37434, Start Num: 44

Candidate Starts for Kevin1_60:

(27, 36940), (34, 36985), (41, 37018), (Start: 44 @37027 has 50 MA's), (76, 37210), (88, 37273), (94, 37360), (99, 37390),

Gene: KiSi_72 Start: 44874, Stop: 45218, Start Num: 51

Candidate Starts for KiSi_72:

(5, 44565), (12, 44607), (21, 44685), (Start: 51 @44874 has 152 MA's), (57, 44904), (59, 44907), (67, 44991), (74, 45048), (75, 45051), (79, 45063), (88, 45117),

Gene: KilKor_60 Start: 41199, Stop: 41705, Start Num: 44

Candidate Starts for KilKor_60:

(10, 40935), (17, 41004), (25, 41052), (29, 41124), (30, 41130), (34, 41148), (Start: 44 @41199 has 50 MA's), (76, 41382), (88, 41445), (94, 41532), (99, 41562), (101, 41598), (102, 41601),

Gene: Kratio_60 Start: 41230, Stop: 41610, Start Num: 51

Candidate Starts for Kratio_60:

(31, 41140), (35, 41170), (46, 41209), (Start: 47 @41215 has 1 MA's), (Start: 51 @41230 has 152 MA's), (69, 41338), (73, 41374), (74, 41392), (79, 41407), (93, 41497), (97, 41572),

Gene: Krueger_72 Start: 43991, Stop: 44365, Start Num: 51

Candidate Starts for Krueger_72:

(20, 43781), (21, 43790), (Start: 51 @43991 has 152 MA's), (75, 44150), (86, 44207), (96, 44321),

Gene: Ksquared_63 Start: 41638, Stop: 42021, Start Num: 44

Candidate Starts for Ksquared_63:

(10, 41374), (17, 41443), (25, 41491), (29, 41563), (30, 41569), (34, 41587), (Start: 44 @41638 has 50 MA's), (76, 41821), (88, 41884),

Gene: Larva_63 Start: 42688, Stop: 43068, Start Num: 51

Candidate Starts for Larva_63:

(13, 42418), (15, 42427), (31, 42586), (35, 42616), (46, 42667), (Start: 47 @42673 has 1 MA's), (Start: 51 @42688 has 152 MA's), (73, 42832), (74, 42850), (79, 42865), (88, 42919), (93, 42955), (97, 43030),

Gene: LastHope_72 Start: 43303, Stop: 43674, Start Num: 51
Candidate Starts for LastHope_72:
(Start: 51 @43303 has 152 MA's), (74, 43456), (79, 43471), (96, 43630),

Gene: LaterM_68 Start: 44555, Stop: 44926, Start Num: 51
Candidate Starts for LaterM_68:
(Start: 51 @44555 has 152 MA's), (71, 44672), (74, 44708), (79, 44723), (80, 44726), (96, 44882),

Gene: LeMond_71 Start: 44508, Stop: 44852, Start Num: 51
Candidate Starts for LeMond_71:
(5, 44199), (12, 44241), (21, 44319), (37, 44454), (Start: 51 @44508 has 152 MA's), (57, 44538), (59, 44541), (67, 44625), (74, 44682), (75, 44685), (79, 44697), (88, 44751),

Gene: Leston_62 Start: 43294, Stop: 43674, Start Num: 51
Candidate Starts for Leston_62:
(31, 43192), (35, 43222), (46, 43273), (Start: 51 @43294 has 152 MA's), (58, 43312), (73, 43438), (74, 43456), (79, 43471), (88, 43525), (93, 43561),

Gene: LilPharaoh_57 Start: 40911, Stop: 41282, Start Num: 56
Candidate Starts for LilPharaoh_57:
(20, 40698), (21, 40707), (26, 40749), (37, 40854), (Start: 56 @40911 has 8 MA's), (74, 41064), (75, 41067), (79, 41079), (80, 41082), (88, 41133),

Gene: LindNT_67 Start: 44352, Stop: 44723, Start Num: 51
Candidate Starts for LindNT_67:
(Start: 51 @44352 has 152 MA's), (71, 44469), (74, 44505), (79, 44520), (80, 44523), (96, 44679),

Gene: Llorens_68 Start: 44097, Stop: 44468, Start Num: 51
Candidate Starts for Llorens_68:
(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Lunahalos_68 Start: 44097, Stop: 44468, Start Num: 51
Candidate Starts for Lunahalos_68:
(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: MacnCheese_71 Start: 44967, Stop: 45302, Start Num: 51
Candidate Starts for MacnCheese_71:
(37, 44913), (Start: 51 @44967 has 152 MA's), (75, 45126), (82, 45168), (86, 45183),

Gene: Magsby_60 Start: 38701, Stop: 39165, Start Num: 44
Candidate Starts for Magsby_60:
(Start: 44 @38701 has 50 MA's), (62, 38773), (64, 38788), (76, 38947), (88, 39010), (94, 39097),

Gene: MalagasyRose_68 Start: 43493, Stop: 43888, Start Num: 42
Candidate Starts for MalagasyRose_68:
(33, 43436), (Start: 42 @43493 has 1 MA's), (73, 43661), (75, 43682), (79, 43694),

Gene: Malthus_74 Start: 44635, Stop: 45015, Start Num: 51

Candidate Starts for Malthus_74:

(Start: 51 @44635 has 152 MA's), (Start: 55 @44653 has 1 MA's), (74, 44815), (75, 44818), (84, 44866), (96, 44986),

Gene: Marcoliusprime_71 Start: 46501, Stop: 46845, Start Num: 52

Candidate Starts for Marcoliusprime_71:

(Start: 52 @46501 has 9 MA's), (73, 46642), (75, 46663), (79, 46675), (88, 46729),

Gene: MarkPhew_70 Start: 44007, Stop: 44354, Start Num: 51

Candidate Starts for MarkPhew_70:

(12, 43740), (21, 43818), (37, 43953), (Start: 51 @44007 has 152 MA's), (57, 44040), (59, 44043), (67, 44127), (73, 44166), (74, 44184), (75, 44187), (79, 44199), (87, 44247), (88, 44253),

Gene: Marshawn_67 Start: 44384, Stop: 44707, Start Num: 51

Candidate Starts for Marshawn_67:

(37, 44330), (Start: 51 @44384 has 152 MA's), (66, 44480), (67, 44489), (71, 44510), (73, 44528), (74, 44546), (75, 44549), (79, 44561), (88, 44615),

Gene: Mcklovin_65 Start: 48076, Stop: 48429, Start Num: 44

Candidate Starts for Mcklovin_65:

(Start: 44 @48076 has 50 MA's), (88, 48319), (94, 48403),

Gene: Mdavu_57 Start: 41172, Stop: 41543, Start Num: 56

Candidate Starts for Mdavu_57:

(20, 40959), (21, 40968), (26, 41010), (37, 41115), (Start: 56 @41172 has 8 MA's), (74, 41325), (75, 41328), (79, 41340), (80, 41343), (88, 41394),

Gene: MeaningOfLife_69 Start: 44849, Stop: 45220, Start Num: 51

Candidate Starts for MeaningOfLife_69:

(36, 44789), (37, 44795), (Start: 47 @44834 has 1 MA's), (Start: 51 @44849 has 152 MA's), (71, 44966), (74, 45002), (79, 45017), (80, 45020), (96, 45176),

Gene: Megsy_70 Start: 44274, Stop: 44645, Start Num: 51

Candidate Starts for Megsy_70:

(Start: 51 @44274 has 152 MA's), (71, 44391), (74, 44427), (79, 44442), (80, 44445), (96, 44601),

Gene: Melville_66 Start: 38310, Stop: 38774, Start Num: 44

Candidate Starts for Melville_66:

(Start: 44 @38310 has 50 MA's), (62, 38382), (64, 38397), (76, 38556), (88, 38619), (94, 38706),

Gene: Milly_71 Start: 46475, Stop: 46819, Start Num: 52

Candidate Starts for Milly_71:

(Start: 52 @46475 has 9 MA's), (73, 46616), (75, 46637), (79, 46649), (88, 46703),

Gene: Minerva_106 Start: 62938, Stop: 63273, Start Num: 44

Candidate Starts for Minerva_106:

(Start: 44 @62938 has 50 MA's), (62, 63010), (88, 63184), (90, 63202),

Gene: Miryou_67 Start: 45908, Stop: 46288, Start Num: 51

Candidate Starts for Miryou_67:

(31, 45806), (35, 45836), (46, 45887), (Start: 51 @45908 has 152 MA's), (58, 45926), (73, 46052), (74, 46070), (79, 46085), (88, 46139), (93, 46175),

Gene: MissDaisy_70 Start: 43549, Stop: 43929, Start Num: 51

Candidate Starts for MissDaisy_70:

(Start: 51 @43549 has 152 MA's), (Start: 55 @43567 has 1 MA's), (74, 43729), (75, 43732), (84, 43780), (96, 43900),

Gene: Mitti_73 Start: 44790, Stop: 45170, Start Num: 51

Candidate Starts for Mitti_73:

(Start: 51 @44790 has 152 MA's), (Start: 55 @44808 has 1 MA's), (74, 44970), (75, 44973), (84, 45021), (96, 45141),

Gene: Mufasa_71 Start: 46061, Stop: 46405, Start Num: 52

Candidate Starts for Mufasa_71:

(Start: 52 @46061 has 9 MA's), (68, 46166), (73, 46205), (75, 46226), (79, 46238), (88, 46292), (89, 46307),

Gene: MulchSalad_79 Start: 47746, Stop: 48222, Start Num: 44

Candidate Starts for MulchSalad_79:

(Start: 44 @47746 has 50 MA's), (62, 47818), (64, 47833), (76, 47992), (80, 48004), (88, 48067), (94, 48154),

Gene: Murucutumbu_69 Start: 45130, Stop: 45501, Start Num: 51

Candidate Starts for Murucutumbu_69:

(Start: 51 @45130 has 152 MA's), (71, 45247), (74, 45283), (79, 45298), (80, 45301), (96, 45457),

Gene: Mynx_70 Start: 44709, Stop: 45080, Start Num: 51

Candidate Starts for Mynx_70:

(36, 44649), (37, 44655), (Start: 47 @44694 has 1 MA's), (Start: 51 @44709 has 152 MA's), (71, 44826), (74, 44862), (79, 44877), (80, 44880), (96, 45036),

Gene: Nergal_59 Start: 40436, Stop: 40837, Start Num: 48

Candidate Starts for Nergal_59:

(40, 40403), (Start: 48 @40436 has 1 MA's), (73, 40598), (74, 40616), (79, 40631), (86, 40676), (87, 40679), (88, 40685), (89, 40700),

Gene: Nibb_70 Start: 44218, Stop: 44553, Start Num: 50

Candidate Starts for Nibb_70:

(37, 44167), (Start: 50 @44218 has 4 MA's), (73, 44356), (75, 44377), (82, 44419), (86, 44434), (88, 44443), (91, 44467),

Gene: NihilNomen_108 Start: 63079, Stop: 63414, Start Num: 44

Candidate Starts for NihilNomen_108:

(Start: 44 @63079 has 50 MA's), (62, 63151), (88, 63325), (90, 63343),

Gene: Nikao_59 Start: 43796, Stop: 44167, Start Num: 56

Candidate Starts for Nikao_59:

(20, 43583), (21, 43592), (26, 43634), (37, 43739), (Start: 56 @43796 has 8 MA's), (74, 43949), (75, 43952), (79, 43964), (80, 43967), (88, 44018),

Gene: Niklas_70 Start: 44420, Stop: 44800, Start Num: 50

Candidate Starts for Niklas_70:

(7, 44111), (20, 44213), (21, 44222), (37, 44369), (Start: 50 @44420 has 4 MA's), (57, 44438), (73, 44564), (74, 44582), (75, 44585), (80, 44600), (83, 44633), (87, 44645), (88, 44651),

Gene: Nutello_56 Start: 41183, Stop: 41554, Start Num: 56

Candidate Starts for Nutello_56:

(20, 40970), (21, 40979), (26, 41021), (37, 41126), (Start: 56 @41183 has 8 MA's), (74, 41336), (75, 41339), (79, 41351), (80, 41354), (88, 41405),

Gene: OkiRoe_63 Start: 43580, Stop: 43960, Start Num: 51

Candidate Starts for OkiRoe_63:

(31, 43478), (35, 43508), (46, 43559), (Start: 51 @43580 has 152 MA's), (58, 43598), (73, 43724), (74, 43742), (79, 43757),

Gene: OmniCritical_72 Start: 44741, Stop: 45103, Start Num: 55

Candidate Starts for OmniCritical_72:

(Start: 51 @44723 has 152 MA's), (Start: 55 @44741 has 1 MA's), (74, 44903), (75, 44906), (84, 44954), (96, 45074),

Gene: Omnicron_66 Start: 43686, Stop: 44066, Start Num: 51

Candidate Starts for Omnicron_66:

(31, 43584), (35, 43614), (46, 43665), (Start: 51 @43686 has 152 MA's), (58, 43704), (73, 43830), (74, 43848), (79, 43863), (84, 43902), (88, 43917), (93, 43953), (99, 44034),

Gene: Optimus_100 Start: 61613, Stop: 61945, Start Num: 44

Candidate Starts for Optimus_100:

(Start: 44 @61613 has 50 MA's), (75, 61793), (88, 61859), (90, 61877),

Gene: Oscar_71 Start: 44425, Stop: 44769, Start Num: 51

Candidate Starts for Oscar_71:

(5, 44116), (12, 44158), (21, 44236), (Start: 51 @44425 has 152 MA's), (57, 44455), (59, 44458), (67, 44542), (74, 44599), (75, 44602), (79, 44614), (88, 44668),

Gene: Padfoot_68 Start: 44294, Stop: 44665, Start Num: 51

Candidate Starts for Padfoot_68:

(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Padpat_71 Start: 44414, Stop: 44785, Start Num: 51

Candidate Starts for Padpat_71:

(36, 44354), (37, 44360), (Start: 47 @44399 has 1 MA's), (Start: 51 @44414 has 152 MA's), (71, 44531), (74, 44567), (79, 44582), (80, 44585), (96, 44741),

Gene: Paola_62 Start: 43165, Stop: 43545, Start Num: 51

Candidate Starts for Paola_62:

(31, 43063), (35, 43093), (46, 43144), (Start: 51 @43165 has 152 MA's), (58, 43183), (73, 43309), (74, 43327), (79, 43342), (88, 43396), (93, 43432),

Gene: Parmesanjohn_61 Start: 38759, Stop: 39223, Start Num: 44

Candidate Starts for Parmesanjohn_61:

(Start: 44 @38759 has 50 MA's), (62, 38831), (64, 38846), (76, 39005), (88, 39068), (94, 39155),

Gene: Patt_69 Start: 43273, Stop: 43653, Start Num: 51

Candidate Starts for Patt_69:

(Start: 51 @43273 has 152 MA's), (Start: 55 @43291 has 1 MA's), (74, 43453), (75, 43456), (84, 43504), (96, 43624),

Gene: Peanam_70 Start: 44377, Stop: 44757, Start Num: 50

Candidate Starts for Peanam_70:

(7, 44068), (20, 44170), (21, 44179), (37, 44326), (Start: 50 @44377 has 4 MA's), (57, 44395), (73, 44521), (74, 44539), (75, 44542), (80, 44557), (83, 44590), (87, 44602), (88, 44608),

Gene: Peel_68 Start: 44099, Stop: 44470, Start Num: 51

Candidate Starts for Peel_68:

(36, 44039), (37, 44045), (Start: 47 @44084 has 1 MA's), (Start: 51 @44099 has 152 MA's), (71, 44216), (74, 44252), (79, 44267), (80, 44270), (96, 44426),

Gene: Phalm_60 Start: 40506, Stop: 41012, Start Num: 44

Candidate Starts for Phalm_60:

(10, 40242), (17, 40311), (25, 40359), (29, 40431), (30, 40437), (34, 40455), (Start: 44 @40506 has 50 MA's), (76, 40689), (88, 40752), (94, 40839), (99, 40869), (101, 40905), (102, 40908),

Gene: Pharb_68 Start: 43690, Stop: 44025, Start Num: 51

Candidate Starts for Pharb_68:

(20, 43477), (21, 43486), (37, 43636), (Start: 51 @43690 has 152 MA's), (61, 43726), (75, 43849), (80, 43864), (82, 43891), (86, 43906), (89, 43930), (92, 43945),

Gene: PhelpsODU_69 Start: 43630, Stop: 44004, Start Num: 51

Candidate Starts for PhelpsODU_69:

(37, 43576), (Start: 51 @43630 has 152 MA's), (74, 43786), (75, 43789), (80, 43804), (86, 43846),

Gene: Philonius_61 Start: 38924, Stop: 39388, Start Num: 44

Candidate Starts for Philonius_61:

(Start: 44 @38924 has 50 MA's), (62, 38996), (64, 39011), (76, 39170), (88, 39233), (94, 39320),

Gene: Phloss_59 Start: 38166, Stop: 38630, Start Num: 44

Candidate Starts for Phloss_59:

(Start: 44 @38166 has 50 MA's), (62, 38238), (64, 38253), (76, 38412), (88, 38475), (94, 38562),

Gene: Phrank_71 Start: 43693, Stop: 44067, Start Num: 51

Candidate Starts for Phrank_71:

(37, 43639), (Start: 51 @43693 has 152 MA's), (74, 43849), (86, 43909),

Gene: Piatt_68 Start: 44294, Stop: 44665, Start Num: 51

Candidate Starts for Piatt_68:

(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Piper2020_85 Start: 51523, Stop: 51987, Start Num: 44

Candidate Starts for Piper2020_85:

(Start: 44 @51523 has 50 MA's), (62, 51595), (64, 51610), (76, 51769), (88, 51832), (94, 51919), (95, 51928),

Gene: Pipsqueaks_62 Start: 38737, Stop: 39201, Start Num: 44

Candidate Starts for Pipsqueaks_62:

(Start: 44 @38737 has 50 MA's), (62, 38809), (64, 38824), (76, 38983), (88, 39046), (94, 39133),

Gene: Pixie_68 Start: 43865, Stop: 44236, Start Num: 51

Candidate Starts for Pixie_68:

(37, 43811), (Start: 51 @43865 has 152 MA's), (61, 43901), (63, 43916), (75, 44024), (86, 44081), (89, 44105), (96, 44195), (98, 44204),

Gene: Pokerus_68 Start: 44439, Stop: 44810, Start Num: 51

Candidate Starts for Pokerus_68:

(36, 44379), (37, 44385), (Start: 47 @44424 has 1 MA's), (Start: 51 @44439 has 152 MA's), (71, 44556), (74, 44592), (79, 44607), (80, 44610), (96, 44766),

Gene: Prithvi_69 Start: 44352, Stop: 44723, Start Num: 51

Candidate Starts for Prithvi_69:

(Start: 51 @44352 has 152 MA's), (71, 44469), (74, 44505), (79, 44520), (80, 44523), (96, 44679),

Gene: Psycho_62 Start: 41813, Stop: 42193, Start Num: 51

Candidate Starts for Psycho_62:

(13, 41543), (15, 41552), (31, 41711), (35, 41741), (46, 41792), (Start: 47 @41798 has 1 MA's), (Start: 51 @41813 has 152 MA's), (73, 41957), (74, 41975), (79, 41990), (88, 42044), (93, 42080), (97, 42155),

Gene: QuincyRose_66 Start: 44320, Stop: 44691, Start Num: 51

Candidate Starts for QuincyRose_66:

(36, 44260), (37, 44266), (Start: 47 @44305 has 1 MA's), (Start: 51 @44320 has 152 MA's), (71, 44437), (74, 44473), (79, 44488), (80, 44491), (96, 44647),

Gene: Ramen_69 Start: 43944, Stop: 44315, Start Num: 51

Candidate Starts for Ramen_69:

(36, 43884), (37, 43890), (Start: 47 @43929 has 1 MA's), (Start: 51 @43944 has 152 MA's), (71, 44061), (74, 44097), (79, 44112), (80, 44115), (96, 44271),

Gene: Rando14_65 Start: 42494, Stop: 42874, Start Num: 51

Candidate Starts for Rando14_65:

(Start: 51 @42494 has 152 MA's), (73, 42638), (74, 42656), (79, 42671), (88, 42725), (93, 42761), (99, 42842),

Gene: Rapunzel97_70 Start: 44395, Stop: 44766, Start Num: 51

Candidate Starts for Rapunzel97_70:

(36, 44335), (37, 44341), (Start: 47 @44380 has 1 MA's), (Start: 51 @44395 has 152 MA's), (71, 44512), (74, 44548), (79, 44563), (80, 44566), (96, 44722),

Gene: Redno2_98 Start: 58813, Stop: 59148, Start Num: 44

Candidate Starts for Redno2_98:

(Start: 44 @58813 has 50 MA's), (62, 58885), (88, 59059), (90, 59077),

Gene: Reptar3000_70 Start: 43262, Stop: 43642, Start Num: 51

Candidate Starts for Reptar3000_70:

(Start: 51 @43262 has 152 MA's), (Start: 55 @43280 has 1 MA's), (74, 43442), (75, 43445), (84, 43493), (96, 43613),

Gene: Rosmarinus_68 Start: 44085, Stop: 44456, Start Num: 51

Candidate Starts for Rosmarinus_68:

(36, 44025), (37, 44031), (Start: 47 @44070 has 1 MA's), (Start: 51 @44085 has 152 MA's), (71, 44202), (74, 44238), (79, 44253), (80, 44256), (96, 44412),

Gene: Ruthiejr_74 Start: 44734, Stop: 45114, Start Num: 51

Candidate Starts for Ruthiejr_74:

(Start: 51 @44734 has 152 MA's), (Start: 55 @44752 has 1 MA's), (74, 44914), (75, 44917), (84, 44965), (96, 45085),

Gene: SamScheppers_71 Start: 45114, Stop: 45494, Start Num: 51

Candidate Starts for SamScheppers_71:

(Start: 51 @45114 has 152 MA's), (Start: 55 @45132 has 1 MA's), (74, 45294), (75, 45297), (84, 45345), (96, 45465),

Gene: SamuelLPlaqson_68 Start: 44604, Stop: 44975, Start Num: 51

Candidate Starts for SamuelLPlaqson_68:

(20, 44391), (21, 44400), (37, 44550), (Start: 51 @44604 has 152 MA's), (73, 44739), (74, 44757), (79, 44772), (96, 44931),

Gene: Scarlett_72 Start: 44755, Stop: 45099, Start Num: 51

Candidate Starts for Scarlett_72:

(5, 44446), (12, 44488), (21, 44566), (Start: 51 @44755 has 152 MA's), (57, 44785), (59, 44788), (67, 44872), (74, 44929), (75, 44932), (79, 44944), (88, 44998),

Gene: Schatzie_101 Start: 61869, Stop: 62204, Start Num: 44

Candidate Starts for Schatzie_101:

(Start: 44 @61869 has 50 MA's), (62, 61941), (88, 62115), (90, 62133),

Gene: Schnauzer_62 Start: 38759, Stop: 39223, Start Num: 44

Candidate Starts for Schnauzer_62:

(Start: 44 @38759 has 50 MA's), (62, 38831), (64, 38846), (76, 39005), (88, 39068), (94, 39155),

Gene: SgtBeansprout_57 Start: 41183, Stop: 41554, Start Num: 56

Candidate Starts for SgtBeansprout_57:

(20, 40970), (21, 40979), (26, 41021), (37, 41126), (Start: 56 @41183 has 8 MA's), (74, 41336), (75, 41339), (79, 41351), (80, 41354), (88, 41405),

Gene: Shadow1_72 Start: 44143, Stop: 44517, Start Num: 51

Candidate Starts for Shadow1_72:

(20, 43933), (21, 43942), (Start: 51 @44143 has 152 MA's), (75, 44302), (86, 44359), (96, 44473),

Gene: Shaobing_70 Start: 44395, Stop: 44775, Start Num: 50

Candidate Starts for Shaobing_70:

(7, 44086), (20, 44188), (21, 44197), (37, 44344), (Start: 50 @44395 has 4 MA's), (57, 44413), (73, 44539), (74, 44557), (75, 44560), (80, 44575), (83, 44608), (87, 44620), (88, 44626),

Gene: ShedlockHolmes_70 Start: 44378, Stop: 44749, Start Num: 51

Candidate Starts for ShedlockHolmes_70:

(21, 44174), (37, 44324), (Start: 51 @44378 has 152 MA's), (61, 44414), (63, 44429), (75, 44537), (86, 44594), (89, 44618), (98, 44717),

Gene: ShiaSurprise_69 Start: 44294, Stop: 44665, Start Num: 51

Candidate Starts for ShiaSurprise_69:

(19, 44084), (36, 44234), (37, 44240), (Start: 47 @44279 has 1 MA's), (Start: 51 @44294 has 152 MA's), (71, 44411), (74, 44447), (79, 44462), (80, 44465), (96, 44621),

Gene: Silvafighter_63 Start: 38302, Stop: 38766, Start Num: 44

Candidate Starts for Silvafighter_63:

(Start: 44 @38302 has 50 MA's), (62, 38374), (64, 38389), (76, 38548), (88, 38611), (94, 38698),

Gene: Silvy_62 Start: 39395, Stop: 39856, Start Num: 44

Candidate Starts for Silvy_62:

(Start: 44 @39395 has 50 MA's), (62, 39467), (64, 39482), (76, 39641), (88, 39704), (94, 39791),

Gene: SirPhilip_67 Start: 44537, Stop: 44893, Start Num: 51

Candidate Starts for SirPhilip_67:

(12, 44258), (21, 44336), (37, 44483), (Start: 51 @44537 has 152 MA's), (53, 44555), (57, 44570), (73, 44696), (74, 44714), (79, 44729), (88, 44783),

Gene: SkinnyPete_58 Start: 38506, Stop: 38970, Start Num: 44

Candidate Starts for SkinnyPete_58:

(Start: 44 @38506 has 50 MA's), (62, 38578), (64, 38593), (76, 38752), (88, 38815), (94, 38902),

Gene: Slarp_73 Start: 44642, Stop: 45022, Start Num: 51

Candidate Starts for Slarp_73:

(Start: 51 @44642 has 152 MA's), (Start: 55 @44660 has 1 MA's), (74, 44822), (75, 44825), (84, 44873), (96, 44993),

Gene: Slimphazie_69 Start: 44395, Stop: 44766, Start Num: 51

Candidate Starts for Slimphazie_69:

(36, 44335), (37, 44341), (Start: 47 @44380 has 1 MA's), (Start: 51 @44395 has 152 MA's), (71, 44512), (74, 44548), (79, 44563), (80, 44566), (96, 44722),

Gene: Smurph_61 Start: 38759, Stop: 39223, Start Num: 44

Candidate Starts for Smurph_61:

(Start: 44 @38759 has 50 MA's), (62, 38831), (64, 38846), (76, 39005), (88, 39068), (94, 39155),

Gene: SoSeph_63 Start: 43532, Stop: 43912, Start Num: 51

Candidate Starts for SoSeph_63:

(31, 43430), (35, 43460), (46, 43511), (Start: 51 @43532 has 152 MA's), (58, 43550), (73, 43676), (74, 43694), (79, 43709),

Gene: Soos_83 Start: 55576, Stop: 55950, Start Num: 44

Candidate Starts for Soos_83:

(22, 55414), (Start: 44 @55576 has 50 MA's), (85, 55807), (86, 55810), (94, 55906), (99, 55936),

Gene: Spock_68 Start: 44098, Stop: 44469, Start Num: 51

Candidate Starts for Spock_68:

(36, 44038), (37, 44044), (Start: 47 @44083 has 1 MA's), (Start: 51 @44098 has 152 MA's), (71, 44215), (74, 44251), (79, 44266), (80, 44269), (96, 44425),

Gene: Sting_88 Start: 56015, Stop: 56389, Start Num: 44

Candidate Starts for Sting_88:

(22, 55853), (Start: 44 @56015 has 50 MA's), (85, 56246), (86, 56249), (94, 56345), (99, 56375),

Gene: Stinson_69 Start: 44490, Stop: 44861, Start Num: 51

Candidate Starts for Stinson_69:

(Start: 51 @44490 has 152 MA's), (71, 44607), (74, 44643), (79, 44658), (80, 44661), (96, 44817),

Gene: Strobilo_76 Start: 46477, Stop: 46821, Start Num: 52

Candidate Starts for Strobilo_76:

(Start: 52 @46477 has 9 MA's), (73, 46618), (75, 46639), (79, 46651), (88, 46705),

Gene: Sulley_67 Start: 43925, Stop: 44296, Start Num: 51

Candidate Starts for Sulley_67:

(20, 43712), (21, 43721), (37, 43871), (Start: 51 @43925 has 152 MA's), (71, 44042), (74, 44078), (79, 44093), (80, 44096), (96, 44252),

Gene: Sunflower1121_73 Start: 44289, Stop: 44663, Start Num: 51

Candidate Starts for Sunflower1121_73:

(20, 44079), (21, 44088), (Start: 51 @44289 has 152 MA's), (75, 44448), (86, 44505), (96, 44619),

Gene: Syra333_71 Start: 44003, Stop: 44377, Start Num: 51

Candidate Starts for Syra333_71:

(20, 43793), (21, 43802), (Start: 51 @44003 has 152 MA's), (75, 44162), (86, 44219), (96, 44333),

Gene: TBond007_65 Start: 43864, Stop: 44235, Start Num: 51

Candidate Starts for TBond007_65:

(37, 43810), (Start: 51 @43864 has 152 MA's), (61, 43900), (63, 43915), (75, 44023), (86, 44080), (89, 44104), (96, 44194), (98, 44203),

Gene: TClif_70 Start: 43964, Stop: 44338, Start Num: 51

Candidate Starts for TClif_70:

(21, 43763), (37, 43910), (Start: 51 @43964 has 152 MA's), (73, 44102), (80, 44138), (86, 44180),

Gene: TM4_69 Start: 41139, Stop: 41513, Start Num: 52

Candidate Starts for TM4_69:

(Start: 52 @41139 has 9 MA's), (68, 41244), (73, 41283), (75, 41304), (79, 41316), (88, 41370), (89, 41385),

Gene: Tachez_68 Start: 43942, Stop: 44313, Start Num: 51

Candidate Starts for Tachez_68:

(36, 43882), (37, 43888), (Start: 47 @43927 has 1 MA's), (Start: 51 @43942 has 152 MA's), (71, 44059), (74, 44095), (79, 44110), (80, 44113), (96, 44269),

Gene: TaiwanKao_70 Start: 44414, Stop: 44785, Start Num: 51

Candidate Starts for TaiwanKao_70:

(Start: 51 @44414 has 152 MA's), (71, 44531), (74, 44567), (79, 44582), (80, 44585), (96, 44741),

Gene: Tapioca_59 Start: 39339, Stop: 39740, Start Num: 44

Candidate Starts for Tapioca_59:

(4, 39042), (14, 39117), (18, 39156), (29, 39264), (30, 39270), (34, 39288), (Start: 44 @39339 has 50 MA's), (76, 39522), (88, 39585), (94, 39672),

Gene: Taquito_72 Start: 44847, Stop: 45227, Start Num: 51

Candidate Starts for Taquito_72:

(Start: 51 @44847 has 152 MA's), (Start: 55 @44865 has 1 MA's), (74, 45027), (75, 45030), (84, 45078), (96, 45198),

Gene: ThreeRngTarjay_103 Start: 63154, Stop: 63486, Start Num: 44

Candidate Starts for ThreeRngTarjay_103:

(Start: 44 @63154 has 50 MA's), (75, 63334), (88, 63400), (90, 63418),

Gene: ThulaThula_64 Start: 43444, Stop: 43848, Start Num: 43

Candidate Starts for ThulaThula_64:

(Start: 43 @43444 has 2 MA's), (Start: 44 @43447 has 50 MA's), (75, 43627), (76, 43630), (88, 43693), (94, 43780), (95, 43789), (99, 43810),

Gene: Thyatira_65 Start: 45497, Stop: 45877, Start Num: 51

Candidate Starts for Thyatira_65:

(31, 45395), (35, 45425), (46, 45476), (Start: 51 @45497 has 152 MA's), (58, 45515), (73, 45641), (74, 45659), (79, 45674),

Gene: Tierra_71 Start: 44504, Stop: 44878, Start Num: 51

Candidate Starts for Tierra_71:

(37, 44450), (Start: 51 @44504 has 152 MA's), (74, 44660), (86, 44720),

Gene: TiniBug_68 Start: 44600, Stop: 44971, Start Num: 51

Candidate Starts for TiniBug_68:

(21, 44396), (37, 44546), (Start: 51 @44600 has 152 MA's), (73, 44735), (74, 44753), (79, 44768), (80, 44771), (96, 44927),

Gene: Tiri_68 Start: 43998, Stop: 44369, Start Num: 51

Candidate Starts for Tiri_68:

(Start: 51 @43998 has 152 MA's), (71, 44115), (74, 44151), (79, 44166), (80, 44169), (96, 44325),

Gene: Topper_68 Start: 44097, Stop: 44468, Start Num: 51

Candidate Starts for Topper_68:

(36, 44037), (37, 44043), (Start: 47 @44082 has 1 MA's), (Start: 51 @44097 has 152 MA's), (71, 44214), (74, 44250), (79, 44265), (80, 44268), (96, 44424),

Gene: Tortellini_67 Start: 45000, Stop: 45356, Start Num: 44

Candidate Starts for Tortellini_67:

(29, 44925), (30, 44931), (34, 44949), (Start: 44 @45000 has 50 MA's), (76, 45183), (88, 45246), (94, 45333),

Gene: TreyKay_69 Start: 44352, Stop: 44723, Start Num: 51

Candidate Starts for TreyKay_69:

(Start: 51 @44352 has 152 MA's), (71, 44469), (74, 44505), (79, 44520), (80, 44523), (96, 44679),

Gene: TribbleTrouble_69 Start: 44867, Stop: 45202, Start Num: 51

Candidate Starts for TribbleTrouble_69:

(37, 44813), (Start: 51 @44867 has 152 MA's), (71, 44987), (75, 45026), (80, 45041), (82, 45068), (86, 45083), (89, 45107),

Gene: TruffulaTree_69 Start: 44391, Stop: 44762, Start Num: 51

Candidate Starts for TruffulaTree_69:

(36, 44331), (37, 44337), (Start: 47 @44376 has 1 MA's), (Start: 51 @44391 has 152 MA's), (71, 44508), (74, 44544), (79, 44559), (80, 44562), (96, 44718),

Gene: Twitch_68 Start: 44099, Stop: 44470, Start Num: 51

Candidate Starts for Twitch_68:

(36, 44039), (37, 44045), (Start: 47 @44084 has 1 MA's), (Start: 51 @44099 has 152 MA's), (71, 44216), (74, 44252), (79, 44267), (80, 44270), (96, 44426),

Gene: Unicorn_69 Start: 43630, Stop: 44004, Start Num: 51

Candidate Starts for Unicorn_69:

(37, 43576), (Start: 51 @43630 has 152 MA's), (74, 43786), (75, 43789), (80, 43804), (86, 43846),

Gene: Urkel_68 Start: 44604, Stop: 44975, Start Num: 51

Candidate Starts for Urkel_68:

(20, 44391), (21, 44400), (37, 44550), (Start: 51 @44604 has 152 MA's), (73, 44739), (74, 44757), (79, 44772), (96, 44931),

Gene: Validus_73 Start: 44948, Stop: 45340, Start Num: 45

Candidate Starts for Validus_73:

(32, 44876), (38, 44927), (39, 44933), (Start: 45 @44948 has 1 MA's), (Start: 48 @44966 has 1 MA's), (57, 44981), (73, 45107), (74, 45125), (75, 45128), (79, 45140), (80, 45143), (87, 45188), (88, 45194), (96, 45299), (100, 45317),

Gene: Veliki_69 Start: 44131, Stop: 44502, Start Num: 51

Candidate Starts for Veliki_69:

(Start: 51 @44131 has 152 MA's), (71, 44248), (74, 44284), (79, 44299), (80, 44302), (96, 44458),

Gene: Waterfoul_64 Start: 43594, Stop: 43974, Start Num: 51

Candidate Starts for Waterfoul_64:

(31, 43492), (35, 43522), (46, 43573), (Start: 51 @43594 has 152 MA's), (58, 43612), (73, 43738), (74, 43756), (79, 43771),

Gene: Willsammy_60 Start: 40682, Stop: 41095, Start Num: 44

Candidate Starts for Willsammy_60:

(10, 40418), (17, 40487), (25, 40535), (29, 40607), (30, 40613), (34, 40631), (Start: 44 @40682 has 50 MA's), (76, 40865), (88, 40928),

Gene: Wintermute_73 Start: 44872, Stop: 45252, Start Num: 51

Candidate Starts for Wintermute_73:

(Start: 51 @44872 has 152 MA's), (Start: 55 @44890 has 1 MA's), (74, 45052), (75, 45055), (84, 45103), (96, 45223),

Gene: Xerxes_61 Start: 38756, Stop: 39220, Start Num: 44

Candidate Starts for Xerxes_61:

(Start: 44 @38756 has 50 MA's), (62, 38828), (64, 38843), (76, 39002), (88, 39065), (94, 39152),

Gene: Ximenita_73 Start: 44332, Stop: 44706, Start Num: 51

Candidate Starts for Ximenita_73:

(Start: 51 @44332 has 152 MA's), (74, 44488), (75, 44491), (86, 44548), (96, 44662),

Gene: Y10_70 Start: 44849, Stop: 45229, Start Num: 51

Candidate Starts for Y10_70:

(Start: 51 @44849 has 152 MA's), (Start: 55 @44867 has 1 MA's), (74, 45029), (75, 45032), (84, 45080), (96, 45200),

Gene: Y2_70 Start: 44849, Stop: 45229, Start Num: 51

Candidate Starts for Y2_70:

(Start: 51 @44849 has 152 MA's), (Start: 55 @44867 has 1 MA's), (74, 45029), (75, 45032), (84, 45080), (96, 45200),

Gene: YoureAdopted_67 Start: 44277, Stop: 44648, Start Num: 51

Candidate Starts for YoureAdopted_67:

(20, 44064), (21, 44073), (37, 44223), (Start: 51 @44277 has 152 MA's), (71, 44394), (74, 44430), (79, 44445), (80, 44448), (96, 44604),

Gene: Yuna_72 Start: 45450, Stop: 45779, Start Num: 54

Candidate Starts for Yuna_72:

(Start: 54 @45450 has 1 MA's), (82, 45651), (86, 45666),

Gene: Yunkel11_72 Start: 44191, Stop: 44562, Start Num: 51

Candidate Starts for Yunkel11_72:

(37, 44137), (Start: 51 @44191 has 152 MA's), (71, 44308), (74, 44344), (79, 44359), (80, 44362), (96, 44518),

Gene: Zabiza_64 Start: 40247, Stop: 40618, Start Num: 51

Candidate Starts for Zabiza_64:

(36, 40187), (37, 40193), (Start: 47 @40232 has 1 MA's), (Start: 51 @40247 has 152 MA's), (71, 40364), (74, 40400), (79, 40415), (80, 40418), (96, 40574),

Gene: Zavala_71 Start: 44669, Stop: 45040, Start Num: 51

Candidate Starts for Zavala_71:

(36, 44609), (37, 44615), (Start: 47 @44654 has 1 MA's), (Start: 51 @44669 has 152 MA's), (71, 44786), (74, 44822), (79, 44837), (80, 44840), (96, 44996),

Gene: ZenTime222_58 Start: 39792, Stop: 40148, Start Num: 44

Candidate Starts for ZenTime222_58:

(Start: 44 @39792 has 50 MA's), (76, 39975), (88, 40038), (94, 40125),

Gene: ZoeJ_70 Start: 45880, Stop: 46251, Start Num: 52

Candidate Starts for ZoeJ_70:

(Start: 52 @45880 has 9 MA's), (70, 45988), (73, 46021), (75, 46042), (79, 46054), (88, 46108), (89, 46123),

Gene: Zucker_83 Start: 48730, Stop: 49089, Start Num: 43

Candidate Starts for Zucker_83:

(Start: 43 @48730 has 2 MA's), (72, 48886), (77, 48919), (88, 48979), (94, 49072),