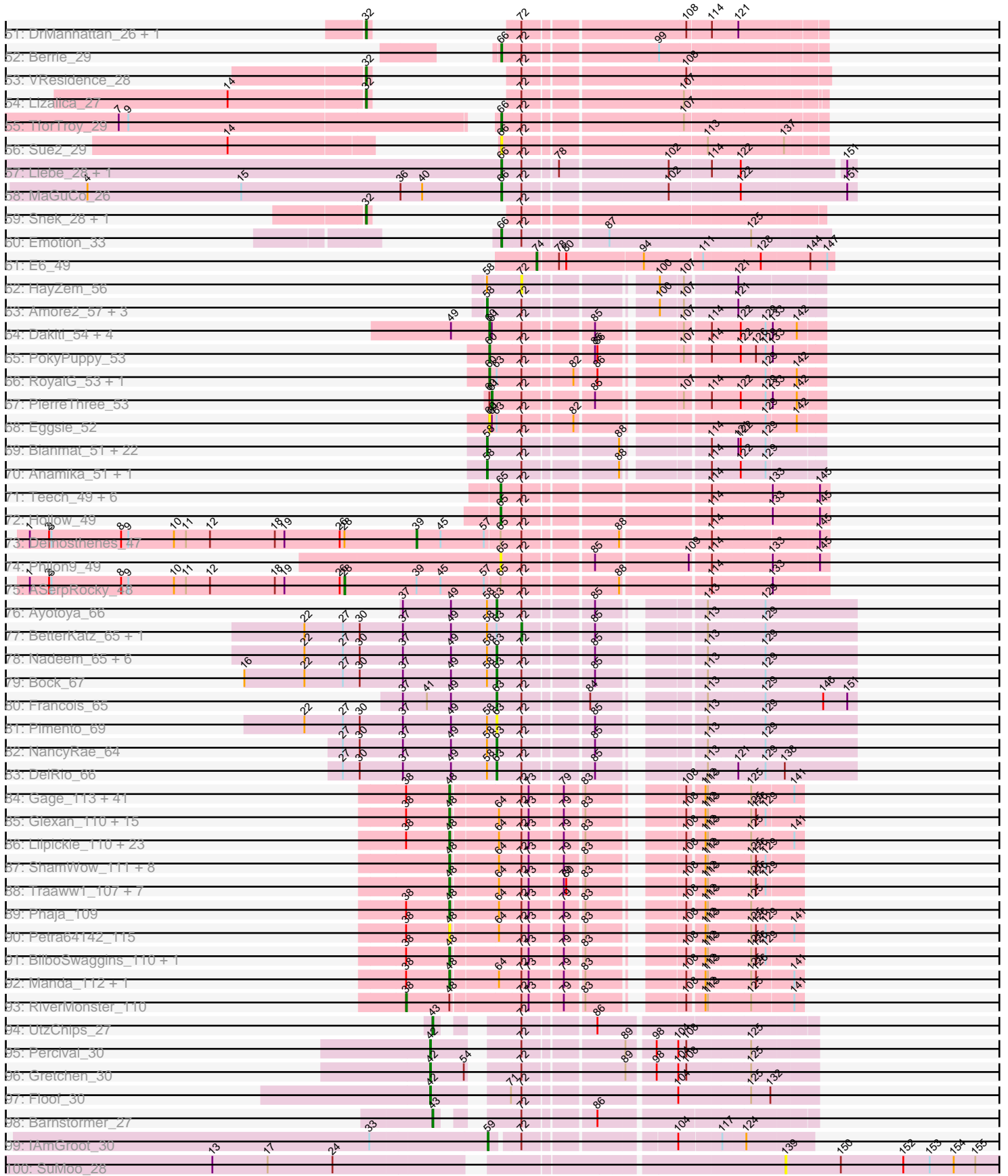


Pham 157527



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 157527 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157527 has 291 members, 45 are drafts.

Phages represented in each track:

- Track 1 : JayCookie_92, Conboy_90, HumptyDumpty_92, PrincessTrina_93, Chocolat_92, Chipper1996_930, Linus_92, EdgarPoe_91, Kabreeze_92, RosiePosie_92, Tophat_93, Scavito_93
- Track 2 : Lymara_89
- Track 3 : KBurroustX_90
- Track 4 : Colucci_95
- Track 5 : ArV1_079
- Track 6 : DrYang_88
- Track 7 : Chubster_92
- Track 8 : Chickaboom_56
- Track 9 : Orcanus_52
- Track 10 : Galaxy_50
- Track 11 : Vulpecula_50, Ruchi_50, Basilisk_51
- Track 12 : TaylorSipht_52
- Track 13 : Abidatro_53
- Track 14 : Jamun_50
- Track 15 : Coral_53
- Track 16 : Kepler_54, Amelia_53, Cote_55, Polka_53, Lunar_54
- Track 17 : LittleTokyo_51
- Track 18 : Kuleana_54
- Track 19 : HannahPhantana_61
- Track 20 : Melons_54
- Track 21 : Daob_55
- Track 22 : Leona_53, RedFox_54
- Track 23 : Juno112_54, PhluffyCoco_54, KHumphrey_53
- Track 24 : Renna12_53
- Track 25 : Andrew_55
- Track 26 : Asa16_29, Niobe_29, Eraser_29
- Track 27 : London_29
- Track 28 : Joemato_29, Cyan_27, Tutumahutu_29, AGrandiflora_28, Powerpuff_27, JohnDoe_27, YesChef_27, Lego_27, Kaylissa_27, Simpson_29
- Track 29 : Tbone_27, Warda_27
- Track 30 : Cassia_28
- Track 31 : Pixelle_29
- Track 32 : Elezi_29
- Track 33 : Phives_30, Community_29
- Track 34 : Turab_27, Adumb2043_27, AEgle_27

- Track 35 : Ascela_28, Iter_28
- Track 36 : Crewmate_31
- Track 37 : Nitro_28
- Track 38 : Tian_28, Amyev_28
- Track 39 : MissSwiss_26
- Track 40 : Reedo_27
- Track 41 : Mudpuppy_28
- Track 42 : JuneStar_28
- Track 43 : Yang_28
- Track 44 : Janeemi_30
- Track 45 : KeAlii_28
- Track 46 : DrSierra_27
- Track 47 : IttyBittyPiggy_28
- Track 48 : Tallboi_30
- Track 49 : Tuck_31
- Track 50 : ObiToo_30
- Track 51 : DrManhattan_26, Adolin_26
- Track 52 : Berrie_29
- Track 53 : VResidence_28
- Track 54 : Lizalica_27
- Track 55 : TforTroy_29
- Track 56 : Sue2_29
- Track 57 : Liebe_28, Maureen_28
- Track 58 : MaGuCo_26
- Track 59 : Snek_28, Tweety19_28
- Track 60 : Emotion_33
- Track 61 : E6_49
- Track 62 : HayZem_56
- Track 63 : Amore2_57, Austin_56, GMA7_46, GTE7_45
- Track 64 : Dakiti_54, BigShaq_53, BenoitCattle_55, Chelms_53, Linetti_54
- Track 65 : PokyPuppy_53
- Track 66 : RoyalG_53, SteveFrench_52
- Track 67 : PierreThree_53
- Track 68 : Eggsie_52
- Track 69 : Bianmat_51, Lahirium_51, Damp_49, Kaseim_51, Jormungandr_51, GalacticEye_51, Charianelly_50, Luker_52, Jams_51, Sticker17_51, Shelley_51, MrWormie_51, Nimi13_51, Harambe_51, Neoevie_51, Lidong_51, Teal_51, Berries_51, Hello_51, Guillaume_51, Minos_52, Woes_51, Newt_52
- Track 70 : Anamika_51, Hail2Pitt_50
- Track 71 : Teech_49, Katyusha_48, Benczkowski14_48, Niagara_48, Kvothe_48, Teatealatte_49, Tredge_49
- Track 72 : Hollow_49
- Track 73 : Demosthenes_47
- Track 74 : Philon9_49
- Track 75 : ASerpRocky_48
- Track 76 : Ayotoya_66
- Track 77 : BetterKatz_65, Brylie_65
- Track 78 : Nadeem_65, GrandSlam_67, Hamood_67, Mulch_65, Parada_65, Chop_67, WheatThin_64
- Track 79 : Bock_67
- Track 80 : Francois_65
- Track 81 : Pimento_69
- Track 82 : NancyRae_64

- Track 83 : DelRio_66
- Track 84 : Gage_113, Lilizi_111, Hopey_111, Stark_111, Contagion_108, Adnama_115, Murica_115, Bruin_108, Bench_113, Sassay_106, Misfit_112, GooberAzure_114, xkcd_115, Argent26_115, StolenFromERC_113, Dumbo_111, Pumpkin_112, GoldenSpark_115, Tarkin_110, Cjw1_111, Paperbeatsrock_110, MPhalcon_112, Qualification_112, YassJohnny_108, AmericanBeauty_118, Hoonter_114, Youngblood_115, Gemini_116, Thresher_112, Miniwave_106, Pharsalus_108, Terminus_114, Czyszczo1_111, Tomaszewski_106, ShereKhan_109, Elph10_110, Mosby_108, HufflyPuff_113, Kanye_108, MISSy_112, Willez_106, Phrux_107
- Track 85 : Glexan_110, DrDrey_111, Mindy_110, Cactus_115, Harella_112, Sotrice96_112, TeardropMSU_107, ABCat_108, Dusk_108, BadStone_108, Daikon_112, Kostya_111, SophKB_109, Tuco_112, Rakim_112, IHOP_109
- Track 86 : Lilpickle_110, Emmina_111, Phaux_113, Moldemort_113, HanKaySha_111, Elite2014_110, NelitzaMV_108, ChosenOne_111, Buck_112, Easy2Say_111, Murphy_110, Maxxinista_113, NoSleep_111, PhatBacter_114, FireRed_114, Lilac_112, Rimmer_109, StellaBean_108, MadamMonkfish_110, Highbury_107, OrionPax_109, Saints25_107, Nala_113, Simpliphy_109
- Track 87 : ShamWow_111, Henry_109, Cookies_108, SirDuracell_111, Bask21_111, Command613_113, Gator_109, Myrale_111, Toto_109
- Track 88 : Traaww1_107, Pat3_108, ChotaBhai_111, Barbarian_110, Flypotenuse_107, Asriel_109, Balomoji_111, Amao_111
- Track 89 : Phaja_109
- Track 90 : Petra64142_115
- Track 91 : BilboSwaggins_110, CrystalP_111
- Track 92 : Manda_112, Eureka_111
- Track 93 : RiverMonster_110
- Track 94 : UtzChips_27
- Track 95 : Percival_30
- Track 96 : Gretchen_30
- Track 97 : Floof_30
- Track 98 : Barnstormer_27
- Track 99 : IAmGroot_30
- Track 100 : SuMoo_28
- Track 101 : GardenState_30
- Track 102 : Caron_28
- Track 103 : CallinAllBarbz_26
- Track 104 : Bobby_156
- Track 105 : Azrael100_87, Cosmo_88
- Track 106 : Wildcat_88
- Track 107 : MaryV_88
- Track 108 : DocB7_043
- Track 109 : Shambre1_62
- Track 110 : DS6A_81

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

The start number called the most often in the published annotations is 48, it was called in 98 of the 246 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABCat_108, Adnama_115, Amao_111, AmericanBeauty_118, Argent26_115, Asriel_109, BadStone_108, Balomoji_111, Barbarian_110, Bask21_111, Bench_113, BilboSwaggins_110, Bruin_108, Buck_112, Cactus_115, ChosenOne_111, ChotaBhai_111, Cjw1_111, Command613_113, Contagion_108, Cookies_108, CrystalP_111, Czyszczonek_111, Daikon_112, DrDrey_111, Dumbo_111, Dusk_108, Easy2Say_111, Elite2014_110, Elph10_110, Emmina_111, Eureka_111, FireRed_114, Flypotenuse_107, Gage_113, Gator_109, Gemini_116, Glexan_110, GoldenSpark_115, GooberAzure_114, HanKaySha_111, Harella_112, Henry_109, Highbury_107, Hoonter_114, Hopey_111, HuffyPuff_113, IHOP_109, Kanye_108, Kostya_111, Lilac_112, Lilizi_111, Lilipickle_110, MISSy_112, MPhalcon_112, MadamMonkfish_110, Manda_112, Maxxinista_113, Mindy_110, Miniwave_106, Misfit_112, Moldemort_113, Mosby_108, Murica_115, Murphy_110, Myrale_111, Nala_113, NelitzaMV_108, NoSleep_111, OrionPax_109, Paperbeatsrock_110, Pat3_108, Petra64142_115, Phaja_109, Pharsalus_108, PhatBacter_114, Phaux_113, Phrux_107, Pumpkin_112, Qualification_112, Rakim_112, Rimmer_109, Saints25_107, Sassay_106, ShamWow_111, ShereKhan_109, Simpliphy_109, SirDuracell_111, SophKB_109, Sotrice96_112, Stark_111, StellaBean_108, StolenFromERC_113, Tarkin_110, TeardropMSU_107, Terminus_114, Thresher_112, Tomaszewski_106, Toto_109, Traaww1_107, Tuco_112, Willez_106, YassJohnny_108, Youngblood_115, xkcd_115,

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

- RiverMonster_110,

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

- AEgle_27, AGrandiflora_28, ASerpRocky_48, Abidatro_53, Adolin_26, Adumb2043_27, Amelia_53, Amore2_57, Amyev_28, Anamika_51, Andrew_55, ArV1_079, Asa16_29, Ascela_28, Austin_56, Ayotoya_66, Azrael100_87, Barnstormer_27, Basilisk_51, Benczkowski14_48, BenoitCattle_55, Berrie_29, Berries_51, BetterKatz_65, Bianmat_51, BigShaq_53, Bobby_156, Bock_67, Brylie_65, CallinAllBarbz_26, Caron_28, Cassia_28, Charianelly_50, Chelms_53, Chickaboom_56, Chipper1996_930, Chocolat_92, Chop_67, Chubster_92, Colucci_95, Community_29, Conboy_90, Coral_53, Cosmo_88, Cote_55, Crewmate_31, Cyan_27, DS6A_81, Dakiti_54, Damp_49, Daob_55, DelRio_66, Demosthenes_47, DocB7_043, DrManhattan_26, DrSierra_27, DrYang_88, E6_49, EdgarPoe_91, Eggsie_52, Elezi_29, Emotion_33, Eraser_29, Floof_30, Francois_65, GMA7_46, GTE7_45, GalacticEye_51, Galaxy_50, GardenState_30, GrandSlam_67, Gretchen_30, Guillaume_51, Hail2Pitt_50, Hamood_67, HannahPhantana_61, Harambe_51, HayZem_56, Hello_51, Hollow_49, HumptyDumpty_92, IAmGroot_30, Iter_28, IttyBittyPiggy_28, Jams_51, Jamun_50, Janeemi_30, JayCookie_92, Joemato_29, JohnDoe_27, Jormungandr_51, JuneStar_28, Juno112_54, KBurrousTX_90, KHumphrey_53, Kabreeze_92, Kaseim_51, Katyusha_48, Kaylissa_27, KeAlii_28, Kepler_54, Kuleana_54, Kvothe_48, Lahirium_51, Lego_27, Leona_53, Lidong_51, Liebe_28, Linetti_54, Linus_92, LittleTokyo_51, Lizalica_27, London_29, Luker_52, Lunar_54, Lymara_89, MaGuCo_26, MaryV_88, Maureen_28, Melons_54, Minos_52, MissSwiss_26, MrWormie_51, Mudpuppy_28, Mulch_65, Nadeem_65, NancyRae_64, Neoevie_51, Newt_52, Niagara_48, Nimi13_51, Niobe_29, Nitro_28, ObiToo_30, Orcanus_52, Parada_65, Percival_30, Pilon9_49, Phives_30, PhluffyCoco_54, PierreThree_53, Pimento_69, Pixelle_29, PokyPuppy_53, Polka_53, Powerpuff_27, PrincessTrina_93, RedFox_54, Reedo_27, Renna12_53, RosiePosie_92, RoyalG_53, Ruchi_50, Scavito_93, Shambre1_62, Shelley_51, Simpson_29, Snek_28, SteveFrench_52, Sticker17_51, SuMoo_28,

Sue2_29, Tallboi_30, TaylorSipht_52, Tbone_27, Teal_51, Teatealatte_49, Teech_49, TforTroy_29, Tian_28, Tophat_93, Tredge_49, Tuck_31, Turab_27, Tutumahutu_29, Tweety19_28, UtzChips_27, VResidence_28, Vulpecula_50, Warda_27, WheatThin_64, Wildcat_88, Woes_51, Yang_28, YesChef_27,

Summary by start number:

Start 28:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_48 (CS4),

Start 32:

- Found in 32 of 291 (11.0%) of genes in pham
- Manual Annotations of this start: 20 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_27 (AZ1), AGrandiflora_28 (AZ1), Adolin_26 (AZ1), Adumb2043_27 (AZ1), Amyev_28 (AZ1), Asa16_29 (AZ1), Cyan_27 (AZ1), DrManhattan_26 (AZ1), Eraser_29 (AZ1), Joemato_29 (AZ1), JohnDoe_27 (AZ1), Kaylissa_27 (AZ1), Lego_27 (AZ1), Lizalica_27 (AZ1), MissSwiss_26 (AZ1), Mudpuppy_28 (AZ1), Niobe_29 (AZ1), Nitro_28 (AZ1), Pixelle_29 (AZ1), Powerpuff_27 (AZ1), Reedo_27 (AZ1), Simpson_29 (AZ1), Snek_28 (AZ3), Tallboi_30 (AZ1), Tbone_27 (AZ1), Tian_28 (AZ1), Turab_27 (AZ1), Tutumahutu_29 (AZ1), Tweety19_28 (AZ3), VResidence_28 (AZ1), Warda_27 (AZ1), YesChef_27 (AZ1),

Start 38:

- Found in 89 of 291 (30.6%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 1.1% of time when present
- Phage (with cluster) where this start called: RiverMonster_110 (E),

Start 39:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Demosthenes_47 (CS4),

Start 42:

- Found in 12 of 291 (4.1%) of genes in pham
- Manual Annotations of this start: 4 of 246
- Called 58.3% of time when present
- Phage (with cluster) where this start called: Caron_28 (EH), Floof_30 (EH), Gretchen_30 (EH), Juno112_54 (AS3), KHumphrey_53 (AS3), Percival_30 (EH), PhluffyCoco_54 (AS3),

Start 43:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_27 (EH), UtzChips_27 (EH),

Start 44:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A_81 (singleton),

Start 46:

- Found in 17 of 291 (5.8%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Daob_55 (AS2),

Start 47:

- Found in 19 of 291 (6.5%) of genes in pham
- Manual Annotations of this start: 16 of 246
- Called 89.5% of time when present
- Phage (with cluster) where this start called: Abidatro_53 (AS1), Amelia_53 (AS2), Basilisk_51 (AS1), Chickaboom_56 (AS1), Coral_53 (AS2), Cote_55 (AS2), Galaxy_50 (AS1), Jamun_50 (AS1), Kepler_54 (AS2), Kuleana_54 (AS2), Lunar_54 (AS2), Melons_54 (AS2), Orcanus_52 (AS1), Polka_53 (AS2), Ruchi_50 (AS1), TaylorSipt_52 (AS1), Vulpecula_50 (AS1),

Start 48:

- Found in 106 of 291 (36.4%) of genes in pham
- Manual Annotations of this start: 98 of 246
- Called 99.1% of time when present
- Phage (with cluster) where this start called: ABCat_108 (E), Adnama_115 (E), Amao_111 (E), AmericanBeauty_118 (E), Argent26_115 (E), Asriel_109 (E), BadStone_108 (E), Balomoji_111 (E), Barbarian_110 (E), Bask21_111 (E), Bench_113 (E), BilboSwaggins_110 (E), Bruin_108 (E), Buck_112 (E), Cactus_115 (E), ChosenOne_111 (E), ChotaBhai_111 (E), Cjw1_111 (E), Command613_113 (E), Contagion_108 (E), Cookies_108 (E), CrystalP_111 (E), Czystoczon1_111 (E), Daikon_112 (E), DrDrey_111 (E), Dumbo_111 (E), Dusk_108 (E), Easy2Say_111 (E), Elite2014_110 (E), Elph10_110 (E), Emmina_111 (E), Eureka_111 (E), FireRed_114 (E), Flypotenuse_107 (E), Gage_113 (E), Gator_109 (E), Gemini_116 (E), Glexan_110 (E), GoldenSpark_115 (E), GooberAzure_114 (E), HanKaySha_111 (E), Harella_112 (E), Henry_109 (E), Highbury_107 (E), Hoonter_114 (E), Hopey_111 (E), HufflyPuff_113 (E), IHOP_109 (E), Kanye_108 (E), Kostya_111 (E), Lilac_112 (E), Lilizi_111 (E), Lilpickle_110 (E), MISSy_112 (E), MPhalcon_112 (E), MadamMonkfish_110 (E), Manda_112 (E), Maxxinista_113 (E), Mindy_110 (E), Miniwave_106 (E), Misfit_112 (E), Moldemort_113 (E), Mosby_108 (E), Murica_115 (E), Murphy_110 (E), Myrale_111 (E), Nala_113 (E), NelitzaMV_108 (E), NoSleep_111 (E), OrionPax_109 (E), Paperbeatsrock_110 (E), Pat3_108 (E), Petra64142_115 (E), Phaja_109 (E), Pharsalus_108 (E), PhatBacter_114 (E), Paux_113 (E), Phrux_107 (E), Pumpkin_112 (E), Qualification_112 (E), Rakim_112 (E), Rimmer_109 (E), Saints25_107 (E), Sassay_106 (E), ShamWow_111 (E), ShereKhan_109 (E), Simpliphy_109 (E), SirDuracell_111 (E), SophKB_109 (E), Sotrice96_112 (E), Stark_111 (E), StellaBean_108 (E), StolenFromERC_113 (E), Tarkin_110 (E), TeardropMSU_107 (E), Terminus_114 (E), Thresher_112 (E), Tomaszewski_106 (E), Toto_109 (E), Traaww1_107 (E), Tuco_112 (E), Willez_106 (E), YassJohnny_108 (E), Youngblood_115 (E), xkcd_115 (E),

Start 50:

- Found in 7 of 291 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 246
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Andrew_55 (AS3), Leona_53 (AS3), RedFox_54 (AS3), Renna12_53 (AS3),

Start 52:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_62 (singleton),

Start 58:

- Found in 44 of 291 (15.1%) of genes in pham
- Manual Annotations of this start: 23 of 246
- Called 65.9% of time when present
- Phage (with cluster) where this start called: Amore2_57 (CS1), Anamika_51 (CS3), Austin_56 (CS1), Berries_51 (CS3), Bianmat_51 (CS3), Charianelly_50 (CS3), Damp_49 (CS3), GMA7_46 (CS1), GTE7_45 (CS1), GalacticEye_51 (CS3), Guillaume_51 (CS3), Hail2Pitt_50 (CS3), Harambe_51 (CS3), Hello_51 (CS3), Jams_51 (CS3), Jormungandr_51 (CS3), Kaseim_51 (CS3), Lahirium_51 (CS3), Lidong_51 (CS3), Luker_52 (CS3), Minos_52 (CS3), MrWormie_51 (CS3), Neevie_51 (CS3), Newt_52 (CS3), Nimi13_51 (CS3), Shelley_51 (CS3), Sticker17_51 (CS3), Teal_51 (CS3), Woes_51 (CS3),

Start 59:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GardenState_30 (EH), IAmGroot_30 (EH),

Start 60:

- Found in 12 of 291 (4.1%) of genes in pham
- Manual Annotations of this start: 7 of 246
- Called 83.3% of time when present
- Phage (with cluster) where this start called: BenoitCattle_55 (CS2), BigShaq_53 (CS2), Chelms_53 (CS2), Dakiti_54 (CS2), Eggsie_52 (CS2), Linetti_54 (CS2), LittleTokyo_51 (AS2), PokyPuppy_53 (CS2), RoyalG_53 (CS2), SteveFrench_52 (CS2),

Start 61:

- Found in 11 of 291 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 246
- Called 18.2% of time when present
- Phage (with cluster) where this start called: PierreThree_53 (CS2), Wildcat_88 (V),

Start 63:

- Found in 22 of 291 (7.6%) of genes in pham
- Manual Annotations of this start: 12 of 246
- Called 63.6% of time when present

- Phage (with cluster) where this start called: Ayotoya_66 (DI), Bock_67 (DI), Chop_67 (DI), DelRio_66 (DI), Francois_65 (DI), GrandSlam_67 (DI), Hamood_67 (DI), MaryV_88 (V), Mulch_65 (DI), Nadeem_65 (DI), NancyRae_64 (DI), Parada_65 (DI), Pimento_69 (DI), WheatThin_64 (DI),

Start 65:

- Found in 11 of 291 (3.8%) of genes in pham
- Manual Annotations of this start: 7 of 246
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Benczkowski14_48 (CS4), Hollow_49 (CS4), Katyusha_48 (CS4), Kvothe_48 (CS4), Niagara_48 (CS4), Philon9_49 (CS4), Teatealatte_49 (CS4), Teech_49 (CS4), Tredge_49 (CS4),

Start 66:

- Found in 30 of 291 (10.3%) of genes in pham
- Manual Annotations of this start: 23 of 246
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Ascela_28 (AZ1), Azrael100_87 (V), Berrie_29 (AZ1), Bobby_156 (J), CallinAllBarbz_26 (FP), Cassia_28 (AZ1), Community_29 (AZ1), Cosmo_88 (V), Crewmate_31 (AZ1), DocB7_043 (singleton), DrSierra_27 (AZ1), Elezi_29 (AZ1), Emotion_33 (AZ4), Iter_28 (AZ1), IttyBittyPiggy_28 (AZ1), Janeemi_30 (AZ1), JuneStar_28 (AZ1), KeAlii_28 (AZ1), Liebe_28 (AZ2), London_29 (AZ1), MaGuCo_26 (AZ2), Maureen_28 (AZ2), ObiToo_30 (AZ1), Phives_30 (AZ1), Sue2_29 (AZ1), TforTroy_29 (AZ1), Tuck_31 (AZ1), Yang_28 (AZ1),

Start 67:

- Found in 1 of 291 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV1_079 (AR),

Start 68:

- Found in 15 of 291 (5.2%) of genes in pham
- Manual Annotations of this start: 15 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996_930 (AR), Chocolat_92 (AR), Conboy_90 (AR), DrYang_88 (AR), EdgarPoe_91 (AR), HumptyDumpty_92 (AR), JayCookie_92 (AR), KBurrousTX_90 (AR), Kabreeze_92 (AR), Linus_92 (AR), Lymara_89 (AR), PrincessTrina_93 (AR), RosiePosie_92 (AR), Scavito_93 (AR), Tophat_93 (AR),

Start 69:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chubster_92 (AR), Colucci_95 (AR),

Start 72:

- Found in 271 of 291 (93.1%) of genes in pham
- Manual Annotations of this start: 2 of 246
- Called 1.5% of time when present

- Phage (with cluster) where this start called: BetterKatz_65 (DI), Brylie_65 (DI), HannahPhantana_61 (AS2), HayZem_56 (CS1),

Start 74:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 246
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E6_49 (BW),

Start 139:

- Found in 1 of 291 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SuMoo_28 (EH),

Summary by clusters:

There are 20 clusters represented in this pham: AS3, AS2, singleton, J, E, EH, DI, CS1, V, AS1, FP, BW, AR, AZ1, CS4, AZ2, AZ3, AZ4, CS3, CS2,

Info for manual annotations of cluster AR:

- Start number 68 was manually annotated 15 times for cluster AR.
- Start number 69 was manually annotated 2 times for cluster AR.

Info for manual annotations of cluster AS1:

- Start number 47 was manually annotated 8 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 46 was manually annotated 1 time for cluster AS2.
- Start number 47 was manually annotated 8 times for cluster AS2.
- Start number 60 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 50 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster AZ1:

- Start number 32 was manually annotated 18 times for cluster AZ1.
- Start number 66 was manually annotated 15 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 66 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 32 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 66 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BW:

- Start number 74 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CS1:

- Start number 58 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 60 was manually annotated 6 times for cluster CS2.
- Start number 61 was manually annotated 1 time for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 58 was manually annotated 21 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 28 was manually annotated 1 time for cluster CS4.
- Start number 39 was manually annotated 1 time for cluster CS4.
- Start number 65 was manually annotated 7 times for cluster CS4.

Info for manual annotations of cluster DI:

- Start number 63 was manually annotated 11 times for cluster DI.
- Start number 72 was manually annotated 2 times for cluster DI.

Info for manual annotations of cluster E:

- Start number 38 was manually annotated 1 time for cluster E.
- Start number 48 was manually annotated 98 times for cluster E.

Info for manual annotations of cluster EH:

- Start number 42 was manually annotated 4 times for cluster EH.
- Start number 43 was manually annotated 2 times for cluster EH.
- Start number 59 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster FP:

- Start number 66 was manually annotated 1 time for cluster FP.

Info for manual annotations of cluster J:

- Start number 66 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster V:

- Start number 61 was manually annotated 1 time for cluster V.
- Start number 63 was manually annotated 1 time for cluster V.
- Start number 66 was manually annotated 2 times for cluster V.

Gene Information:

Gene: ABCat_108 Start: 64031, Stop: 64405, Start Num: 48

Candidate Starts for ABCat_108:

(Start: 38 @63977 has 1 MA's), (Start: 48 @64031 has 98 MA's), (64, 64085), (Start: 72 @64112 has 2 MA's), (73, 64121), (79, 64160), (83, 64181), (108, 64274), (112, 64292), (113, 64295), (125, 64343), (126, 64349), (129, 64361),

Gene: AEgle_27 Start: 22275, Stop: 22640, Start Num: 32

Candidate Starts for AEgle_27:

(14, 22110), (Start: 32 @22275 has 20 MA's), (Start: 72 @22299 has 2 MA's), (121, 22542),

Gene: AGrandiflora_28 Start: 22305, Stop: 22670, Start Num: 32

Candidate Starts for AGrandiflora_28:

(Start: 32 @22305 has 20 MA's), (Start: 72 @22329 has 2 MA's), (107, 22512),

Gene: ASerpRocky_48 Start: 48513, Stop: 47953, Start Num: 28

Candidate Starts for ASerpRocky_48:

(1, 48906), (2, 48882), (3, 48879), (8, 48792), (9, 48783), (10, 48726), (11, 48711), (12, 48681), (18, 48600), (19, 48588), (26, 48519), (Start: 28 @48513 has 1 MA's), (Start: 39 @48423 has 1 MA's), (45, 48393), (57, 48339), (Start: 65 @48321 has 7 MA's), (Start: 72 @48297 has 2 MA's), (88, 48192), (114, 48090), (133, 48021),

Gene: Abidatro_53 Start: 33792, Stop: 34178, Start Num: 47

Candidate Starts for Abidatro_53:

(Start: 46 @33783 has 1 MA's), (Start: 47 @33792 has 16 MA's), (55, 33810), (Start: 72 @33831 has 2 MA's), (85, 33906), (91, 33954), (92, 33963), (103, 34002), (116, 34053), (123, 34089), (135, 34128),

Gene: Adnama_115 Start: 63320, Stop: 63694, Start Num: 48

Candidate Starts for Adnama_115:

(Start: 38 @63266 has 1 MA's), (Start: 48 @63320 has 98 MA's), (Start: 72 @63401 has 2 MA's), (73, 63410), (79, 63449), (83, 63470), (108, 63563), (112, 63581), (113, 63584), (125, 63632), (141, 63683),

Gene: Adolin_26 Start: 20726, Stop: 21094, Start Num: 32

Candidate Starts for Adolin_26:

(Start: 32 @20726 has 20 MA's), (Start: 72 @20750 has 2 MA's), (108, 20936), (114, 20963), (121, 20993),

Gene: Adumb2043_27 Start: 22274, Stop: 22639, Start Num: 32

Candidate Starts for Adumb2043_27:

(14, 22109), (Start: 32 @22274 has 20 MA's), (Start: 72 @22298 has 2 MA's), (121, 22541),

Gene: Amao_111 Start: 63594, Stop: 63968, Start Num: 48

Candidate Starts for Amao_111:

(Start: 48 @63594 has 98 MA's), (64, 63648), (Start: 72 @63675 has 2 MA's), (73, 63684), (79, 63723), (80, 63726), (83, 63744), (108, 63837), (112, 63855), (113, 63858), (125, 63906), (126, 63912), (129, 63924),

Gene: Amelia_53 Start: 32651, Stop: 33019, Start Num: 47

Candidate Starts for Amelia_53:

(Start: 46 @32642 has 1 MA's), (Start: 47 @32651 has 16 MA's), (Start: 72 @32693 has 2 MA's), (91, 32810), (92, 32819), (103, 32858), (119, 32930), (135, 32984),

Gene: AmericanBeauty_118 Start: 63362, Stop: 63736, Start Num: 48

Candidate Starts for AmericanBeauty_118:

(Start: 38 @63308 has 1 MA's), (Start: 48 @63362 has 98 MA's), (Start: 72 @63443 has 2 MA's), (73, 63452), (79, 63491), (83, 63512), (108, 63605), (112, 63623), (113, 63626), (125, 63674), (141, 63725),

Gene: Amore2_57 Start: 48420, Stop: 48055, Start Num: 58

Candidate Starts for Amore2_57:

(Start: 58 @48420 has 23 MA's), (Start: 72 @48378 has 2 MA's), (100, 48240), (107, 48213), (121, 48156),

Gene: Amyev_28 Start: 24196, Stop: 24564, Start Num: 32

Candidate Starts for Amyev_28:

(14, 24034), (Start: 32 @24196 has 20 MA's), (Start: 72 @24220 has 2 MA's), (107, 24403),

Gene: Anamika_51 Start: 48759, Stop: 48394, Start Num: 58

Candidate Starts for Anamika_51:

(Start: 58 @48759 has 23 MA's), (Start: 72 @48717 has 2 MA's), (88, 48612), (114, 48525), (122, 48492), (129, 48462),

Gene: Andrew_55 Start: 33040, Stop: 33402, Start Num: 50

Candidate Starts for Andrew_55:

(Start: 42 @33016 has 4 MA's), (Start: 50 @33040 has 4 MA's), (53, 33052), (Start: 72 @33079 has 2 MA's), (92, 33208), (103, 33247), (118, 33313), (119, 33319), (135, 33373),

Gene: ArV1_079 Start: 59307, Stop: 59669, Start Num: 67

Candidate Starts for ArV1_079:

(51, 59250), (56, 59286), (67, 59307), (75, 59352), (76, 59355), (79, 59376), (90, 59451), (97, 59481), (102, 59499), (111, 59538),

Gene: Argent26_115 Start: 63244, Stop: 63618, Start Num: 48

Candidate Starts for Argent26_115:

(Start: 38 @63190 has 1 MA's), (Start: 48 @63244 has 98 MA's), (Start: 72 @63325 has 2 MA's), (73, 63334), (79, 63373), (83, 63394), (108, 63487), (112, 63505), (113, 63508), (125, 63556), (141, 63607),

Gene: Asa16_29 Start: 24444, Stop: 24812, Start Num: 32

Candidate Starts for Asa16_29:

(14, 24279), (Start: 32 @24444 has 20 MA's), (Start: 72 @24468 has 2 MA's),

Gene: Ascela_28 Start: 22439, Stop: 22807, Start Num: 66

Candidate Starts for Ascela_28:

(Start: 66 @22439 has 23 MA's), (Start: 72 @22463 has 2 MA's), (108, 22649),

Gene: Asriel_109 Start: 61777, Stop: 62151, Start Num: 48

Candidate Starts for Asriel_109:

(Start: 48 @61777 has 98 MA's), (64, 61831), (Start: 72 @61858 has 2 MA's), (73, 61867), (79, 61906), (80, 61909), (83, 61927), (108, 62020), (112, 62038), (113, 62041), (125, 62089), (126, 62095), (129, 62107),

Gene: Austin_56 Start: 48418, Stop: 48053, Start Num: 58

Candidate Starts for Austin_56:

(Start: 58 @48418 has 23 MA's), (Start: 72 @48376 has 2 MA's), (100, 48238), (107, 48211), (121, 48154),

Gene: Ayotoya_66 Start: 43183, Stop: 43569, Start Num: 63

Candidate Starts for Ayotoya_66:

(37, 43066), (49, 43126), (Start: 58 @43171 has 23 MA's), (Start: 63 @43183 has 12 MA's), (Start: 72 @43213 has 2 MA's), (85, 43288), (113, 43390), (129, 43456),

Gene: Azrael100_87 Start: 53907, Stop: 54263, Start Num: 66

Candidate Starts for Azrael100_87:

(Start: 61 @53895 has 2 MA's), (62, 53898), (Start: 63 @53901 has 12 MA's), (Start: 66 @53907 has 23 MA's), (Start: 72 @53931 has 2 MA's), (79, 53973), (82, 53985), (93, 54048), (95, 54054), (105, 54093), (110, 54108), (111, 54117), (113, 54123), (122, 54159), (125, 54171), (129, 54189),

Gene: BadStone_108 Start: 63579, Stop: 63953, Start Num: 48

Candidate Starts for BadStone_108:

(Start: 38 @63525 has 1 MA's), (Start: 48 @63579 has 98 MA's), (64, 63633), (Start: 72 @63660 has 2 MA's), (73, 63669), (79, 63708), (83, 63729), (108, 63822), (112, 63840), (113, 63843), (125, 63891), (126, 63897), (129, 63909),

Gene: Balomoji_111 Start: 63560, Stop: 63934, Start Num: 48

Candidate Starts for Balomoji_111:

(Start: 48 @63560 has 98 MA's), (64, 63614), (Start: 72 @63641 has 2 MA's), (73, 63650), (79, 63689), (80, 63692), (83, 63710), (108, 63803), (112, 63821), (113, 63824), (125, 63872), (126, 63878), (129, 63890),

Gene: Barbarian_110 Start: 61777, Stop: 62151, Start Num: 48

Candidate Starts for Barbarian_110:

(Start: 48 @61777 has 98 MA's), (64, 61831), (Start: 72 @61858 has 2 MA's), (73, 61867), (79, 61906), (80, 61909), (83, 61927), (108, 62020), (112, 62038), (113, 62041), (125, 62089), (126, 62095), (129, 62107),

Gene: Barnstormer_27 Start: 22061, Stop: 22453, Start Num: 43

Candidate Starts for Barnstormer_27:

(Start: 43 @22061 has 2 MA's), (Start: 72 @22127 has 2 MA's), (86, 22205),

Gene: Basilisk_51 Start: 33012, Stop: 33398, Start Num: 47

Candidate Starts for Basilisk_51:

(Start: 46 @33003 has 1 MA's), (Start: 47 @33012 has 16 MA's), (55, 33030), (Start: 72 @33051 has 2 MA's), (85, 33126), (92, 33183), (103, 33222), (115, 33270), (119, 33294), (135, 33348),

Gene: Bask21_111 Start: 62396, Stop: 62770, Start Num: 48

Candidate Starts for Bask21_111:

(Start: 48 @62396 has 98 MA's), (64, 62450), (Start: 72 @62477 has 2 MA's), (73, 62486), (79, 62525), (83, 62546), (108, 62639), (112, 62657), (113, 62660), (125, 62708), (126, 62714), (129, 62726),

Gene: Bench_113 Start: 64001, Stop: 64375, Start Num: 48

Candidate Starts for Bench_113:

(Start: 38 @63947 has 1 MA's), (Start: 48 @64001 has 98 MA's), (Start: 72 @64082 has 2 MA's), (73, 64091), (79, 64130), (83, 64151), (108, 64244), (112, 64262), (113, 64265), (125, 64313), (141, 64364),

Gene: Benczkowski14_48 Start: 48592, Stop: 48224, Start Num: 65

Candidate Starts for Benczkowski14_48:

(Start: 65 @48592 has 7 MA's), (Start: 72 @48568 has 2 MA's), (114, 48361), (133, 48292), (145, 48235),

Gene: BenoitCattle_55 Start: 48070, Stop: 47708, Start Num: 60

Candidate Starts for BenoitCattle_55:

(49, 48118), (Start: 60 @48070 has 7 MA's), (Start: 61 @48067 has 2 MA's), (Start: 72 @48031 has 2 MA's), (85, 47956), (107, 47866), (114, 47839), (122, 47806), (129, 47776), (133, 47770), (142, 47740),

Gene: Berrie_29 Start: 23499, Stop: 23867, Start Num: 66

Candidate Starts for Berrie_29:

(Start: 66 @23499 has 23 MA's), (Start: 72 @23523 has 2 MA's), (99, 23676),

Gene: Berries_51 Start: 48731, Stop: 48366, Start Num: 58

Candidate Starts for Berries_51:

(Start: 58 @48731 has 23 MA's), (Start: 72 @48689 has 2 MA's), (88, 48584), (114, 48497), (121, 48467), (122, 48464), (129, 48434),

Gene: BetterKatz_65 Start: 42412, Stop: 42768, Start Num: 72

Candidate Starts for BetterKatz_65:

(22, 42142), (27, 42190), (30, 42211), (37, 42265), (49, 42325), (Start: 58 @42370 has 23 MA's), (Start: 63 @42382 has 12 MA's), (Start: 72 @42412 has 2 MA's), (85, 42487), (113, 42589), (129, 42655),

Gene: Bianmat_51 Start: 48771, Stop: 48406, Start Num: 58

Candidate Starts for Bianmat_51:

(Start: 58 @48771 has 23 MA's), (Start: 72 @48729 has 2 MA's), (88, 48624), (114, 48537), (121, 48507), (122, 48504), (129, 48474),

Gene: BigShaq_53 Start: 48075, Stop: 47713, Start Num: 60

Candidate Starts for BigShaq_53:

(49, 48123), (Start: 60 @48075 has 7 MA's), (Start: 61 @48072 has 2 MA's), (Start: 72 @48036 has 2 MA's), (85, 47961), (107, 47871), (114, 47844), (122, 47811), (129, 47781), (133, 47775), (142, 47745),

Gene: BilboSwaggins_110 Start: 64057, Stop: 64431, Start Num: 48

Candidate Starts for BilboSwaggins_110:

(Start: 38 @64003 has 1 MA's), (Start: 48 @64057 has 98 MA's), (Start: 72 @64138 has 2 MA's), (73, 64147), (79, 64186), (83, 64207), (108, 64300), (112, 64318), (113, 64321), (125, 64369), (126, 64375), (129, 64387),

Gene: Bobby_156 Start: 89177, Stop: 89539, Start Num: 66

Candidate Starts for Bobby_156:

(Start: 66 @89177 has 23 MA's), (Start: 72 @89201 has 2 MA's), (82, 89255), (85, 89276), (106, 89357), (128, 89444), (129, 89450), (140, 89477), (148, 89528),

Gene: Bock_67 Start: 42626, Stop: 43012, Start Num: 63

Candidate Starts for Bock_67:

(16, 42311), (22, 42386), (27, 42434), (30, 42455), (37, 42509), (49, 42569), (Start: 58 @42614 has 23 MA's), (Start: 63 @42626 has 12 MA's), (Start: 72 @42656 has 2 MA's), (85, 42731), (113, 42833), (129, 42899),

Gene: Bruin_108 Start: 62685, Stop: 63059, Start Num: 48

Candidate Starts for Bruin_108:

(Start: 38 @62631 has 1 MA's), (Start: 48 @62685 has 98 MA's), (Start: 72 @62766 has 2 MA's), (73, 62775), (79, 62814), (83, 62835), (108, 62928), (112, 62946), (113, 62949), (125, 62997), (141, 63048),

Gene: Brylie_65 Start: 42235, Stop: 42591, Start Num: 72

Candidate Starts for Brylie_65:

(22, 41965), (27, 42013), (30, 42034), (37, 42088), (49, 42148), (Start: 58 @42193 has 23 MA's), (Start: 63 @42205 has 12 MA's), (Start: 72 @42235 has 2 MA's), (85, 42310), (113, 42412), (129, 42478),

Gene: Buck_112 Start: 64501, Stop: 64875, Start Num: 48

Candidate Starts for Buck_112:

(Start: 38 @64447 has 1 MA's), (Start: 48 @64501 has 98 MA's), (64, 64555), (Start: 72 @64582 has 2 MA's), (73, 64591), (79, 64630), (83, 64651), (108, 64744), (112, 64762), (113, 64765), (125, 64813), (141, 64864),

Gene: Cactus_115 Start: 62939, Stop: 63313, Start Num: 48

Candidate Starts for Cactus_115:

(Start: 38 @62885 has 1 MA's), (Start: 48 @62939 has 98 MA's), (64, 62993), (Start: 72 @63020 has 2 MA's), (73, 63029), (79, 63068), (83, 63089), (108, 63182), (112, 63200), (113, 63203), (125, 63251), (126, 63257), (129, 63269),

Gene: CallinAllBarbz_26 Start: 21897, Stop: 22250, Start Num: 66

Candidate Starts for CallinAllBarbz_26:

(30, 21858), (Start: 66 @21897 has 23 MA's), (Start: 72 @21921 has 2 MA's), (87, 22014), (102, 22086), (111, 22128), (124, 22176),

Gene: Caron_28 Start: 22040, Stop: 22432, Start Num: 42

Candidate Starts for Caron_28:

(5, 21614), (Start: 42 @22040 has 4 MA's), (Start: 72 @22109 has 2 MA's), (77, 22139), (108, 22286),

Gene: Cassia_28 Start: 22891, Stop: 23259, Start Num: 66

Candidate Starts for Cassia_28:

(6, 22426), (15, 22588), (Start: 66 @22891 has 23 MA's), (Start: 72 @22915 has 2 MA's), (99, 23068),

Gene: Charianelly_50 Start: 48481, Stop: 48116, Start Num: 58

Candidate Starts for Charianelly_50:

(Start: 58 @48481 has 23 MA's), (Start: 72 @48439 has 2 MA's), (88, 48334), (114, 48247), (121, 48217), (122, 48214), (129, 48184),

Gene: Chelms_53 Start: 48063, Stop: 47701, Start Num: 60

Candidate Starts for Chelms_53:

(49, 48111), (Start: 60 @48063 has 7 MA's), (Start: 61 @48060 has 2 MA's), (Start: 72 @48024 has 2 MA's), (85, 47949), (107, 47859), (114, 47832), (122, 47799), (129, 47769), (133, 47763), (142, 47733),

Gene: Chickaboom_56 Start: 33345, Stop: 33731, Start Num: 47

Candidate Starts for Chickaboom_56:

(Start: 47 @33345 has 16 MA's), (Start: 72 @33384 has 2 MA's), (85, 33459), (92, 33516), (96, 33528), (103, 33555), (115, 33603), (119, 33627), (135, 33681),

Gene: Chipper1996_930 Start: 60998, Stop: 61360, Start Num: 68

Candidate Starts for Chipper1996_930:

(Start: 68 @60998 has 15 MA's), (75, 61043), (76, 61046), (79, 61067), (90, 61142), (97, 61172), (102, 61190), (113, 61235), (128, 61295), (129, 61301),

Gene: Chocolat_92 Start: 60705, Stop: 61067, Start Num: 68

Candidate Starts for Chocolat_92:

(Start: 68 @60705 has 15 MA's), (75, 60750), (76, 60753), (79, 60774), (90, 60849), (97, 60879), (102, 60897), (113, 60942), (128, 61002), (129, 61008),

Gene: Chop_67 Start: 43371, Stop: 43757, Start Num: 63

Candidate Starts for Chop_67:

(22, 43131), (27, 43179), (30, 43200), (37, 43254), (49, 43314), (Start: 58 @43359 has 23 MA's), (Start: 63 @43371 has 12 MA's), (Start: 72 @43401 has 2 MA's), (85, 43476), (113, 43578), (129, 43644),

Gene: ChosenOne_111 Start: 62885, Stop: 63259, Start Num: 48

Candidate Starts for ChosenOne_111:

(Start: 38 @62831 has 1 MA's), (Start: 48 @62885 has 98 MA's), (64, 62939), (Start: 72 @62966 has 2 MA's), (73, 62975), (79, 63014), (83, 63035), (108, 63128), (112, 63146), (113, 63149), (125, 63197), (141, 63248),

Gene: ChotaBhai_111 Start: 63338, Stop: 63712, Start Num: 48

Candidate Starts for ChotaBhai_111:

(Start: 48 @63338 has 98 MA's), (64, 63392), (Start: 72 @63419 has 2 MA's), (73, 63428), (79, 63467), (80, 63470), (83, 63488), (108, 63581), (112, 63599), (113, 63602), (125, 63650), (126, 63656), (129, 63668),

Gene: Chubster_92 Start: 60945, Stop: 61307, Start Num: 69

Candidate Starts for Chubster_92:

(Start: 69 @60945 has 2 MA's), (75, 60990), (76, 60993), (79, 61014), (90, 61089), (97, 61119), (102, 61137), (113, 61182), (128, 61242), (129, 61248),

Gene: Cjw1_111 Start: 64694, Stop: 65068, Start Num: 48

Candidate Starts for Cjw1_111:

(Start: 38 @64640 has 1 MA's), (Start: 48 @64694 has 98 MA's), (Start: 72 @64775 has 2 MA's), (73, 64784), (79, 64823), (83, 64844), (108, 64937), (112, 64955), (113, 64958), (125, 65006), (141, 65057),

Gene: Colucci_95 Start: 61317, Stop: 61679, Start Num: 69

Candidate Starts for Colucci_95:

(Start: 69 @61317 has 2 MA's), (75, 61362), (76, 61365), (79, 61386), (90, 61461), (97, 61491), (102, 61509), (111, 61548),

Gene: Command613_113 Start: 63553, Stop: 63927, Start Num: 48

Candidate Starts for Command613_113:

(Start: 48 @63553 has 98 MA's), (64, 63607), (Start: 72 @63634 has 2 MA's), (73, 63643), (79, 63682), (83, 63703), (108, 63796), (112, 63814), (113, 63817), (125, 63865), (126, 63871), (129, 63883),

Gene: Community_29 Start: 24629, Stop: 24997, Start Num: 66

Candidate Starts for Community_29:

(Start: 66 @24629 has 23 MA's), (Start: 72 @24653 has 2 MA's), (99, 24806), (136, 24947),

Gene: Conboy_90 Start: 60454, Stop: 60816, Start Num: 68

Candidate Starts for Conboy_90:

(Start: 68 @60454 has 15 MA's), (75, 60499), (76, 60502), (79, 60523), (90, 60598), (97, 60628), (102, 60646), (113, 60691), (128, 60751), (129, 60757),

Gene: Contagion_108 Start: 63047, Stop: 63421, Start Num: 48

Candidate Starts for Contagion_108:

(Start: 38 @62993 has 1 MA's), (Start: 48 @63047 has 98 MA's), (Start: 72 @63128 has 2 MA's), (73, 63137), (79, 63176), (83, 63197), (108, 63290), (112, 63308), (113, 63311), (125, 63359), (141, 63410),

Gene: Cookies_108 Start: 63324, Stop: 63698, Start Num: 48

Candidate Starts for Cookies_108:

(Start: 48 @63324 has 98 MA's), (64, 63378), (Start: 72 @63405 has 2 MA's), (73, 63414), (79, 63453), (83, 63474), (108, 63567), (112, 63585), (113, 63588), (125, 63636), (126, 63642), (129, 63654),

Gene: Coral_53 Start: 32516, Stop: 32923, Start Num: 47

Candidate Starts for Coral_53:

(Start: 46 @32507 has 1 MA's), (Start: 47 @32516 has 16 MA's), (Start: 60 @32558 has 7 MA's), (Start: 72 @32597 has 2 MA's), (91, 32714), (92, 32723), (103, 32762), (119, 32834), (135, 32888),

Gene: Cosmo_88 Start: 53908, Stop: 54264, Start Num: 66

Candidate Starts for Cosmo_88:

(Start: 61 @53896 has 2 MA's), (62, 53899), (Start: 63 @53902 has 12 MA's), (Start: 66 @53908 has 23 MA's), (Start: 72 @53932 has 2 MA's), (79, 53974), (82, 53986), (93, 54049), (95, 54055), (105, 54094), (110, 54109), (111, 54118), (113, 54124), (122, 54160), (125, 54172), (129, 54190),

Gene: Cote_55 Start: 32989, Stop: 33357, Start Num: 47

Candidate Starts for Cote_55:

(Start: 46 @32980 has 1 MA's), (Start: 47 @32989 has 16 MA's), (Start: 72 @33031 has 2 MA's), (91, 33148), (92, 33157), (103, 33196), (119, 33268), (135, 33322),

Gene: Crewmate_31 Start: 23149, Stop: 23517, Start Num: 66

Candidate Starts for Crewmate_31:

(9, 22744), (Start: 66 @23149 has 23 MA's), (Start: 72 @23173 has 2 MA's), (107, 23356), (108, 23359),

Gene: CrystalP_111 Start: 64057, Stop: 64431, Start Num: 48

Candidate Starts for CrystalP_111:

(Start: 38 @64003 has 1 MA's), (Start: 48 @64057 has 98 MA's), (Start: 72 @64138 has 2 MA's), (73, 64147), (79, 64186), (83, 64207), (108, 64300), (112, 64318), (113, 64321), (125, 64369), (126, 64375), (129, 64387),

Gene: Cyan_27 Start: 22364, Stop: 22729, Start Num: 32

Candidate Starts for Cyan_27:

(Start: 32 @22364 has 20 MA's), (Start: 72 @22388 has 2 MA's), (107, 22571),

Gene: Czyszczone1_111 Start: 63040, Stop: 63414, Start Num: 48

Candidate Starts for Czyszczone1_111:

(Start: 38 @62986 has 1 MA's), (Start: 48 @63040 has 98 MA's), (Start: 72 @63121 has 2 MA's), (73, 63130), (79, 63169), (83, 63190), (108, 63283), (112, 63301), (113, 63304), (125, 63352), (141, 63403),

Gene: DS6A_81 Start: 51791, Stop: 52174, Start Num: 44

Candidate Starts for DS6A_81:

(31, 51698), (35, 51737), (41, 51776), (Start: 44 @51791 has 1 MA's), (Start: 72 @51890 has 2 MA's), (78, 51926), (84, 51959), (107, 52043), (108, 52046), (111, 52061), (112, 52064), (125, 52115), (134, 52142),

Gene: Daikon_112 Start: 62856, Stop: 63230, Start Num: 48

Candidate Starts for Daikon_112:

(Start: 38 @62802 has 1 MA's), (Start: 48 @62856 has 98 MA's), (64, 62910), (Start: 72 @62937 has 2 MA's), (73, 62946), (79, 62985), (83, 63006), (108, 63099), (112, 63117), (113, 63120), (125, 63168),

(126, 63174), (129, 63186),

Gene: Dakiti_54 Start: 48931, Stop: 48569, Start Num: 60

Candidate Starts for Dakiti_54:

(49, 48979), (Start: 60 @48931 has 7 MA's), (Start: 61 @48928 has 2 MA's), (Start: 72 @48892 has 2 MA's), (85, 48817), (107, 48727), (114, 48700), (122, 48667), (129, 48637), (133, 48631), (142, 48601),

Gene: Damp_49 Start: 47645, Stop: 47280, Start Num: 58

Candidate Starts for Damp_49:

(Start: 58 @47645 has 23 MA's), (Start: 72 @47603 has 2 MA's), (88, 47498), (114, 47411), (121, 47381), (122, 47378), (129, 47348),

Gene: Daob_55 Start: 32991, Stop: 33368, Start Num: 46

Candidate Starts for Daob_55:

(Start: 46 @32991 has 1 MA's), (Start: 47 @33000 has 16 MA's), (Start: 72 @33042 has 2 MA's), (91, 33159), (92, 33168), (103, 33207), (119, 33279), (135, 33333),

Gene: DelRio_66 Start: 43392, Stop: 43778, Start Num: 63

Candidate Starts for DelRio_66:

(27, 43200), (30, 43221), (37, 43275), (49, 43335), (Start: 58 @43380 has 23 MA's), (Start: 63 @43392 has 12 MA's), (Start: 72 @43422 has 2 MA's), (85, 43497), (113, 43599), (121, 43632), (129, 43665), (138, 43689),

Gene: Demosthenes_47 Start: 48399, Stop: 47929, Start Num: 39

Candidate Starts for Demosthenes_47:

(1, 48882), (2, 48858), (3, 48855), (8, 48768), (9, 48759), (10, 48702), (11, 48687), (12, 48657), (18, 48576), (19, 48564), (26, 48495), (Start: 28 @48489 has 1 MA's), (Start: 39 @48399 has 1 MA's), (45, 48369), (57, 48315), (Start: 65 @48297 has 7 MA's), (Start: 72 @48273 has 2 MA's), (88, 48168), (114, 48066), (145, 47940),

Gene: DocB7_043 Start: 40188, Stop: 39829, Start Num: 66

Candidate Starts for DocB7_043:

(Start: 66 @40188 has 23 MA's), (Start: 72 @40164 has 2 MA's), (79, 40122), (87, 40071), (107, 40014), (129, 39924), (130, 39921), (133, 39918), (149, 39843),

Gene: DrDrey_111 Start: 64717, Stop: 65091, Start Num: 48

Candidate Starts for DrDrey_111:

(Start: 38 @64663 has 1 MA's), (Start: 48 @64717 has 98 MA's), (64, 64771), (Start: 72 @64798 has 2 MA's), (73, 64807), (79, 64846), (83, 64867), (108, 64960), (112, 64978), (113, 64981), (125, 65029), (126, 65035), (129, 65047),

Gene: DrManhattan_26 Start: 20716, Stop: 21084, Start Num: 32

Candidate Starts for DrManhattan_26:

(Start: 32 @20716 has 20 MA's), (Start: 72 @20740 has 2 MA's), (108, 20926), (114, 20953), (121, 20983),

Gene: DrSierra_27 Start: 21394, Stop: 21762, Start Num: 66

Candidate Starts for DrSierra_27:

(Start: 66 @21394 has 23 MA's), (Start: 72 @21418 has 2 MA's),

Gene: DrYang_88 Start: 60507, Stop: 60866, Start Num: 68

Candidate Starts for DrYang_88:

(Start: 68 @60507 has 15 MA's), (75, 60552), (76, 60555), (79, 60576), (90, 60651), (97, 60681), (102, 60699), (108, 60720), (113, 60744), (128, 60804),

Gene: Dumbo_111 Start: 63077, Stop: 63451, Start Num: 48

Candidate Starts for Dumbo_111:

(Start: 38 @63023 has 1 MA's), (Start: 48 @63077 has 98 MA's), (Start: 72 @63158 has 2 MA's), (73, 63167), (79, 63206), (83, 63227), (108, 63320), (112, 63338), (113, 63341), (125, 63389), (141, 63440),

Gene: Dusk_108 Start: 63239, Stop: 63613, Start Num: 48

Candidate Starts for Dusk_108:

(Start: 38 @63185 has 1 MA's), (Start: 48 @63239 has 98 MA's), (64, 63293), (Start: 72 @63320 has 2 MA's), (73, 63329), (79, 63368), (83, 63389), (108, 63482), (112, 63500), (113, 63503), (125, 63551), (126, 63557), (129, 63569),

Gene: E6_49 Start: 32814, Stop: 33161, Start Num: 74

Candidate Starts for E6_49:

(Start: 74 @32814 has 1 MA's), (78, 32838), (80, 32847), (94, 32937), (111, 33006), (128, 33072), (144, 33132), (147, 33153),

Gene: Easy2Say_111 Start: 63711, Stop: 64085, Start Num: 48

Candidate Starts for Easy2Say_111:

(Start: 38 @63657 has 1 MA's), (Start: 48 @63711 has 98 MA's), (64, 63765), (Start: 72 @63792 has 2 MA's), (73, 63801), (79, 63840), (83, 63861), (108, 63954), (112, 63972), (113, 63975), (125, 64023), (141, 64074),

Gene: EdgarPoe_91 Start: 60862, Stop: 61224, Start Num: 68

Candidate Starts for EdgarPoe_91:

(Start: 68 @60862 has 15 MA's), (75, 60907), (76, 60910), (79, 60931), (90, 61006), (97, 61036), (102, 61054), (113, 61099), (128, 61159), (129, 61165),

Gene: Eggsie_52 Start: 47363, Stop: 47001, Start Num: 60

Candidate Starts for Eggsie_52:

(Start: 60 @47363 has 7 MA's), (Start: 61 @47360 has 2 MA's), (Start: 63 @47354 has 12 MA's), (Start: 72 @47324 has 2 MA's), (82, 47270), (129, 47069), (142, 47033),

Gene: Elezi_29 Start: 24459, Stop: 24827, Start Num: 66

Candidate Starts for Elezi_29:

(7, 24144), (9, 24156), (Start: 66 @24459 has 23 MA's), (70, 24465), (Start: 72 @24483 has 2 MA's), (107, 24666),

Gene: Elite2014_110 Start: 62884, Stop: 63258, Start Num: 48

Candidate Starts for Elite2014_110:

(Start: 38 @62830 has 1 MA's), (Start: 48 @62884 has 98 MA's), (64, 62938), (Start: 72 @62965 has 2 MA's), (73, 62974), (79, 63013), (83, 63034), (108, 63127), (112, 63145), (113, 63148), (125, 63196), (141, 63247),

Gene: Elph10_110 Start: 62723, Stop: 63097, Start Num: 48

Candidate Starts for Elph10_110:

(Start: 38 @62669 has 1 MA's), (Start: 48 @62723 has 98 MA's), (Start: 72 @62804 has 2 MA's), (73, 62813), (79, 62852), (83, 62873), (108, 62966), (112, 62984), (113, 62987), (125, 63035), (141, 63086),

Gene: Emmina_111 Start: 62662, Stop: 63036, Start Num: 48

Candidate Starts for Emmina_111:

(Start: 38 @62608 has 1 MA's), (Start: 48 @62662 has 98 MA's), (64, 62716), (Start: 72 @62743 has 2 MA's), (73, 62752), (79, 62791), (83, 62812), (108, 62905), (112, 62923), (113, 62926), (125, 62974), (141, 63025),

Gene: Emotion_33 Start: 24307, Stop: 24687, Start Num: 66

Candidate Starts for Emotion_33:

(Start: 66 @24307 has 23 MA's), (Start: 72 @24331 has 2 MA's), (87, 24424), (125, 24592),

Gene: Eraser_29 Start: 24451, Stop: 24819, Start Num: 32

Candidate Starts for Eraser_29:

(14, 24286), (Start: 32 @24451 has 20 MA's), (Start: 72 @24475 has 2 MA's),

Gene: Eureka_111 Start: 63850, Stop: 64224, Start Num: 48

Candidate Starts for Eureka_111:

(Start: 38 @63796 has 1 MA's), (Start: 48 @63850 has 98 MA's), (64, 63904), (Start: 72 @63931 has 2 MA's), (73, 63940), (79, 63979), (83, 64000), (108, 64093), (112, 64111), (113, 64114), (125, 64162), (126, 64168), (141, 64213),

Gene: FireRed_114 Start: 64126, Stop: 64500, Start Num: 48

Candidate Starts for FireRed_114:

(Start: 38 @64072 has 1 MA's), (Start: 48 @64126 has 98 MA's), (64, 64180), (Start: 72 @64207 has 2 MA's), (73, 64216), (79, 64255), (83, 64276), (108, 64369), (112, 64387), (113, 64390), (125, 64438), (141, 64489),

Gene: Floof_30 Start: 23138, Stop: 23557, Start Num: 42

Candidate Starts for Floof_30:

(Start: 42 @23138 has 4 MA's), (71, 23213), (Start: 72 @23225 has 2 MA's), (104, 23393), (125, 23477), (132, 23501),

Gene: Flypotenuse_107 Start: 62431, Stop: 62805, Start Num: 48

Candidate Starts for Flypotenuse_107:

(Start: 48 @62431 has 98 MA's), (64, 62485), (Start: 72 @62512 has 2 MA's), (73, 62521), (79, 62560), (80, 62563), (83, 62581), (108, 62674), (112, 62692), (113, 62695), (125, 62743), (126, 62749), (129, 62761),

Gene: Francois_65 Start: 42391, Stop: 42777, Start Num: 63

Candidate Starts for Francois_65:

(37, 42274), (41, 42304), (49, 42334), (Start: 63 @42391 has 12 MA's), (Start: 72 @42421 has 2 MA's), (84, 42490), (113, 42598), (129, 42664), (146, 42736), (151, 42766),

Gene: GMA7_46 Start: 42634, Stop: 42269, Start Num: 58

Candidate Starts for GMA7_46:

(Start: 58 @42634 has 23 MA's), (Start: 72 @42592 has 2 MA's), (100, 42454), (107, 42427), (121, 42370),

Gene: GTE7_45 Start: 42665, Stop: 42300, Start Num: 58

Candidate Starts for GTE7_45:

(Start: 58 @42665 has 23 MA's), (Start: 72 @42623 has 2 MA's), (100, 42485), (107, 42458), (121, 42401),

Gene: Gage_113 Start: 63382, Stop: 63756, Start Num: 48

Candidate Starts for Gage_113:

(Start: 38 @63328 has 1 MA's), (Start: 48 @63382 has 98 MA's), (Start: 72 @63463 has 2 MA's), (73, 63472), (79, 63511), (83, 63532), (108, 63625), (112, 63643), (113, 63646), (125, 63694), (141, 63745),

Gene: GalacticEye_51 Start: 48442, Stop: 48077, Start Num: 58

Candidate Starts for GalacticEye_51:

(Start: 58 @48442 has 23 MA's), (Start: 72 @48400 has 2 MA's), (88, 48295), (114, 48208), (121, 48178), (122, 48175), (129, 48145),

Gene: Galaxy_50 Start: 32207, Stop: 32593, Start Num: 47

Candidate Starts for Galaxy_50:

(25, 32063), (Start: 46 @32198 has 1 MA's), (Start: 47 @32207 has 16 MA's), (55, 32225), (Start: 72 @32246 has 2 MA's), (91, 32369), (92, 32378), (103, 32417), (116, 32468), (135, 32543),

Gene: GardenState_30 Start: 22984, Stop: 23337, Start Num: 59

Candidate Starts for GardenState_30:

(33, 22870), (Start: 59 @22984 has 2 MA's), (Start: 72 @23017 has 2 MA's), (104, 23182), (117, 23230), (124, 23257),

Gene: Gator_109 Start: 63291, Stop: 63665, Start Num: 48

Candidate Starts for Gator_109:

(Start: 48 @63291 has 98 MA's), (64, 63345), (Start: 72 @63372 has 2 MA's), (73, 63381), (79, 63420), (83, 63441), (108, 63534), (112, 63552), (113, 63555), (125, 63603), (126, 63609), (129, 63621),

Gene: Gemini_116 Start: 63761, Stop: 64135, Start Num: 48

Candidate Starts for Gemini_116:

(Start: 38 @63707 has 1 MA's), (Start: 48 @63761 has 98 MA's), (Start: 72 @63842 has 2 MA's), (73, 63851), (79, 63890), (83, 63911), (108, 64004), (112, 64022), (113, 64025), (125, 64073), (141, 64124),

Gene: Glexan_110 Start: 63441, Stop: 63815, Start Num: 48

Candidate Starts for Glexan_110:

(Start: 38 @63387 has 1 MA's), (Start: 48 @63441 has 98 MA's), (64, 63495), (Start: 72 @63522 has 2 MA's), (73, 63531), (79, 63570), (83, 63591), (108, 63684), (112, 63702), (113, 63705), (125, 63753), (126, 63759), (129, 63771),

Gene: GoldenSpark_115 Start: 63244, Stop: 63618, Start Num: 48

Candidate Starts for GoldenSpark_115:

(Start: 38 @63190 has 1 MA's), (Start: 48 @63244 has 98 MA's), (Start: 72 @63325 has 2 MA's), (73, 63334), (79, 63373), (83, 63394), (108, 63487), (112, 63505), (113, 63508), (125, 63556), (141, 63607),

Gene: GooberAzure_114 Start: 63244, Stop: 63618, Start Num: 48

Candidate Starts for GooberAzure_114:

(Start: 38 @63190 has 1 MA's), (Start: 48 @63244 has 98 MA's), (Start: 72 @63325 has 2 MA's), (73, 63334), (79, 63373), (83, 63394), (108, 63487), (112, 63505), (113, 63508), (125, 63556), (141, 63607),

Gene: GrandSlam_67 Start: 43371, Stop: 43757, Start Num: 63

Candidate Starts for GrandSlam_67:

(22, 43131), (27, 43179), (30, 43200), (37, 43254), (49, 43314), (Start: 58 @43359 has 23 MA's), (Start: 63 @43371 has 12 MA's), (Start: 72 @43401 has 2 MA's), (85, 43476), (113, 43578), (129, 43644),

Gene: Gretchen_30 Start: 24301, Stop: 24720, Start Num: 42

Candidate Starts for Gretchen_30:

(Start: 42 @24301 has 4 MA's), (54, 24343), (Start: 72 @24388 has 2 MA's), (89, 24499), (98, 24529), (104, 24556), (108, 24565), (125, 24640),

Gene: Guillaume_51 Start: 48492, Stop: 48127, Start Num: 58

Candidate Starts for Guillaume_51:

(Start: 58 @48492 has 23 MA's), (Start: 72 @48450 has 2 MA's), (88, 48345), (114, 48258), (121, 48228), (122, 48225), (129, 48195),

Gene: Hail2Pitt_50 Start: 48968, Stop: 48603, Start Num: 58

Candidate Starts for Hail2Pitt_50:

(Start: 58 @48968 has 23 MA's), (Start: 72 @48926 has 2 MA's), (88, 48821), (114, 48734), (122, 48701), (129, 48671),

Gene: Hamood_67 Start: 43371, Stop: 43757, Start Num: 63

Candidate Starts for Hamood_67:

(22, 43131), (27, 43179), (30, 43200), (37, 43254), (49, 43314), (Start: 58 @43359 has 23 MA's), (Start: 63 @43371 has 12 MA's), (Start: 72 @43401 has 2 MA's), (85, 43476), (113, 43578), (129, 43644),

Gene: HanKaySha_111 Start: 63432, Stop: 63806, Start Num: 48

Candidate Starts for HanKaySha_111:

(Start: 38 @63378 has 1 MA's), (Start: 48 @63432 has 98 MA's), (64, 63486), (Start: 72 @63513 has 2 MA's), (73, 63522), (79, 63561), (83, 63582), (108, 63675), (112, 63693), (113, 63696), (125, 63744), (141, 63795),

Gene: HannahPhantana_61 Start: 32688, Stop: 33014, Start Num: 72

Candidate Starts for HannahPhantana_61:

(Start: 46 @32637 has 1 MA's), (Start: 47 @32646 has 16 MA's), (Start: 72 @32688 has 2 MA's), (91, 32805), (92, 32814), (103, 32853), (119, 32925), (135, 32979),

Gene: Harambe_51 Start: 48759, Stop: 48394, Start Num: 58

Candidate Starts for Harambe_51:

(Start: 58 @48759 has 23 MA's), (Start: 72 @48717 has 2 MA's), (88, 48612), (114, 48525), (121, 48495), (122, 48492), (129, 48462),

Gene: Harella_112 Start: 63957, Stop: 64331, Start Num: 48

Candidate Starts for Harella_112:

(Start: 38 @63903 has 1 MA's), (Start: 48 @63957 has 98 MA's), (64, 64011), (Start: 72 @64038 has 2 MA's), (73, 64047), (79, 64086), (83, 64107), (108, 64200), (112, 64218), (113, 64221), (125, 64269), (126, 64275), (129, 64287),

Gene: HayZem_56 Start: 48375, Stop: 48052, Start Num: 72

Candidate Starts for HayZem_56:

(Start: 58 @48417 has 23 MA's), (Start: 72 @48375 has 2 MA's), (100, 48237), (107, 48210), (121, 48153),

Gene: Hello_51 Start: 48721, Stop: 48356, Start Num: 58

Candidate Starts for Hello_51:

(Start: 58 @48721 has 23 MA's), (Start: 72 @48679 has 2 MA's), (88, 48574), (114, 48487), (121, 48457), (122, 48454), (129, 48424),

Gene: Henry_109 Start: 63242, Stop: 63616, Start Num: 48

Candidate Starts for Henry_109:

(Start: 48 @63242 has 98 MA's), (64, 63296), (Start: 72 @63323 has 2 MA's), (73, 63332), (79, 63371), (83, 63392), (108, 63485), (112, 63503), (113, 63506), (125, 63554), (126, 63560), (129, 63572),

Gene: Highbury_107 Start: 61589, Stop: 61963, Start Num: 48

Candidate Starts for Highbury_107:

(Start: 38 @61535 has 1 MA's), (Start: 48 @61589 has 98 MA's), (64, 61643), (Start: 72 @61670 has 2 MA's), (73, 61679), (79, 61718), (83, 61739), (108, 61832), (112, 61850), (113, 61853), (125, 61901), (141, 61952),

Gene: Hollow_49 Start: 48928, Stop: 48560, Start Num: 65

Candidate Starts for Hollow_49:

(Start: 65 @48928 has 7 MA's), (Start: 72 @48904 has 2 MA's), (114, 48697), (133, 48628), (145, 48571),

Gene: Hoonter_114 Start: 63737, Stop: 64111, Start Num: 48

Candidate Starts for Hoonter_114:

(Start: 38 @63683 has 1 MA's), (Start: 48 @63737 has 98 MA's), (Start: 72 @63818 has 2 MA's), (73, 63827), (79, 63866), (83, 63887), (108, 63980), (112, 63998), (113, 64001), (125, 64049), (141, 64100),

Gene: Hokey_111 Start: 64043, Stop: 64417, Start Num: 48

Candidate Starts for Hokey_111:

(Start: 38 @63989 has 1 MA's), (Start: 48 @64043 has 98 MA's), (Start: 72 @64124 has 2 MA's), (73, 64133), (79, 64172), (83, 64193), (108, 64286), (112, 64304), (113, 64307), (125, 64355), (141, 64406),

Gene: HufflyPuff_113 Start: 64352, Stop: 64726, Start Num: 48

Candidate Starts for HufflyPuff_113:

(Start: 38 @64298 has 1 MA's), (Start: 48 @64352 has 98 MA's), (Start: 72 @64433 has 2 MA's), (73, 64442), (79, 64481), (83, 64502), (108, 64595), (112, 64613), (113, 64616), (125, 64664), (141, 64715),

Gene: HumptyDumpty_92 Start: 60665, Stop: 61027, Start Num: 68

Candidate Starts for HumptyDumpty_92:

(Start: 68 @60665 has 15 MA's), (75, 60710), (76, 60713), (79, 60734), (90, 60809), (97, 60839), (102, 60857), (113, 60902), (128, 60962), (129, 60968),

Gene: IAmGroot_30 Start: 23648, Stop: 24001, Start Num: 59

Candidate Starts for IAmGroot_30:

(33, 23534), (Start: 59 @23648 has 2 MA's), (Start: 72 @23681 has 2 MA's), (104, 23846), (117, 23894), (124, 23921),

Gene: IHOP_109 Start: 62960, Stop: 63334, Start Num: 48

Candidate Starts for IHOP_109:

(Start: 38 @62906 has 1 MA's), (Start: 48 @62960 has 98 MA's), (64, 63014), (Start: 72 @63041 has 2 MA's), (73, 63050), (79, 63089), (83, 63110), (108, 63203), (112, 63221), (113, 63224), (125, 63272),

(126, 63278), (129, 63290),

Gene: Iter_28 Start: 22439, Stop: 22807, Start Num: 66

Candidate Starts for Iter_28:

(Start: 66 @22439 has 23 MA's), (Start: 72 @22463 has 2 MA's), (108, 22649),

Gene: IttyBittyPiggy_28 Start: 22679, Stop: 23044, Start Num: 66

Candidate Starts for IttyBittyPiggy_28:

(Start: 66 @22679 has 23 MA's), (Start: 72 @22703 has 2 MA's), (85, 22778), (108, 22889), (143, 23027),

Gene: Jams_51 Start: 47931, Stop: 47566, Start Num: 58

Candidate Starts for Jams_51:

(Start: 58 @47931 has 23 MA's), (Start: 72 @47889 has 2 MA's), (88, 47784), (114, 47697), (121, 47667), (122, 47664), (129, 47634),

Gene: Jamun_50 Start: 33451, Stop: 33831, Start Num: 47

Candidate Starts for Jamun_50:

(Start: 46 @33442 has 1 MA's), (Start: 47 @33451 has 16 MA's), (Start: 72 @33484 has 2 MA's), (92, 33616), (103, 33655), (115, 33703), (119, 33727), (135, 33781),

Gene: Janeemi_30 Start: 24658, Stop: 25026, Start Num: 66

Candidate Starts for Janeemi_30:

(Start: 66 @24658 has 23 MA's), (Start: 72 @24682 has 2 MA's), (99, 24835), (108, 24868),

Gene: JayCookie_92 Start: 61198, Stop: 61560, Start Num: 68

Candidate Starts for JayCookie_92:

(Start: 68 @61198 has 15 MA's), (75, 61243), (76, 61246), (79, 61267), (90, 61342), (97, 61372), (102, 61390), (113, 61435), (128, 61495), (129, 61501),

Gene: Joemato_29 Start: 22364, Stop: 22729, Start Num: 32

Candidate Starts for Joemato_29:

(Start: 32 @22364 has 20 MA's), (Start: 72 @22388 has 2 MA's), (107, 22571),

Gene: JohnDoe_27 Start: 22359, Stop: 22724, Start Num: 32

Candidate Starts for JohnDoe_27:

(Start: 32 @22359 has 20 MA's), (Start: 72 @22383 has 2 MA's), (107, 22566),

Gene: Jormungandr_51 Start: 48474, Stop: 48109, Start Num: 58

Candidate Starts for Jormungandr_51:

(Start: 58 @48474 has 23 MA's), (Start: 72 @48432 has 2 MA's), (88, 48327), (114, 48240), (121, 48210), (122, 48207), (129, 48177),

Gene: JuneStar_28 Start: 24589, Stop: 24957, Start Num: 66

Candidate Starts for JuneStar_28:

(14, 24424), (Start: 66 @24589 has 23 MA's), (Start: 72 @24613 has 2 MA's),

Gene: Juno112_54 Start: 33123, Stop: 33518, Start Num: 42

Candidate Starts for Juno112_54:

(Start: 42 @33123 has 4 MA's), (Start: 50 @33147 has 4 MA's), (71, 33174), (Start: 72 @33186 has 2 MA's), (81, 33237), (91, 33306), (92, 33315), (101, 33339), (103, 33354), (119, 33426), (135, 33480),

Gene: KBurrousTX_90 Start: 62135, Stop: 62494, Start Num: 68

Candidate Starts for KBurrousTX_90:

(Start: 68 @62135 has 15 MA's), (75, 62180), (76, 62183), (79, 62204), (90, 62279), (97, 62309), (102, 62327), (113, 62372), (128, 62432),

Gene: KHumphrey_53 Start: 33011, Stop: 33406, Start Num: 42

Candidate Starts for KHumphrey_53:

(Start: 42 @33011 has 4 MA's), (Start: 50 @33035 has 4 MA's), (71, 33062), (Start: 72 @33074 has 2 MA's), (81, 33125), (91, 33194), (92, 33203), (101, 33227), (103, 33242), (119, 33314), (135, 33368),

Gene: Kabreeze_92 Start: 60722, Stop: 61084, Start Num: 68

Candidate Starts for Kabreeze_92:

(Start: 68 @60722 has 15 MA's), (75, 60767), (76, 60770), (79, 60791), (90, 60866), (97, 60896), (102, 60914), (113, 60959), (128, 61019), (129, 61025),

Gene: Kanye_108 Start: 63493, Stop: 63867, Start Num: 48

Candidate Starts for Kanye_108:

(Start: 38 @63439 has 1 MA's), (Start: 48 @63493 has 98 MA's), (Start: 72 @63574 has 2 MA's), (73, 63583), (79, 63622), (83, 63643), (108, 63736), (112, 63754), (113, 63757), (125, 63805), (141, 63856),

Gene: Kaseim_51 Start: 47916, Stop: 47551, Start Num: 58

Candidate Starts for Kaseim_51:

(Start: 58 @47916 has 23 MA's), (Start: 72 @47874 has 2 MA's), (88, 47769), (114, 47682), (121, 47652), (122, 47649), (129, 47619),

Gene: Katyusha_48 Start: 48592, Stop: 48224, Start Num: 65

Candidate Starts for Katyusha_48:

(Start: 65 @48592 has 7 MA's), (Start: 72 @48568 has 2 MA's), (114, 48361), (133, 48292), (145, 48235),

Gene: Kaylissa_27 Start: 22354, Stop: 22719, Start Num: 32

Candidate Starts for Kaylissa_27:

(Start: 32 @22354 has 20 MA's), (Start: 72 @22378 has 2 MA's), (107, 22561),

Gene: KeAlii_28 Start: 22518, Stop: 22889, Start Num: 66

Candidate Starts for KeAlii_28:

(14, 22341), (Start: 66 @22518 has 23 MA's), (Start: 72 @22542 has 2 MA's),

Gene: Kepler_54 Start: 32767, Stop: 33135, Start Num: 47

Candidate Starts for Kepler_54:

(Start: 46 @32758 has 1 MA's), (Start: 47 @32767 has 16 MA's), (Start: 72 @32809 has 2 MA's), (91, 32926), (92, 32935), (103, 32974), (119, 33046), (135, 33100),

Gene: Kostya_111 Start: 63062, Stop: 63436, Start Num: 48

Candidate Starts for Kostya_111:

(Start: 38 @63008 has 1 MA's), (Start: 48 @63062 has 98 MA's), (64, 63116), (Start: 72 @63143 has 2 MA's), (73, 63152), (79, 63191), (83, 63212), (108, 63305), (112, 63323), (113, 63326), (125, 63374), (126, 63380), (129, 63392),

Gene: Kuleana_54 Start: 32362, Stop: 32733, Start Num: 47

Candidate Starts for Kuleana_54:

(Start: 46 @32353 has 1 MA's), (Start: 47 @32362 has 16 MA's), (55, 32383), (Start: 72 @32404 has 2 MA's), (85, 32479), (91, 32521), (92, 32530), (103, 32569), (105, 32575), (119, 32641), (120, 32647),

Gene: Kvothe_48 Start: 48491, Stop: 48123, Start Num: 65

Candidate Starts for Kvothe_48:

(Start: 65 @48491 has 7 MA's), (Start: 72 @48467 has 2 MA's), (114, 48260), (133, 48191), (145, 48134),

Gene: Lahirium_51 Start: 48996, Stop: 48631, Start Num: 58

Candidate Starts for Lahirium_51:

(Start: 58 @48996 has 23 MA's), (Start: 72 @48954 has 2 MA's), (88, 48849), (114, 48762), (121, 48732), (122, 48729), (129, 48699),

Gene: Lego_27 Start: 22308, Stop: 22673, Start Num: 32

Candidate Starts for Lego_27:

(Start: 32 @22308 has 20 MA's), (Start: 72 @22332 has 2 MA's), (107, 22515),

Gene: Leona_53 Start: 33226, Stop: 33597, Start Num: 50

Candidate Starts for Leona_53:

(Start: 42 @33202 has 4 MA's), (Start: 50 @33226 has 4 MA's), (71, 33253), (Start: 72 @33265 has 2 MA's), (81, 33316), (91, 33385), (92, 33394), (101, 33418), (103, 33433), (119, 33505), (135, 33559),

Gene: Lidong_51 Start: 48731, Stop: 48366, Start Num: 58

Candidate Starts for Lidong_51:

(Start: 58 @48731 has 23 MA's), (Start: 72 @48689 has 2 MA's), (88, 48584), (114, 48497), (121, 48467), (122, 48464), (129, 48434),

Gene: Liebe_28 Start: 23243, Stop: 23641, Start Num: 66

Candidate Starts for Liebe_28:

(Start: 66 @23243 has 23 MA's), (Start: 72 @23267 has 2 MA's), (78, 23303), (102, 23432), (114, 23480), (122, 23513), (151, 23630),

Gene: Lilac_112 Start: 64186, Stop: 64560, Start Num: 48

Candidate Starts for Lilac_112:

(Start: 38 @64132 has 1 MA's), (Start: 48 @64186 has 98 MA's), (64, 64240), (Start: 72 @64267 has 2 MA's), (73, 64276), (79, 64315), (83, 64336), (108, 64429), (112, 64447), (113, 64450), (125, 64498), (141, 64549),

Gene: Lilizi_111 Start: 63472, Stop: 63846, Start Num: 48

Candidate Starts for Lilizi_111:

(Start: 38 @63418 has 1 MA's), (Start: 48 @63472 has 98 MA's), (Start: 72 @63553 has 2 MA's), (73, 63562), (79, 63601), (83, 63622), (108, 63715), (112, 63733), (113, 63736), (125, 63784), (141, 63835),

Gene: Lilpickle_110 Start: 62884, Stop: 63258, Start Num: 48

Candidate Starts for Lilpickle_110:

(Start: 38 @62830 has 1 MA's), (Start: 48 @62884 has 98 MA's), (64, 62938), (Start: 72 @62965 has 2 MA's), (73, 62974), (79, 63013), (83, 63034), (108, 63127), (112, 63145), (113, 63148), (125, 63196), (141, 63247),

Gene: Linetti_54 Start: 49072, Stop: 48710, Start Num: 60

Candidate Starts for Linetti_54:

(49, 49120), (Start: 60 @49072 has 7 MA's), (Start: 61 @49069 has 2 MA's), (Start: 72 @49033 has 2 MA's), (85, 48958), (107, 48868), (114, 48841), (122, 48808), (129, 48778), (133, 48772), (142, 48742),

Gene: Linus_92 Start: 61170, Stop: 61532, Start Num: 68

Candidate Starts for Linus_92:

(Start: 68 @61170 has 15 MA's), (75, 61215), (76, 61218), (79, 61239), (90, 61314), (97, 61344), (102, 61362), (113, 61407), (128, 61467), (129, 61473),

Gene: LittleTokyo_51 Start: 31575, Stop: 31949, Start Num: 60

Candidate Starts for LittleTokyo_51:

(Start: 42 @31518 has 4 MA's), (Start: 60 @31575 has 7 MA's), (Start: 72 @31614 has 2 MA's), (92, 31743), (99, 31764), (119, 31854), (123, 31869), (127, 31887), (135, 31908),

Gene: Lizalica_27 Start: 22357, Stop: 22722, Start Num: 32

Candidate Starts for Lizalica_27:

(14, 22192), (Start: 32 @22357 has 20 MA's), (Start: 72 @22381 has 2 MA's), (107, 22564),

Gene: London_29 Start: 24459, Stop: 24827, Start Num: 66

Candidate Starts for London_29:

(7, 24144), (9, 24156), (Start: 66 @24459 has 23 MA's), (70, 24465), (Start: 72 @24483 has 2 MA's),

Gene: Luker_52 Start: 48949, Stop: 48584, Start Num: 58

Candidate Starts for Luker_52:

(Start: 58 @48949 has 23 MA's), (Start: 72 @48907 has 2 MA's), (88, 48802), (114, 48715), (121, 48685), (122, 48682), (129, 48652),

Gene: Lunar_54 Start: 32679, Stop: 33047, Start Num: 47

Candidate Starts for Lunar_54:

(Start: 46 @32670 has 1 MA's), (Start: 47 @32679 has 16 MA's), (Start: 72 @32721 has 2 MA's), (91, 32838), (92, 32847), (103, 32886), (119, 32958), (135, 33012),

Gene: Lymara_89 Start: 59643, Stop: 60005, Start Num: 68

Candidate Starts for Lymara_89:

(Start: 68 @59643 has 15 MA's), (75, 59688), (76, 59691), (79, 59712), (90, 59787), (97, 59817), (102, 59835), (113, 59880), (128, 59940),

Gene: MISSy_112 Start: 64169, Stop: 64543, Start Num: 48

Candidate Starts for MISSy_112:

(Start: 38 @64115 has 1 MA's), (Start: 48 @64169 has 98 MA's), (Start: 72 @64250 has 2 MA's), (73, 64259), (79, 64298), (83, 64319), (108, 64412), (112, 64430), (113, 64433), (125, 64481), (141, 64532),

Gene: MPhalcon_112 Start: 63587, Stop: 63961, Start Num: 48

Candidate Starts for MPhalcon_112:

(Start: 38 @63533 has 1 MA's), (Start: 48 @63587 has 98 MA's), (Start: 72 @63668 has 2 MA's), (73, 63677), (79, 63716), (83, 63737), (108, 63830), (112, 63848), (113, 63851), (125, 63899), (141, 63950),

Gene: MaGuCo_26 Start: 22035, Stop: 22442, Start Num: 66

Candidate Starts for MaGuCo_26:

(4, 21519), (15, 21711), (36, 21909), (40, 21936), (Start: 66 @22035 has 23 MA's), (Start: 72 @22059 has 2 MA's), (102, 22224), (122, 22305), (151, 22431),

Gene: MadamMonkfish_110 Start: 62894, Stop: 63268, Start Num: 48

Candidate Starts for MadamMonkfish_110:

(Start: 38 @62840 has 1 MA's), (Start: 48 @62894 has 98 MA's), (64, 62948), (Start: 72 @62975 has 2 MA's), (73, 62984), (79, 63023), (83, 63044), (108, 63137), (112, 63155), (113, 63158), (125, 63206), (141, 63257),

Gene: Manda_112 Start: 63624, Stop: 63998, Start Num: 48

Candidate Starts for Manda_112:

(Start: 38 @63570 has 1 MA's), (Start: 48 @63624 has 98 MA's), (64, 63678), (Start: 72 @63705 has 2 MA's), (73, 63714), (79, 63753), (83, 63774), (108, 63867), (112, 63885), (113, 63888), (125, 63936), (126, 63942), (141, 63987),

Gene: MaryV_88 Start: 53723, Stop: 54085, Start Num: 63

Candidate Starts for MaryV_88:

(Start: 61 @53717 has 2 MA's), (62, 53720), (Start: 63 @53723 has 12 MA's), (Start: 66 @53729 has 23 MA's), (Start: 72 @53753 has 2 MA's), (79, 53795), (82, 53807), (93, 53870), (95, 53876), (105, 53915), (110, 53930), (111, 53939), (112, 53942), (113, 53945), (122, 53981), (125, 53993), (128, 54005), (129, 54011),

Gene: Maureen_28 Start: 23243, Stop: 23641, Start Num: 66

Candidate Starts for Maureen_28:

(Start: 66 @23243 has 23 MA's), (Start: 72 @23267 has 2 MA's), (78, 23303), (102, 23432), (114, 23480), (122, 23513), (151, 23630),

Gene: Maxxinista_113 Start: 63371, Stop: 63745, Start Num: 48

Candidate Starts for Maxxinista_113:

(Start: 38 @63317 has 1 MA's), (Start: 48 @63371 has 98 MA's), (64, 63425), (Start: 72 @63452 has 2 MA's), (73, 63461), (79, 63500), (83, 63521), (108, 63614), (112, 63632), (113, 63635), (125, 63683), (141, 63734),

Gene: Melons_54 Start: 32493, Stop: 32861, Start Num: 47

Candidate Starts for Melons_54:

(Start: 46 @32484 has 1 MA's), (Start: 47 @32493 has 16 MA's), (Start: 72 @32535 has 2 MA's), (91, 32652), (92, 32661), (103, 32700), (119, 32772), (135, 32826),

Gene: Mindy_110 Start: 62903, Stop: 63277, Start Num: 48

Candidate Starts for Mindy_110:

(Start: 38 @62849 has 1 MA's), (Start: 48 @62903 has 98 MA's), (64, 62957), (Start: 72 @62984 has 2 MA's), (73, 62993), (79, 63032), (83, 63053), (108, 63146), (112, 63164), (113, 63167), (125, 63215), (126, 63221), (129, 63233),

Gene: Miniwave_106 Start: 63080, Stop: 63454, Start Num: 48

Candidate Starts for Miniwave_106:

(Start: 38 @63026 has 1 MA's), (Start: 48 @63080 has 98 MA's), (Start: 72 @63161 has 2 MA's), (73, 63170), (79, 63209), (83, 63230), (108, 63323), (112, 63341), (113, 63344), (125, 63392), (141, 63443),

Gene: Minos_52 Start: 48473, Stop: 48108, Start Num: 58

Candidate Starts for Minos_52:

(Start: 58 @48473 has 23 MA's), (Start: 72 @48431 has 2 MA's), (88, 48326), (114, 48239), (121, 48209), (122, 48206), (129, 48176),

Gene: Misfit_112 Start: 64683, Stop: 65057, Start Num: 48

Candidate Starts for Misfit_112:

(Start: 38 @64629 has 1 MA's), (Start: 48 @64683 has 98 MA's), (Start: 72 @64764 has 2 MA's), (73, 64773), (79, 64812), (83, 64833), (108, 64926), (112, 64944), (113, 64947), (125, 64995), (141, 65046),

Gene: MissSwiss_26 Start: 20779, Stop: 21147, Start Num: 32

Candidate Starts for MissSwiss_26:

(Start: 32 @20779 has 20 MA's), (Start: 72 @20803 has 2 MA's), (108, 20989), (114, 21016), (121, 21046),

Gene: Moldemort_113 Start: 63352, Stop: 63726, Start Num: 48

Candidate Starts for Moldemort_113:

(Start: 38 @63298 has 1 MA's), (Start: 48 @63352 has 98 MA's), (64, 63406), (Start: 72 @63433 has 2 MA's), (73, 63442), (79, 63481), (83, 63502), (108, 63595), (112, 63613), (113, 63616), (125, 63664), (141, 63715),

Gene: Mosby_108 Start: 63047, Stop: 63421, Start Num: 48

Candidate Starts for Mosby_108:

(Start: 38 @62993 has 1 MA's), (Start: 48 @63047 has 98 MA's), (Start: 72 @63128 has 2 MA's), (73, 63137), (79, 63176), (83, 63197), (108, 63290), (112, 63308), (113, 63311), (125, 63359), (141, 63410),

Gene: MrWormie_51 Start: 47634, Stop: 47269, Start Num: 58

Candidate Starts for MrWormie_51:

(Start: 58 @47634 has 23 MA's), (Start: 72 @47592 has 2 MA's), (88, 47487), (114, 47400), (121, 47370), (122, 47367), (129, 47337),

Gene: Mudpuppy_28 Start: 22359, Stop: 22724, Start Num: 32

Candidate Starts for Mudpuppy_28:

(14, 22197), (Start: 32 @22359 has 20 MA's), (Start: 72 @22383 has 2 MA's), (107, 22566),

Gene: Mulch_65 Start: 42205, Stop: 42591, Start Num: 63

Candidate Starts for Mulch_65:

(22, 41965), (27, 42013), (30, 42034), (37, 42088), (49, 42148), (Start: 58 @42193 has 23 MA's), (Start: 63 @42205 has 12 MA's), (Start: 72 @42235 has 2 MA's), (85, 42310), (113, 42412), (129, 42478),

Gene: Murica_115 Start: 65386, Stop: 65760, Start Num: 48

Candidate Starts for Murica_115:

(Start: 38 @65332 has 1 MA's), (Start: 48 @65386 has 98 MA's), (Start: 72 @65467 has 2 MA's), (73, 65476), (79, 65515), (83, 65536), (108, 65629), (112, 65647), (113, 65650), (125, 65698), (141, 65749),

Gene: Murphy_110 Start: 63744, Stop: 64118, Start Num: 48

Candidate Starts for Murphy_110:

(Start: 38 @63690 has 1 MA's), (Start: 48 @63744 has 98 MA's), (64, 63798), (Start: 72 @63825 has 2 MA's), (73, 63834), (79, 63873), (83, 63894), (108, 63987), (112, 64005), (113, 64008), (125, 64056), (141, 64107),

Gene: Myrale_111 Start: 63841, Stop: 64215, Start Num: 48

Candidate Starts for Myrale_111:

(Start: 48 @63841 has 98 MA's), (64, 63895), (Start: 72 @63922 has 2 MA's), (73, 63931), (79, 63970), (83, 63991), (108, 64084), (112, 64102), (113, 64105), (125, 64153), (126, 64159), (129, 64171),

Gene: Nadeem_65 Start: 42193, Stop: 42579, Start Num: 63

Candidate Starts for Nadeem_65:

(22, 41953), (27, 42001), (30, 42022), (37, 42076), (49, 42136), (Start: 58 @42181 has 23 MA's), (Start: 63 @42193 has 12 MA's), (Start: 72 @42223 has 2 MA's), (85, 42298), (113, 42400), (129, 42466),

Gene: Nala_113 Start: 64096, Stop: 64470, Start Num: 48

Candidate Starts for Nala_113:

(Start: 38 @64042 has 1 MA's), (Start: 48 @64096 has 98 MA's), (64, 64150), (Start: 72 @64177 has 2 MA's), (73, 64186), (79, 64225), (83, 64246), (108, 64339), (112, 64357), (113, 64360), (125, 64408), (141, 64459),

Gene: NancyRae_64 Start: 42143, Stop: 42529, Start Num: 63

Candidate Starts for NancyRae_64:

(27, 41951), (30, 41972), (37, 42026), (49, 42086), (Start: 58 @42131 has 23 MA's), (Start: 63 @42143 has 12 MA's), (Start: 72 @42173 has 2 MA's), (85, 42248), (113, 42350), (129, 42416),

Gene: NelitzaMV_108 Start: 62069, Stop: 62443, Start Num: 48

Candidate Starts for NelitzaMV_108:

(Start: 38 @62015 has 1 MA's), (Start: 48 @62069 has 98 MA's), (64, 62123), (Start: 72 @62150 has 2 MA's), (73, 62159), (79, 62198), (83, 62219), (108, 62312), (112, 62330), (113, 62333), (125, 62381), (141, 62432),

Gene: Neoevie_51 Start: 48735, Stop: 48370, Start Num: 58

Candidate Starts for Neoevie_51:

(Start: 58 @48735 has 23 MA's), (Start: 72 @48693 has 2 MA's), (88, 48588), (114, 48501), (121, 48471), (122, 48468), (129, 48438),

Gene: Newt_52 Start: 48963, Stop: 48598, Start Num: 58

Candidate Starts for Newt_52:

(Start: 58 @48963 has 23 MA's), (Start: 72 @48921 has 2 MA's), (88, 48816), (114, 48729), (121, 48699), (122, 48696), (129, 48666),

Gene: Niagara_48 Start: 48582, Stop: 48214, Start Num: 65

Candidate Starts for Niagara_48:

(Start: 65 @48582 has 7 MA's), (Start: 72 @48558 has 2 MA's), (114, 48351), (133, 48282), (145, 48225),

Gene: Nimi13_51 Start: 48482, Stop: 48117, Start Num: 58

Candidate Starts for Nimi13_51:

(Start: 58 @48482 has 23 MA's), (Start: 72 @48440 has 2 MA's), (88, 48335), (114, 48248), (121, 48218), (122, 48215), (129, 48185),

Gene: Niobe_29 Start: 24445, Stop: 24813, Start Num: 32

Candidate Starts for Niobe_29:

(14, 24280), (Start: 32 @24445 has 20 MA's), (Start: 72 @24469 has 2 MA's),

Gene: Nitro_28 Start: 23769, Stop: 24137, Start Num: 32

Candidate Starts for Nitro_28:

(14, 23607), (Start: 32 @23769 has 20 MA's), (Start: 72 @23793 has 2 MA's), (81, 23844), (107, 23976),

Gene: NoSleep_111 Start: 62904, Stop: 63278, Start Num: 48

Candidate Starts for NoSleep_111:

(Start: 38 @62850 has 1 MA's), (Start: 48 @62904 has 98 MA's), (64, 62958), (Start: 72 @62985 has 2 MA's), (73, 62994), (79, 63033), (83, 63054), (108, 63147), (112, 63165), (113, 63168), (125, 63216), (141, 63267),

Gene: ObiToo_30 Start: 22889, Stop: 23257, Start Num: 66

Candidate Starts for ObiToo_30:

(9, 22481), (Start: 66 @22889 has 23 MA's), (Start: 72 @22913 has 2 MA's), (107, 23096), (108, 23099),

Gene: Orcanus_52 Start: 34039, Stop: 34413, Start Num: 47

Candidate Starts for Orcanus_52:

(Start: 46 @34030 has 1 MA's), (Start: 47 @34039 has 16 MA's), (55, 34057), (Start: 72 @34078 has 2 MA's), (85, 34153), (92, 34210), (103, 34249), (112, 34288), (135, 34375),

Gene: OrionPax_109 Start: 62977, Stop: 63351, Start Num: 48

Candidate Starts for OrionPax_109:

(Start: 38 @62923 has 1 MA's), (Start: 48 @62977 has 98 MA's), (64, 63031), (Start: 72 @63058 has 2 MA's), (73, 63067), (79, 63106), (83, 63127), (108, 63220), (112, 63238), (113, 63241), (125, 63289), (141, 63340),

Gene: Paperbeatsrock_110 Start: 63758, Stop: 64132, Start Num: 48

Candidate Starts for Paperbeatsrock_110:

(Start: 38 @63704 has 1 MA's), (Start: 48 @63758 has 98 MA's), (Start: 72 @63839 has 2 MA's), (73, 63848), (79, 63887), (83, 63908), (108, 64001), (112, 64019), (113, 64022), (125, 64070), (141, 64121),

Gene: Parada_65 Start: 42205, Stop: 42591, Start Num: 63

Candidate Starts for Parada_65:

(22, 41965), (27, 42013), (30, 42034), (37, 42088), (49, 42148), (Start: 58 @42193 has 23 MA's), (Start: 63 @42205 has 12 MA's), (Start: 72 @42235 has 2 MA's), (85, 42310), (113, 42412), (129, 42478),

Gene: Pat3_108 Start: 62397, Stop: 62771, Start Num: 48

Candidate Starts for Pat3_108:

(Start: 48 @62397 has 98 MA's), (64, 62451), (Start: 72 @62478 has 2 MA's), (73, 62487), (79, 62526), (80, 62529), (83, 62547), (108, 62640), (112, 62658), (113, 62661), (125, 62709), (126, 62715), (129, 62727),

Gene: Percival_30 Start: 24132, Stop: 24551, Start Num: 42

Candidate Starts for Percival_30:

(Start: 42 @24132 has 4 MA's), (Start: 72 @24219 has 2 MA's), (89, 24330), (98, 24360), (104, 24387), (108, 24396), (125, 24471),

Gene: Petra64142_115 Start: 64226, Stop: 64600, Start Num: 48

Candidate Starts for Petra64142_115:

(Start: 38 @64172 has 1 MA's), (Start: 48 @64226 has 98 MA's), (64, 64280), (Start: 72 @64307 has 2 MA's), (73, 64316), (79, 64355), (83, 64376), (108, 64469), (112, 64487), (113, 64490), (125, 64538), (126, 64544), (129, 64556), (141, 64589),

Gene: Phaja_109 Start: 62962, Stop: 63336, Start Num: 48

Candidate Starts for Phaja_109:

(Start: 38 @62908 has 1 MA's), (Start: 48 @62962 has 98 MA's), (64, 63016), (Start: 72 @63043 has 2 MA's), (73, 63052), (79, 63091), (83, 63112), (108, 63205), (112, 63223), (113, 63226), (125, 63274),

Gene: Pharsalus_108 Start: 63457, Stop: 63831, Start Num: 48

Candidate Starts for Pharsalus_108:

(Start: 38 @63403 has 1 MA's), (Start: 48 @63457 has 98 MA's), (Start: 72 @63538 has 2 MA's), (73, 63547), (79, 63586), (83, 63607), (108, 63700), (112, 63718), (113, 63721), (125, 63769), (141, 63820),

Gene: PhatBacter_114 Start: 64126, Stop: 64500, Start Num: 48

Candidate Starts for PhatBacter_114:

(Start: 38 @64072 has 1 MA's), (Start: 48 @64126 has 98 MA's), (64, 64180), (Start: 72 @64207 has 2 MA's), (73, 64216), (79, 64255), (83, 64276), (108, 64369), (112, 64387), (113, 64390), (125, 64438), (141, 64489),

Gene: Phaux_113 Start: 64686, Stop: 65060, Start Num: 48

Candidate Starts for Phaux_113:

(Start: 38 @64632 has 1 MA's), (Start: 48 @64686 has 98 MA's), (64, 64740), (Start: 72 @64767 has 2 MA's), (73, 64776), (79, 64815), (83, 64836), (108, 64929), (112, 64947), (113, 64950), (125, 64998), (141, 65049),

Gene: Philon9_49 Start: 49613, Stop: 49245, Start Num: 65

Candidate Starts for Philon9_49:

(Start: 65 @49613 has 7 MA's), (Start: 72 @49589 has 2 MA's), (85, 49514), (109, 49403), (114, 49382), (133, 49313), (145, 49256),

Gene: Phives_30 Start: 24466, Stop: 24834, Start Num: 66

Candidate Starts for Phives_30:

(Start: 66 @24466 has 23 MA's), (Start: 72 @24490 has 2 MA's), (99, 24643), (136, 24784),

Gene: PhluffyCoco_54 Start: 33221, Stop: 33616, Start Num: 42

Candidate Starts for PhluffyCoco_54:

(Start: 42 @33221 has 4 MA's), (Start: 50 @33245 has 4 MA's), (71, 33272), (Start: 72 @33284 has 2 MA's), (81, 33335), (91, 33404), (92, 33413), (101, 33437), (103, 33452), (119, 33524), (135, 33578),

Gene: Phrux_107 Start: 62764, Stop: 63138, Start Num: 48

Candidate Starts for Phrux_107:

(Start: 38 @62710 has 1 MA's), (Start: 48 @62764 has 98 MA's), (Start: 72 @62845 has 2 MA's), (73, 62854), (79, 62893), (83, 62914), (108, 63007), (112, 63025), (113, 63028), (125, 63076), (141, 63127),

Gene: PierreThree_53 Start: 48715, Stop: 48356, Start Num: 61

Candidate Starts for PierreThree_53:

(Start: 60 @48718 has 7 MA's), (Start: 61 @48715 has 2 MA's), (Start: 72 @48679 has 2 MA's), (85, 48604), (107, 48514), (114, 48487), (122, 48454), (129, 48424), (133, 48418), (142, 48388),

Gene: Pimento_69 Start: 42324, Stop: 42710, Start Num: 63

Candidate Starts for Pimento_69:

(22, 42084), (27, 42132), (30, 42153), (37, 42207), (49, 42267), (Start: 58 @42312 has 23 MA's), (Start: 63 @42324 has 12 MA's), (Start: 72 @42354 has 2 MA's), (85, 42429), (113, 42531), (129, 42597),

Gene: Pixelle_29 Start: 24216, Stop: 24584, Start Num: 32

Candidate Starts for Pixelle_29:

(Start: 32 @24216 has 20 MA's), (34, 24222), (71, 24228), (Start: 72 @24240 has 2 MA's), (107, 24423),

Gene: PokyPuppy_53 Start: 48755, Stop: 48393, Start Num: 60

Candidate Starts for PokyPuppy_53:

(Start: 60 @48755 has 7 MA's), (Start: 72 @48716 has 2 MA's), (85, 48641), (86, 48638), (107, 48551), (114, 48524), (122, 48491), (126, 48473), (129, 48461), (133, 48455),

Gene: Polka_53 Start: 32500, Stop: 32868, Start Num: 47

Candidate Starts for Polka_53:

(Start: 46 @32491 has 1 MA's), (Start: 47 @32500 has 16 MA's), (Start: 72 @32542 has 2 MA's), (91, 32659), (92, 32668), (103, 32707), (119, 32779), (135, 32833),

Gene: Powerpuff_27 Start: 22359, Stop: 22724, Start Num: 32

Candidate Starts for Powerpuff_27:

(Start: 32 @22359 has 20 MA's), (Start: 72 @22383 has 2 MA's), (107, 22566),

Gene: PrincessTrina_93 Start: 60952, Stop: 61314, Start Num: 68

Candidate Starts for PrincessTrina_93:

(Start: 68 @60952 has 15 MA's), (75, 60997), (76, 61000), (79, 61021), (90, 61096), (97, 61126), (102, 61144), (113, 61189), (128, 61249), (129, 61255),

Gene: Pumpkin_112 Start: 63104, Stop: 63478, Start Num: 48

Candidate Starts for Pumpkin_112:

(Start: 38 @63050 has 1 MA's), (Start: 48 @63104 has 98 MA's), (Start: 72 @63185 has 2 MA's), (73, 63194), (79, 63233), (83, 63254), (108, 63347), (112, 63365), (113, 63368), (125, 63416), (141, 63467),

Gene: Quallification_112 Start: 64172, Stop: 64546, Start Num: 48

Candidate Starts for Quallification_112:

(Start: 38 @64118 has 1 MA's), (Start: 48 @64172 has 98 MA's), (Start: 72 @64253 has 2 MA's), (73, 64262), (79, 64301), (83, 64322), (108, 64415), (112, 64433), (113, 64436), (125, 64484), (141, 64535),

Gene: Rakim_112 Start: 63174, Stop: 63548, Start Num: 48

Candidate Starts for Rakim_112:

(Start: 38 @63120 has 1 MA's), (Start: 48 @63174 has 98 MA's), (64, 63228), (Start: 72 @63255 has 2 MA's), (73, 63264), (79, 63303), (83, 63324), (108, 63417), (112, 63435), (113, 63438), (125, 63486), (126, 63492), (129, 63504),

Gene: RedFox_54 Start: 33244, Stop: 33615, Start Num: 50

Candidate Starts for RedFox_54:

(Start: 42 @33220 has 4 MA's), (Start: 50 @33244 has 4 MA's), (71, 33271), (Start: 72 @33283 has 2 MA's), (81, 33334), (91, 33403), (92, 33412), (101, 33436), (103, 33451), (119, 33523), (135, 33577),

Gene: Reedo_27 Start: 20942, Stop: 21310, Start Num: 32

Candidate Starts for Reedo_27:

(Start: 32 @20942 has 20 MA's), (Start: 72 @20966 has 2 MA's),

Gene: Renna12_53 Start: 33097, Stop: 33468, Start Num: 50

Candidate Starts for Renna12_53:

(Start: 42 @33073 has 4 MA's), (Start: 50 @33097 has 4 MA's), (71, 33124), (Start: 72 @33136 has 2 MA's), (91, 33256), (92, 33265), (101, 33289), (103, 33304), (119, 33376), (135, 33430),

Gene: Rimmer_109 Start: 63563, Stop: 63937, Start Num: 48

Candidate Starts for Rimmer_109:

(Start: 38 @63509 has 1 MA's), (Start: 48 @63563 has 98 MA's), (64, 63617), (Start: 72 @63644 has 2 MA's), (73, 63653), (79, 63692), (83, 63713), (108, 63806), (112, 63824), (113, 63827), (125, 63875), (141, 63926),

Gene: RiverMonster_110 Start: 63605, Stop: 64033, Start Num: 38

Candidate Starts for RiverMonster_110:

(Start: 38 @63605 has 1 MA's), (Start: 48 @63659 has 98 MA's), (Start: 72 @63740 has 2 MA's), (73, 63749), (79, 63788), (83, 63809), (108, 63902), (112, 63920), (113, 63923), (125, 63971), (141, 64022),

Gene: RosiePosie_92 Start: 60817, Stop: 61179, Start Num: 68

Candidate Starts for RosiePosie_92:

(Start: 68 @60817 has 15 MA's), (75, 60862), (76, 60865), (79, 60886), (90, 60961), (97, 60991), (102, 61009), (113, 61054), (128, 61114), (129, 61120),

Gene: RoyalG_53 Start: 48012, Stop: 47650, Start Num: 60

Candidate Starts for RoyalG_53:

(Start: 60 @48012 has 7 MA's), (Start: 63 @48003 has 12 MA's), (Start: 72 @47973 has 2 MA's), (82, 47919), (86, 47895), (129, 47718), (142, 47682),

Gene: Ruchi_50 Start: 32934, Stop: 33320, Start Num: 47

Candidate Starts for Ruchi_50:

(Start: 46 @32925 has 1 MA's), (Start: 47 @32934 has 16 MA's), (55, 32952), (Start: 72 @32973 has 2 MA's), (85, 33048), (92, 33105), (103, 33144), (115, 33192), (119, 33216), (135, 33270),

Gene: Saints25_107 Start: 61589, Stop: 61963, Start Num: 48

Candidate Starts for Saints25_107:

(Start: 38 @61535 has 1 MA's), (Start: 48 @61589 has 98 MA's), (64, 61643), (Start: 72 @61670 has 2 MA's), (73, 61679), (79, 61718), (83, 61739), (108, 61832), (112, 61850), (113, 61853), (125, 61901), (141, 61952),

Gene: Sassay_106 Start: 62009, Stop: 62383, Start Num: 48

Candidate Starts for Sassay_106:

(Start: 38 @61955 has 1 MA's), (Start: 48 @62009 has 98 MA's), (Start: 72 @62090 has 2 MA's), (73, 62099), (79, 62138), (83, 62159), (108, 62252), (112, 62270), (113, 62273), (125, 62321), (141, 62372),

Gene: Scavito_93 Start: 60810, Stop: 61172, Start Num: 68

Candidate Starts for Scavito_93:

(Start: 68 @60810 has 15 MA's), (75, 60855), (76, 60858), (79, 60879), (90, 60954), (97, 60984), (102, 61002), (113, 61047), (128, 61107), (129, 61113),

Gene: ShamWow_111 Start: 64057, Stop: 64431, Start Num: 48

Candidate Starts for ShamWow_111:

(Start: 48 @64057 has 98 MA's), (64, 64111), (Start: 72 @64138 has 2 MA's), (73, 64147), (79, 64186), (83, 64207), (108, 64300), (112, 64318), (113, 64321), (125, 64369), (126, 64375), (129, 64387),

Gene: Shambre1_62 Start: 40086, Stop: 40415, Start Num: 52
Candidate Starts for Shambre1_62:
(Start: 52 @40086 has 1 MA's), (Start: 72 @40113 has 2 MA's), (92, 40245),

Gene: Shelley_51 Start: 47958, Stop: 47593, Start Num: 58
Candidate Starts for Shelley_51:
(Start: 58 @47958 has 23 MA's), (Start: 72 @47916 has 2 MA's), (88, 47811), (114, 47724), (121, 47694), (122, 47691), (129, 47661),

Gene: ShereKhan_109 Start: 64418, Stop: 64792, Start Num: 48
Candidate Starts for ShereKhan_109:
(Start: 38 @64364 has 1 MA's), (Start: 48 @64418 has 98 MA's), (Start: 72 @64499 has 2 MA's), (73, 64508), (79, 64547), (83, 64568), (108, 64661), (112, 64679), (113, 64682), (125, 64730), (141, 64781),

Gene: Simpliphy_109 Start: 63230, Stop: 63604, Start Num: 48
Candidate Starts for Simpliphy_109:
(Start: 38 @63176 has 1 MA's), (Start: 48 @63230 has 98 MA's), (64, 63284), (Start: 72 @63311 has 2 MA's), (73, 63320), (79, 63359), (83, 63380), (108, 63473), (112, 63491), (113, 63494), (125, 63542), (141, 63593),

Gene: Simpson_29 Start: 22364, Stop: 22729, Start Num: 32
Candidate Starts for Simpson_29:
(Start: 32 @22364 has 20 MA's), (Start: 72 @22388 has 2 MA's), (107, 22571),

Gene: SirDuracell_111 Start: 62896, Stop: 63270, Start Num: 48
Candidate Starts for SirDuracell_111:
(Start: 48 @62896 has 98 MA's), (64, 62950), (Start: 72 @62977 has 2 MA's), (73, 62986), (79, 63025), (83, 63046), (108, 63139), (112, 63157), (113, 63160), (125, 63208), (126, 63214), (129, 63226),

Gene: Snek_28 Start: 21512, Stop: 21880, Start Num: 32
Candidate Starts for Snek_28:
(Start: 32 @21512 has 20 MA's), (Start: 72 @21536 has 2 MA's),

Gene: SophKB_109 Start: 63219, Stop: 63593, Start Num: 48
Candidate Starts for SophKB_109:
(Start: 38 @63165 has 1 MA's), (Start: 48 @63219 has 98 MA's), (64, 63273), (Start: 72 @63300 has 2 MA's), (73, 63309), (79, 63348), (83, 63369), (108, 63462), (112, 63480), (113, 63483), (125, 63531), (126, 63537), (129, 63549),

Gene: Sotrice96_112 Start: 63683, Stop: 64057, Start Num: 48
Candidate Starts for Sotrice96_112:
(Start: 38 @63629 has 1 MA's), (Start: 48 @63683 has 98 MA's), (64, 63737), (Start: 72 @63764 has 2 MA's), (73, 63773), (79, 63812), (83, 63833), (108, 63926), (112, 63944), (113, 63947), (125, 63995), (126, 64001), (129, 64013),

Gene: Stark_111 Start: 63543, Stop: 63917, Start Num: 48
Candidate Starts for Stark_111:
(Start: 38 @63489 has 1 MA's), (Start: 48 @63543 has 98 MA's), (Start: 72 @63624 has 2 MA's), (73, 63633), (79, 63672), (83, 63693), (108, 63786), (112, 63804), (113, 63807), (125, 63855), (141, 63906),

Gene: StellaBean_108 Start: 63840, Stop: 64214, Start Num: 48

Candidate Starts for StellaBean_108:

(Start: 38 @63786 has 1 MA's), (Start: 48 @63840 has 98 MA's), (64, 63894), (Start: 72 @63921 has 2 MA's), (73, 63930), (79, 63969), (83, 63990), (108, 64083), (112, 64101), (113, 64104), (125, 64152), (141, 64203),

Gene: SteveFrench_52 Start: 48252, Stop: 47890, Start Num: 60

Candidate Starts for SteveFrench_52:

(Start: 60 @48252 has 7 MA's), (Start: 63 @48243 has 12 MA's), (Start: 72 @48213 has 2 MA's), (82, 48159), (86, 48135), (129, 47958), (142, 47922),

Gene: Sticker17_51 Start: 48473, Stop: 48108, Start Num: 58

Candidate Starts for Sticker17_51:

(Start: 58 @48473 has 23 MA's), (Start: 72 @48431 has 2 MA's), (88, 48326), (114, 48239), (121, 48209), (122, 48206), (129, 48176),

Gene: StolenFromERC_113 Start: 63382, Stop: 63756, Start Num: 48

Candidate Starts for StolenFromERC_113:

(Start: 38 @63328 has 1 MA's), (Start: 48 @63382 has 98 MA's), (Start: 72 @63463 has 2 MA's), (73, 63472), (79, 63511), (83, 63532), (108, 63625), (112, 63643), (113, 63646), (125, 63694), (141, 63745),

Gene: SuMoo_28 Start: 21704, Stop: 22096, Start Num: 139

Candidate Starts for SuMoo_28:

(13, 21047), (17, 21116), (24, 21197), (139, 21704), (150, 21773), (152, 21851), (153, 21884), (154, 21914), (155, 21941),

Gene: Sue2_29 Start: 23242, Stop: 23610, Start Num: 66

Candidate Starts for Sue2_29:

(14, 23062), (Start: 66 @23242 has 23 MA's), (Start: 72 @23266 has 2 MA's), (113, 23476), (137, 23563),

Gene: Tallboi_30 Start: 23797, Stop: 24162, Start Num: 32

Candidate Starts for Tallboi_30:

(Start: 32 @23797 has 20 MA's), (Start: 72 @23821 has 2 MA's), (107, 24004),

Gene: Tarkin_110 Start: 64283, Stop: 64657, Start Num: 48

Candidate Starts for Tarkin_110:

(Start: 38 @64229 has 1 MA's), (Start: 48 @64283 has 98 MA's), (Start: 72 @64364 has 2 MA's), (73, 64373), (79, 64412), (83, 64433), (108, 64526), (112, 64544), (113, 64547), (125, 64595), (141, 64646),

Gene: TaylorSipht_52 Start: 33579, Stop: 33953, Start Num: 47

Candidate Starts for TaylorSipht_52:

(Start: 47 @33579 has 16 MA's), (71, 33606), (Start: 72 @33618 has 2 MA's), (83, 33681), (91, 33741), (92, 33750), (123, 33876), (131, 33906), (135, 33915),

Gene: Tbone_27 Start: 22383, Stop: 22748, Start Num: 32

Candidate Starts for Tbone_27:

(14, 22221), (Start: 32 @22383 has 20 MA's), (Start: 72 @22407 has 2 MA's), (107, 22590),

Gene: Teal_51 Start: 48940, Stop: 48575, Start Num: 58

Candidate Starts for Teal_51:

(Start: 58 @48940 has 23 MA's), (Start: 72 @48898 has 2 MA's), (88, 48793), (114, 48706), (121, 48676), (122, 48673), (129, 48643),

Gene: TeardropMSU_107 Start: 62785, Stop: 63159, Start Num: 48

Candidate Starts for TeardropMSU_107:

(Start: 38 @62731 has 1 MA's), (Start: 48 @62785 has 98 MA's), (64, 62839), (Start: 72 @62866 has 2 MA's), (73, 62875), (79, 62914), (83, 62935), (108, 63028), (112, 63046), (113, 63049), (125, 63097), (126, 63103), (129, 63115),

Gene: Teatealatte_49 Start: 48494, Stop: 48126, Start Num: 65

Candidate Starts for Teatealatte_49:

(Start: 65 @48494 has 7 MA's), (Start: 72 @48470 has 2 MA's), (114, 48263), (133, 48194), (145, 48137),

Gene: Teech_49 Start: 48295, Stop: 47927, Start Num: 65

Candidate Starts for Teech_49:

(Start: 65 @48295 has 7 MA's), (Start: 72 @48271 has 2 MA's), (114, 48064), (133, 47995), (145, 47938),

Gene: Terminus_114 Start: 64683, Stop: 65057, Start Num: 48

Candidate Starts for Terminus_114:

(Start: 38 @64629 has 1 MA's), (Start: 48 @64683 has 98 MA's), (Start: 72 @64764 has 2 MA's), (73, 64773), (79, 64812), (83, 64833), (108, 64926), (112, 64944), (113, 64947), (125, 64995), (141, 65046),

Gene: TforTroy_29 Start: 23185, Stop: 23553, Start Num: 66

Candidate Starts for TforTroy_29:

(7, 22750), (9, 22762), (Start: 66 @23185 has 23 MA's), (Start: 72 @23209 has 2 MA's), (107, 23392),

Gene: Thresher_112 Start: 64323, Stop: 64697, Start Num: 48

Candidate Starts for Thresher_112:

(Start: 38 @64269 has 1 MA's), (Start: 48 @64323 has 98 MA's), (Start: 72 @64404 has 2 MA's), (73, 64413), (79, 64452), (83, 64473), (108, 64566), (112, 64584), (113, 64587), (125, 64635), (141, 64686),

Gene: Tian_28 Start: 24196, Stop: 24564, Start Num: 32

Candidate Starts for Tian_28:

(14, 24034), (Start: 32 @24196 has 20 MA's), (Start: 72 @24220 has 2 MA's), (107, 24403),

Gene: Tomaszewski_106 Start: 63221, Stop: 63595, Start Num: 48

Candidate Starts for Tomaszewski_106:

(Start: 38 @63167 has 1 MA's), (Start: 48 @63221 has 98 MA's), (Start: 72 @63302 has 2 MA's), (73, 63311), (79, 63350), (83, 63371), (108, 63464), (112, 63482), (113, 63485), (125, 63533), (141, 63584),

Gene: Tophat_93 Start: 60999, Stop: 61361, Start Num: 68

Candidate Starts for Tophat_93:

(Start: 68 @60999 has 15 MA's), (75, 61044), (76, 61047), (79, 61068), (90, 61143), (97, 61173), (102, 61191), (113, 61236), (128, 61296), (129, 61302),

Gene: Toto_109 Start: 64057, Stop: 64431, Start Num: 48

Candidate Starts for Toto_109:

(Start: 48 @64057 has 98 MA's), (64, 64111), (Start: 72 @64138 has 2 MA's), (73, 64147), (79, 64186), (83, 64207), (108, 64300), (112, 64318), (113, 64321), (125, 64369), (126, 64375), (129, 64387),

Gene: Traaww1_107 Start: 62606, Stop: 62980, Start Num: 48

Candidate Starts for Traaww1_107:

(Start: 48 @62606 has 98 MA's), (64, 62660), (Start: 72 @62687 has 2 MA's), (73, 62696), (79, 62735), (80, 62738), (83, 62756), (108, 62849), (112, 62867), (113, 62870), (125, 62918), (126, 62924), (129, 62936),

Gene: Tredge_49 Start: 48494, Stop: 48126, Start Num: 65

Candidate Starts for Tredge_49:

(Start: 65 @48494 has 7 MA's), (Start: 72 @48470 has 2 MA's), (114, 48263), (133, 48194), (145, 48137),

Gene: Tuck_31 Start: 25007, Stop: 25378, Start Num: 66

Candidate Starts for Tuck_31:

(20, 24872), (21, 24875), (23, 24893), (29, 24929), (Start: 66 @25007 has 23 MA's), (70, 25013), (Start: 72 @25031 has 2 MA's), (108, 25217),

Gene: Tuco_112 Start: 64844, Stop: 65218, Start Num: 48

Candidate Starts for Tuco_112:

(Start: 38 @64790 has 1 MA's), (Start: 48 @64844 has 98 MA's), (64, 64898), (Start: 72 @64925 has 2 MA's), (73, 64934), (79, 64973), (83, 64994), (108, 65087), (112, 65105), (113, 65108), (125, 65156), (126, 65162), (129, 65174),

Gene: Turab_27 Start: 22274, Stop: 22639, Start Num: 32

Candidate Starts for Turab_27:

(14, 22109), (Start: 32 @22274 has 20 MA's), (Start: 72 @22298 has 2 MA's), (121, 22541),

Gene: Tutumahutu_29 Start: 22358, Stop: 22723, Start Num: 32

Candidate Starts for Tutumahutu_29:

(Start: 32 @22358 has 20 MA's), (Start: 72 @22382 has 2 MA's), (107, 22565),

Gene: Tweety19_28 Start: 21511, Stop: 21879, Start Num: 32

Candidate Starts for Tweety19_28:

(Start: 32 @21511 has 20 MA's), (Start: 72 @21535 has 2 MA's),

Gene: UtzChips_27 Start: 22046, Stop: 22438, Start Num: 43

Candidate Starts for UtzChips_27:

(Start: 43 @22046 has 2 MA's), (Start: 72 @22112 has 2 MA's), (86, 22190),

Gene: VResidence_28 Start: 22506, Stop: 22880, Start Num: 32

Candidate Starts for VResidence_28:

(Start: 32 @22506 has 20 MA's), (Start: 72 @22530 has 2 MA's), (108, 22716),

Gene: Vulpecula_50 Start: 32594, Stop: 32980, Start Num: 47

Candidate Starts for Vulpecula_50:

(Start: 46 @32585 has 1 MA's), (Start: 47 @32594 has 16 MA's), (55, 32612), (Start: 72 @32633 has 2 MA's), (85, 32708), (92, 32765), (103, 32804), (115, 32852), (119, 32876), (135, 32930),

Gene: Warda_27 Start: 22358, Stop: 22723, Start Num: 32

Candidate Starts for Warda_27:

(14, 22196), (Start: 32 @22358 has 20 MA's), (Start: 72 @22382 has 2 MA's), (107, 22565),

Gene: WheatThin_64 Start: 42193, Stop: 42579, Start Num: 63

Candidate Starts for WheatThin_64:

(22, 41953), (27, 42001), (30, 42022), (37, 42076), (49, 42136), (Start: 58 @42181 has 23 MA's), (Start: 63 @42193 has 12 MA's), (Start: 72 @42223 has 2 MA's), (85, 42298), (113, 42400), (129, 42466),

Gene: Wildcat_88 Start: 53727, Stop: 54095, Start Num: 61

Candidate Starts for Wildcat_88:

(Start: 61 @53727 has 2 MA's), (62, 53730), (Start: 63 @53733 has 12 MA's), (Start: 66 @53739 has 23 MA's), (Start: 72 @53763 has 2 MA's), (79, 53805), (82, 53817), (93, 53880), (95, 53886), (105, 53925), (110, 53940), (111, 53949), (112, 53952), (113, 53955), (122, 53991), (125, 54003), (128, 54015), (129, 54021),

Gene: Willez_106 Start: 62009, Stop: 62383, Start Num: 48

Candidate Starts for Willez_106:

(Start: 38 @61955 has 1 MA's), (Start: 48 @62009 has 98 MA's), (Start: 72 @62090 has 2 MA's), (73, 62099), (79, 62138), (83, 62159), (108, 62252), (112, 62270), (113, 62273), (125, 62321), (141, 62372),

Gene: Woes_51 Start: 48991, Stop: 48626, Start Num: 58

Candidate Starts for Woes_51:

(Start: 58 @48991 has 23 MA's), (Start: 72 @48949 has 2 MA's), (88, 48844), (114, 48757), (121, 48727), (122, 48724), (129, 48694),

Gene: Yang_28 Start: 22698, Stop: 23066, Start Num: 66

Candidate Starts for Yang_28:

(Start: 66 @22698 has 23 MA's), (Start: 72 @22722 has 2 MA's), (85, 22797),

Gene: YassJohnny_108 Start: 62030, Stop: 62404, Start Num: 48

Candidate Starts for YassJohnny_108:

(Start: 38 @61976 has 1 MA's), (Start: 48 @62030 has 98 MA's), (Start: 72 @62111 has 2 MA's), (73, 62120), (79, 62159), (83, 62180), (108, 62273), (112, 62291), (113, 62294), (125, 62342), (141, 62393),

Gene: YesChef_27 Start: 22359, Stop: 22724, Start Num: 32

Candidate Starts for YesChef_27:

(Start: 32 @22359 has 20 MA's), (Start: 72 @22383 has 2 MA's), (107, 22566),

Gene: Youngblood_115 Start: 64179, Stop: 64553, Start Num: 48

Candidate Starts for Youngblood_115:

(Start: 38 @64125 has 1 MA's), (Start: 48 @64179 has 98 MA's), (Start: 72 @64260 has 2 MA's), (73, 64269), (79, 64308), (83, 64329), (108, 64422), (112, 64440), (113, 64443), (125, 64491), (141, 64542),

Gene: xkcd_115 Start: 64364, Stop: 64738, Start Num: 48

Candidate Starts for xkcd_115:

(Start: 38 @64310 has 1 MA's), (Start: 48 @64364 has 98 MA's), (Start: 72 @64445 has 2 MA's), (73, 64454), (79, 64493), (83, 64514), (108, 64607), (112, 64625), (113, 64628), (125, 64676), (141, 64727),