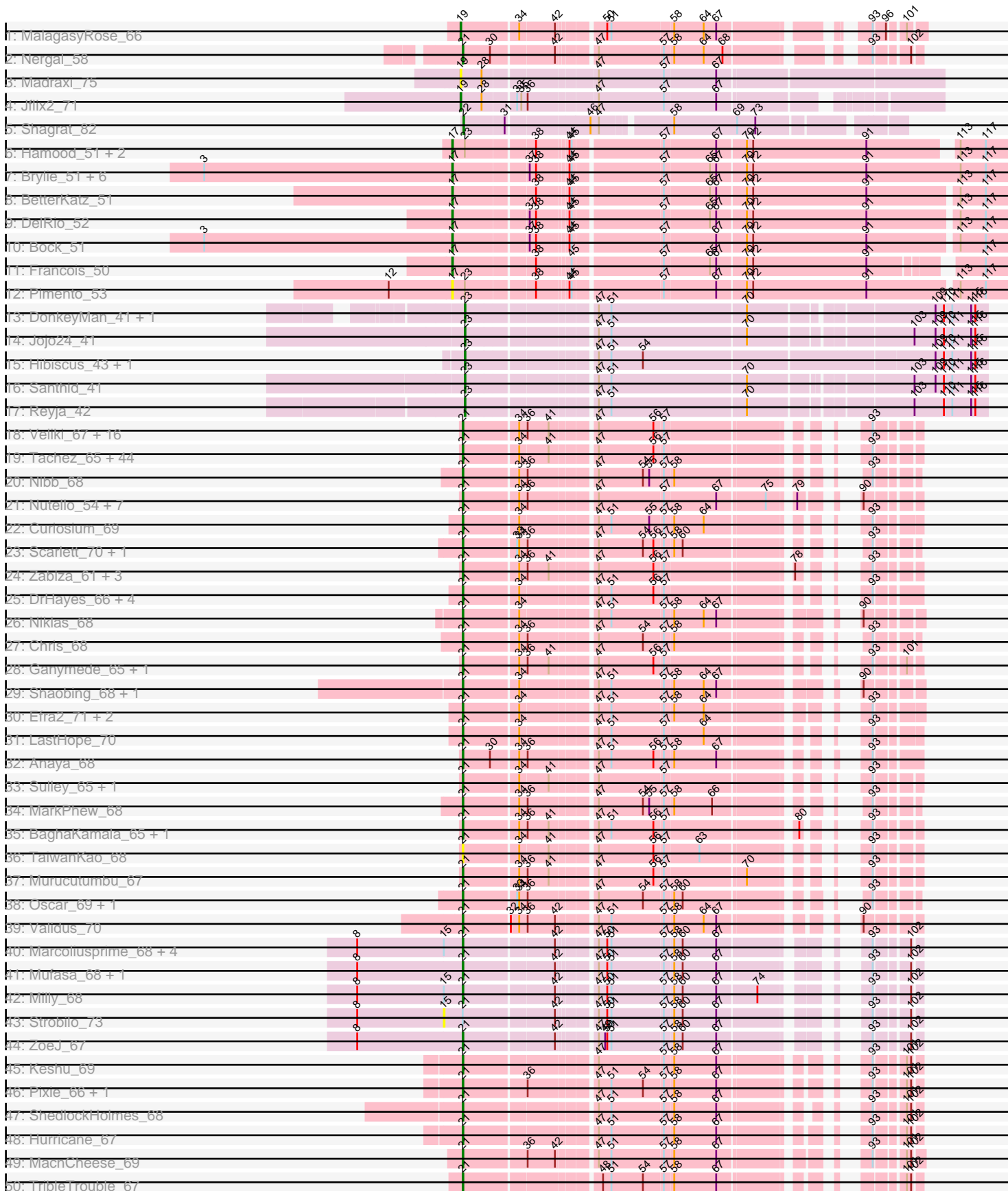
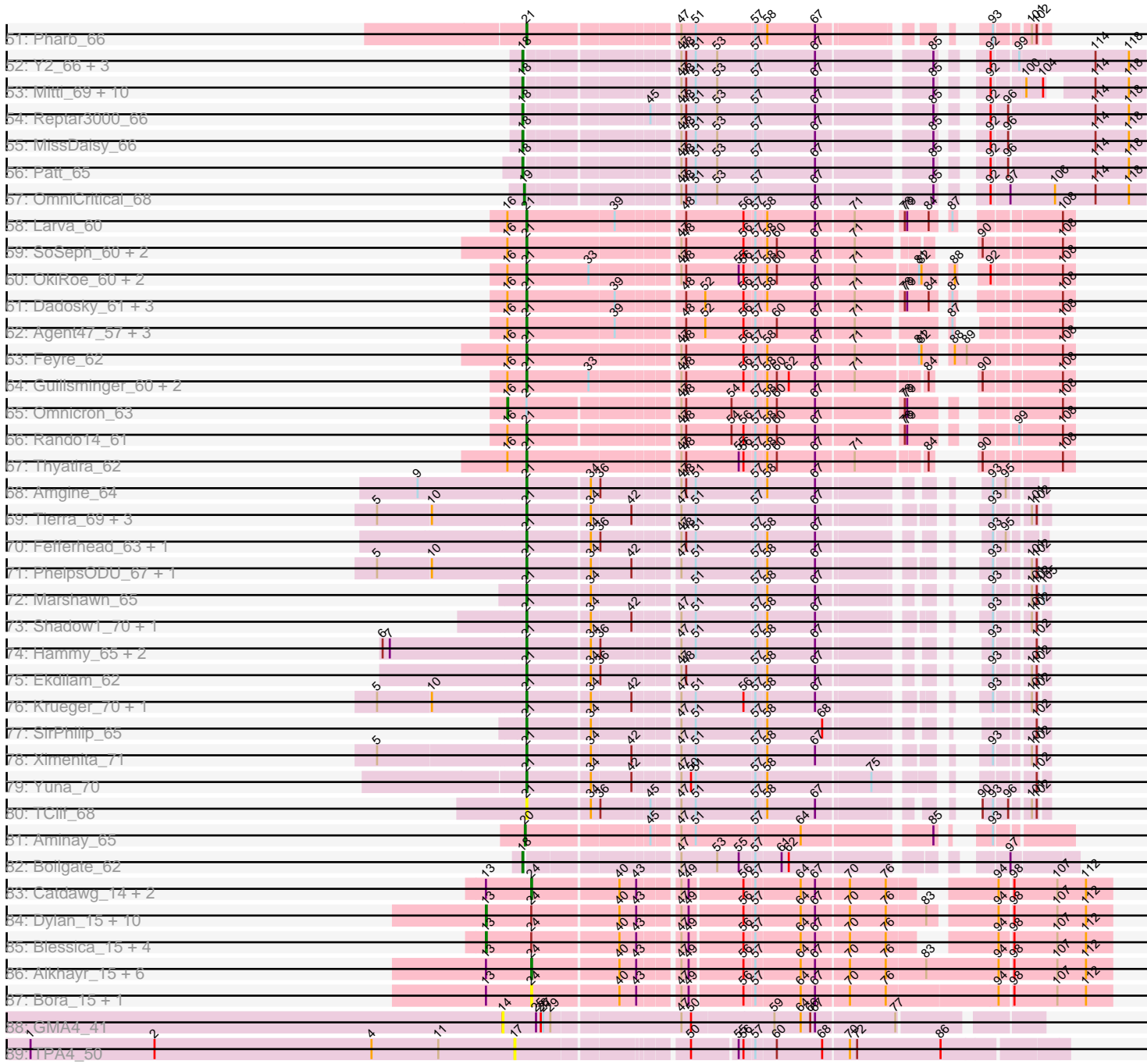


Pham 163327



Pham 163327



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 163327 Report

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

Pham number 163327 has 244 members, 22 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_66
- Track 2 : Nergal_58
- Track 3 : Madraxi_75
- Track 4 : Jflix2_71
- Track 5 : Shagrat_82
- Track 6 : Hamood_51, Chop_51, GrandSlam_51
- Track 7 : Brylie_51, NancyRae_50, Mulch_51, Nadeem_51, WheatThin_50, Parada_51, Ayotoya_51
- Track 8 : BetterKatz_51
- Track 9 : DelRio_52
- Track 10 : Bock_51
- Track 11 : Francois_50
- Track 12 : Pimento_53
- Track 13 : DonkeyMan_41, Tarzan_42
- Track 14 : Jojo24_41
- Track 15 : Hibiscus_43, Heinz_43
- Track 16 : Santhid_41
- Track 17 : Reyja_42
- Track 18 : Veliki_67, LaterM_66, Apocalypse_68, Stinson_67, JAWS_66, Ageofdapage_69, Devera_73, BarrelRoll_66, Rapunzel97_67, TruffulaTree_66, Dole_71, Slimphazie_66, Illumine_71, MeaningOfLife_66, Deby_66, Zavala_68, Mynx_67
- Track 19 : Tachez_65, BGlluviae_65, Durfee_65, Padpat_68, Twitch_65, Jarvi_65, Pokerus_65, Adonis_65, Emerson_67, Blizzard_65, Atiba_66, CaseJules_67, Adephegia_65, Llorens_65, Hyperbowlee_65, Capricorn_65, Asayake_65, Homura_65, Spock_65, Rosmarinus_65, Megsy_68, Lunahalos_65, YoureAdopted_65, Boiiii_65, Piatt_65, Joy99_65, CrimD_67, Tiri_66, Peel_65, Belladonna_65, Beezoo_67, Padfoot_65, Topper_65, Jayhawk_67, Dalmuri_65, ShiaSurprise_66, Inky_65, LindNT_65, TreyKay_67, Jeckyll_65, Prithvi_67, AlishaPH_65, Geraldini_68, CREW_65, BEEST_65
- Track 20 : Nibb_68
- Track 21 : Nutello_54, SgtBeansprout_55, Nikao_57, Binglebops_54, LilPharaoh_55, Mdavu_55, Enkosi_56, Amelie_54
- Track 22 : Curiosium_69
- Track 23 : Scarlett_70, KiSi_70
- Track 24 : Zabiza_61, Ramen_66, ActinUp_65, HedwigODU_65
- Track 25 : DrHayes_66, Urkel_66, Bella96_66, SamuelLPlaqson_66, TiniBug_66

- Track 26 : Niklas_68
- Track 27 : Chris_68
- Track 28 : Ganymede_65, QuincyRose_63
- Track 29 : Shaobing_68, Peanam_68
- Track 30 : Efra2_71, Yunkel11_70, Guanica15_70
- Track 31 : LastHope_70
- Track 32 : Anaya_68
- Track 33 : Sulley_65, Angelica_65
- Track 34 : MarkPhew_68
- Track 35 : BaghaKamala_65, CheetoDust_65
- Track 36 : TaiwanKao_68
- Track 37 : Murucutumbu_67
- Track 38 : Oscar_69, LeMond_69
- Track 39 : Validus_70
- Track 40 : Marcoliusprime_68, DismalFunk_68, TM4_66, Findley_68, DismalStressor_68
- Track 41 : Mufasa_68, BoostSeason_68
- Track 42 : Milly_68
- Track 43 : Strobilo_73
- Track 44 : ZoeJ_67
- Track 45 : Keshu_69
- Track 46 : Pixie_66, TBond007_63
- Track 47 : ShedlockHolmes_68
- Track 48 : Hurricane_67
- Track 49 : MacnCheese_69
- Track 50 : TribbleTrouble_67
- Track 51 : Pharb_66
- Track 52 : Y2_66, Ruthiejr_70, Y10_66, JF1_69
- Track 53 : Mitti_69, Eponine_71, Cheetobro_69, Malthus_70, Taquito_68, Juliette_71, Slarp_69, Fionnbharth_69, Wintermute_69, SamScheppers_67, Chancellor_69
- Track 54 : Reptar3000_66
- Track 55 : MissDaisy_66
- Track 56 : Patt_65
- Track 57 : OmniCritical_68
- Track 58 : Larva_60
- Track 59 : SoSeph_60, Heftyboy_60, Waterfoul_61
- Track 60 : OkiRoe_60, Gengar_59, Miryou_64
- Track 61 : Dadosky_61, Edugator_58, AlleyCat_61, Psycho_59
- Track 62 : Agent47_57, Collard_57, Kratio_57, InvictusManeo_57
- Track 63 : Feyre_62
- Track 64 : Guillsminger_60, Paola_59, Leston_59
- Track 65 : Omnicron_63
- Track 66 : Rando14_61
- Track 67 : Thyatira_62
- Track 68 : Amgine_64
- Track 69 : Tierra_69, Cain_69, Phrank_69, Bryler_69
- Track 70 : Fefferhead_63, Ellie_61
- Track 71 : PhelpsODU_67, Unicorn_67
- Track 72 : Marshawn_65
- Track 73 : Shadow1_70, Sunflower1121_71
- Track 74 : Hammy_65, Amohnition_65, DarthP_65
- Track 75 : Ekdilam_62

- Track 76 : Krueger_70, Syra333_69
- Track 77 : SirPhilip_65
- Track 78 : Ximenita_71
- Track 79 : Yuna_70
- Track 80 : TClif_68
- Track 81 : Aminay_65
- Track 82 : Boilgate_62
- Track 83 : Catdawg_14, JangDynasty_14, FoulBall_14
- Track 84 : Dylan_15, YungJamal_16, Zakhe101_16, Ryadel_17, Ashwin_16, Murai_15, Krili_15, MadKillah_16, Firecracker_15, Smooch_16, Winget_15
- Track 85 : Blessica_15, Idergollasper_14, TelAviv_14, Familton_15, SchoolBus_14
- Track 86 : Alkhayr_15, Vorrrps_15, Mori_15, Shida_15, Schuy_15, Corndog_17, NiebruSaylor_15
- Track 87 : Bora_15, Wildflower_15
- Track 88 : GMA4_41
- Track 89 : TPA4_50

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

The start number called the most often in the published annotations is 21, it was called in 157 of the 222 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_65, Adephegia_65, Adonis_65, Agent47_57, Ageofdapage_69, AlishaPH_65, AlleyCat_61, Amelie_54, Amgine_64, Amohnition_65, Anaya_68, Angelica_65, Apocalypse_68, Asayake_65, Atiba_66, BEEST_65, BGIluviae_65, BaghaKamala_65, BarrelRoll_66, Beezoo_67, Bella96_66, Belladonna_65, Biglebops_54, Blizzard_65, Boiiii_65, BoostSeason_68, Bryler_69, CREW_65, Cain_69, Capricorn_65, CaseJules_67, CheetoDust_65, Chris_68, Collard_57, CrimD_67, Curiosium_69, Dadosky_61, Dalmuri_65, DARTH_P_65, Deby_66, Devera_73, DismalFunk_68, DismalStressor_68, Dole_71, DrHayes_66, Durfee_65, Edugator_58, Efra2_71, Ekdilam_62, Ellie_61, Emerson_67, Enkosi_56, Fefferhead_63, Feyre_62, Findley_68, Ganymede_65, Gengar_59, Geraldini_68, Guanica15_70, Guillsminger_60, Hammy_65, HedwigODU_65, Heftyboy_60, Homura_65, Hurricane_67, Hyperbowlee_65, Illumine_71, Inky_65, InvictusManeo_57, JAWS_66, Jarvi_65, Jayhawk_67, Jeckyll_65, Joy99_65, Keshu_69, KiSi_70, Kratio_57, Krueger_70, Larva_60, LastHope_70, LaterM_66, LeMond_69, Leston_59, LilPharaoh_55, LindNT_65, Llorens_65, Lunahalos_65, MacnCheese_69, Marcoliusprime_68, MarkPhew_68, Marshawn_65, Mdavu_55, MeaningOfLife_66, Megsy_68, Milly_68, Miryou_64, Mufasa_68, Murucutumbu_67, Mynx_67, Nergal_58, Nibb_68, Nikao_57, Niklas_68, Nutello_54, OkiRoe_60, Oscar_69, Padfoot_65, Padpat_68, Paola_59, Peanam_68, Peel_65, Pharb_66, PhelpsODU_67, Phrank_69, Piatt_65, Pixie_66, Pokerus_65, Prithvi_67, Psycho_59, QuincyRose_63, Ramen_66, Rando14_61, Rapunzel97_67, Rosmarinus_65, SamuelLPlaqson_66, Scarlett_70, SgtBeansprout_55, Shadow1_70, Shaobing_68, ShedlockHolmes_68, ShiaSurprise_66, SirPhilip_65, Slimphazie_66, SoSeph_60, Spock_65, Stinson_67, Sulley_65, Sunflower1121_71, Syra333_69, TBond007_63, TClif_68, TM4_66, Tachez_65, TaiwanKao_68, Thyatira_62, Tierra_69, TiniBug_66, Tiri_66, Topper_65, TreyKay_67, TripleTrouble_67, TruffulaTree_66, Twitch_65, Unicorn_67, Urkel_66, Validus_70, Veliki_67, Waterfoul_61, Ximenita_71,

YoureAdopted_65, Yuna_70, Yunkel11_70, Zabiza_61, Zavala_68, ZoeJ_67,

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

- Omnicron_63, Strobilo_73,

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

- Alkhayr_15, Aminay_65, Ashwin_16, Ayotoya_51, BetterKatz_51, Blessica_15, Bock_51, Boilgate_62, Bora_15, Brylie_51, Catdawg_14, Chancellor_69, Cheetobro_69, Chop_51, Corndog_17, DelRio_52, DonkeyMan_41, Dylan_15, Eponine_71, Familton_15, Fionnbharth_69, Firecracker_15, FoulBall_14, Francois_50, GMA4_41, GrandSlam_51, Hamood_51, Heinz_43, Hibiscus_43, Idergollasper_14, JF1_69, JangDynasty_14, Jflix2_71, Jojo24_41, Juliette_71, Krili_15, MadKillah_16, Madraxi_75, MalagasyRose_66, Malthus_70, MissDaisy_66, Mitti_69, Mori_15, Mulch_51, Murai_15, Nadeem_51, NancyRae_50, NiebruSaylor_15, OmniCritical_68, Parada_51, Patt_65, Pimento_53, Reptar3000_66, Reyja_42, Ruthiejr_70, Ryadel_17, SamScheppers_67, Santhid_41, SchoolBus_14, Schuy_15, Shagrat_82, Shida_15, Slarp_69, Smooch_16, TPA4_50, Taquito_68, Tarzan_42, TelAviv_14, Vorrps_15, WheatThin_50, Wildflower_15, Winget_15, Wintermute_69, Y10_66, Y2_66, YungJamal_16, Zakhe101_16,

Summary by start number:

Start 13:

- Found in 28 of 244 (11.5%) of genes in pham
- Manual Annotations of this start: 15 of 222
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Ashwin_16 (O), Blessica_15 (O), Dylan_15 (O), Familton_15 (O), Firecracker_15 (O), Idergollasper_14 (O), Krili_15 (O), MadKillah_16 (O), Murai_15 (O), Ryadel_17 (O), SchoolBus_14 (O), Smooch_16 (O), TelAviv_14 (O), Winget_15 (O), YungJamal_16 (O), Zakhe101_16 (O),

Start 14:

- Found in 1 of 244 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4_41 (singleton),

Start 15:

- Found in 7 of 244 (2.9%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Strobilo_73 (K2),

Start 16:

- Found in 22 of 244 (9.0%) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Omnicron_63 (K5),

Start 17:

- Found in 16 of 244 (6.6%) of genes in pham
- Manual Annotations of this start: 13 of 222
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Ayotoya_51 (DI), BetterKatz_51 (DI), Bock_51 (DI), Brylie_51 (DI), Chop_51 (DI), DelRio_52 (DI), Francois_50 (DI), GrandSlam_51 (DI), Hamood_51 (DI), Mulch_51 (DI), Nadeem_51 (DI), NancyRae_50 (DI), Parada_51 (DI), Pimento_53 (DI), TPA4_50 (singleton), WheatThin_50 (DI),

Start 18:

- Found in 19 of 244 (7.8%) of genes in pham
- Manual Annotations of this start: 19 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_62 (K8), Chancellor_69 (K4), Cheetobro_69 (K4), Eponine_71 (K4), Fionnbharth_69 (K4), JF1_69 (K4), Juliette_71 (K4), Malthus_70 (K4), MissDaisy_66 (K4), Mitti_69 (K4), Patt_65 (K4), Reptar3000_66 (K4), Ruthiejr_70 (K4), SamScheppers_67 (K4), Slarp_69 (K4), Taquito_68 (K4), Wintermute_69 (K4), Y10_66 (K4), Y2_66 (K4),

Start 19:

- Found in 4 of 244 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jflix2_71 (CF), Madraxi_75 (CF), MalagasyRose_66 (AG), OmniCritical_68 (K4),

Start 20:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_65 (K7),

Start 21:

- Found in 167 of 244 (68.4%) of genes in pham
- Manual Annotations of this start: 157 of 222
- Called 98.8% of time when present
- Phage (with cluster) where this start called: ActinUp_65 (K1), Adephagia_65 (K1), Adonis_65 (K1), Agent47_57 (K5), Ageofdapage_69 (K1), AlishaPH_65 (K1), AlleyCat_61 (K5), Amelie_54 (K1), Amgine_64 (K6), Amohnition_65 (K6), Anaya_68 (K1), Angelica_65 (K1), Apocalypse_68 (K1), Asayake_65 (K1), Atiba_66 (K1), BEEST_65 (K1), BGlluviae_65 (K1), BaghaKamala_65 (K1), BarrelRoll_66 (K1), Beezoo_67 (K1), Bella96_66 (K1), Belladonna_65 (K1), Binglebops_54 (K1), Blizzard_65 (K1), Boiiii_65 (K1), BoostSeason_68 (K2), Bryler_69 (K6), CREW_65 (K1), Cain_69 (K6), Capricorn_65 (K1), CaseJules_67 (K1), CheetoDust_65 (K1), Chris_68 (K1), Collard_57 (K5), CrimD_67 (K1), Curiosium_69 (K1), Dadosky_61 (K5), Dalmuri_65 (K1), DarthP_65 (K6), Deby_66 (K1), Devera_73 (K1), DismalFunk_68 (K2), DismalStressor_68 (K2), Dole_71 (K1), DrHayes_66 (K1), Durfee_65 (K1), Edugator_58 (K5), Efra2_71 (K1), Ekdilam_62 (K6), Ellie_61 (K6), Emerson_67 (K1), Enkosi_56 (K1), Fefferhead_63 (K6), Feyre_62 (K5), Findley_68 (K2), Ganymede_65 (K1), Gengar_59 (K5), Geraldini_68 (K1), Guanica15_70 (K1), Guillsminger_60 (K5), Hammy_65 (K6), HedwigODU_65 (K1), Heftyboy_60 (K5), Homura_65 (K1), Hurricane_67 (K3), Hyperbowlee_65 (K1), Illumine_71 (K1), Inky_65 (K1), InvictusManeo_57 (K5), JAWS_66 (K1), Jarvi_65 (K1), Jayhawk_67 (K1), Jeckyll_65 (K1), Joy99_65 (K1), Keshu_69 (K3), KiSi_70 (K1), Kratio_57 (K5), Krueger_70 (K6), Larva_60 (K5), LastHope_70 (K1), LaterM_66 (K1), LeMond_69 (K1), Leston_59 (K5), LilPharaoh_55 (K1), LindNT_65 (K1), Llorens_65 (K1),

Lunahalos_65 (K1), MacnCheese_69 (K3), Marcoliusprime_68 (K2), MarkPheW_68 (K1), Marshawn_65 (K6), Mdavu_55 (K1), MeaningOfLife_66 (K1), Megsy_68 (K1), Milly_68 (K2), Miryou_64 (K5), Mufasa_68 (K2), Murucutumbu_67 (K1), Mynx_67 (K1), Nergal_58 (AG), Nibb_68 (K1), Nikao_57 (K1), Niklas_68 (K1), Nutello_54 (K1), OkiRoe_60 (K5), Oscar_69 (K1), Padfoot_65 (K1), Padpat_68 (K1), Paola_59 (K5), Peanam_68 (K1), Peel_65 (K1), Pharb_66 (K3), PhelpsODU_67 (K6), Phrank_69 (K6), Piatt_65 (K1), Pixie_66 (K3), Pokerus_65 (K1), Prithvi_67 (K1), Psycho_59 (K5), QuincyRose_63 (K1), Ramen_66 (K1), Rando14_61 (K5), Rapunzel97_67 (K1), Rosmarinus_65 (K1), SamuelLPlaqson_66 (K1), Scarlett_70 (K1), SgtBeansprout_55 (K1), Shadow1_70 (K6), Shaobing_68 (K1), ShedlockHolmes_68 (K3), ShiaSurprise_66 (K1), SirPhilip_65 (K6), Slimphazie_66 (K1), SoSeph_60 (K5), Spock_65 (K1), Stinson_67 (K1), Sulley_65 (K1), Sunflower1121_71 (K6), Syra333_69 (K6), TBond007_63 (K3), TClif_68 (K6), TM4_66 (K2), Tachez_65 (K1), TaiwanKao_68 (K1), Thyatira_62 (K5), Tierra_69 (K6), TiniBug_66 (K1), Tiri_66 (K1), Topper_65 (K1), TreyKay_67 (K1), TribbleTrouble_67 (K3), TruffulaTree_66 (K1), Twitch_65 (K1), Unicorn_67 (K6), Urkel_66 (K1), Validus_70 (K1), Veliki_67 (K1), Waterfoul_61 (K5), Ximenita_71 (K6), YoureAdopted_65 (K1), Yuna_70 (K6), Yunkel11_70 (K1), Zabiza_61 (K1), Zavala_68 (K1), ZoeJ_67 (K2),

Start 22:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 222
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_82 (CF),

Start 23:

- Found in 11 of 244 (4.5%) of genes in pham
- Manual Annotations of this start: 5 of 222
- Called 63.6% of time when present
- Phage (with cluster) where this start called: DonkeyMan_41 (DY), Heinz_43 (DY), Hibiscus_43 (DY), Jojo24_41 (DY), Reyja_42 (DY), Santhid_41 (DY), Tarzan_42 (DY),

Start 24:

- Found in 28 of 244 (11.5%) of genes in pham
- Manual Annotations of this start: 7 of 222
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Alkhayr_15 (O), Bora_15 (O), Catdawg_14 (O), Corndog_17 (O), FoulBall_14 (O), JangDynasty_14 (O), Mori_15 (O), NiebruSaylor_15 (O), Schuy_15 (O), Shida_15 (O), Vorrrps_15 (O), Wildflower_15 (O),

Summary by clusters:

There are 14 clusters represented in this pham: singleton, AG, DI, DY, CF, O, K3, K2, K1, K7, K6, K5, K4, K8,

Info for manual annotations of cluster AG:

- Start number 19 was manually annotated 1 time for cluster AG.
- Start number 21 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CF:

- Start number 19 was manually annotated 1 time for cluster CF.

- Start number 22 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster DI:

- Start number 17 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DY:

- Start number 23 was manually annotated 5 times for cluster DY.

Info for manual annotations of cluster K1:

- Start number 21 was manually annotated 99 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 21 was manually annotated 9 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 21 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 18 was manually annotated 18 times for cluster K4.
- Start number 19 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K5:

- Start number 16 was manually annotated 1 time for cluster K5.
- Start number 21 was manually annotated 19 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 21 was manually annotated 21 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 20 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 18 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster O:

- Start number 13 was manually annotated 15 times for cluster O.
- Start number 24 was manually annotated 7 times for cluster O.

Gene Information:

Gene: ActinUp_65 Start: 42856, Stop: 43365, Start Num: 21

Candidate Starts for ActinUp_65:

(Start: 21 @42856 has 157 MA's), (34, 42931), (36, 42940), (41, 42970), (47, 43024), (56, 43102), (57, 43114), (78, 43273), (93, 43315),

Gene: Adephagia_65 Start: 42893, Stop: 43402, Start Num: 21

Candidate Starts for Adephagia_65:

(Start: 21 @42893 has 157 MA's), (34, 42968), (41, 43007), (47, 43061), (56, 43139), (57, 43151), (93, 43352),

Gene: Adonis_65 Start: 43128, Stop: 43637, Start Num: 21

Candidate Starts for Adonis_65:

(Start: 21 @43128 has 157 MA's), (34, 43203), (41, 43242), (47, 43296), (56, 43374), (57, 43386), (93, 43587),

Gene: Agent47_57 Start: 40081, Stop: 40656, Start Num: 21

Candidate Starts for Agent47_57:

(Start: 16 @40057 has 1 MA's), (Start: 21 @40081 has 157 MA's), (39, 40189), (48, 40261), (52, 40285), (56, 40333), (57, 40345), (60, 40369), (67, 40417), (71, 40462), (87, 40552), (108, 40645),

Gene: Ageofdapage_69 Start: 44287, Stop: 44796, Start Num: 21

Candidate Starts for Ageofdapage_69:

(Start: 21 @44287 has 157 MA's), (34, 44362), (36, 44371), (41, 44401), (47, 44455), (56, 44533), (57, 44545), (93, 44746),

Gene: AlishaPH_65 Start: 43154, Stop: 43663, Start Num: 21

Candidate Starts for AlishaPH_65:

(Start: 21 @43154 has 157 MA's), (34, 43229), (41, 43268), (47, 43322), (56, 43400), (57, 43412), (93, 43613),

Gene: Alkhayr_15 Start: 6062, Stop: 6742, Start Num: 24

Candidate Starts for Alkhayr_15:

(Start: 13 @6005 has 15 MA's), (Start: 24 @6062 has 7 MA's), (40, 6167), (43, 6185), (47, 6227), (49, 6236), (56, 6299), (57, 6311), (64, 6365), (67, 6383), (70, 6422), (76, 6467), (83, 6515), (94, 6605), (98, 6620), (107, 6674), (112, 6710),

Gene: AlleyCat_61 Start: 40379, Stop: 40972, Start Num: 21

Candidate Starts for AlleyCat_61:

(Start: 16 @40355 has 1 MA's), (Start: 21 @40379 has 157 MA's), (39, 40487), (48, 40559), (52, 40583), (56, 40631), (57, 40643), (58, 40655), (67, 40715), (71, 40760), (78, 40814), (79, 40817), (84, 40844), (87, 40859), (108, 40958),

Gene: Amelie_54 Start: 40324, Stop: 40845, Start Num: 21

Candidate Starts for Amelie_54:

(Start: 21 @40324 has 157 MA's), (34, 40399), (36, 40408), (47, 40492), (57, 40582), (67, 40654), (75, 40717), (79, 40744), (90, 40783),

Gene: Amgine_64 Start: 43961, Stop: 44473, Start Num: 21

Candidate Starts for Amgine_64:

(9, 43832), (Start: 21 @43961 has 157 MA's), (34, 44036), (36, 44045), (47, 44129), (48, 44135), (51, 44147), (57, 44219), (58, 44231), (67, 44291), (93, 44426), (95, 44438),

Gene: Aminay_65 Start: 42473, Stop: 43045, Start Num: 20

Candidate Starts for Aminay_65:

(Start: 20 @42473 has 1 MA's), (45, 42614), (47, 42641), (51, 42659), (57, 42731), (64, 42785), (85, 42932), (93, 42959),

Gene: Amohnition_65 Start: 43500, Stop: 44012, Start Num: 21

Candidate Starts for Amohnition_65:

(6, 43323), (7, 43332), (Start: 21 @43500 has 157 MA's), (34, 43575), (36, 43584), (47, 43668), (51, 43686), (57, 43758), (58, 43770), (67, 43830), (93, 43962), (102, 44001),

Gene: Anaya_68 Start: 43839, Stop: 44357, Start Num: 21

Candidate Starts for Anaya_68:

(Start: 21 @43839 has 157 MA's), (30, 43878), (34, 43914), (36, 43923), (47, 44007), (51, 44025), (56, 44085), (57, 44097), (58, 44109), (67, 44169), (93, 44301),

Gene: Angelica_65 Start: 43046, Stop: 43555, Start Num: 21

Candidate Starts for Angelica_65:

(Start: 21 @43046 has 157 MA's), (34, 43121), (41, 43160), (47, 43214), (57, 43304), (93, 43505),

Gene: Apocalypse_68 Start: 43810, Stop: 44319, Start Num: 21

Candidate Starts for Apocalypse_68:

(Start: 21 @43810 has 157 MA's), (34, 43885), (36, 43894), (41, 43924), (47, 43978), (56, 44056), (57, 44068), (93, 44269),

Gene: Asayake_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for Asayake_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Ashwin_16 Start: 6240, Stop: 6962, Start Num: 13

Candidate Starts for Ashwin_16:

(Start: 13 @6240 has 15 MA's), (Start: 24 @6297 has 7 MA's), (40, 6402), (43, 6420), (47, 6462), (49, 6471), (56, 6534), (57, 6546), (64, 6600), (67, 6618), (70, 6657), (76, 6702), (83, 6750), (94, 6825), (98, 6840), (107, 6894), (112, 6930),

Gene: Atiba_66 Start: 42856, Stop: 43365, Start Num: 21

Candidate Starts for Atiba_66:

(Start: 21 @42856 has 157 MA's), (34, 42931), (41, 42970), (47, 43024), (56, 43102), (57, 43114), (93, 43315),

Gene: Ayotoya_51 Start: 37282, Stop: 38049, Start Num: 17

Candidate Starts for Ayotoya_51:

(3, 36928), (Start: 17 @37282 has 13 MA's), (37, 37381), (38, 37390), (44, 37429), (45, 37432), (57, 37549), (65, 37612), (67, 37621), (70, 37660), (72, 37669), (91, 37831), (113, 37942), (117, 37978),

Gene: BEEST_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for BEEST_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: BGlluviae_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for BGlluviae_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: BaghaKamala_65 Start: 42675, Stop: 43184, Start Num: 21

Candidate Starts for BaghaKamala_65:

(Start: 21 @42675 has 157 MA's), (34, 42750), (36, 42759), (41, 42789), (47, 42843), (51, 42861), (56, 42921), (57, 42933), (80, 43098), (93, 43134),

Gene: BarrelRoll_66 Start: 43294, Stop: 43803, Start Num: 21

Candidate Starts for BarrelRoll_66:

(Start: 21 @43294 has 157 MA's), (34, 43369), (36, 43378), (41, 43408), (47, 43462), (56, 43540), (57, 43552), (93, 43753),

Gene: Beezoo_67 Start: 43806, Stop: 44315, Start Num: 21
Candidate Starts for Beezoo_67:
(Start: 21 @43806 has 157 MA's), (34, 43881), (41, 43920), (47, 43974), (56, 44052), (57, 44064), (93, 44265),

Gene: Bella96_66 Start: 43591, Stop: 44106, Start Num: 21
Candidate Starts for Bella96_66:
(Start: 21 @43591 has 157 MA's), (34, 43666), (47, 43759), (51, 43777), (56, 43837), (57, 43849), (93, 44050),

Gene: Belladonna_65 Start: 43011, Stop: 43520, Start Num: 21
Candidate Starts for Belladonna_65:
(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: BetterKatz_51 Start: 36768, Stop: 37547, Start Num: 17
Candidate Starts for BetterKatz_51:
(Start: 17 @36768 has 13 MA's), (38, 36876), (44, 36915), (45, 36918), (57, 37035), (65, 37098), (67, 37107), (70, 37146), (72, 37155), (91, 37317), (113, 37440), (117, 37476),

Gene: Biglebops_54 Start: 40324, Stop: 40845, Start Num: 21
Candidate Starts for Biglebops_54:
(Start: 21 @40324 has 157 MA's), (34, 40399), (36, 40408), (47, 40492), (57, 40582), (67, 40654), (75, 40717), (79, 40744), (90, 40783),

Gene: Blessica_15 Start: 6070, Stop: 6765, Start Num: 13
Candidate Starts for Blessica_15:
(Start: 13 @6070 has 15 MA's), (Start: 24 @6127 has 7 MA's), (40, 6232), (43, 6250), (47, 6292), (49, 6301), (56, 6364), (57, 6376), (64, 6430), (67, 6448), (70, 6487), (76, 6532), (94, 6628), (98, 6643), (107, 6697), (112, 6733),

Gene: Blizzard_65 Start: 43208, Stop: 43717, Start Num: 21
Candidate Starts for Blizzard_65:
(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Bock_51 Start: 36502, Stop: 37281, Start Num: 17
Candidate Starts for Bock_51:
(3, 36148), (Start: 17 @36502 has 13 MA's), (37, 36601), (38, 36610), (44, 36649), (45, 36652), (57, 36769), (67, 36841), (70, 36880), (72, 36889), (91, 37051), (113, 37174), (117, 37210),

Gene: Boiiii_65 Start: 43210, Stop: 43719, Start Num: 21
Candidate Starts for Boiiii_65:
(Start: 21 @43210 has 157 MA's), (34, 43285), (41, 43324), (47, 43378), (56, 43456), (57, 43468), (93, 43669),

Gene: Boilgate_62 Start: 44590, Stop: 45171, Start Num: 18
Candidate Starts for Boilgate_62:
(Start: 18 @44590 has 19 MA's), (47, 44755), (53, 44800), (55, 44827), (57, 44845), (61, 44875), (62, 44884), (97, 45094),

Gene: BoostSeason_68 Start: 45062, Stop: 45580, Start Num: 21
Candidate Starts for BoostSeason_68:

(8, 44912), (Start: 21 @45062 has 157 MA's), (42, 45185), (47, 45227), (50, 45239), (51, 45245), (57, 45317), (58, 45329), (60, 45341), (67, 45389), (93, 45530), (102, 45569),

Gene: Bora_15 Start: 6095, Stop: 6772, Start Num: 24

Candidate Starts for Bora_15:

(Start: 13 @6038 has 15 MA's), (Start: 24 @6095 has 7 MA's), (40, 6200), (43, 6218), (47, 6260), (49, 6269), (56, 6332), (57, 6344), (64, 6398), (67, 6416), (70, 6455), (76, 6500), (94, 6635), (98, 6650), (107, 6704), (112, 6740),

Gene: Bryler_69 Start: 42843, Stop: 43361, Start Num: 21

Candidate Starts for Bryler_69:

(5, 42663), (10, 42729), (Start: 21 @42843 has 157 MA's), (34, 42918), (42, 42966), (47, 43011), (51, 43029), (57, 43101), (67, 43173), (93, 43311), (101, 43344), (102, 43350),

Gene: Brylie_51 Start: 36552, Stop: 37343, Start Num: 17

Candidate Starts for Brylie_51:

(3, 36198), (Start: 17 @36552 has 13 MA's), (37, 36651), (38, 36660), (44, 36699), (45, 36702), (57, 36819), (65, 36882), (67, 36891), (70, 36930), (72, 36939), (91, 37101), (113, 37236), (117, 37272),

Gene: CREW_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for CREW_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: Cain_69 Start: 42831, Stop: 43349, Start Num: 21

Candidate Starts for Cain_69:

(5, 42651), (10, 42717), (Start: 21 @42831 has 157 MA's), (34, 42906), (42, 42954), (47, 42999), (51, 43017), (57, 43089), (67, 43161), (93, 43299), (101, 43332), (102, 43338),

Gene: Capricorn_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Capricorn_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: CaseJules_67 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for CaseJules_67:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Catdawg_14 Start: 5733, Stop: 6371, Start Num: 24

Candidate Starts for Catdawg_14:

(Start: 13 @5676 has 15 MA's), (Start: 24 @5733 has 7 MA's), (40, 5838), (43, 5856), (47, 5898), (49, 5907), (56, 5970), (57, 5982), (64, 6036), (67, 6054), (70, 6093), (76, 6138), (94, 6234), (98, 6249), (107, 6303), (112, 6339),

Gene: Chancellor_69 Start: 42601, Stop: 43269, Start Num: 18

Candidate Starts for Chancellor_69:

(Start: 18 @42601 has 19 MA's), (47, 42763), (48, 42769), (51, 42781), (53, 42808), (57, 42853), (67, 42925), (85, 43054), (92, 43087), (100, 43120), (104, 43141), (114, 43207), (118, 43249),

Gene: CheetoDust_65 Start: 42722, Stop: 43231, Start Num: 21

Candidate Starts for CheetoDust_65:

(Start: 21 @42722 has 157 MA's), (34, 42797), (36, 42806), (41, 42836), (47, 42890), (51, 42908), (56, 42968), (57, 42980), (80, 43145), (93, 43181),

Gene: Cheetobro_69 Start: 42598, Stop: 43266, Start Num: 18

Candidate Starts for Cheetobro_69:

(Start: 18 @42598 has 19 MA's), (47, 42760), (48, 42766), (51, 42778), (53, 42805), (57, 42850), (67, 42922), (85, 43051), (92, 43084), (100, 43117), (104, 43138), (114, 43204), (118, 43246),

Gene: Chop_51 Start: 37033, Stop: 37800, Start Num: 17

Candidate Starts for Chop_51:

(Start: 17 @37033 has 13 MA's), (Start: 23 @37051 has 5 MA's), (38, 37141), (44, 37180), (45, 37183), (57, 37300), (67, 37372), (70, 37411), (72, 37420), (91, 37582), (113, 37693), (117, 37729),

Gene: Chris_68 Start: 44067, Stop: 44573, Start Num: 21

Candidate Starts for Chris_68:

(Start: 21 @44067 has 157 MA's), (34, 44142), (36, 44151), (47, 44235), (54, 44298), (57, 44325), (58, 44337), (93, 44526),

Gene: Collard_57 Start: 40042, Stop: 40617, Start Num: 21

Candidate Starts for Collard_57:

(Start: 16 @40018 has 1 MA's), (Start: 21 @40042 has 157 MA's), (39, 40150), (48, 40222), (52, 40246), (56, 40294), (57, 40306), (60, 40330), (67, 40378), (71, 40423), (87, 40513), (108, 40606),

Gene: Corndog_17 Start: 6409, Stop: 7074, Start Num: 24

Candidate Starts for Corndog_17:

(Start: 13 @6352 has 15 MA's), (Start: 24 @6409 has 7 MA's), (40, 6514), (43, 6532), (47, 6574), (49, 6583), (56, 6646), (57, 6658), (64, 6712), (67, 6730), (70, 6769), (76, 6814), (83, 6862), (94, 6937), (98, 6952), (107, 7006), (112, 7042),

Gene: CrimD_67 Start: 43833, Stop: 44342, Start Num: 21

Candidate Starts for CrimD_67:

(Start: 21 @43833 has 157 MA's), (34, 43908), (41, 43947), (47, 44001), (56, 44079), (57, 44091), (93, 44292),

Gene: Curiosium_69 Start: 42524, Stop: 43036, Start Num: 21

Candidate Starts for Curiosium_69:

(Start: 21 @42524 has 157 MA's), (34, 42599), (47, 42692), (51, 42710), (55, 42764), (57, 42782), (58, 42794), (64, 42836), (93, 42983),

Gene: Dadosky_61 Start: 40381, Stop: 40974, Start Num: 21

Candidate Starts for Dadosky_61:

(Start: 16 @40357 has 1 MA's), (Start: 21 @40381 has 157 MA's), (39, 40489), (48, 40561), (52, 40585), (56, 40633), (57, 40645), (58, 40657), (67, 40717), (71, 40762), (78, 40816), (79, 40819), (84, 40846), (87, 40861), (108, 40960),

Gene: Dalmuri_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Dalmuri_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: DarthP_65 Start: 43354, Stop: 43866, Start Num: 21

Candidate Starts for DarthP_65:

(6, 43177), (7, 43186), (Start: 21 @43354 has 157 MA's), (34, 43429), (36, 43438), (47, 43522), (51, 43540), (57, 43612), (58, 43624), (67, 43684), (93, 43816), (102, 43855),

Gene: Deby_66 Start: 43494, Stop: 44003, Start Num: 21

Candidate Starts for Deby_66:

(Start: 21 @43494 has 157 MA's), (34, 43569), (36, 43578), (41, 43608), (47, 43662), (56, 43740), (57, 43752), (93, 43953),

Gene: DelRio_52 Start: 37746, Stop: 38525, Start Num: 17

Candidate Starts for DelRio_52:

(Start: 17 @37746 has 13 MA's), (37, 37845), (38, 37854), (44, 37893), (45, 37896), (57, 38013), (65, 38076), (67, 38085), (70, 38124), (72, 38133), (91, 38295), (113, 38418), (117, 38454),

Gene: Devera_73 Start: 44850, Stop: 45359, Start Num: 21

Candidate Starts for Devera_73:

(Start: 21 @44850 has 157 MA's), (34, 44925), (36, 44934), (41, 44964), (47, 45018), (56, 45096), (57, 45108), (93, 45309),

Gene: DismalFunk_68 Start: 45487, Stop: 46005, Start Num: 21

Candidate Starts for DismalFunk_68:

(8, 45337), (15, 45460), (Start: 21 @45487 has 157 MA's), (42, 45610), (47, 45652), (50, 45664), (51, 45670), (57, 45742), (58, 45754), (60, 45766), (67, 45814), (93, 45955), (102, 45994),

Gene: DismalStressor_68 Start: 45487, Stop: 46005, Start Num: 21

Candidate Starts for DismalStressor_68:

(8, 45337), (15, 45460), (Start: 21 @45487 has 157 MA's), (42, 45610), (47, 45652), (50, 45664), (51, 45670), (57, 45742), (58, 45754), (60, 45766), (67, 45814), (93, 45955), (102, 45994),

Gene: Dole_71 Start: 44853, Stop: 45362, Start Num: 21

Candidate Starts for Dole_71:

(Start: 21 @44853 has 157 MA's), (34, 44928), (36, 44937), (41, 44967), (47, 45021), (56, 45099), (57, 45111), (93, 45312),

Gene: DonkeyMan_41 Start: 30250, Stop: 30930, Start Num: 23

Candidate Starts for DonkeyMan_41:

(Start: 23 @30250 has 5 MA's), (47, 30412), (51, 30430), (70, 30619), (109, 30856), (110, 30868), (111, 30880), (115, 30907), (116, 30913),

Gene: DrHayes_66 Start: 43745, Stop: 44260, Start Num: 21

Candidate Starts for DrHayes_66:

(Start: 21 @43745 has 157 MA's), (34, 43820), (47, 43913), (51, 43931), (56, 43991), (57, 44003), (93, 44204),

Gene: Durfee_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for Durfee_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Dylan_15 Start: 6240, Stop: 6962, Start Num: 13

Candidate Starts for Dylan_15:

(Start: 13 @6240 has 15 MA's), (Start: 24 @6297 has 7 MA's), (40, 6402), (43, 6420), (47, 6462), (49, 6471), (56, 6534), (57, 6546), (64, 6600), (67, 6618), (70, 6657), (76, 6702), (83, 6750), (94, 6825), (98, 6840), (107, 6894), (112, 6930),

Gene: Edugator_58 Start: 41802, Stop: 42395, Start Num: 21

Candidate Starts for Edugator_58:

(Start: 16 @41778 has 1 MA's), (Start: 21 @41802 has 157 MA's), (39, 41910), (48, 41982), (52, 42006), (56, 42054), (57, 42066), (58, 42078), (67, 42138), (71, 42183), (78, 42237), (79, 42240), (84, 42267), (87, 42282), (108, 42381),

Gene: Efra2_71 Start: 43581, Stop: 44105, Start Num: 21

Candidate Starts for Efra2_71:

(Start: 21 @43581 has 157 MA's), (34, 43656), (47, 43749), (51, 43767), (57, 43839), (58, 43851), (64, 43893), (93, 44049),

Gene: Ekdilam_62 Start: 43584, Stop: 44096, Start Num: 21

Candidate Starts for Ekdilam_62:

(Start: 21 @43584 has 157 MA's), (34, 43659), (36, 43668), (47, 43752), (48, 43758), (57, 43842), (58, 43854), (67, 43914), (93, 44046), (101, 44079), (102, 44085),

Gene: Ellie_61 Start: 42821, Stop: 43333, Start Num: 21

Candidate Starts for Ellie_61:

(Start: 21 @42821 has 157 MA's), (34, 42896), (36, 42905), (47, 42989), (48, 42995), (51, 43007), (57, 43079), (58, 43091), (67, 43151), (93, 43286), (95, 43298),

Gene: Emerson_67 Start: 43328, Stop: 43837, Start Num: 21

Candidate Starts for Emerson_67:

(Start: 21 @43328 has 157 MA's), (34, 43403), (41, 43442), (47, 43496), (56, 43574), (57, 43586), (93, 43787),

Gene: Enkosi_56 Start: 42937, Stop: 43458, Start Num: 21

Candidate Starts for Enkosi_56:

(Start: 21 @42937 has 157 MA's), (34, 43012), (36, 43021), (47, 43105), (57, 43195), (67, 43267), (75, 43330), (79, 43357), (90, 43396),

Gene: Eponine_71 Start: 43444, Stop: 44112, Start Num: 18

Candidate Starts for Eponine_71:

(Start: 18 @43444 has 19 MA's), (47, 43606), (48, 43612), (51, 43624), (53, 43651), (57, 43696), (67, 43768), (85, 43897), (92, 43930), (100, 43963), (104, 43984), (114, 44050), (118, 44092),

Gene: Familton_15 Start: 5677, Stop: 6372, Start Num: 13

Candidate Starts for Familton_15:

(Start: 13 @5677 has 15 MA's), (Start: 24 @5734 has 7 MA's), (40, 5839), (43, 5857), (47, 5899), (49, 5908), (56, 5971), (57, 5983), (64, 6037), (67, 6055), (70, 6094), (76, 6139), (94, 6235), (98, 6250), (107, 6304), (112, 6340),

Gene: Fefferhead_63 Start: 42730, Stop: 43242, Start Num: 21

Candidate Starts for Fefferhead_63:

(Start: 21 @42730 has 157 MA's), (34, 42805), (36, 42814), (47, 42898), (48, 42904), (51, 42916), (57, 42988), (58, 43000), (67, 43060), (93, 43195), (95, 43207),

Gene: Feyre_62 Start: 43763, Stop: 44383, Start Num: 21

Candidate Starts for Feyre_62:

(Start: 16 @43739 has 1 MA's), (Start: 21 @43763 has 157 MA's), (47, 43937), (48, 43943), (56, 44015), (57, 44027), (58, 44039), (67, 44099), (71, 44144), (81, 44219), (82, 44222), (88, 44249), (89, 44264), (108, 44369),

Gene: Findley_68 Start: 45480, Stop: 45998, Start Num: 21

Candidate Starts for Findley_68:

(8, 45330), (15, 45453), (Start: 21 @45480 has 157 MA's), (42, 45603), (47, 45645), (50, 45657), (51, 45663), (57, 45735), (58, 45747), (60, 45759), (67, 45807), (93, 45948), (102, 45987),

Gene: Fionnbharth_69 Start: 42842, Stop: 43510, Start Num: 18

Candidate Starts for Fionnbharth_69:

(Start: 18 @42842 has 19 MA's), (47, 43004), (48, 43010), (51, 43022), (53, 43049), (57, 43094), (67, 43166), (85, 43295), (92, 43328), (100, 43361), (104, 43382), (114, 43448), (118, 43490),

Gene: Firecracker_15 Start: 5973, Stop: 6695, Start Num: 13

Candidate Starts for Firecracker_15:

(Start: 13 @5973 has 15 MA's), (Start: 24 @6030 has 7 MA's), (40, 6135), (43, 6153), (47, 6195), (49, 6204), (56, 6267), (57, 6279), (64, 6333), (67, 6351), (70, 6390), (76, 6435), (83, 6483), (94, 6558), (98, 6573), (107, 6627), (112, 6663),

Gene: FoulBall_14 Start: 5734, Stop: 6372, Start Num: 24

Candidate Starts for FoulBall_14:

(Start: 13 @5677 has 15 MA's), (Start: 24 @5734 has 7 MA's), (40, 5839), (43, 5857), (47, 5899), (49, 5908), (56, 5971), (57, 5983), (64, 6037), (67, 6055), (70, 6094), (76, 6139), (94, 6235), (98, 6250), (107, 6304), (112, 6340),

Gene: Francois_50 Start: 36554, Stop: 37309, Start Num: 17

Candidate Starts for Francois_50:

(Start: 17 @36554 has 13 MA's), (38, 36662), (45, 36704), (57, 36821), (65, 36884), (67, 36893), (70, 36932), (72, 36941), (91, 37103), (117, 37238),

Gene: GMA4_41 Start: 30857, Stop: 31489, Start Num: 14

Candidate Starts for GMA4_41:

(14, 30857), (25, 30899), (26, 30905), (27, 30908), (29, 30917), (47, 31070), (50, 31082), (59, 31181), (64, 31214), (66, 31226), (67, 31232), (77, 31328),

Gene: Ganymede_65 Start: 43234, Stop: 43743, Start Num: 21

Candidate Starts for Ganymede_65:

(Start: 21 @43234 has 157 MA's), (34, 43309), (36, 43318), (41, 43348), (47, 43402), (56, 43480), (57, 43492), (93, 43693), (101, 43726),

Gene: Gengar_59 Start: 41780, Stop: 42370, Start Num: 21

Candidate Starts for Gengar_59:

(Start: 16 @41756 has 1 MA's), (Start: 21 @41780 has 157 MA's), (33, 41858), (47, 41954), (48, 41960), (55, 42026), (56, 42032), (57, 42044), (58, 42056), (60, 42068), (67, 42116), (71, 42161), (81, 42233), (82, 42236), (88, 42263), (92, 42278), (108, 42356),

Gene: Geraldini_68 Start: 43890, Stop: 44399, Start Num: 21

Candidate Starts for Geraldini_68:

(Start: 21 @43890 has 157 MA's), (34, 43965), (41, 44004), (47, 44058), (56, 44136), (57, 44148), (93, 44349),

Gene: GrandSlam_51 Start: 37033, Stop: 37800, Start Num: 17

Candidate Starts for GrandSlam_51:

(Start: 17 @37033 has 13 MA's), (Start: 23 @37051 has 5 MA's), (38, 37141), (44, 37180), (45, 37183), (57, 37300), (67, 37372), (70, 37411), (72, 37420), (91, 37582), (113, 37693), (117, 37729),

Gene: Guanica15_70 Start: 43322, Stop: 43843, Start Num: 21

Candidate Starts for Guanica15_70:

(Start: 21 @43322 has 157 MA's), (34, 43397), (47, 43490), (51, 43508), (57, 43580), (58, 43592), (64, 43634), (93, 43790),

Gene: Guillsminger_60 Start: 41751, Stop: 42323, Start Num: 21

Candidate Starts for Guillsminger_60:

(Start: 16 @41727 has 1 MA's), (Start: 21 @41751 has 157 MA's), (33, 41829), (47, 41925), (48, 41931), (56, 42003), (57, 42015), (58, 42027), (60, 42039), (62, 42054), (67, 42087), (71, 42132), (84, 42210), (90, 42222), (108, 42309),

Gene: Hammy_65 Start: 43342, Stop: 43854, Start Num: 21

Candidate Starts for Hammy_65:

(6, 43165), (7, 43174), (Start: 21 @43342 has 157 MA's), (34, 43417), (36, 43426), (47, 43510), (51, 43528), (57, 43600), (58, 43612), (67, 43672), (93, 43804), (102, 43843),

Gene: Hamood_51 Start: 37033, Stop: 37800, Start Num: 17

Candidate Starts for Hamood_51:

(Start: 17 @37033 has 13 MA's), (Start: 23 @37051 has 5 MA's), (38, 37141), (44, 37180), (45, 37183), (57, 37300), (67, 37372), (70, 37411), (72, 37420), (91, 37582), (113, 37693), (117, 37729),

Gene: HedwigODU_65 Start: 42856, Stop: 43365, Start Num: 21

Candidate Starts for HedwigODU_65:

(Start: 21 @42856 has 157 MA's), (34, 42931), (36, 42940), (41, 42970), (47, 43024), (56, 43102), (57, 43114), (78, 43273), (93, 43315),

Gene: Heftyboy_60 Start: 42125, Stop: 42691, Start Num: 21

Candidate Starts for Heftyboy_60:

(Start: 16 @42101 has 1 MA's), (Start: 21 @42125 has 157 MA's), (47, 42299), (48, 42305), (56, 42377), (57, 42389), (58, 42401), (60, 42413), (67, 42461), (71, 42506), (90, 42590), (108, 42677),

Gene: Heinz_43 Start: 28349, Stop: 29047, Start Num: 23

Candidate Starts for Heinz_43:

(Start: 23 @28349 has 5 MA's), (47, 28511), (51, 28529), (54, 28574), (109, 28973), (110, 28985), (111, 28997), (115, 29024), (116, 29030),

Gene: Hibiscus_43 Start: 28298, Stop: 28996, Start Num: 23

Candidate Starts for Hibiscus_43:

(Start: 23 @28298 has 5 MA's), (47, 28460), (51, 28478), (54, 28523), (109, 28922), (110, 28934), (111, 28946), (115, 28973), (116, 28979),

Gene: Homura_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Homura_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: Hurricane_67 Start: 43488, Stop: 44006, Start Num: 21

Candidate Starts for Hurricane_67:

(Start: 21 @43488 has 157 MA's), (47, 43656), (51, 43674), (57, 43746), (58, 43758), (67, 43818), (93, 43956), (101, 43989), (102, 43995),

Gene: Hyperbowlee_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for Hyperbowlee_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Idergollasper_14 Start: 5677, Stop: 6372, Start Num: 13

Candidate Starts for Idergollasper_14:

(Start: 13 @5677 has 15 MA's), (Start: 24 @5734 has 7 MA's), (40, 5839), (43, 5857), (47, 5899), (49, 5908), (56, 5971), (57, 5983), (64, 6037), (67, 6055), (70, 6094), (76, 6139), (94, 6235), (98, 6250), (107, 6304), (112, 6340),

Gene: Illumine_71 Start: 44852, Stop: 45361, Start Num: 21

Candidate Starts for Illumine_71:

(Start: 21 @44852 has 157 MA's), (34, 44927), (36, 44936), (41, 44966), (47, 45020), (56, 45098), (57, 45110), (93, 45311),

Gene: Inky_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Inky_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: InvictusManeo_57 Start: 40085, Stop: 40660, Start Num: 21

Candidate Starts for InvictusManeo_57:

(Start: 16 @40061 has 1 MA's), (Start: 21 @40085 has 157 MA's), (39, 40193), (48, 40265), (52, 40289), (56, 40337), (57, 40349), (60, 40373), (67, 40421), (71, 40466), (87, 40556), (108, 40649),

Gene: JAWS_66 Start: 43287, Stop: 43796, Start Num: 21

Candidate Starts for JAWS_66:

(Start: 21 @43287 has 157 MA's), (34, 43362), (36, 43371), (41, 43401), (47, 43455), (56, 43533), (57, 43545), (93, 43746),

Gene: JF1_69 Start: 42759, Stop: 43424, Start Num: 18

Candidate Starts for JF1_69:

(Start: 18 @42759 has 19 MA's), (47, 42921), (48, 42927), (51, 42939), (53, 42966), (57, 43011), (67, 43083), (85, 43212), (92, 43245), (99, 43272), (114, 43362), (118, 43404),

Gene: JangDynasty_14 Start: 5823, Stop: 6461, Start Num: 24

Candidate Starts for JangDynasty_14:

(Start: 13 @5766 has 15 MA's), (Start: 24 @5823 has 7 MA's), (40, 5928), (43, 5946), (47, 5988), (49, 5997), (56, 6060), (57, 6072), (64, 6126), (67, 6144), (70, 6183), (76, 6228), (94, 6324), (98, 6339), (107, 6393), (112, 6429),

Gene: Jarvi_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Jarvi_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: Jayhawk_67 Start: 43354, Stop: 43863, Start Num: 21

Candidate Starts for Jayhawk_67:

(Start: 21 @43354 has 157 MA's), (34, 43429), (41, 43468), (47, 43522), (56, 43600), (57, 43612), (93, 43813),

Gene: Jeckyll_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Jeckyll_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: Jflix2_71 Start: 44931, Stop: 45539, Start Num: 19

Candidate Starts for Jflix2_71:

(Start: 19 @44931 has 3 MA's), (28, 44961), (33, 45003), (35, 45009), (36, 45015), (47, 45105), (57, 45198), (67, 45270),

Gene: Jojo24_41 Start: 28906, Stop: 29589, Start Num: 23

Candidate Starts for Jojo24_41:

(Start: 23 @28906 has 5 MA's), (47, 29068), (51, 29086), (70, 29275), (103, 29485), (109, 29515), (110, 29527), (111, 29539), (115, 29566), (116, 29572),

Gene: Joy99_65 Start: 42940, Stop: 43449, Start Num: 21

Candidate Starts for Joy99_65:

(Start: 21 @42940 has 157 MA's), (34, 43015), (41, 43054), (47, 43108), (56, 43186), (57, 43198), (93, 43399),

Gene: Juliette_71 Start: 42906, Stop: 43574, Start Num: 18

Candidate Starts for Juliette_71:

(Start: 18 @42906 has 19 MA's), (47, 43068), (48, 43074), (51, 43086), (53, 43113), (57, 43158), (67, 43230), (85, 43359), (92, 43392), (100, 43425), (104, 43446), (114, 43512), (118, 43554),

Gene: Keshu_69 Start: 43586, Stop: 44104, Start Num: 21

Candidate Starts for Keshu_69:

(Start: 21 @43586 has 157 MA's), (47, 43754), (57, 43844), (58, 43856), (67, 43916), (93, 44054), (101, 44087), (102, 44093),

Gene: KiSi_70 Start: 44046, Stop: 44552, Start Num: 21

Candidate Starts for KiSi_70:

(Start: 21 @44046 has 157 MA's), (33, 44118), (34, 44121), (36, 44130), (47, 44214), (54, 44277), (56, 44292), (57, 44304), (58, 44316), (60, 44328), (93, 44505),

Gene: Kratio_57 Start: 39821, Stop: 40396, Start Num: 21

Candidate Starts for Kratio_57:

(Start: 16 @39797 has 1 MA's), (Start: 21 @39821 has 157 MA's), (39, 39929), (48, 40001), (52, 40025), (56, 40073), (57, 40085), (60, 40109), (67, 40157), (71, 40202), (87, 40292), (108, 40385),

Gene: Krili_15 Start: 6006, Stop: 6731, Start Num: 13

Candidate Starts for Krili_15:

(Start: 13 @6006 has 15 MA's), (Start: 24 @6063 has 7 MA's), (40, 6168), (43, 6186), (47, 6228), (49, 6237), (56, 6300), (57, 6312), (64, 6366), (67, 6384), (70, 6423), (76, 6468), (83, 6507), (94, 6594), (98, 6609), (107, 6663), (112, 6699),

Gene: Krueger_70 Start: 43119, Stop: 43637, Start Num: 21

Candidate Starts for Krueger_70:

(5, 42939), (10, 43005), (Start: 21 @43119 has 157 MA's), (34, 43194), (42, 43242), (47, 43287), (51, 43305), (56, 43365), (57, 43377), (58, 43389), (67, 43449), (93, 43587), (101, 43620), (102, 43626),

Gene: Larva_60 Start: 41253, Stop: 41846, Start Num: 21

Candidate Starts for Larva_60:

(Start: 16 @41229 has 1 MA's), (Start: 21 @41253 has 157 MA's), (39, 41361), (48, 41433), (56, 41505), (57, 41517), (58, 41529), (67, 41589), (71, 41634), (78, 41688), (79, 41691), (84, 41718), (87,

41733), (108, 41832),

Gene: LastHope_70 Start: 42442, Stop: 42954, Start Num: 21

Candidate Starts for LastHope_70:

(Start: 21 @42442 has 157 MA's), (34, 42517), (47, 42610), (51, 42628), (57, 42700), (64, 42754), (93, 42901),

Gene: LaterM_66 Start: 43705, Stop: 44214, Start Num: 21

Candidate Starts for LaterM_66:

(Start: 21 @43705 has 157 MA's), (34, 43780), (36, 43789), (41, 43819), (47, 43873), (56, 43951), (57, 43963), (93, 44164),

Gene: LeMond_69 Start: 43680, Stop: 44186, Start Num: 21

Candidate Starts for LeMond_69:

(Start: 21 @43680 has 157 MA's), (33, 43752), (34, 43755), (36, 43764), (47, 43848), (54, 43911), (57, 43938), (58, 43950), (60, 43962), (93, 44139),

Gene: Leston_59 Start: 41880, Stop: 42452, Start Num: 21

Candidate Starts for Leston_59:

(Start: 16 @41856 has 1 MA's), (Start: 21 @41880 has 157 MA's), (33, 41958), (47, 42054), (48, 42060), (56, 42132), (57, 42144), (58, 42156), (60, 42168), (62, 42183), (67, 42216), (71, 42261), (84, 42339), (90, 42351), (108, 42438),

Gene: LilPharaoh_55 Start: 40052, Stop: 40573, Start Num: 21

Candidate Starts for LilPharaoh_55:

(Start: 21 @40052 has 157 MA's), (34, 40127), (36, 40136), (47, 40220), (57, 40310), (67, 40382), (75, 40445), (79, 40472), (90, 40511),

Gene: LindNT_65 Start: 43499, Stop: 44008, Start Num: 21

Candidate Starts for LindNT_65:

(Start: 21 @43499 has 157 MA's), (34, 43574), (41, 43613), (47, 43667), (56, 43745), (57, 43757), (93, 43958),

Gene: Llorens_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Llorens_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: Lunahalos_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Lunahalos_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: MacnCheese_69 Start: 44105, Stop: 44629, Start Num: 21

Candidate Starts for MacnCheese_69:

(Start: 21 @44105 has 157 MA's), (36, 44189), (42, 44228), (47, 44273), (51, 44291), (57, 44363), (58, 44375), (67, 44435), (93, 44576), (101, 44609), (102, 44615),

Gene: MadKillah_16 Start: 6027, Stop: 6764, Start Num: 13

Candidate Starts for MadKillah_16:

(Start: 13 @6027 has 15 MA's), (Start: 24 @6084 has 7 MA's), (40, 6189), (43, 6207), (47, 6249), (49, 6258), (56, 6321), (57, 6333), (64, 6387), (67, 6405), (70, 6444), (76, 6489), (83, 6537), (94, 6627), (98, 6642), (107, 6696), (112, 6732),

Gene: Madraxi_75 Start: 47623, Stop: 48270, Start Num: 19

Candidate Starts for Madraxi_75:

(Start: 19 @47623 has 3 MA's), (28, 47653), (47, 47797), (57, 47890), (67, 47962),

Gene: MalagasyRose_66 Start: 42483, Stop: 43022, Start Num: 19

Candidate Starts for MalagasyRose_66:

(Start: 19 @42483 has 3 MA's), (34, 42558), (42, 42606), (50, 42660), (51, 42666), (58, 42750), (64, 42792), (67, 42810), (93, 42966), (96, 42981), (101, 42999),

Gene: Malthus_70 Start: 42594, Stop: 43262, Start Num: 18

Candidate Starts for Malthus_70:

(Start: 18 @42594 has 19 MA's), (47, 42756), (48, 42762), (51, 42774), (53, 42801), (57, 42846), (67, 42918), (85, 43047), (92, 43080), (100, 43113), (104, 43134), (114, 43200), (118, 43242),

Gene: Marcoliusprime_68 Start: 45487, Stop: 46005, Start Num: 21

Candidate Starts for Marcoliusprime_68:

(8, 45337), (15, 45460), (Start: 21 @45487 has 157 MA's), (42, 45610), (47, 45652), (50, 45664), (51, 45670), (57, 45742), (58, 45754), (60, 45766), (67, 45814), (93, 45955), (102, 45994),

Gene: MarkPhew_68 Start: 43181, Stop: 43687, Start Num: 21

Candidate Starts for MarkPhew_68:

(Start: 21 @43181 has 157 MA's), (34, 43256), (36, 43265), (47, 43349), (54, 43412), (55, 43421), (57, 43439), (58, 43451), (66, 43505), (93, 43640),

Gene: Marshawn_65 Start: 43539, Stop: 44048, Start Num: 21

Candidate Starts for Marshawn_65:

(Start: 21 @43539 has 157 MA's), (34, 43614), (51, 43725), (57, 43797), (58, 43809), (67, 43869), (93, 43998), (101, 44031), (102, 44037), (105, 44040),

Gene: Mdavu_55 Start: 40313, Stop: 40834, Start Num: 21

Candidate Starts for Mdavu_55:

(Start: 21 @40313 has 157 MA's), (34, 40388), (36, 40397), (47, 40481), (57, 40571), (67, 40643), (75, 40706), (79, 40733), (90, 40772),

Gene: MeaningOfLife_66 Start: 43763, Stop: 44272, Start Num: 21

Candidate Starts for MeaningOfLife_66:

(Start: 21 @43763 has 157 MA's), (34, 43838), (36, 43847), (41, 43877), (47, 43931), (56, 44009), (57, 44021), (93, 44222),

Gene: Megsy_68 Start: 43420, Stop: 43929, Start Num: 21

Candidate Starts for Megsy_68:

(Start: 21 @43420 has 157 MA's), (34, 43495), (41, 43534), (47, 43588), (56, 43666), (57, 43678), (93, 43879),

Gene: Milly_68 Start: 45460, Stop: 45978, Start Num: 21

Candidate Starts for Milly_68:

(8, 45310), (15, 45433), (Start: 21 @45460 has 157 MA's), (42, 45583), (47, 45625), (50, 45637), (51, 45643), (57, 45715), (58, 45727), (60, 45739), (67, 45787), (74, 45841), (93, 45928), (102, 45967),

Gene: Miryou_64 Start: 44477, Stop: 45067, Start Num: 21

Candidate Starts for Miryou_64:

(Start: 16 @44453 has 1 MA's), (Start: 21 @44477 has 157 MA's), (33, 44555), (47, 44651), (48, 44657), (55, 44723), (56, 44729), (57, 44741), (58, 44753), (60, 44765), (67, 44813), (71, 44858), (81, 44930), (82, 44933), (88, 44960), (92, 44975), (108, 45053),

Gene: MissDaisy_66 Start: 41506, Stop: 42177, Start Num: 18

Candidate Starts for MissDaisy_66:

(Start: 18 @41506 has 19 MA's), (47, 41668), (48, 41674), (51, 41686), (53, 41713), (57, 41758), (67, 41830), (85, 41959), (92, 41992), (96, 42010), (114, 42115), (118, 42157),

Gene: Mitti_69 Start: 42773, Stop: 43417, Start Num: 18

Candidate Starts for Mitti_69:

(Start: 18 @42773 has 19 MA's), (47, 42935), (48, 42941), (51, 42953), (53, 42980), (57, 43025), (67, 43097), (85, 43226), (92, 43259), (100, 43292), (104, 43313), (114, 43355), (118, 43397),

Gene: Mori_15 Start: 5923, Stop: 6603, Start Num: 24

Candidate Starts for Mori_15:

(Start: 13 @5866 has 15 MA's), (Start: 24 @5923 has 7 MA's), (40, 6028), (43, 6046), (47, 6088), (49, 6097), (56, 6160), (57, 6172), (64, 6226), (67, 6244), (70, 6283), (76, 6328), (83, 6376), (94, 6466), (98, 6481), (107, 6535), (112, 6571),

Gene: Mufasa_68 Start: 45047, Stop: 45565, Start Num: 21

Candidate Starts for Mufasa_68:

(8, 44897), (Start: 21 @45047 has 157 MA's), (42, 45170), (47, 45212), (50, 45224), (51, 45230), (57, 45302), (58, 45314), (60, 45326), (67, 45374), (93, 45515), (102, 45554),

Gene: Mulch_51 Start: 36552, Stop: 37343, Start Num: 17

Candidate Starts for Mulch_51:

(3, 36198), (Start: 17 @36552 has 13 MA's), (37, 36651), (38, 36660), (44, 36699), (45, 36702), (57, 36819), (65, 36882), (67, 36891), (70, 36930), (72, 36939), (91, 37101), (113, 37236), (117, 37272),

Gene: Murai_15 Start: 5866, Stop: 6603, Start Num: 13

Candidate Starts for Murai_15:

(Start: 13 @5866 has 15 MA's), (Start: 24 @5923 has 7 MA's), (40, 6028), (43, 6046), (47, 6088), (49, 6097), (56, 6160), (57, 6172), (64, 6226), (67, 6244), (70, 6283), (76, 6328), (83, 6376), (94, 6466), (98, 6481), (107, 6535), (112, 6571),

Gene: Murucutumbu_67 Start: 44280, Stop: 44789, Start Num: 21

Candidate Starts for Murucutumbu_67:

(Start: 21 @44280 has 157 MA's), (34, 44355), (36, 44364), (41, 44394), (47, 44448), (56, 44526), (57, 44538), (70, 44646), (93, 44739),

Gene: Mynx_67 Start: 43623, Stop: 44132, Start Num: 21

Candidate Starts for Mynx_67:

(Start: 21 @43623 has 157 MA's), (34, 43698), (36, 43707), (41, 43737), (47, 43791), (56, 43869), (57, 43881), (93, 44082),

Gene: Nadeem_51 Start: 36552, Stop: 37331, Start Num: 17

Candidate Starts for Nadeem_51:

(3, 36198), (Start: 17 @36552 has 13 MA's), (37, 36651), (38, 36660), (44, 36699), (45, 36702), (57, 36819), (65, 36882), (67, 36891), (70, 36930), (72, 36939), (91, 37101), (113, 37224), (117, 37260),

Gene: NancyRae_50 Start: 36571, Stop: 37350, Start Num: 17

Candidate Starts for NancyRae_50:

(3, 36217), (Start: 17 @36571 has 13 MA's), (37, 36670), (38, 36679), (44, 36718), (45, 36721), (57, 36838), (65, 36901), (67, 36910), (70, 36949), (72, 36958), (91, 37120), (113, 37243), (117, 37279),

Gene: Nergal_58 Start: 39813, Stop: 40349, Start Num: 21

Candidate Starts for Nergal_58:

(Start: 21 @39813 has 157 MA's), (30, 39852), (42, 39936), (47, 39978), (57, 40068), (58, 40080), (64, 40122), (68, 40149), (93, 40299), (102, 40338),

Gene: Nibb_68 Start: 43393, Stop: 43899, Start Num: 21

Candidate Starts for Nibb_68:

(Start: 21 @43393 has 157 MA's), (34, 43468), (36, 43477), (47, 43561), (54, 43624), (55, 43633), (57, 43651), (58, 43663), (93, 43852),

Gene: NiebruSaylor_15 Start: 5923, Stop: 6603, Start Num: 24

Candidate Starts for NiebruSaylor_15:

(Start: 13 @5866 has 15 MA's), (Start: 24 @5923 has 7 MA's), (40, 6028), (43, 6046), (47, 6088), (49, 6097), (56, 6160), (57, 6172), (64, 6226), (67, 6244), (70, 6283), (76, 6328), (83, 6376), (94, 6466), (98, 6481), (107, 6535), (112, 6571),

Gene: Nikao_57 Start: 42937, Stop: 43458, Start Num: 21

Candidate Starts for Nikao_57:

(Start: 21 @42937 has 157 MA's), (34, 43012), (36, 43021), (47, 43105), (57, 43195), (67, 43267), (75, 43330), (79, 43357), (90, 43396),

Gene: Niklas_68 Start: 43560, Stop: 44087, Start Num: 21

Candidate Starts for Niklas_68:

(Start: 21 @43560 has 157 MA's), (34, 43635), (47, 43728), (51, 43746), (57, 43818), (58, 43830), (64, 43872), (67, 43890), (90, 44022),

Gene: Nutello_54 Start: 40324, Stop: 40845, Start Num: 21

Candidate Starts for Nutello_54:

(Start: 21 @40324 has 157 MA's), (34, 40399), (36, 40408), (47, 40492), (57, 40582), (67, 40654), (75, 40717), (79, 40744), (90, 40783),

Gene: OkiRoe_60 Start: 42149, Stop: 42739, Start Num: 21

Candidate Starts for OkiRoe_60:

(Start: 16 @42125 has 1 MA's), (Start: 21 @42149 has 157 MA's), (33, 42227), (47, 42323), (48, 42329), (55, 42395), (56, 42401), (57, 42413), (58, 42425), (60, 42437), (67, 42485), (71, 42530), (81, 42602), (82, 42605), (88, 42632), (92, 42647), (108, 42725),

Gene: OmniCritical_68 Start: 42624, Stop: 43298, Start Num: 19

Candidate Starts for OmniCritical_68:

(Start: 19 @42624 has 3 MA's), (47, 42786), (48, 42792), (51, 42804), (53, 42831), (57, 42876), (67, 42948), (85, 43077), (92, 43110), (97, 43131), (106, 43185), (114, 43236), (118, 43278),

Gene: Omnicron_63 Start: 42235, Stop: 42843, Start Num: 16

Candidate Starts for Omnicron_63:

(Start: 16 @42235 has 1 MA's), (Start: 21 @42259 has 157 MA's), (47, 42427), (48, 42433), (54, 42490), (57, 42517), (58, 42529), (60, 42541), (67, 42589), (78, 42685), (79, 42688), (108, 42829),

Gene: Oscar_69 Start: 43597, Stop: 44103, Start Num: 21

Candidate Starts for Oscar_69:

(Start: 21 @43597 has 157 MA's), (33, 43669), (34, 43672), (36, 43681), (47, 43765), (54, 43828), (57, 43855), (58, 43867), (60, 43879), (93, 44056),

Gene: Padfoot_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for Padfoot_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Padpat_68 Start: 43328, Stop: 43837, Start Num: 21

Candidate Starts for Padpat_68:

(Start: 21 @43328 has 157 MA's), (34, 43403), (41, 43442), (47, 43496), (56, 43574), (57, 43586), (93, 43787),

Gene: Paola_59 Start: 41751, Stop: 42323, Start Num: 21

Candidate Starts for Paola_59:

(Start: 16 @41727 has 1 MA's), (Start: 21 @41751 has 157 MA's), (33, 41829), (47, 41925), (48, 41931), (56, 42003), (57, 42015), (58, 42027), (60, 42039), (62, 42054), (67, 42087), (71, 42132), (84, 42210), (90, 42222), (108, 42309),

Gene: Parada_51 Start: 36552, Stop: 37343, Start Num: 17

Candidate Starts for Parada_51:

(3, 36198), (Start: 17 @36552 has 13 MA's), (37, 36651), (38, 36660), (44, 36699), (45, 36702), (57, 36819), (65, 36882), (67, 36891), (70, 36930), (72, 36939), (91, 37101), (113, 37236), (117, 37272),

Gene: Patt_65 Start: 41230, Stop: 41901, Start Num: 18

Candidate Starts for Patt_65:

(Start: 18 @41230 has 19 MA's), (47, 41392), (48, 41398), (51, 41410), (53, 41437), (57, 41482), (67, 41554), (85, 41683), (92, 41716), (96, 41734), (114, 41839), (118, 41881),

Gene: Peanam_68 Start: 43517, Stop: 44044, Start Num: 21

Candidate Starts for Peanam_68:

(Start: 21 @43517 has 157 MA's), (34, 43592), (47, 43685), (51, 43703), (57, 43775), (58, 43787), (64, 43829), (67, 43847), (90, 43979),

Gene: Peel_65 Start: 43013, Stop: 43522, Start Num: 21

Candidate Starts for Peel_65:

(Start: 21 @43013 has 157 MA's), (34, 43088), (41, 43127), (47, 43181), (56, 43259), (57, 43271), (93, 43472),

Gene: Pharb_66 Start: 42835, Stop: 43353, Start Num: 21

Candidate Starts for Pharb_66:

(Start: 21 @42835 has 157 MA's), (47, 43003), (51, 43021), (57, 43093), (58, 43105), (67, 43165), (93, 43303), (101, 43336), (102, 43342),

Gene: PhelpsODU_67 Start: 42757, Stop: 43275, Start Num: 21

Candidate Starts for PhelpsODU_67:

(5, 42577), (10, 42643), (Start: 21 @42757 has 157 MA's), (34, 42832), (42, 42880), (47, 42925), (51, 42943), (57, 43015), (58, 43027), (67, 43087), (93, 43225), (101, 43258), (102, 43264),

Gene: Phrank_69 Start: 42821, Stop: 43339, Start Num: 21

Candidate Starts for Phrank_69:

(5, 42641), (10, 42707), (Start: 21 @42821 has 157 MA's), (34, 42896), (42, 42944), (47, 42989), (51, 43007), (57, 43079), (67, 43151), (93, 43289), (101, 43322), (102, 43328),

Gene: Piatt_65 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for Piatt_65:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Pimento_53 Start: 36149, Stop: 36928, Start Num: 17

Candidate Starts for Pimento_53:

(12, 36059), (Start: 17 @36149 has 13 MA's), (Start: 23 @36167 has 5 MA's), (38, 36257), (44, 36296), (45, 36299), (57, 36416), (67, 36488), (70, 36527), (72, 36536), (91, 36698), (113, 36821), (117, 36857),

Gene: Pixie_66 Start: 43008, Stop: 43526, Start Num: 21

Candidate Starts for Pixie_66:

(Start: 21 @43008 has 157 MA's), (36, 43092), (47, 43176), (51, 43194), (54, 43239), (57, 43266), (58, 43278), (67, 43338), (93, 43476), (101, 43509), (102, 43515),

Gene: Pokerus_65 Start: 43353, Stop: 43862, Start Num: 21

Candidate Starts for Pokerus_65:

(Start: 21 @43353 has 157 MA's), (34, 43428), (41, 43467), (47, 43521), (56, 43599), (57, 43611), (93, 43812),

Gene: Prithvi_67 Start: 43499, Stop: 44008, Start Num: 21

Candidate Starts for Prithvi_67:

(Start: 21 @43499 has 157 MA's), (34, 43574), (41, 43613), (47, 43667), (56, 43745), (57, 43757), (93, 43958),

Gene: Psycho_59 Start: 40378, Stop: 40971, Start Num: 21

Candidate Starts for Psycho_59:

(Start: 16 @40354 has 1 MA's), (Start: 21 @40378 has 157 MA's), (39, 40486), (48, 40558), (52, 40582), (56, 40630), (57, 40642), (58, 40654), (67, 40714), (71, 40759), (78, 40813), (79, 40816), (84, 40843), (87, 40858), (108, 40957),

Gene: QuincyRose_63 Start: 43234, Stop: 43743, Start Num: 21

Candidate Starts for QuincyRose_63:

(Start: 21 @43234 has 157 MA's), (34, 43309), (36, 43318), (41, 43348), (47, 43402), (56, 43480), (57, 43492), (93, 43693), (101, 43726),

Gene: Ramen_66 Start: 42858, Stop: 43367, Start Num: 21

Candidate Starts for Ramen_66:

(Start: 21 @42858 has 157 MA's), (34, 42933), (36, 42942), (41, 42972), (47, 43026), (56, 43104), (57, 43116), (78, 43275), (93, 43317),

Gene: Rando14_61 Start: 39976, Stop: 40557, Start Num: 21

Candidate Starts for Rando14_61:

(Start: 16 @39952 has 1 MA's), (Start: 21 @39976 has 157 MA's), (47, 40144), (48, 40150), (54, 40207), (56, 40222), (57, 40234), (58, 40246), (60, 40258), (67, 40306), (78, 40402), (79, 40405), (99, 40492), (108, 40543),

Gene: Rapunzel97_67 Start: 43309, Stop: 43818, Start Num: 21

Candidate Starts for Rapunzel97_67:

(Start: 21 @43309 has 157 MA's), (34, 43384), (36, 43393), (41, 43423), (47, 43477), (56, 43555), (57, 43567), (93, 43768),

Gene: Reptar3000_66 Start: 41218, Stop: 41889, Start Num: 18

Candidate Starts for Reptar3000_66:

(Start: 18 @41218 has 19 MA's), (45, 41353), (47, 41380), (48, 41386), (51, 41398), (53, 41425), (57, 41470), (67, 41542), (85, 41671), (92, 41704), (96, 41722), (114, 41827), (118, 41869),

Gene: Reyja_42 Start: 29334, Stop: 30017, Start Num: 23

Candidate Starts for Reyja_42:

(Start: 23 @29334 has 5 MA's), (47, 29496), (51, 29514), (70, 29703), (103, 29913), (110, 29955), (111, 29967), (115, 29994), (116, 30000),

Gene: Rosmarinus_65 Start: 42999, Stop: 43508, Start Num: 21

Candidate Starts for Rosmarinus_65:

(Start: 21 @42999 has 157 MA's), (34, 43074), (41, 43113), (47, 43167), (56, 43245), (57, 43257), (93, 43458),

Gene: Ruthiejr_70 Start: 42644, Stop: 43309, Start Num: 18

Candidate Starts for Ruthiejr_70:

(Start: 18 @42644 has 19 MA's), (47, 42806), (48, 42812), (51, 42824), (53, 42851), (57, 42896), (67, 42968), (85, 43097), (92, 43130), (99, 43157), (114, 43247), (118, 43289),

Gene: Ryadel_17 Start: 6460, Stop: 7185, Start Num: 13

Candidate Starts for Ryadel_17:

(Start: 13 @6460 has 15 MA's), (Start: 24 @6517 has 7 MA's), (40, 6622), (43, 6640), (47, 6682), (49, 6691), (56, 6754), (57, 6766), (64, 6820), (67, 6838), (70, 6877), (76, 6922), (83, 6961), (94, 7048), (98, 7063), (107, 7117), (112, 7153),

Gene: SamScheppers_67 Start: 43073, Stop: 43741, Start Num: 18

Candidate Starts for SamScheppers_67:

(Start: 18 @43073 has 19 MA's), (47, 43235), (48, 43241), (51, 43253), (53, 43280), (57, 43325), (67, 43397), (85, 43526), (92, 43559), (100, 43592), (104, 43613), (114, 43679), (118, 43721),

Gene: SamuelLPlaqson_66 Start: 43745, Stop: 44260, Start Num: 21

Candidate Starts for SamuelLPlaqson_66:

(Start: 21 @43745 has 157 MA's), (34, 43820), (47, 43913), (51, 43931), (56, 43991), (57, 44003), (93, 44204),

Gene: Santhid_41 Start: 27625, Stop: 28305, Start Num: 23

Candidate Starts for Santhid_41:

(Start: 23 @27625 has 5 MA's), (47, 27787), (51, 27805), (70, 27994), (103, 28201), (109, 28231), (110, 28243), (111, 28255), (115, 28282), (116, 28288),

Gene: Scarlett_70 Start: 43927, Stop: 44433, Start Num: 21

Candidate Starts for Scarlett_70:

(Start: 21 @43927 has 157 MA's), (33, 43999), (34, 44002), (36, 44011), (47, 44095), (54, 44158), (56, 44173), (57, 44185), (58, 44197), (60, 44209), (93, 44386),

Gene: SchoolBus_14 Start: 5677, Stop: 6372, Start Num: 13

Candidate Starts for SchoolBus_14:

(Start: 13 @5677 has 15 MA's), (Start: 24 @5734 has 7 MA's), (40, 5839), (43, 5857), (47, 5899), (49, 5908), (56, 5971), (57, 5983), (64, 6037), (67, 6055), (70, 6094), (76, 6139), (94, 6235), (98, 6250), (107, 6304), (112, 6340),

Gene: Schuy_15 Start: 6084, Stop: 6764, Start Num: 24

Candidate Starts for Schuy_15:

(Start: 13 @6027 has 15 MA's), (Start: 24 @6084 has 7 MA's), (40, 6189), (43, 6207), (47, 6249), (49, 6258), (56, 6321), (57, 6333), (64, 6387), (67, 6405), (70, 6444), (76, 6489), (83, 6537), (94, 6627), (98, 6642), (107, 6696), (112, 6732),

Gene: SgtBeansprout_55 Start: 40324, Stop: 40845, Start Num: 21

Candidate Starts for SgtBeansprout_55:

(Start: 21 @40324 has 157 MA's), (34, 40399), (36, 40408), (47, 40492), (57, 40582), (67, 40654), (75, 40717), (79, 40744), (90, 40783),

Gene: Shadow1_70 Start: 43271, Stop: 43789, Start Num: 21

Candidate Starts for Shadow1_70:

(Start: 21 @43271 has 157 MA's), (34, 43346), (42, 43394), (47, 43439), (51, 43457), (57, 43529), (58, 43541), (67, 43601), (93, 43739), (101, 43772), (102, 43778),

Gene: Shagrat_82 Start: 45931, Stop: 46494, Start Num: 22

Candidate Starts for Shagrat_82:

(Start: 22 @45931 has 1 MA's), (31, 45985), (46, 46093), (47, 46105), (58, 46195), (69, 46285), (73, 46309),

Gene: Shaobing_68 Start: 43535, Stop: 44062, Start Num: 21

Candidate Starts for Shaobing_68:

(Start: 21 @43535 has 157 MA's), (34, 43610), (47, 43703), (51, 43721), (57, 43793), (58, 43805), (64, 43847), (67, 43865), (90, 43997),

Gene: ShedlockHolmes_68 Start: 43528, Stop: 44040, Start Num: 21

Candidate Starts for ShedlockHolmes_68:

(Start: 21 @43528 has 157 MA's), (47, 43696), (51, 43714), (57, 43786), (58, 43798), (67, 43858), (93, 43990), (101, 44023), (102, 44029),

Gene: ShiaSurprise_66 Start: 43208, Stop: 43717, Start Num: 21

Candidate Starts for ShiaSurprise_66:

(Start: 21 @43208 has 157 MA's), (34, 43283), (41, 43322), (47, 43376), (56, 43454), (57, 43466), (93, 43667),

Gene: Shida_15 Start: 5989, Stop: 6669, Start Num: 24

Candidate Starts for Shida_15:

(Start: 13 @5932 has 15 MA's), (Start: 24 @5989 has 7 MA's), (40, 6094), (43, 6112), (47, 6154), (49, 6163), (56, 6226), (57, 6238), (64, 6292), (67, 6310), (70, 6349), (76, 6394), (83, 6442), (94, 6532), (98, 6547), (107, 6601), (112, 6637),

Gene: SirPhilip_65 Start: 43696, Stop: 44205, Start Num: 21

Candidate Starts for SirPhilip_65:

(Start: 21 @43696 has 157 MA's), (34, 43771), (47, 43864), (51, 43882), (57, 43954), (58, 43966), (68, 44035), (102, 44194),

Gene: Slarp_69 Start: 42601, Stop: 43269, Start Num: 18

Candidate Starts for Slarp_69:

(Start: 18 @42601 has 19 MA's), (47, 42763), (48, 42769), (51, 42781), (53, 42808), (57, 42853), (67, 42925), (85, 43054), (92, 43087), (100, 43120), (104, 43141), (114, 43207), (118, 43249),

Gene: Slimphazie_66 Start: 43309, Stop: 43818, Start Num: 21

Candidate Starts for Slimphazie_66:

(Start: 21 @43309 has 157 MA's), (34, 43384), (36, 43393), (41, 43423), (47, 43477), (56, 43555), (57, 43567), (93, 43768),

Gene: Smooch_16 Start: 6196, Stop: 6918, Start Num: 13

Candidate Starts for Smooch_16:

(Start: 13 @6196 has 15 MA's), (Start: 24 @6253 has 7 MA's), (40, 6358), (43, 6376), (47, 6418), (49, 6427), (56, 6490), (57, 6502), (64, 6556), (67, 6574), (70, 6613), (76, 6658), (83, 6706), (94, 6781), (98, 6796), (107, 6850), (112, 6886),

Gene: SoSeph_60 Start: 42125, Stop: 42691, Start Num: 21

Candidate Starts for SoSeph_60:

(Start: 16 @42101 has 1 MA's), (Start: 21 @42125 has 157 MA's), (47, 42299), (48, 42305), (56, 42377), (57, 42389), (58, 42401), (60, 42413), (67, 42461), (71, 42506), (90, 42590), (108, 42677),

Gene: Spock_65 Start: 43012, Stop: 43521, Start Num: 21

Candidate Starts for Spock_65:

(Start: 21 @43012 has 157 MA's), (34, 43087), (41, 43126), (47, 43180), (56, 43258), (57, 43270), (93, 43471),

Gene: Stinson_67 Start: 43637, Stop: 44149, Start Num: 21

Candidate Starts for Stinson_67:

(Start: 21 @43637 has 157 MA's), (34, 43712), (36, 43721), (41, 43751), (47, 43805), (56, 43883), (57, 43895), (93, 44096),

Gene: Strobilo_73 Start: 45435, Stop: 45980, Start Num: 15

Candidate Starts for Strobilo_73:

(8, 45312), (15, 45435), (Start: 21 @45462 has 157 MA's), (42, 45585), (47, 45627), (50, 45639), (51, 45645), (57, 45717), (58, 45729), (60, 45741), (67, 45789), (93, 45930), (102, 45969),

Gene: Sulley_65 Start: 43072, Stop: 43581, Start Num: 21

Candidate Starts for Sulley_65:

(Start: 21 @43072 has 157 MA's), (34, 43147), (41, 43186), (47, 43240), (57, 43330), (93, 43531),

Gene: Sunflower1121_71 Start: 43417, Stop: 43935, Start Num: 21

Candidate Starts for Sunflower1121_71:

(Start: 21 @43417 has 157 MA's), (34, 43492), (42, 43540), (47, 43585), (51, 43603), (57, 43675), (58, 43687), (67, 43747), (93, 43885), (101, 43918), (102, 43924),

Gene: Syra333_69 Start: 43131, Stop: 43649, Start Num: 21

Candidate Starts for Syra333_69:

(5, 42951), (10, 43017), (Start: 21 @43131 has 157 MA's), (34, 43206), (42, 43254), (47, 43299), (51, 43317), (56, 43377), (57, 43389), (58, 43401), (67, 43461), (93, 43599), (101, 43632), (102, 43638),

Gene: TBond007_63 Start: 43007, Stop: 43525, Start Num: 21

Candidate Starts for TBond007_63:

(Start: 21 @43007 has 157 MA's), (36, 43091), (47, 43175), (51, 43193), (54, 43238), (57, 43265), (58, 43277), (67, 43337), (93, 43475), (101, 43508), (102, 43514),

Gene: TClif_68 Start: 43102, Stop: 43614, Start Num: 21

Candidate Starts for TClif_68:

(Start: 21 @43102 has 157 MA's), (34, 43177), (36, 43186), (45, 43243), (47, 43270), (51, 43288), (57, 43360), (58, 43372), (67, 43432), (90, 43552), (93, 43564), (96, 43579), (101, 43597), (102, 43603),

Gene: TM4_66 Start: 40125, Stop: 40643, Start Num: 21

Candidate Starts for TM4_66:

(8, 39975), (15, 40098), (Start: 21 @40125 has 157 MA's), (42, 40248), (47, 40290), (50, 40302), (51, 40308), (57, 40380), (58, 40392), (60, 40404), (67, 40452), (93, 40593), (102, 40632),

Gene: TPA4_50 Start: 38139, Stop: 38771, Start Num: 17

Candidate Starts for TPA4_50:

(1, 37530), (2, 37686), (4, 37959), (11, 38043), (Start: 17 @38139 has 13 MA's), (50, 38325), (55, 38379), (56, 38385), (57, 38397), (60, 38421), (68, 38478), (70, 38508), (72, 38517), (86, 38622),

Gene: Tachez_65 Start: 42856, Stop: 43365, Start Num: 21

Candidate Starts for Tachez_65:

(Start: 21 @42856 has 157 MA's), (34, 42931), (41, 42970), (47, 43024), (56, 43102), (57, 43114), (93, 43315),

Gene: TaiwanKao_68 Start: 43561, Stop: 44070, Start Num: 21

Candidate Starts for TaiwanKao_68:

(Start: 21 @43561 has 157 MA's), (34, 43636), (41, 43675), (47, 43729), (56, 43807), (57, 43819), (63, 43867), (93, 44020),

Gene: Taquito_68 Start: 42836, Stop: 43474, Start Num: 18

Candidate Starts for Taquito_68:

(Start: 18 @42836 has 19 MA's), (47, 42998), (48, 43004), (51, 43016), (53, 43043), (57, 43088), (67, 43160), (85, 43289), (92, 43322), (100, 43355), (104, 43376), (114, 43412), (118, 43454),

Gene: Tarzan_42 Start: 28732, Stop: 29412, Start Num: 23

Candidate Starts for Tarzan_42:

(Start: 23 @28732 has 5 MA's), (47, 28894), (51, 28912), (70, 29101), (109, 29338), (110, 29350), (111, 29362), (115, 29389), (116, 29395),

Gene: TelAviv_14 Start: 5674, Stop: 6369, Start Num: 13

Candidate Starts for TelAviv_14:

(Start: 13 @5674 has 15 MA's), (Start: 24 @5731 has 7 MA's), (40, 5836), (43, 5854), (47, 5896), (49, 5905), (56, 5968), (57, 5980), (64, 6034), (67, 6052), (70, 6091), (76, 6136), (94, 6232), (98, 6247), (107, 6301), (112, 6337),

Gene: Thyatira_62 Start: 44083, Stop: 44655, Start Num: 21

Candidate Starts for Thyatira_62:

(Start: 16 @44059 has 1 MA's), (Start: 21 @44083 has 157 MA's), (47, 44257), (48, 44263), (55, 44329), (56, 44335), (57, 44347), (58, 44359), (60, 44371), (67, 44419), (71, 44464), (84, 44542), (90, 44554), (108, 44641),

Gene: Tierra_69 Start: 43632, Stop: 44150, Start Num: 21

Candidate Starts for Tierra_69:

(5, 43452), (10, 43518), (Start: 21 @43632 has 157 MA's), (34, 43707), (42, 43755), (47, 43800), (51, 43818), (57, 43890), (67, 43962), (93, 44100), (101, 44133), (102, 44139),

Gene: TiniBug_66 Start: 43741, Stop: 44256, Start Num: 21

Candidate Starts for TiniBug_66:

(Start: 21 @43741 has 157 MA's), (34, 43816), (47, 43909), (51, 43927), (56, 43987), (57, 43999), (93, 44200),

Gene: Tiri_66 Start: 43145, Stop: 43654, Start Num: 21

Candidate Starts for Tiri_66:

(Start: 21 @43145 has 157 MA's), (34, 43220), (41, 43259), (47, 43313), (56, 43391), (57, 43403), (93, 43604),

Gene: Topper_65 Start: 43011, Stop: 43520, Start Num: 21

Candidate Starts for Topper_65:

(Start: 21 @43011 has 157 MA's), (34, 43086), (41, 43125), (47, 43179), (56, 43257), (57, 43269), (93, 43470),

Gene: TreyKay_67 Start: 43499, Stop: 44008, Start Num: 21

Candidate Starts for TreyKay_67:

(Start: 21 @43499 has 157 MA's), (34, 43574), (41, 43613), (47, 43667), (56, 43745), (57, 43757), (93, 43958),

Gene: TribelTrouble_67 Start: 44010, Stop: 44528, Start Num: 21

Candidate Starts for TribelTrouble_67:

(Start: 21 @44010 has 157 MA's), (48, 44184), (51, 44196), (54, 44241), (57, 44268), (58, 44280), (67, 44340), (101, 44511), (102, 44517),

Gene: TruffulaTree_66 Start: 43305, Stop: 43814, Start Num: 21

Candidate Starts for TruffulaTree_66:

(Start: 21 @43305 has 157 MA's), (34, 43380), (36, 43389), (41, 43419), (47, 43473), (56, 43551), (57, 43563), (93, 43764),

Gene: Twitch_65 Start: 43013, Stop: 43522, Start Num: 21

Candidate Starts for Twitch_65:

(Start: 21 @43013 has 157 MA's), (34, 43088), (41, 43127), (47, 43181), (56, 43259), (57, 43271), (93, 43472),

Gene: Unicorn_67 Start: 42757, Stop: 43275, Start Num: 21

Candidate Starts for Unicorn_67:

(5, 42577), (10, 42643), (Start: 21 @42757 has 157 MA's), (34, 42832), (42, 42880), (47, 42925), (51, 42943), (57, 43015), (58, 43027), (67, 43087), (93, 43225), (101, 43258), (102, 43264),

Gene: Urkel_66 Start: 43745, Stop: 44260, Start Num: 21

Candidate Starts for Urkel_66:

(Start: 21 @43745 has 157 MA's), (34, 43820), (47, 43913), (51, 43931), (56, 43991), (57, 44003), (93, 44204),

Gene: Validus_70 Start: 43876, Stop: 44394, Start Num: 21

Candidate Starts for Validus_70:

(Start: 21 @43876 has 157 MA's), (32, 43939), (34, 43951), (36, 43960), (42, 43999), (47, 44044), (51, 44062), (57, 44134), (58, 44146), (64, 44188), (67, 44206), (90, 44332),

Gene: Veliki_67 Start: 43278, Stop: 43787, Start Num: 21

Candidate Starts for Veliki_67:

(Start: 21 @43278 has 157 MA's), (34, 43353), (36, 43362), (41, 43392), (47, 43446), (56, 43524), (57, 43536), (93, 43737),

Gene: Vorrps_15 Start: 5923, Stop: 6603, Start Num: 24

Candidate Starts for Vorrps_15:

(Start: 13 @5866 has 15 MA's), (Start: 24 @5923 has 7 MA's), (40, 6028), (43, 6046), (47, 6088), (49, 6097), (56, 6160), (57, 6172), (64, 6226), (67, 6244), (70, 6283), (76, 6328), (83, 6376), (94, 6466), (98, 6481), (107, 6535), (112, 6571),

Gene: Waterfoul_61 Start: 42187, Stop: 42753, Start Num: 21

Candidate Starts for Waterfoul_61:

(Start: 16 @42163 has 1 MA's), (Start: 21 @42187 has 157 MA's), (47, 42361), (48, 42367), (56, 42439), (57, 42451), (58, 42463), (60, 42475), (67, 42523), (71, 42568), (90, 42652), (108, 42739),

Gene: WheatThin_50 Start: 36552, Stop: 37331, Start Num: 17

Candidate Starts for WheatThin_50:

(3, 36198), (Start: 17 @36552 has 13 MA's), (37, 36651), (38, 36660), (44, 36699), (45, 36702), (57, 36819), (65, 36882), (67, 36891), (70, 36930), (72, 36939), (91, 37101), (113, 37224), (117, 37260),

Gene: Wildflower_15 Start: 5949, Stop: 6626, Start Num: 24

Candidate Starts for Wildflower_15:

(Start: 13 @5892 has 15 MA's), (Start: 24 @5949 has 7 MA's), (40, 6054), (43, 6072), (47, 6114), (49, 6123), (56, 6186), (57, 6198), (64, 6252), (67, 6270), (70, 6309), (76, 6354), (94, 6489), (98, 6504), (107, 6558), (112, 6594),

Gene: Winget_15 Start: 5931, Stop: 6644, Start Num: 13

Candidate Starts for Winget_15:

(Start: 13 @5931 has 15 MA's), (Start: 24 @5988 has 7 MA's), (40, 6093), (43, 6111), (47, 6153), (49, 6162), (56, 6225), (57, 6237), (64, 6291), (67, 6309), (70, 6348), (76, 6393), (83, 6441), (94, 6507), (98, 6522), (107, 6576), (112, 6612),

Gene: Wintermute_69 Start: 42831, Stop: 43499, Start Num: 18

Candidate Starts for Wintermute_69:

(Start: 18 @42831 has 19 MA's), (47, 42993), (48, 42999), (51, 43011), (53, 43038), (57, 43083), (67, 43155), (85, 43284), (92, 43317), (100, 43350), (104, 43371), (114, 43437), (118, 43479),

Gene: Ximenita_71 Start: 43457, Stop: 43978, Start Num: 21

Candidate Starts for Ximenita_71:

(5, 43277), (Start: 21 @43457 has 157 MA's), (34, 43532), (42, 43580), (47, 43625), (51, 43643), (57, 43715), (58, 43727), (67, 43787), (93, 43928), (101, 43961), (102, 43967),

Gene: Y10_66 Start: 42759, Stop: 43424, Start Num: 18

Candidate Starts for Y10_66:

(Start: 18 @42759 has 19 MA's), (47, 42921), (48, 42927), (51, 42939), (53, 42966), (57, 43011), (67, 43083), (85, 43212), (92, 43245), (99, 43272), (114, 43362), (118, 43404),

Gene: Y2_66 Start: 42759, Stop: 43424, Start Num: 18

Candidate Starts for Y2_66:

(Start: 18 @42759 has 19 MA's), (47, 42921), (48, 42927), (51, 42939), (53, 42966), (57, 43011), (67, 43083), (85, 43212), (92, 43245), (99, 43272), (114, 43362), (118, 43404),

Gene: YoureAdopted_65 Start: 43424, Stop: 43933, Start Num: 21

Candidate Starts for YoureAdopted_65:

(Start: 21 @43424 has 157 MA's), (34, 43499), (41, 43538), (47, 43592), (56, 43670), (57, 43682), (93, 43883),

Gene: Yuna_70 Start: 44572, Stop: 45099, Start Num: 21

Candidate Starts for Yuna_70:

(Start: 21 @44572 has 157 MA's), (34, 44647), (42, 44695), (47, 44740), (50, 44752), (51, 44758), (57, 44830), (58, 44842), (75, 44965), (102, 45088),

Gene: YungJamal_16 Start: 6232, Stop: 6954, Start Num: 13

Candidate Starts for YungJamal_16:

(Start: 13 @6232 has 15 MA's), (Start: 24 @6289 has 7 MA's), (40, 6394), (43, 6412), (47, 6454), (49, 6463), (56, 6526), (57, 6538), (64, 6592), (67, 6610), (70, 6649), (76, 6694), (83, 6742), (94, 6817), (98, 6832), (107, 6886), (112, 6922),

Gene: Yunkel11_70 Start: 43327, Stop: 43848, Start Num: 21

Candidate Starts for Yunkel11_70:

(Start: 21 @43327 has 157 MA's), (34, 43402), (47, 43495), (51, 43513), (57, 43585), (58, 43597), (64, 43639), (93, 43795),

Gene: Zabiza_61 Start: 39161, Stop: 39670, Start Num: 21

Candidate Starts for Zabiza_61:

(Start: 21 @39161 has 157 MA's), (34, 39236), (36, 39245), (41, 39275), (47, 39329), (56, 39407), (57, 39419), (78, 39578), (93, 39620),

Gene: Zakhe101_16 Start: 6244, Stop: 6966, Start Num: 13

Candidate Starts for Zakhe101_16:

(Start: 13 @6244 has 15 MA's), (Start: 24 @6301 has 7 MA's), (40, 6406), (43, 6424), (47, 6466), (49, 6475), (56, 6538), (57, 6550), (64, 6604), (67, 6622), (70, 6661), (76, 6706), (83, 6754), (94, 6829), (98, 6844), (107, 6898), (112, 6934),

Gene: Zavala_68 Start: 43583, Stop: 44092, Start Num: 21

Candidate Starts for Zavala_68:

(Start: 21 @43583 has 157 MA's), (34, 43658), (36, 43667), (41, 43697), (47, 43751), (56, 43829), (57, 43841), (93, 44042),

Gene: ZoeJ_67 Start: 44866, Stop: 45384, Start Num: 21

Candidate Starts for ZoeJ_67:

(8, 44716), (Start: 21 @44866 has 157 MA's), (42, 44989), (47, 45031), (49, 45040), (50, 45043), (51, 45049), (57, 45121), (58, 45133), (60, 45145), (67, 45193), (93, 45334), (102, 45373),