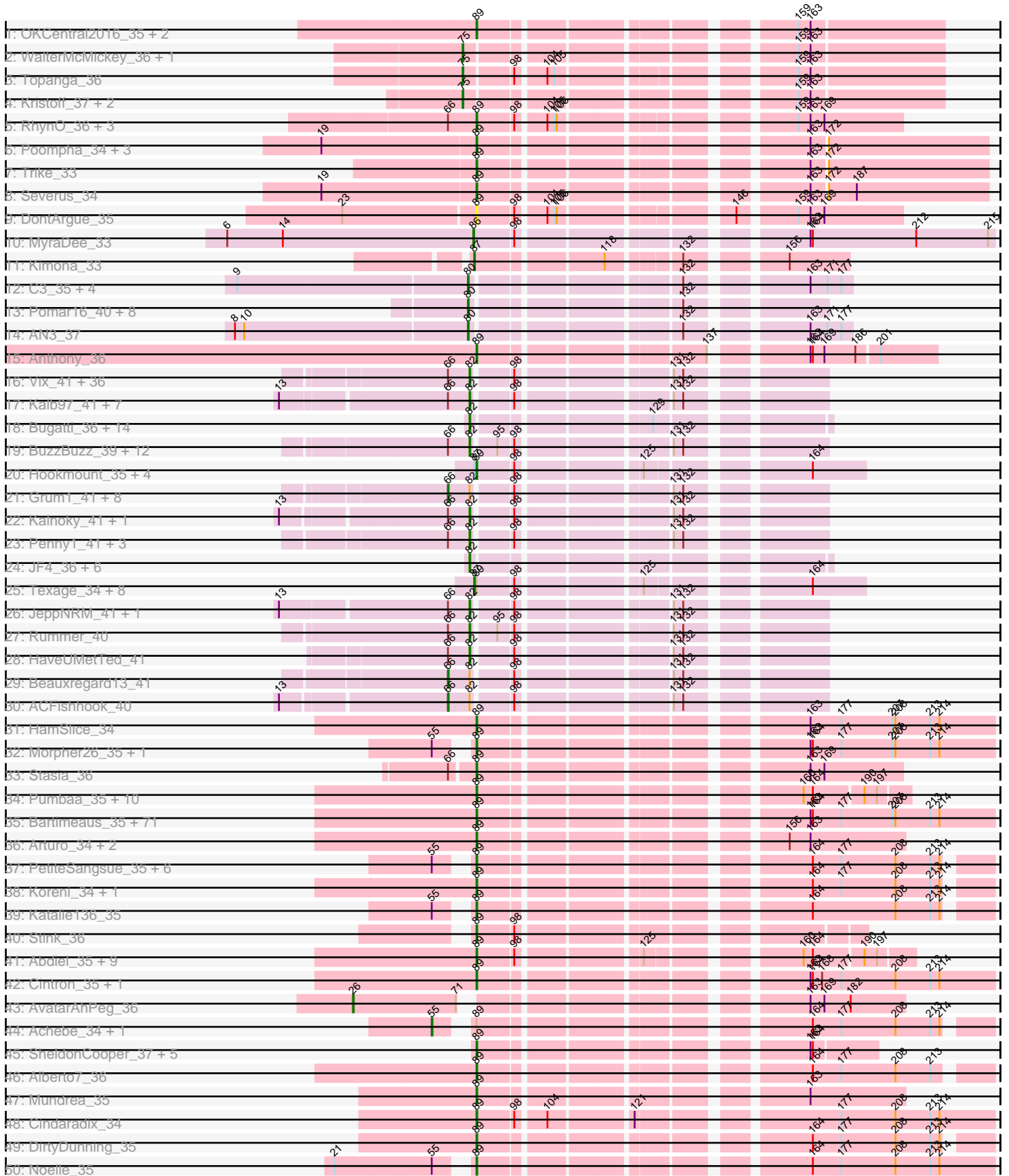
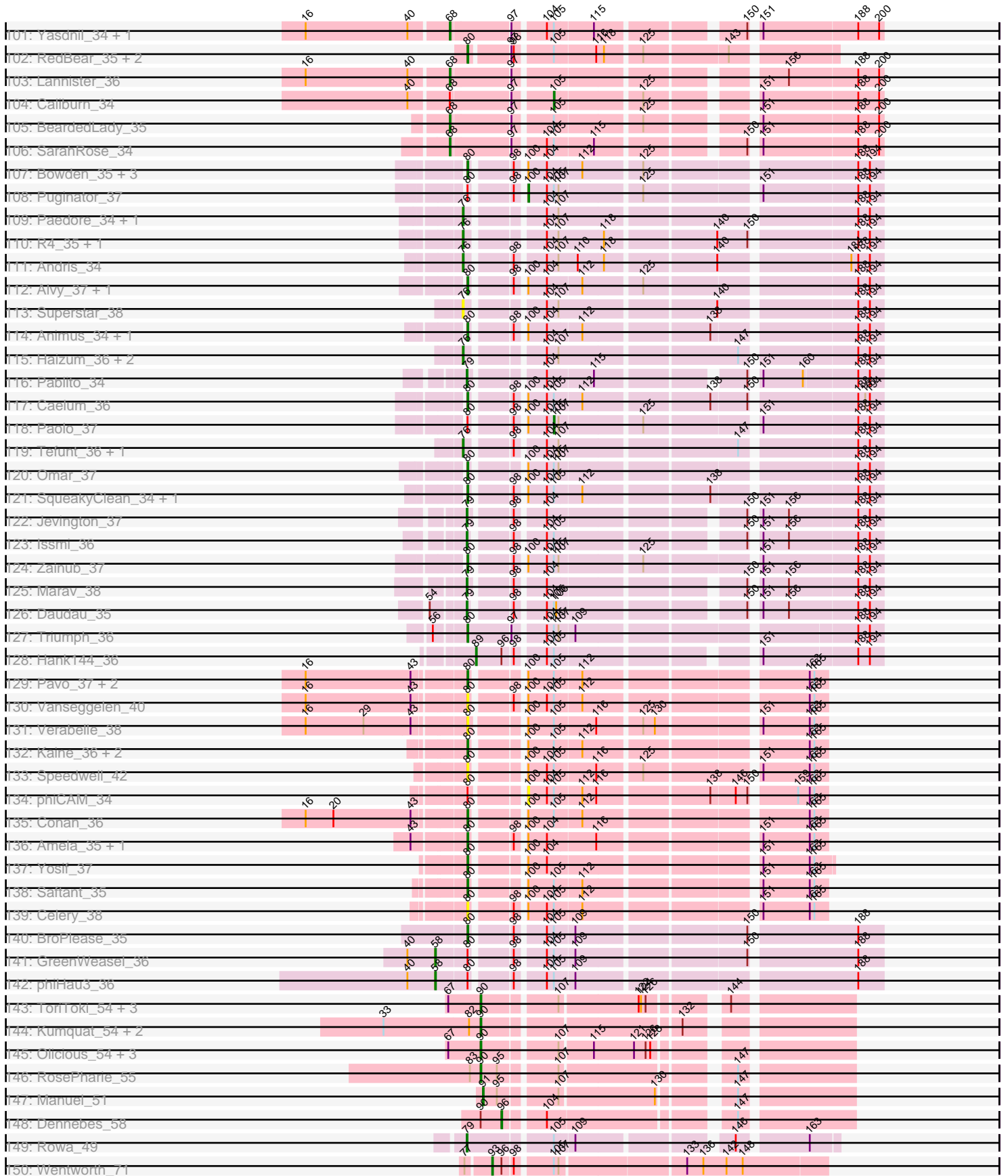


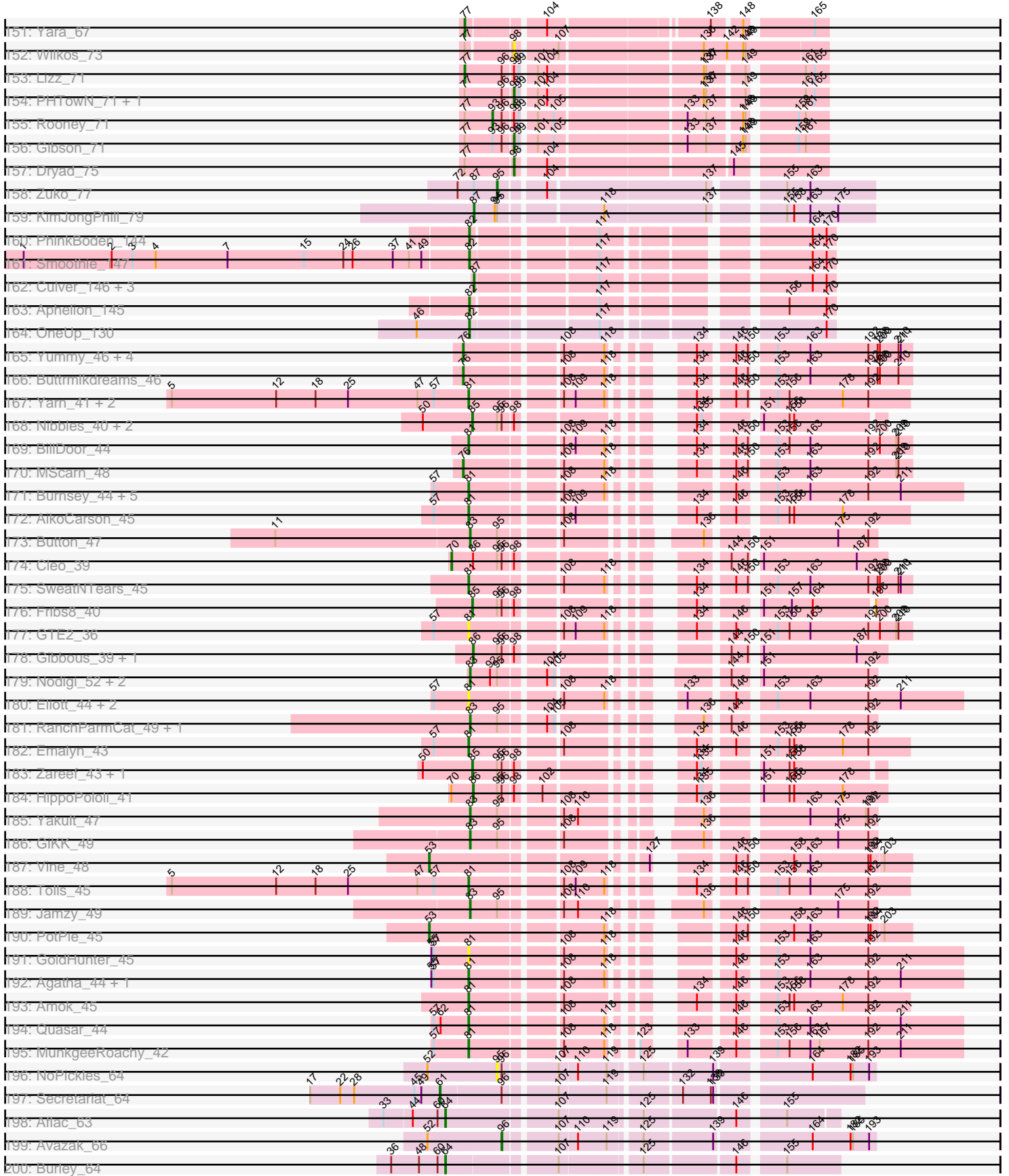
Pham 193624



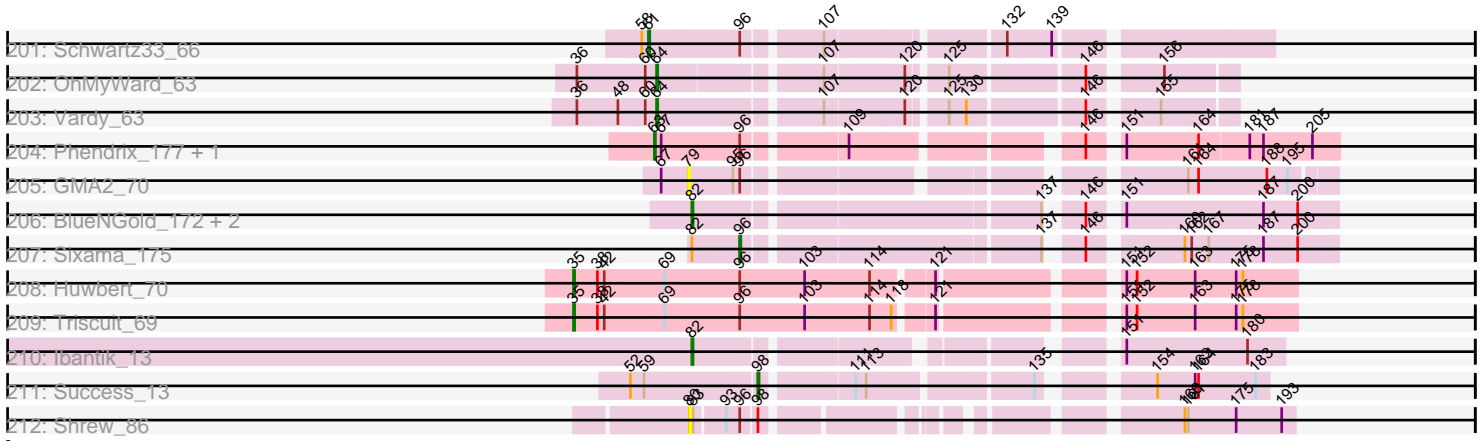
Pham 193624



Pham 193624



Pham 193624



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 193624 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 193624 has 601 members, 34 are drafts.

Phages represented in each track:

- Track 1 : OKCentral2016_35, Chupacabra_35, Goose_36
- Track 2 : WalterMcMickey_36, Twister_36
- Track 3 : Topanga_36
- Track 4 : Kristoff_37, Edison31_36, Rebeuca_37
- Track 5 : RhynO_36, Shapes_39, Rowdy_39, DustyMartin_39
- Track 6 : Poompha_34, PeaceMeal1_34, Drake94_34, KittenMittens_33
- Track 7 : Trike_33
- Track 8 : Severus_34
- Track 9 : DontArgue_35
- Track 10 : MyraDee_33
- Track 11 : Kimona_33
- Track 12 : C3_35, AN9_40, VC3_40, ANI8_40, VA6_37
- Track 13 : Pomar16_40, Naji_40, D29_36.1, Kerberos_40, StarStuff_40, Tomathan_40, DBQu4n_40, Duplo_40, D32_40
- Track 14 : AN3_37
- Track 15 : Anthony_36
- Track 16 : Vix_41, Microwolf_41, Dieselweasel_41, MuchMore_43, DaHudson_41, Phoebe_41, JHC117_41, GtownJaz_41, Jobu08_40, Taurus_41, Aglet_41, Tiffany_41, MarQuardt_41, Malinsilva_43, Mainiac_41, Pembroke_41, Cullens_41, Stagni_41, Fernando_41, Lilith_41, BreSam8_41, AugsMagnumOpus_43, Anubis_43, JenCasNa_41, Grif_41, SoilDragon_40, P28Green_41, Marie_41, Sabinator_40, MadMarie_41, StepMih_41, Farber_41, Zetzy_40, LugYA_43, Ollie_41, PGHhamlin_43, OlanP_40
- Track 17 : Kalb97_41, Reba_41, Manu_41, Groupthink_41, Phranny_41, PurpleHaze_40, PhishRPhriends_39, Gemma_40
- Track 18 : Bugatti_36, TNguyen7_36, Pistachio_37, Heathen_36, MA5_36, Fred313_36, SaturnRing_36, BlueBird_37, Kachowdy_36, HelDan_36, Marchesa_36, Puppy_37, Scout_36, BabyRay_36, Idleandcovert_36
- Track 19 : BuzzBuzz_39, Daishi_39, Soshari_42, Louie6_40, LarryKay_40, Spike509_40, Methuselah_39, HashRod_41, Bx2_38, Misomonster_42, KADY_41, Phoxy_40, AgronaGT15_40
- Track 20 : Hookmount_35, Lambert1_35, Popcicle_35, Caviar_35, Pocahontas_35

- Track 21 : Grum1_41, GingkoMaracino_41, Sabia_41, Watson_41, Grub_41, MoneyMay_41, Wooldri_43, Hercules11_41, SoYo_41
- Track 22 : Kalnoky_41, Marius_41
- Track 23 : Penny1_41, EpicPhail_41, LBerry_41, PotatoSplit_42
- Track 24 : JF4_36, JF2_36, MK4_36, Isca_36, Rockstar_36, Phantastic_36, B1_34
- Track 25 : Texage_34, Margo_35, Todacoro_35, QuinnKiro_34, Veracruz_34, Noella_35, ResDef_35, Norbert_34, Panamaxus_34
- Track 26 : JeppNRM_41, Heliosoles_40
- Track 27 : Rummer_40
- Track 28 : HaveUMetTed_41
- Track 29 : Beauxregard13_41
- Track 30 : ACFishhook_40
- Track 31 : HamSlice_34
- Track 32 : Morpher26_35, Wile_35
- Track 33 : Stasia_36
- Track 34 : Pumbaa_35, Melvin_37, Phelipe_36, TinaFeyge_36, Nyxis_35, TroyPia_36, Commander_36, Ulysses_34, Phontbonne_35, LittleGuy_35, Medusa_36
- Track 35 : Bartimeaus_35, Wilbur_35, Bruiser_34, Happiness_35, Caelakin_35, Ruin_35, TygerBlood_35, NotAPhaseMom_35, Albee_35, Flux_35, Annyong_35, Bombshell_35, TiroTheta9_35, Sabertooth_35, LochMonster_35, JoongJeon_35, Mazhar510_35, Millski_34, PeterPeter_35, Broseidon_35, Lorenzo_35, Eapen_35, Avle17_35, Relief_35, Holli_35, CentreCat_35, Thanksgivukkah_35, Phighter1804_35, Nemo27_35, LappelDuVide_35, Lemur_35, LittleB_35, Eris_34, Druantia_35, Wander_35, Skipitt_35, Kingmustik0402_35, Connomayer_35, Romney_35, BubbleTrouble_35, Jaykayelowell_35, Spino_35, Roosevelt_35, Cocoaberry_35, Taquarus_35, Kyee_35, Pipcraft_35, Scamp_35, Baby16_35, Chaph_35, Iceman_36, Maverick_35, NorthStar_35, Phacado_35, Peaches_35, Deano_35, Shaka_35, JetBlade_35, KFPoly_35, Florean_35, Funston_35, Citius_35, Wizard007_35, Lunsford_36, MeeZee_35, Blackmoor_35, Houdini22_35, Burger_34, Eros_35, Clarenza_35, Palestino_34, YoSam321_35
- Track 36 : Arturo_34, Kratak_35, Iracema64_36
- Track 37 : PetiteSangsue_35, Perplexer_35, AbbysRanger_35, Datway_35, Backyardigan_35, Badger_35, Xena_35
- Track 38 : Koreni_34, ICleared_35
- Track 39 : Katalie136_35
- Track 40 : Stink_36
- Track 41 : Abdiel_35, BellusTerra_36, Eurydice_36, Eagle_35, Ohfah_36, Sparxx_36, Nebs_36, Polymorphads_36, Morrow_36, Maxo_36
- Track 42 : Cintron_35, Camperdownii_34
- Track 43 : AvatarAhPeg_36
- Track 44 : Achebe_34, Bumblebee11_35
- Track 45 : SheldonCooper_37, ChampagnePapi_37, BangNhom_36, Obama12_37, LHTSCC_37, Cerulean_37
- Track 46 : Alberto7_36
- Track 47 : Mundrea_35
- Track 48 : Cindaradix_34
- Track 49 : DirtyDunning_35
- Track 50 : Noelle_35
- Track 51 : Shygu2_35
- Track 52 : Kremtemulon_35
- Track 53 : Miramae_35
- Track 54 : Gadost_35

- Track 55 : Dhanush_35
- Track 56 : Cici_35
- Track 57 : HuhtaEnerson15_32, George_31, LittleCherry_32, MarysWell_31, Coog_32, Bonamassa_32, Archetta_32, Cuco_32, Milcery_32, Tarynearal_31, Theia_30, Midas2_32
- Track 58 : Bluefalcon_31, Discoknowium_32, Lev2_32, AgentM_32, Aragog_32, Conspiracy_32, Tiger_32, Phlorence_32, ForGetIt_32, Jovo_32, PickleBack_32
- Track 59 : Jabiru_33
- Track 60 : Ghoulboy_32, Micasa_32, Zolita_31, SydNat_32, Swirley_32
- Track 61 : Naca_33, Airmid_33, ElTiger69_33, Scorpio_34, Benedict_33, PetterN_34, Chadwick_34
- Track 62 : UnionJack_33
- Track 63 : Dublin_31
- Track 64 : BABullseye_40, Gruunaga_40, Dorothea_40, Kazan_41, Blinn1_41, Gladiator_40, SuperAwesome_40, Hoot_40, Indra_42, McFly_40, Newrala_40, Cookiedough_40, Roksolana_41, VohminGhazi_40, JewelBug_41, Neeharika16_40, Jordennis_40, SmellyB_40
- Track 65 : Rifter_40, Hammer_40, Koko_40, Blue7_41
- Track 66 : Yokurt_40, Artemis2UCLA_40, WunderPhul_40, Priamo_41, Zaka_40, Hexamo_40, Jeffabunny_40, Lilbunny_39, Wiks_39, ToneTone_37, CloudWang3_40
- Track 67 : Kipper29_40
- Track 68 : Zulu_40, Tucker_40
- Track 69 : Isiphiwo_40
- Track 70 : Sheen_36
- Track 71 : Timshel_36
- Track 72 : HINdeR_35
- Track 73 : DroogsArmy_36
- Track 74 : Phillis_32
- Track 75 : NearlyHeadless_32, Stephig9_32, Danforth_31, Roary_32, Expelliarmus_31
- Track 76 : Groundhog_31, Astro_32, Dixon_32, Smeadley_32
- Track 77 : FF47_44A, Muddy_45
- Track 78 : 8UZL_45
- Track 79 : NoShow_53
- Track 80 : Maco6_43
- Track 81 : Samora_48
- Track 82 : phiBT1_20
- Track 83 : Lilbooboo_46
- Track 84 : Shawty_45
- Track 85 : TG1_40
- Track 86 : Vash_45
- Track 87 : RemusLoopin_46
- Track 88 : Sebastisaurus_45
- Track 89 : Toma_34, Lika_34, Goby_34, Sujidade_35, Godpower_35
- Track 90 : Zemlya_36
- Track 91 : Brataylor_37, Danzina_36
- Track 92 : Esperer_34, Hydra_36, Bovely_34, Unstoppable_34, Leviticus_34, Aaronocolus_34, Ozzie_34, SunsetPointe_34, Legacy_34, Indigo_33, Phettuccine_34
- Track 93 : Dattran_36, Celeste_35
- Track 94 : Chucky_34, BarryBee_37, OzzyJ_35, TagePhighter_36, Snorlax_34, Dwayne_34, Triste_34, Emaanora_37
- Track 95 : Ejemplo_33, TuanPN_33

- Track 96 : Nabi_35, Lorelei_35, Rana_35
- Track 97 : Asten_34, Whatever_34
- Track 98 : EnochSoames_37, Izzy_35, Eddasa_35, Oliynyk_35, Rusticus_35, BryanRecycles_35, Jash_35
- Track 99 : Nanodon_36
- Track 100 : Werner_34, Hippo_34
- Track 101 : Yasdnil_34, Maneekul_34
- Track 102 : RedBear_35, Katalie_34, South40_34
- Track 103 : Lannister_36
- Track 104 : Caliburn_34
- Track 105 : BeardedLady_35
- Track 106 : SarahRose_34
- Track 107 : Bowden_35, Thestral_36, TinaBelcher_35, TrvxScott_34
- Track 108 : Puginator_37
- Track 109 : Paedore_34, Loofah_35
- Track 110 : R4_35, ELB20_33
- Track 111 : Andris_34
- Track 112 : Alvy_37, BartholomewSD_37
- Track 113 : Superstar_38
- Track 114 : Animus_34, GirlDinner_34
- Track 115 : Haizum_36, Diane_34, Amethyst_34
- Track 116 : Pablito_34
- Track 117 : Caelum_36
- Track 118 : Paolo_37
- Track 119 : Tefunt_36, Nishikigoi_36
- Track 120 : Omar_37
- Track 121 : SqueakyClean_34, Janus_35
- Track 122 : Jevington_37
- Track 123 : Issmi_36
- Track 124 : Zainub_37
- Track 125 : Marav_38
- Track 126 : Daudau_35
- Track 127 : Triumph_36
- Track 128 : Hank144_36
- Track 129 : Pavo_37, ElGato_36, Provolone_36
- Track 130 : Vanseggelen_40
- Track 131 : Verabelle_38
- Track 132 : Kaine_36, Dexers_34, Alsaber_36
- Track 133 : Speedwell_42
- Track 134 : phiCAM_34
- Track 135 : Conan_36
- Track 136 : Amela_35, Verse_35
- Track 137 : Yosif_37
- Track 138 : Saftant_35
- Track 139 : Celery_38
- Track 140 : BroPlease_35
- Track 141 : GreenWeasel_36
- Track 142 : phiHau3_36
- Track 143 : ToriToki_54, HaugeAnator_54, Percastrophe_54, ZooBear_54
- Track 144 : Kumquat_54, Zeigle_54, WRightOn_58
- Track 145 : Olicious_54, Immanuel3_53, Romero_54, Treat_54
- Track 146 : RosePharie_55
- Track 147 : Manuel_51

- Track 148 : Dennebes_58
- Track 149 : Rowa_49
- Track 150 : Wentworth_71
- Track 151 : Yara_67
- Track 152 : Wilkos_73
- Track 153 : Lizz_71
- Track 154 : PHTowN_71, ShakeNBake_71
- Track 155 : Rooney_71
- Track 156 : Gibson_71
- Track 157 : Dryad_75
- Track 158 : Zuko_77
- Track 159 : KimJongPhill_79
- Track 160 : PhinkBoden_144
- Track 161 : Smoothie_147
- Track 162 : Culver_146, Cucurbita_145, Toniann_146, Lozinak_146
- Track 163 : Aphelion_145
- Track 164 : OneUp_130
- Track 165 : Yummy_46, Troje_46, Horseradish_46, Biskit_46, SketchMex_44
- Track 166 : Buttrmilkdreams_46
- Track 167 : Yarn_41, AndPeggy_41, SteamedHams_44
- Track 168 : Nibbles_40, Survivors_41, MaVan_41
- Track 169 : BillDoor_44
- Track 170 : MScarn_48
- Track 171 : Burnsey_44, Axym_43, Carsonalex_47, Typhonmachy_44, Nina_43, RedBaron_46
- Track 172 : AikoCarson_45
- Track 173 : Button_47
- Track 174 : Cleo_39
- Track 175 : SweatNTears_45
- Track 176 : Fribs8_40
- Track 177 : GTE2_36
- Track 178 : Gibbous_39, Dre3_39
- Track 179 : Nodigi_52, Hexbug_52, Orla_52
- Track 180 : Elliott_44, PsychoKiller_43, Sopespian_42
- Track 181 : RanchParmCat_49, Margaret_50
- Track 182 : Emalyn_43
- Track 183 : Zareef_43, Azira_41
- Track 184 : HippoPololi_41
- Track 185 : Yakult_47
- Track 186 : GiKK_49
- Track 187 : Vine_48
- Track 188 : Tolls_45
- Track 189 : Jamzy_49
- Track 190 : PotPie_45
- Track 191 : GoldHunter_45
- Track 192 : Agatha_44, Cozz_42
- Track 193 : Amok_45
- Track 194 : Quasar_44
- Track 195 : MunkgeeRoachy_42
- Track 196 : NoPickles_64
- Track 197 : Secretariat_64
- Track 198 : Aflac_63
- Track 199 : Avazak_66

- Track 200 : Burley_64
- Track 201 : Schwartz33_66
- Track 202 : OhMyWard_63
- Track 203 : Vardy_63
- Track 204 : Phendrix_177, GodonK_189
- Track 205 : GMA2_70
- Track 206 : BlueNGold_172, Mareelih_173, Boopy_175
- Track 207 : Sixama_175
- Track 208 : Huwbert_70
- Track 209 : Triscuit_69
- Track 210 : Ibantik_13
- Track 211 : Success_13
- Track 212 : Shrew_86

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

The start number called the most often in the published annotations is 89, it was called in 151 of the 567 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_35, Abdiel_35, Albee_35, Alberto7_36, Annyong_35, Anthony_36, Arturo_34, Avle17_35, Baby16_35, Backyardigan_35, Badger_35, BangNhom_36, Bartimeaus_35, BellusTerra_36, Blackmoor_35, Bombshell_35, Broseidon_35, Bruiser_34, BubbleTrouble_35, Burger_34, Caelakin_35, Camperdownii_34, Caviar_35, CentreCat_35, Cerulean_37, ChampagnePapi_37, Chaph_35, Chupacabra_35, Cici_35, Cindaradix_34, Cintron_35, Citius_35, Clarenza_35, Cocoaberry_35, Commander_36, Connomayer_35, Datway_35, Deano_35, Dhanush_35, DirtyDunning_35, DontArgue_35, Drake94_34, DroogsArmy_36, Druantia_35, DustyMartin_39, Eagle_35, Eapen_35, Eris_34, Eros_35, Eurydice_36, Florean_35, Flux_35, Funston_35, Gadost_35, Goose_36, HINdeR_35, HamSlice_34, Hank144_36, Happiness_35, Holli_35, Hookmount_35, Houdini22_35, ICleared_35, Iceman_36, Iracema64_36, Jaykayelowell_35, JetBlade_35, JoongJeon_35, KFPoly_35, Katalie136_35, Kingmustik0402_35, KittenMittens_33, Koreni_34, Kratak_35, Kremtemulon_35, Kyee_35, LHTSCC_37, Lambert1_35, LappelDuVide_35, Lemur_35, Lilbooboo_46, LittleB_35, LittleGuy_35, LochMonster_35, Lorenzo_35, Lunsford_36, Maverick_35, Maxo_36, Mazhar510_35, Medusa_36, MeeZee_35, Melvin_37, Millski_34, Morpher26_35, Morrow_36, Mundrea_35, Nebs_36, Nemo27_35, Noelle_35, NorthStar_35, NotAPhaseMom_35, Nyxis_35, OKCentral2016_35, Obama12_37, Ohfah_36, Palestino_34, PeaceMeal1_34, Peaches_35, Perplexer_35, PeterPeter_35, PetiteSangsue_35, Phacado_35, Phelipe_36, Phighter1804_35, Phontbonne_35, Pipcraft_35, Pocahontas_35, Polymorphads_36, Poompha_34, Popcicle_35, Pumbaa_35, Relief_35, RhynO_36, Romney_35, Roosevelt_35, Rowdy_39, Ruin_35, Sabertooth_35, Scamp_35, Severus_34, Shaka_35, Shapes_39, Sheen_36, SheldonCooper_37, Shygu2_35, Skipitt_35, Sparxx_36, Spino_35, Stasia_36, Stink_36, TG1_40, Taquarus_35, Thanksgivukkah_35, TinaFeyge_36, TiroTheta9_35, Trike_33, TroyPia_36, TygerBlood_35, Ulysses_34, Wander_35, Wilbur_35, Wile_35, Wizard007_35, Xena_35, YoSam321_35,

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

• Achebe_34, Bumblebee11_35, Margo_35, Noella_35, Norbert_34, Panamaxus_34, QuinnKiro_34, ResDef_35, Samora_48, Texage_34, Todacoro_35, Vash_45, Veracruz_34,

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

• 8UZL_45, ACFishhook_40, AN3_37, AN9_40, ANI8_40, Aaronocolus_34, Aflac_63, Agatha_44, AgentM_32, Aglet_41, AgronaGT15_40, AikoCarson_45, Airmid_33, Alsaber_36, Alvy_37, Amela_35, Amethyst_34, Amok_45, AndPeggy_41, Andris_34, Animus_34, Anubis_43, Aphelion_145, Aragog_32, Archetta_32, Artemis2UCLA_40, Asten_34, Astro_32, AugsMagnumOpus_43, AvatarAhPeg_36, Avazak_66, Axym_43, Azira_41, B1_34, BABullseye_40, BabyRay_36, BarryBee_37, BartholomewSD_37, BeardedLady_35, Beauxregard13_41, Benedict_33, BillDoor_44, Biskit_46, Blinn1_41, Blue7_41, BlueBird_37, BlueNGold_172, Bluefalcon_31, Bonamassa_32, Boopy_175, Bovely_34, Bowden_35, Brataylor_37, BreSam8_41, BroPlease_35, BryanRecycles_35, Bugatti_36, Burley_64, Burnsey_44, Button_47, Buttrmikedreams_46, BuzzBuzz_39, Bxz2_38, C3_35, Caelum_36, Caliburn_34, Carsonalex_47, Celery_38, Celeste_35, Chadwick_34, Chucky_34, Cleo_39, CloudWang3_40, Conan_36, Conspiracy_32, Coog_32, Cookiedough_40, Cozz_42, Cuco_32, Cucurbita_145, Cullens_41, Culver_146, D29_36.1, D32_40, DBQu4n_40, DaHudson_41, Daishi_39, Danforth_31, Danzina_36, Dattran_36, Daudau_35, Dennebes_58, Dexers_34, Diane_34, Dieselweasel_41, Discoknowium_32, Dixon_32, Dorothea_40, Dre3_39, Dryad_75, Dublin_31, Duplo_40, Dwayne_34, ELB20_33, Eddasa_35, Edison31_36, Ejemplo_33, ElGato_36, ElTiger69_33, Elliott_44, Emaanora_37, Emalyn_43, EnochSoames_37, EpicPhail_41, Esperer_34, Expelliarmus_31, FF47_44A, Farber_41, Fernando_41, ForGetIt_32, Fred313_36, Fribs8_40, GMA2_70, GTE2_36, Gemma_40, George_31, Ghoulboy_32, GiKK_49, Gibbous_39, Gibson_71, GingkoMaracino_41, GirlDinner_34, Gladiator_40, Goby_34, GodonK_189, Godpower_35, GoldHunter_45, GreenWeasel_36, Grif_41, Groundhog_31, Groupthink_41, Grub_41, Grum1_41, Gruunaga_40, GtownJaz_41, Haizum_36, Hammer_40, HashRod_41, HaugeAnator_54, HaveUMetTed_41, Heathen_36, HelDan_36, Heliosoles_40, Hercules11_41, Hexamo_40, Hexbug_52, HippoPololi_41, Hippo_34, Hoot_40, Horseradish_46, HuhtaEnerson15_32, Huwbert_70, Hydra_36, Ibantik_13, Idleandcovert_36, Immanuel3_53, Indigo_33, Indra_42, Isca_36, Isiphiwo_40, Issmi_36, Izzy_35, JF2_36, JF4_36, JHC117_41, Jabiru_33, Jamzy_49, Janus_35, Jash_35, Jeffabunny_40, JenCasNa_41, JeppNRM_41, Jevington_37, JewelBug_41, Jobu08_40, Jordennis_40, Jovo_32, KADY_41, Kachowdy_36, Kaine_36, Kalb97_41, Kalnoky_41, Katalie_34, Kazan_41, Kerberos_40, KimJongPhill_79, Kimona_33, Kipper29_40, Koko_40, Kristoff_37, Kumquat_54, LBerry_41, Lannister_36, LarryKay_40, Legacy_34, Lev2_32, Leviticus_34, Lika_34, Lilbunny_39, Lilith_41, LittleCherry_32, Lizz_71, Loofah_35, Lorelei_35, Louie6_40, Lozinak_146, LugYA_43, MA5_36, MK4_36, MScarn_48, MaVan_41, Maco6_43, MadMarie_41, Mainiac_41, Malinsilva_43, Maneekul_34, Manu_41, Manuel_51, MarQuardt_41, Marav_38, Marchesa_36, Mareelih_173, Margaret_50, Marie_41, Marius_41, MarysWell_31, McFly_40, Methuselah_39, Micasa_32, Microwolf_41, Midas2_32, Milcery_32, Miramae_35, Misomonster_42, MoneyMay_41, MuchMore_43, Muddy_45, MunkgeeRoachy_42, MyraDee_33, Nabi_35, Naca_33, Naji_40, Nanodon_36, NearlyHeadless_32, Neeharika16_40, Newrala_40, Nibbles_40, Nina_43, Nishikigoi_36, NoPickles_64, NoShow_53, Nodigi_52, OhMyWard_63, OlanP_40, Olicious_54, Oliynyk_35, Ollie_41, Omar_37, OneUp_130, Orla_52, Ozzie_34, OzzyJ_35, P28Green_41, PGHhamlin_43, PHTown_71, Pablito_34, Paedore_34, Paolo_37, Pavo_37, Pembroke_41, Penny1_41, Percastrophe_54, PetterN_34, Phantastic_36, Phendrix_177,

Phettuccine_34, Phillis_32, PhinkBoden_144, PhishRPhriends_39, Phlorence_32, Phoebe_41, Phoxy_40, Phranny_41, PickleBack_32, Pistachio_37, Pomar16_40, PotPie_45, PotatoSplit_42, Priamo_41, Provolone_36, PsychoKiller_43, Puginator_37, Puppy_37, PurpleHaze_40, Quasar_44, R4_35, Rana_35, RanchParmCat_49, Reba_41, Rebeuca_37, RedBaron_46, RedBear_35, RemusLoopin_46, Rifter_40, Roary_32, Rockstar_36, Roksolana_41, Romero_54, Rooney_71, RosePharie_55, Rowa_49, Rummer_40, Rusticus_35, Sabia_41, Sabinator_40, Saftant_35, SarahRose_34, SaturnRing_36, Schwartz33_66, Scorpia_34, Scout_36, Sebastisaurus_45, Secretariat_64, ShakeNBake_71, Shawty_45, Shrew_86, Sixama_175, SketchMex_44, Smeadley_32, SmellyB_40, Smoothie_147, Snorlax_34, SoYo_41, SoilDragon_40, Sopespian_42, Soshari_42, South40_34, Speedwell_42, Spike509_40, SqueakyClean_34, Stagni_41, StarStuff_40, SteamedHams_44, StepMih_41, Stephig9_32, Success_13, Sujidade_35, SunsetPointe_34, SuperAwesome_40, Superstar_38, Survivors_41, SweatNTears_45, Swirley_32, SydNat_32, TNguyen7_36, TagePhighter_36, Tarynearal_31, Taurus_41, Tefunt_36, Theia_30, Thestral_36, Tiffany_41, Tiger_32, Timshel_36, TinaBelcher_35, Tolls_45, Toma_34, Tomathan_40, ToneTone_37, Toniann_146, Topanga_36, ToriToki_54, Treat_54, Triscuit_69, Triste_34, Triumph_36, Troje_46, TrvxScott_34, TuanPN_33, Tucker_40, Twister_36, Typhonomachy_44, UnionJack_33, Unstoppable_34, VA6_37, VC3_40, Vanseggelen_40, Vardy_63, Verabelle_38, Verse_35, Vine_48, Vix_41, VohminGhazi_40, WRightOn_58, WalterMcMickey_36, Watson_41, Wentworth_71, Werner_34, Whatever_34, Wiks_39, Wilkos_73, Wooldri_43, WunderPhul_40, Yakult_47, Yara_67, Yarn_41, Yasdnil_34, Yokurt_40, Yosif_37, Yummy_46, Zainub_37, Zaka_40, Zareef_43, Zeigle_54, Zemlya_36, Zetzy_40, Zolita_31, ZooBear_54, Zuko_77, Zulu_40, phiBT1_20, phiCAM_34, phiHau3_36,

Summary by start number:

Start 26:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AvatarAhPeg_36 (A4),

Start 35:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Huwbert_70 (GG), Triscuit_69 (GG),

Start 53:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PotPie_45 (CT), Vine_48 (CT),

Start 55:

- Found in 17 of 601 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Achebe_34 (A4), Bumblebee11_35 (A4),

Start 58:

- Found in 3 of 601 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 66.7% of time when present
- Phage (with cluster) where this start called: GreenWeasel_36 (BD4), phiHau3_36 (BD4),

Start 61:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schwartz33_66 (DJ), Secretariat_64 (DJ),

Start 63:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK_189 (DK), Phendrix_177 (DK),

Start 64:

- Found in 4 of 601 (0.7%) of genes in pham
- Manual Annotations of this start: 4 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aflac_63 (DJ), Burley_64 (DJ), OhMyWard_63 (DJ), Vardy_63 (DJ),

Start 66:

- Found in 85 of 601 (14.1%) of genes in pham
- Manual Annotations of this start: 11 of 567
- Called 12.9% of time when present
- Phage (with cluster) where this start called: ACFishhook_40 (A3), Beauxregard13_41 (A3), GingkoMaracino_41 (A3), Grub_41 (A3), Grum1_41 (A3), Hercules11_41 (A3), MoneyMay_41 (A3), Sabia_41 (A3), SoYo_41 (A3), Watson_41 (A3), Wooldri_43 (A3),

Start 68:

- Found in 38 of 601 (6.3%) of genes in pham
- Manual Annotations of this start: 36 of 567
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Aaronocolus_34 (BD1), Asten_34 (BD1), BarryBee_37 (BD1), BeardedLady_35 (BD1), Bovely_34 (BD1), BryanRecycles_35 (BD1), Chucky_34 (BD1), Dwayne_34 (BD1), Eddasa_35 (BD1), Ejemplo_33 (BD1), Emaanora_37 (BD1), EnochSoames_37 (BD1), Esperer_34 (BD1), Hippo_34 (BD1), Hydra_36 (BD1), Indigo_33 (BD1), Izzy_35 (BD1), Jash_35 (BD1), Lannister_36 (BD1), Legacy_34 (BD1), Leviticus_34 (BD1), Maneekul_34 (BD1), Oliynyk_35 (BD1), Ozzie_34 (BD1), OzzyJ_35 (BD1), Phettuccine_34 (BD1), Rusticus_35 (BD1), SarahRose_34 (BD1), Snorlax_34 (BD1), SunsetPointe_34 (BD1), TagePhighter_36 (BD1), Triste_34 (BD1), TuanPN_33 (BD1), Unstoppable_34 (BD1), Werner_34 (BD1), Whatever_34 (BD1), Yasdnil_34 (BD1),

Start 70:

- Found in 3 of 601 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Cleo_39 (CT),

Start 71:

- Found in 2 of 601 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Miramae_35 (A4),

Start 73:

- Found in 1 of 601 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: UnionJack_33 (A5),

Start 75:

- Found in 6 of 601 (1.0%) of genes in pham
- Manual Annotations of this start: 6 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Edison31_36 (A10), Kristoff_37 (A10), Rebeuca_37 (A10), Topanga_36 (A10), Twister_36 (A10), WalterMcMickey_36 (A10),

Start 76:

- Found in 27 of 601 (4.5%) of genes in pham
- Manual Annotations of this start: 19 of 567
- Called 74.1% of time when present
- Phage (with cluster) where this start called: Amethyst_34 (BD2), Andris_34 (BD2), Biskit_46 (CT), Buttrmlkdreams_46 (CT), Diane_34 (BD2), ELB20_33 (BD2), Haizum_36 (BD2), Horseradish_46 (CT), Loofah_35 (BD2), MScarn_48 (CT), Nanodon_36 (BD1), Nishikigoi_36 (BD2), Paedore_34 (BD2), R4_35 (BD2), SketchMex_44 (CT), Superstar_38 (BD2), Tefunt_36 (BD2), Troje_46 (CT), Yummy_46 (CT), Zemlya_36 (BD1),

Start 77:

- Found in 10 of 601 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Lizz_71 (BN), Yara_67 (BN),

Start 78:

- Found in 5 of 601 (0.8%) of genes in pham
- Manual Annotations of this start: 5 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Goby_34 (BD1), Godpower_35 (BD1), Lika_34 (BD1), Sujidade_35 (BD1), Toma_34 (BD1),

Start 79:

- Found in 12 of 601 (2.0%) of genes in pham
- Manual Annotations of this start: 9 of 567
- Called 83.3% of time when present

- Phage (with cluster) where this start called: Daudau_35 (BD2), GMA2_70 (DS), Issmi_36 (BD2), Jevington_37 (BD2), Marav_38 (BD2), Pablito_34 (BD2), RemusLoopin_46 (BB2), Rowa_49 (BL), Samora_48 (BB1), Vash_45 (BB1),

Start 80:

- Found in 62 of 601 (10.3%) of genes in pham
- Manual Annotations of this start: 49 of 567
- Called 90.3% of time when present
- Phage (with cluster) where this start called: AN3_37 (A2), AN9_40 (A2), ANI8_40 (A2), Alsaber_36 (BD3), Alvy_37 (BD2), Amela_35 (BD3), Animus_34 (BD2), BartholomewSD_37 (BD2), Bowden_35 (BD2), Brataylor_37 (BD1), BroPlease_35 (BD4), C3_35 (A2), Caelum_36 (BD2), Celery_38 (BD3), Celeste_35 (BD1), Conan_36 (BD3), D29_36.1 (A2), D32_40 (A2), DBQu4n_40 (A2), Danzina_36 (BD1), Dattran_36 (BD1), Dexers_34 (BD3), Duplo_40 (A2), ElGato_36 (BD3), GirlDinner_34 (BD2), Janus_35 (BD2), Kaine_36 (BD3), Katalie_34 (BD1), Kerberos_40 (A2), Lorelei_35 (BD1), Nabi_35 (BD1), Naji_40 (A2), Omar_37 (BD2), Pavo_37 (BD3), Pomar16_40 (A2), Provolone_36 (BD3), Rana_35 (BD1), RedBear_35 (BD1), Saftant_35 (BD3), Shrew_86 (singleton), South40_34 (BD1), Speedwell_42 (BD3), SqueakyClean_34 (BD2), StarStuff_40 (A2), Thestral_36 (BD2), TinaBelcher_35 (BD2), Tomathan_40 (A2), Triumph_36 (BD2), TrvxScott_34 (BD2), VA6_37 (A2), VC3_40 (A2), Vanseggelen_40 (BD3), Verabelle_38 (BD3), Verse_35 (BD3), Yosif_37 (BD3), Zainub_37 (BD2),

Start 81:

- Found in 49 of 601 (8.2%) of genes in pham
- Manual Annotations of this start: 40 of 567
- Called 98.0% of time when present
- Phage (with cluster) where this start called: Agatha_44 (CT), AgentM_32 (A5), AikoCarson_45 (CT), Amok_45 (CT), AndPeggy_41 (CT), Aragog_32 (A5), Archetta_32 (A5), Axym_43 (CT), BillDoor_44 (CT), Bluefalcon_31 (A5), Bonamassa_32 (A5), Burnsey_44 (CT), Carsonalex_47 (CT), Conspiracy_32 (A5), Coog_32 (A5), Cozz_42 (CT), Cuco_32 (A5), Discoknowium_32 (A5), Dublin_31 (A5), Elliott_44 (CT), Emalyn_43 (CT), ForGetIt_32 (A5), GTE2_36 (CT), George_31 (A5), GoldHunter_45 (CT), HuhtaEnerson15_32 (A5), Jovo_32 (A5), Lev2_32 (A5), LittleCherry_32 (A5), MarysWell_31 (A5), Midas2_32 (A5), Milcery_32 (A5), MunkgeeRoachy_42 (CT), Nina_43 (CT), Phlorence_32 (A5), PickleBack_32 (A5), PsychoKiller_43 (CT), Quasar_44 (CT), RedBaron_46 (CT), Sopespian_42 (CT), SteamedHams_44 (CT), SweatNTears_45 (CT), Tarynearal_31 (A5), Theia_30 (A5), Tiger_32 (A5), Tolls_45 (CT), Typhonmachy_44 (CT), Yarn_41 (CT),

Start 82:

- Found in 154 of 601 (25.6%) of genes in pham
- Manual Annotations of this start: 135 of 567
- Called 90.3% of time when present
- Phage (with cluster) where this start called: Aglet_41 (A3), AgronaGT15_40 (A3), Airmid_33 (A5), Anubis_43 (A3), Aphelion_145 (CQ1), Astro_32 (A8), AugsMagnumOpus_43 (A3), B1_34 (A3), BABullseye_40 (A6), BabyRay_36 (A3), Benedict_33 (A5), Blinn1_41 (A6), Blue7_41 (A6), BlueBird_37 (A3), BlueNGold_172 (DS), Boopy_175 (DS), BreSam8_41 (A3), Bugatti_36 (A3), BuzzBuzz_39 (A3), Bxz2_38 (A3), Chadwick_34 (A5), Cookiedough_40 (A6), Cullens_41 (A3), DaHudson_41 (A3), Daishi_39 (A3), Danforth_31 (A8), Dieselweasel_41 (A3), Dixon_32 (A8), Dorothea_40 (A6), ElTiger69_33 (A5), EpicPhail_41 (A3), Expelliarmus_31 (A8), Farber_41 (A3), Fernando_41 (A3), Fred313_36 (A3),

Gemma_40 (A3), Gladiator_40 (A6), Grif_41 (A3), Groundhog_31 (A8), Groupthink_41 (A3), Gruunaga_40 (A6), GtownJaz_41 (A3), Hammer_40 (A6), HashRod_41 (A3), HaveUMetTed_41 (A3), Heathen_36 (A3), HelDan_36 (A3), Heliosoles_40 (A3), Hoot_40 (A6), Ibantik_13 (singleton), Idleandcovert_36 (A3), Indra_42 (A6), Isca_36 (A3), Isiphiwo_40 (A6), JF2_36 (A3), JF4_36 (A3), JHC117_41 (A3), Jabiru_33 (A5), JenCasNa_41 (A3), JeppNRM_41 (A3), JewelBug_41 (A6), Jobu08_40 (A3), Jordennis_40 (A6), KADY_41 (A3), Kachowdy_36 (A3), Kalb97_41 (A3), Kalnoky_41 (A3), Kazan_41 (A6), Koko_40 (A6), LBerry_41 (A3), LarryKay_40 (A3), Lilith_41 (A3), Louie6_40 (A3), LugYA_43 (A3), MA5_36 (A3), MK4_36 (A3), MadMarie_41 (A3), Mainiac_41 (A3), Malinsilva_43 (A3), Manu_41 (A3), MarQuardt_41 (A3), Marchesa_36 (A3), Mareelih_173 (DS), Marie_41 (A3), Marius_41 (A3), McFly_40 (A6), Methuselah_39 (A3), Microwolf_41 (A3), Misomonster_42 (A3), MuchMore_43 (A3), Naca_33 (A5), NearlyHeadless_32 (A8), Neeharika16_40 (A6), Newrala_40 (A6), OlanP_40 (A3), Ollie_41 (A3), OneUp_130 (CQ2), P28Green_41 (A3), PGHhamlin_43 (A3), Pembroke_41 (A3), Penny1_41 (A3), PetterN_34 (A5), Phantastic_36 (A3), Phillis_32 (A8), PhinkBoden_144 (CQ1), PhishRPhriends_39 (A3), Phoebe_41 (A3), Phoxy_40 (A3), Phranny_41 (A3), Pistachio_37 (A3), PotatoSplit_42 (A3), Puppy_37 (A3), PurpleHaze_40 (A3), Reba_41 (A3), Rifter_40 (A6), Roary_32 (A8), Rockstar_36 (A3), Roksolana_41 (A6), Rummer_40 (A3), Sabinator_40 (A3), SaturnRing_36 (A3), Scorpia_34 (A5), Scout_36 (A3), Smeadley_32 (A8), SmellyB_40 (A6), Smoothie_147 (CQ1), SoilDragon_40 (A3), Soshari_42 (A3), Spike509_40 (A3), Stagni_41 (A3), StepMih_41 (A3), Stephig9_32 (A8), SuperAwesome_40 (A6), TNguyen7_36 (A3), Taurus_41 (A3), Tiffany_41 (A3), Vix_41 (A3), VohminGhazi_40 (A6), Zetzy_40 (A3),

Start 83:

- Found in 16 of 601 (2.7%) of genes in pham
- Manual Annotations of this start: 11 of 567
- Called 87.5% of time when present
- Phage (with cluster) where this start called: 8UZL_45 (AB), Button_47 (CT), FF47_44A (AB), GiKK_49 (CT), Hexbug_52 (CT), Jamzy_49 (CT), Maco6_43 (AB), Margaret_50 (CT), Muddy_45 (AB), NoShow_53 (AB), Nodigi_52 (CT), Orla_52 (CT), RanchParmCat_49 (CT), Yakult_47 (CT),

Start 85:

- Found in 20 of 601 (3.3%) of genes in pham
- Manual Annotations of this start: 19 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_40 (A6), Azira_41 (CT), CloudWang3_40 (A6), Fribs8_40 (CT), Hexamo_40 (A6), Jeffabunny_40 (A6), Kipper29_40 (A6), Lilbunny_39 (A6), MaVan_41 (CT), Nibbles_40 (CT), Priamo_41 (A6), Survivors_41 (CT), ToneTone_37 (A6), Tucker_40 (A6), Wiks_39 (A6), WunderPhul_40 (A6), Yokurt_40 (A6), Zaka_40 (A6), Zareef_43 (CT), Zulu_40 (A6),

Start 86:

- Found in 5 of 601 (0.8%) of genes in pham
- Manual Annotations of this start: 4 of 567
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Dre3_39 (CT), Gibbous_39 (CT), HippoPololi_41 (CT), MyraDee_33 (A18),

Start 87:

- Found in 22 of 601 (3.7%) of genes in pham
- Manual Annotations of this start: 16 of 567
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Cucurbita_145 (CQ1), Culver_146 (CQ1), KimJongPhill_79 (BR), Kimona_33 (A19), Lozinak_146 (CQ1), Margo_35 (A3), Noella_35 (A3), Norbert_34 (A3), Panamaxus_34 (A3), QuinnKiro_34 (A3), ResDef_35 (A3), Texage_34 (A3), Timshel_36 (A7), Todacoro_35 (A3), Toniann_146 (CQ1), Veracruz_34 (A3),

Start 88:

- Found in 5 of 601 (0.8%) of genes in pham
- Manual Annotations of this start: 5 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ghoulboy_32 (A5), Micasa_32 (A5), Swirley_32 (A5), SydNat_32 (A5), Zolita_31 (A5),

Start 89:

- Found in 168 of 601 (28.0%) of genes in pham
- Manual Annotations of this start: 151 of 567
- Called 92.3% of time when present
- Phage (with cluster) where this start called: AbbysRanger_35 (A4), Abdiel_35 (A4), Albee_35 (A4), Alberto7_36 (A4), Annyong_35 (A4), Anthony_36 (A20), Arturo_34 (A4), Avle17_35 (A4), Baby16_35 (A4), Backyardigan_35 (A4), Badger_35 (A4), BangNhom_36 (A4), Bartimeaus_35 (A4), BellusTerra_36 (A4), Blackmoor_35 (A4), Bombshell_35 (A4), Broseidon_35 (A4), Bruiser_34 (A4), BubbleTrouble_35 (A4), Burger_34 (A4), Caelakin_35 (A4), Camperdownii_34 (A4), Caviar_35 (A3), CentreCat_35 (A4), Cerulean_37 (A4), ChampagnePapi_37 (A4), Chaph_35 (A4), Chupacabra_35 (A10), Cici_35 (A4), Cindaradix_34 (A4), Cintron_35 (A4), Citius_35 (A4), Clarenza_35 (A4), Cocoaberry_35 (A4), Commander_36 (A4), Connomayer_35 (A4), Datway_35 (A4), Deano_35 (A4), Dhanush_35 (A4), DirtyDunning_35 (A4), DontArgue_35 (A10), Drake94_34 (A10), DroogsArmy_36 (A7), Druantia_35 (A4), DustyMartin_39 (A10), Eagle_35 (A4), Eapen_35 (A4), Eris_34 (A4), Eros_35 (A4), Eurydice_36 (A4), Florean_35 (A4), Flux_35 (A4), Funston_35 (A4), Gadost_35 (A4), Goose_36 (A10), HINdeR_35 (A7), HamSlice_34 (A4), Hank144_36 (BD2), Happiness_35 (A4), Holli_35 (A4), Hookmount_35 (A3), Houdini22_35 (A4), ICleared_35 (A4), Iceman_36 (A4), Iracema64_36 (A4), Jaykayelowell_35 (A4), JetBlade_35 (A4), JoongJeon_35 (A4), KFPoly_35 (A4), Katalie136_35 (A4), Kingmustik0402_35 (A4), KittenMittens_33 (A10), Koreni_34 (A4), Kratak_35 (A4), Kremtemulon_35 (A4), Kyee_35 (A4), LHTSCC_37 (A4), Lambert1_35 (A3), LappelDuVide_35 (A4), Lemur_35 (A4), Lilbooboo_46 (BB1), LittleB_35 (A4), LittleGuy_35 (A4), LochMonster_35 (A4), Lorenzo_35 (A4), Lunsford_36 (A4), Maverick_35 (A4), Maxo_36 (A4), Mazhar510_35 (A4), Medusa_36 (A4), MeeZee_35 (A4), Melvin_37 (A4), Millski_34 (A4), Morpher26_35 (A4), Morrow_36 (A4), Mundrea_35 (A4), Nebs_36 (A4), Nemo27_35 (A4), Noelle_35 (A4), NorthStar_35 (A4), NotAPhaseMom_35 (A4), Nyxis_35 (A4), OKCentral2016_35 (A10), Obama12_37 (A4), Ohfah_36 (A4), Palestino_34 (A4), PeaceMeal1_34 (A10), Peaches_35 (A4), Perplexer_35 (A4), PeterPeter_35 (A4), PetiteSangsue_35 (A4), Phacado_35 (A4), Felipe_36 (A4), Phighter1804_35 (A4), Phontbonne_35 (A4), Pipcraft_35 (A4), Pocahontas_35 (A3), Polymorphads_36 (A4), Poompha_34 (A10), Popcicle_35 (A3), Pumbaa_35 (A4), Relief_35 (A4), RhynO_36 (A10), Romney_35 (A4), Roosevelt_35 (A4), Rowdy_39 (A10), Ruin_35 (A4), Sabertooth_35 (A4), Scamp_35 (A4), Severus_34 (A10), Shaka_35 (A4), Shapes_39 (A10), Sheen_36 (A7), SheldonCooper_37 (A4), Shygu2_35 (A4), Skipitt_35 (A4), Sparxx_36 (A4),

Spino_35 (A4), Stasia_36 (A4), Stink_36 (A4), TG1_40 (BB1), Taquarus_35 (A4), Thanksgivukkah_35 (A4), TinaFeyge_36 (A4), TiroTheta9_35 (A4), Trike_33 (A10), TroyPia_36 (A4), TygerBlood_35 (A4), Ulysses_34 (A4), Wander_35 (A4), Wilbur_35 (A4), Wile_35 (A4), Wizard007_35 (A4), Xena_35 (A4), YoSam321_35 (A4),

Start 90:

- Found in 13 of 601 (2.2%) of genes in pham
- Manual Annotations of this start: 12 of 567
- Called 92.3% of time when present
- Phage (with cluster) where this start called: HaugeAnator_54 (BF), Immanuel3_53 (BF), Kumquat_54 (BF), Olicious_54 (BF), Percastrophe_54 (BF), Romero_54 (BF), RosePharie_55 (BF), ToriToki_54 (BF), Treat_54 (BF), WRightOn_58 (BF), Zeigle_54 (BF), ZooBear_54 (BF),

Start 91:

- Found in 1 of 601 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Manuel_51 (BF),

Start 93:

- Found in 8 of 601 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rooney_71 (BN), Wentworth_71 (BN),

Start 95:

- Found in 42 of 601 (7.0%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 4.8% of time when present
- Phage (with cluster) where this start called: NoPickles_64 (DJ), Zuko_77 (BR),

Start 96:

- Found in 33 of 601 (5.5%) of genes in pham
- Manual Annotations of this start: 3 of 567
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Avazak_66 (DJ), Dennebes_58 (BF), Sixama_175 (DS),

Start 98:

- Found in 167 of 601 (27.8%) of genes in pham
- Manual Annotations of this start: 6 of 567
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Dryad_75 (BN), Gibson_71 (BN), PHTowN_71 (BN), ShakeNBake_71 (BN), Shawty_45 (BB1), Success_13 (singleton), Wilkos_73 (BN), phiBT1_20 (BB1),

Start 100:

- Found in 31 of 601 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 6.5% of time when present
- Phage (with cluster) where this start called: Puginator_37 (BD2), phiCAM_34 (BD3),

Start 105:

- Found in 87 of 601 (14.5%) of genes in pham
- Manual Annotations of this start: 2 of 567
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Caliburn_34 (BD1), Paolo_37 (BD2),

Start 107:

- Found in 58 of 601 (9.7%) of genes in pham
- Manual Annotations of this start: 1 of 567
- Called 1.7% of time when present
- Phage (with cluster) where this start called: Sebastisaurus_45 (BB2),

Summary by clusters:

There are 30 clusters represented in this pham: singleton, DJ, DK, BL, BN, BF, BR, DS, A10, A19, A18, BD4, A3, A2, BD1, A4, BD3, A6, A8, CQ1, BB2, BB1, AB, A7, BD2, GG, CQ2, A5, CT, A20,

Info for manual annotations of cluster A10:

- Start number 75 was manually annotated 6 times for cluster A10.
- Start number 89 was manually annotated 10 times for cluster A10.

Info for manual annotations of cluster A18:

- Start number 86 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A19:

- Start number 87 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 80 was manually annotated 15 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 89 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 66 was manually annotated 11 times for cluster A3.
- Start number 82 was manually annotated 86 times for cluster A3.
- Start number 87 was manually annotated 9 times for cluster A3.
- Start number 89 was manually annotated 5 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 26 was manually annotated 1 time for cluster A4.
- Start number 55 was manually annotated 2 times for cluster A4.
- Start number 71 was manually annotated 1 time for cluster A4.
- Start number 89 was manually annotated 129 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 73 was manually annotated 1 time for cluster A5.
- Start number 81 was manually annotated 24 times for cluster A5.
- Start number 82 was manually annotated 8 times for cluster A5.
- Start number 88 was manually annotated 5 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 82 was manually annotated 23 times for cluster A6.
- Start number 85 was manually annotated 14 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 87 was manually annotated 1 time for cluster A7.
- Start number 89 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 82 was manually annotated 10 times for cluster A8.

Info for manual annotations of cluster AB:

- Start number 83 was manually annotated 3 times for cluster AB.

Info for manual annotations of cluster BB1:

- Start number 79 was manually annotated 2 times for cluster BB1.
- Start number 89 was manually annotated 2 times for cluster BB1.
- Start number 98 was manually annotated 1 time for cluster BB1.

Info for manual annotations of cluster BB2:

- Start number 79 was manually annotated 1 time for cluster BB2.
- Start number 107 was manually annotated 1 time for cluster BB2.

Info for manual annotations of cluster BD1:

- Start number 68 was manually annotated 36 times for cluster BD1.
- Start number 76 was manually annotated 2 times for cluster BD1.
- Start number 78 was manually annotated 5 times for cluster BD1.
- Start number 80 was manually annotated 10 times for cluster BD1.
- Start number 105 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 76 was manually annotated 10 times for cluster BD2.
- Start number 79 was manually annotated 5 times for cluster BD2.
- Start number 80 was manually annotated 14 times for cluster BD2.
- Start number 89 was manually annotated 1 time for cluster BD2.
- Start number 100 was manually annotated 1 time for cluster BD2.
- Start number 105 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 80 was manually annotated 9 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 58 was manually annotated 2 times for cluster BD4.
- Start number 80 was manually annotated 1 time for cluster BD4.

Info for manual annotations of cluster BF:

- Start number 90 was manually annotated 12 times for cluster BF.
- Start number 91 was manually annotated 1 time for cluster BF.
- Start number 96 was manually annotated 1 time for cluster BF.

Info for manual annotations of cluster BL:

- Start number 79 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BN:

- Start number 77 was manually annotated 2 times for cluster BN.
- Start number 93 was manually annotated 2 times for cluster BN.
- Start number 98 was manually annotated 4 times for cluster BN.

Info for manual annotations of cluster BR:

- Start number 87 was manually annotated 1 time for cluster BR.
- Start number 95 was manually annotated 1 time for cluster BR.

Info for manual annotations of cluster CQ1:

- Start number 82 was manually annotated 3 times for cluster CQ1.
- Start number 87 was manually annotated 4 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 82 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CT:

- Start number 53 was manually annotated 2 times for cluster CT.
- Start number 70 was manually annotated 1 time for cluster CT.
- Start number 76 was manually annotated 7 times for cluster CT.
- Start number 81 was manually annotated 16 times for cluster CT.
- Start number 83 was manually annotated 8 times for cluster CT.
- Start number 85 was manually annotated 5 times for cluster CT.
- Start number 86 was manually annotated 3 times for cluster CT.

Info for manual annotations of cluster DJ:

- Start number 61 was manually annotated 2 times for cluster DJ.
- Start number 64 was manually annotated 4 times for cluster DJ.
- Start number 96 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster DK:

- Start number 63 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DS:

- Start number 82 was manually annotated 3 times for cluster DS.
- Start number 96 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster GG:

- Start number 35 was manually annotated 2 times for cluster GG.

Gene Information:

Gene: 8UZL_45 Start: 34790, Stop: 34248, Start Num: 83

Candidate Starts for 8UZL_45:

(Start: 83 @34790 has 11 MA's), (Start: 93 @34763 has 2 MA's), (Start: 96 @34751 has 3 MA's), (104, 34706), (Start: 105 @34697 has 2 MA's), (110, 34673), (118, 34640), (158, 34484), (159, 34478), (189, 34397),

Gene: ACFishhook_40 Start: 28503, Stop: 28093, Start Num: 66

Candidate Starts for ACFishhook_40:

(13, 28701), (Start: 66 @28503 has 11 MA's), (Start: 82 @28476 has 135 MA's), (Start: 98 @28431 has 6 MA's), (131, 28260), (132, 28248),

Gene: AN3_37 Start: 28097, Stop: 27681, Start Num: 80

Candidate Starts for AN3_37:

(8, 28388), (10, 28376), (Start: 80 @28097 has 49 MA's), (132, 27866), (163, 27734), (171, 27713), (177, 27695),

Gene: AN9_40 Start: 28082, Stop: 27666, Start Num: 80

Candidate Starts for AN9_40:

(9, 28370), (Start: 80 @28082 has 49 MA's), (132, 27851), (163, 27719), (171, 27698), (177, 27680),

Gene: ANI8_40 Start: 28082, Stop: 27666, Start Num: 80

Candidate Starts for ANI8_40:

(9, 28370), (Start: 80 @28082 has 49 MA's), (132, 27851), (163, 27719), (171, 27698), (177, 27680),

Gene: Aaronocolus_34 Start: 25685, Stop: 26173, Start Num: 68

Candidate Starts for Aaronocolus_34:

(40, 25637), (Start: 68 @25685 has 36 MA's), (97, 25757), (Start: 105 @25802 has 2 MA's), (125, 25904), (151, 26021), (188, 26141), (200, 26168),

Gene: AbbysRanger_35 Start: 27851, Stop: 27276, Start Num: 89

Candidate Starts for AbbysRanger_35:

(Start: 55 @27881 has 2 MA's), (Start: 89 @27851 has 151 MA's), (164, 27488), (177, 27452), (208, 27383), (213, 27338), (214, 27326),

Gene: Abdiel_35 Start: 27799, Stop: 27323, Start Num: 89

Candidate Starts for Abdiel_35:

(Start: 89 @27799 has 151 MA's), (Start: 98 @27754 has 6 MA's), (125, 27616), (160, 27451), (164, 27439), (190, 27379), (197, 27367),

Gene: Achebe_34 Start: 27864, Stop: 27259, Start Num: 55

Candidate Starts for Achebe_34:

(Start: 55 @27864 has 2 MA's), (Start: 89 @27834 has 151 MA's), (164, 27471), (177, 27435), (208, 27366), (213, 27321), (214, 27309),

Gene: Aflac_63 Start: 46335, Stop: 46781, Start Num: 64

Candidate Starts for Aflac_63:

(33, 46263), (44, 46296), (60, 46326), (Start: 64 @46335 has 4 MA's), (Start: 107 @46467 has 1 MA's), (125, 46560), (146, 46668), (155, 46719),

Gene: Agatha_44 Start: 33075, Stop: 32551, Start Num: 81

Candidate Starts for Agatha_44:

(Start: 55 @33123 has 2 MA's), (57, 33120), (Start: 81 @33075 has 40 MA's), (108, 32976), (118, 32925), (146, 32829), (153, 32790), (163, 32748), (192, 32673), (211, 32631),

Gene: AgentM_32 Start: 27051, Stop: 26542, Start Num: 81

Candidate Starts for AgentM_32:

(Start: 81 @27051 has 40 MA's),

Gene: Aglet_41 Start: 28577, Stop: 28194, Start Num: 82

Candidate Starts for Aglet_41:

(Start: 66 @28604 has 11 MA's), (Start: 82 @28577 has 135 MA's), (Start: 98 @28532 has 6 MA's), (131, 28361), (132, 28349),

Gene: AgronaGT15_40 Start: 28395, Stop: 28012, Start Num: 82
Candidate Starts for AgronaGT15_40:
(Start: 66 @28422 has 11 MA's), (Start: 82 @28395 has 135 MA's), (Start: 95 @28368 has 1 MA's),
(Start: 98 @28350 has 6 MA's), (131, 28179), (132, 28167),

Gene: AikoCarson_45 Start: 33253, Stop: 32798, Start Num: 81
Candidate Starts for AikoCarson_45:
(57, 33298), (Start: 81 @33253 has 40 MA's), (108, 33154), (109, 33139), (134, 33046), (146, 33007),
(153, 32968), (156, 32953), (158, 32947), (178, 32884),

Gene: Airmid_33 Start: 26678, Stop: 26169, Start Num: 82
Candidate Starts for Airmid_33:
(Start: 82 @26678 has 135 MA's),

Gene: Albee_35 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for Albee_35:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208,
27336), (213, 27291), (214, 27279),

Gene: Alberto7_36 Start: 28144, Stop: 27569, Start Num: 89
Candidate Starts for Alberto7_36:
(Start: 89 @28144 has 151 MA's), (164, 27781), (177, 27745), (208, 27676), (213, 27631),

Gene: Alsaber_36 Start: 27554, Stop: 27958, Start Num: 80
Candidate Starts for Alsaber_36:
(Start: 80 @27554 has 49 MA's), (Start: 100 @27608 has 1 MA's), (Start: 105 @27641 has 2 MA's),
(112, 27674), (163, 27935), (165, 27941),

Gene: Alvy_37 Start: 27037, Stop: 27510, Start Num: 80
Candidate Starts for Alvy_37:
(Start: 80 @27037 has 49 MA's), (Start: 98 @27082 has 6 MA's), (Start: 100 @27091 has 1 MA's),
(104, 27115), (112, 27157), (125, 27226), (188, 27478), (194, 27493),

Gene: Amela_35 Start: 28386, Stop: 28790, Start Num: 80
Candidate Starts for Amela_35:
(43, 28323), (Start: 80 @28386 has 49 MA's), (Start: 98 @28431 has 6 MA's), (Start: 100 @28440 has
1 MA's), (104, 28464), (116, 28524), (151, 28707), (163, 28767), (165, 28773),

Gene: Amethyst_34 Start: 26390, Stop: 26875, Start Num: 76
Candidate Starts for Amethyst_34:
(Start: 76 @26390 has 19 MA's), (104, 26474), (Start: 107 @26489 has 1 MA's), (147, 26705), (188,
26843), (194, 26858),

Gene: Amok_45 Start: 33277, Stop: 32822, Start Num: 81
Candidate Starts for Amok_45:
(Start: 81 @33277 has 40 MA's), (108, 33178), (134, 33070), (146, 33031), (153, 32992), (156,
32977), (158, 32971), (178, 32908), (192, 32875),

Gene: AndPeggy_41 Start: 32608, Stop: 32153, Start Num: 81
Candidate Starts for AndPeggy_41:
(5, 32992), (12, 32857), (18, 32806), (25, 32764), (47, 32674), (57, 32653), (Start: 81 @32608 has 40
MA's), (108, 32509), (109, 32494), (118, 32458), (134, 32401), (146, 32362), (150, 32347), (153,
32323), (156, 32308), (178, 32239), (192, 32206),

Gene: Andris_34 Start: 26452, Stop: 26937, Start Num: 76

Candidate Starts for Andris_34:

(Start: 76 @26452 has 19 MA's), (Start: 98 @26503 has 6 MA's), (104, 26536), (Start: 107 @26551 has 1 MA's), (110, 26575), (118, 26608), (140, 26740), (184, 26896), (188, 26905), (194, 26920),

Gene: Animus_34 Start: 26897, Stop: 27370, Start Num: 80

Candidate Starts for Animus_34:

(Start: 80 @26897 has 49 MA's), (Start: 98 @26942 has 6 MA's), (Start: 100 @26951 has 1 MA's), (104, 26975), (112, 27017), (138, 27167), (188, 27338), (194, 27353),

Gene: Annyong_35 Start: 27805, Stop: 27209, Start Num: 89

Candidate Starts for Annyong_35:

(Start: 89 @27805 has 151 MA's), (163, 27445), (164, 27442), (177, 27406), (207, 27340), (208, 27337), (213, 27292), (214, 27280),

Gene: Anthony_36 Start: 26453, Stop: 25938, Start Num: 89

Candidate Starts for Anthony_36:

(Start: 89 @26453 has 151 MA's), (137, 26195), (163, 26093), (164, 26090), (169, 26075), (186, 26036), (201, 26009),

Gene: Anubis_43 Start: 28462, Stop: 28079, Start Num: 82

Candidate Starts for Anubis_43:

(Start: 66 @28489 has 11 MA's), (Start: 82 @28462 has 135 MA's), (Start: 98 @28417 has 6 MA's), (131, 28246), (132, 28234),

Gene: Aphelion_145 Start: 79977, Stop: 80369, Start Num: 82

Candidate Starts for Aphelion_145:

(Start: 82 @79977 has 135 MA's), (117, 80118), (156, 80310), (170, 80358),

Gene: Aragog_32 Start: 27081, Stop: 26572, Start Num: 81

Candidate Starts for Aragog_32:

(Start: 81 @27081 has 40 MA's),

Gene: Archetta_32 Start: 27187, Stop: 26678, Start Num: 81

Candidate Starts for Archetta_32:

(Start: 81 @27187 has 40 MA's),

Gene: Artemis2UCLA_40 Start: 26288, Stop: 25899, Start Num: 85

Candidate Starts for Artemis2UCLA_40:

(Start: 85 @26288 has 19 MA's), (118, 26144), (126, 26099), (132, 26057), (136, 26030),

Gene: Arturo_34 Start: 27863, Stop: 27384, Start Num: 89

Candidate Starts for Arturo_34:

(Start: 89 @27863 has 151 MA's), (156, 27530), (163, 27503),

Gene: Asten_34 Start: 26046, Stop: 26534, Start Num: 68

Candidate Starts for Asten_34:

(16, 25866), (20, 25902), (40, 25998), (Start: 68 @26046 has 36 MA's), (97, 26118), (104, 26154), (115, 26211), (150, 26376), (151, 26382), (188, 26502), (200, 26529),

Gene: Astro_32 Start: 26313, Stop: 25705, Start Num: 82

Candidate Starts for Astro_32:

(Start: 82 @26313 has 135 MA's), (160, 25959), (184, 25896), (206, 25845), (209, 25839),

Gene: AugsMagnumOpus_43 Start: 28568, Stop: 28185, Start Num: 82

Candidate Starts for AugsMagnumOpus_43:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: AvatarAhPeg_36 Start: 28482, Stop: 27874, Start Num: 26

Candidate Starts for AvatarAhPeg_36:

(Start: 26 @28482 has 1 MA's), (Start: 71 @28353 has 1 MA's), (163, 27993), (169, 27975), (182, 27942),

Gene: Avazak_66 Start: 46911, Stop: 47336, Start Num: 96

Candidate Starts for Avazak_66:

(52, 46821), (Start: 96 @46911 has 3 MA's), (Start: 107 @46971 has 1 MA's), (110, 46992), (119, 47028), (125, 47064), (139, 47148), (164, 47256), (182, 47304), (185, 47307), (193, 47328),

Gene: Avle17_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Avle17_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Axym_43 Start: 32972, Stop: 32448, Start Num: 81

Candidate Starts for Axym_43:

(57, 33017), (Start: 81 @32972 has 40 MA's), (108, 32873), (118, 32822), (146, 32726), (153, 32687), (163, 32645), (192, 32570), (211, 32528),

Gene: Azira_41 Start: 32431, Stop: 32018, Start Num: 85

Candidate Starts for Azira_41:

(50, 32494), (Start: 85 @32431 has 19 MA's), (Start: 95 @32401 has 1 MA's), (Start: 96 @32395 has 3 MA's), (Start: 98 @32383 has 6 MA's), (134, 32227), (135, 32221), (151, 32167), (156, 32134), (158, 32128),

Gene: B1_34 Start: 27319, Stop: 26933, Start Num: 82

Candidate Starts for B1_34:

(Start: 82 @27319 has 135 MA's),

Gene: BABullseye_40 Start: 26694, Stop: 26302, Start Num: 82

Candidate Starts for BABullseye_40:

(Start: 82 @26694 has 135 MA's), (118, 26547), (126, 26502), (132, 26460), (136, 26433),

Gene: Baby16_35 Start: 27815, Stop: 27219, Start Num: 89

Candidate Starts for Baby16_35:

(Start: 89 @27815 has 151 MA's), (163, 27455), (164, 27452), (177, 27416), (207, 27350), (208, 27347), (213, 27302), (214, 27290),

Gene: BabyRay_36 Start: 27870, Stop: 27484, Start Num: 82

Candidate Starts for BabyRay_36:

(Start: 82 @27870 has 135 MA's), (129, 27672),

Gene: Backyardigan_35 Start: 27867, Stop: 27271, Start Num: 89

Candidate Starts for Backyardigan_35:

(Start: 55 @27897 has 2 MA's), (Start: 89 @27867 has 151 MA's), (164, 27504), (177, 27468), (208, 27399), (213, 27354), (214, 27342),

Gene: Badger_35 Start: 27835, Stop: 27260, Start Num: 89

Candidate Starts for Badger_35:

(Start: 55 @27865 has 2 MA's), (Start: 89 @27835 has 151 MA's), (164, 27472), (177, 27436), (208, 27367), (213, 27322), (214, 27310),

Gene: BangNhom_36 Start: 28100, Stop: 27660, Start Num: 89

Candidate Starts for BangNhom_36:

(Start: 89 @28100 has 151 MA's), (163, 27740), (164, 27737),

Gene: BarryBee_37 Start: 26056, Stop: 26544, Start Num: 68

Candidate Starts for BarryBee_37:

(16, 25876), (20, 25912), (40, 26008), (Start: 68 @26056 has 36 MA's), (97, 26128), (104, 26164), (Start: 105 @26173 has 2 MA's), (115, 26221), (150, 26386), (151, 26392), (188, 26512), (200, 26539),

Gene: BartholomewSD_37 Start: 27037, Stop: 27510, Start Num: 80

Candidate Starts for BartholomewSD_37:

(Start: 80 @27037 has 49 MA's), (Start: 98 @27082 has 6 MA's), (Start: 100 @27091 has 1 MA's), (104, 27115), (112, 27157), (125, 27226), (188, 27478), (194, 27493),

Gene: Bartimeaus_35 Start: 27806, Stop: 27210, Start Num: 89

Candidate Starts for Bartimeaus_35:

(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: BeardedLady_35 Start: 25938, Stop: 26426, Start Num: 68

Candidate Starts for BeardedLady_35:

(Start: 68 @25938 has 36 MA's), (97, 26010), (Start: 105 @26055 has 2 MA's), (125, 26157), (151, 26274), (188, 26394), (200, 26421),

Gene: Beauxregard13_41 Start: 28603, Stop: 28193, Start Num: 66

Candidate Starts for Beauxregard13_41:

(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's), (131, 28360), (132, 28348),

Gene: BellusTerra_36 Start: 27799, Stop: 27323, Start Num: 89

Candidate Starts for BellusTerra_36:

(Start: 89 @27799 has 151 MA's), (Start: 98 @27754 has 6 MA's), (125, 27616), (160, 27451), (164, 27439), (190, 27379), (197, 27367),

Gene: Benedict_33 Start: 26684, Stop: 26172, Start Num: 82

Candidate Starts for Benedict_33:

(Start: 82 @26684 has 135 MA's),

Gene: BillDoor_44 Start: 32280, Stop: 31822, Start Num: 81

Candidate Starts for BillDoor_44:

(Start: 81 @32280 has 40 MA's), (108, 32181), (109, 32166), (118, 32130), (134, 32073), (146, 32034), (150, 32019), (153, 31995), (156, 31980), (163, 31953), (192, 31878), (200, 31863), (209, 31842), (210, 31839),

Gene: Biskit_46 Start: 32979, Stop: 32512, Start Num: 76

Candidate Starts for Biskit_46:

(Start: 76 @32979 has 19 MA's), (108, 32871), (118, 32820), (134, 32763), (146, 32724), (150, 32709), (153, 32685), (163, 32643), (192, 32568), (198, 32556), (200, 32553), (210, 32529), (211, 32526),

Gene: Blackmoor_35 Start: 27806, Stop: 27210, Start Num: 89

Candidate Starts for Blackmoor_35:

(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: Blinn1_41 Start: 26683, Stop: 26291, Start Num: 82

Candidate Starts for Blinn1_41:

(Start: 82 @26683 has 135 MA's), (118, 26536), (126, 26491), (132, 26449), (136, 26422),

Gene: Blue7_41 Start: 26619, Stop: 26230, Start Num: 82

Candidate Starts for Blue7_41:

(Start: 82 @26619 has 135 MA's), (132, 26388), (136, 26361), (163, 26256),

Gene: BlueBird_37 Start: 27799, Stop: 27413, Start Num: 82

Candidate Starts for BlueBird_37:

(Start: 82 @27799 has 135 MA's), (129, 27601),

Gene: BlueNGold_172 Start: 101916, Stop: 101413, Start Num: 82

Candidate Starts for BlueNGold_172:

(Start: 82 @101916 has 135 MA's), (137, 101640), (146, 101619), (151, 101598), (187, 101478), (200, 101448),

Gene: Bluefalcon_31 Start: 27140, Stop: 26631, Start Num: 81

Candidate Starts for Bluefalcon_31:

(Start: 81 @27140 has 40 MA's),

Gene: Bombshell_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Bombshell_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Bonamassa_32 Start: 26981, Stop: 26472, Start Num: 81

Candidate Starts for Bonamassa_32:

(Start: 81 @26981 has 40 MA's),

Gene: Boopy_175 Start: 101927, Stop: 101424, Start Num: 82

Candidate Starts for Boopy_175:

(Start: 82 @101927 has 135 MA's), (137, 101651), (146, 101630), (151, 101609), (187, 101489), (200, 101459),

Gene: Bovely_34 Start: 25691, Stop: 26179, Start Num: 68

Candidate Starts for Bovely_34:

(40, 25643), (Start: 68 @25691 has 36 MA's), (97, 25763), (Start: 105 @25808 has 2 MA's), (125, 25910), (151, 26027), (188, 26147), (200, 26174),

Gene: Bowden_35 Start: 26947, Stop: 27420, Start Num: 80

Candidate Starts for Bowden_35:

(Start: 80 @26947 has 49 MA's), (Start: 98 @26992 has 6 MA's), (Start: 100 @27001 has 1 MA's), (104, 27025), (112, 27067), (125, 27136), (188, 27388), (194, 27403),

Gene: Brataylor_37 Start: 27039, Stop: 27515, Start Num: 80

Candidate Starts for Brataylor_37:

(40, 26973), (Start: 76 @27033 has 19 MA's), (Start: 80 @27039 has 49 MA's), (104, 27117), (Start: 107 @27132 has 1 MA's), (141, 27327), (164, 27426), (188, 27483), (194, 27498), (200, 27510),

Gene: BreSam8_41 Start: 28569, Stop: 28186, Start Num: 82

Candidate Starts for BreSam8_41:

(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's), (131, 28353), (132, 28341),

Gene: BroPlease_35 Start: 26228, Stop: 26704, Start Num: 80

Candidate Starts for BroPlease_35:

(Start: 80 @26228 has 49 MA's), (Start: 98 @26273 has 6 MA's), (104, 26306), (Start: 105 @26315 has 2 MA's), (109, 26339), (150, 26543), (188, 26672),

Gene: Broseidon_35 Start: 27806, Stop: 27210, Start Num: 89

Candidate Starts for Broseidon_35:

(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: Bruiser_34 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Bruiser_34:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: BryanRecycles_35 Start: 26042, Stop: 26530, Start Num: 68

Candidate Starts for BryanRecycles_35:

(29, 25937), (40, 25994), (Start: 68 @26042 has 36 MA's), (97, 26114), (Start: 105 @26159 has 2 MA's), (125, 26261), (151, 26378), (188, 26498), (200, 26525),

Gene: BubbleTrouble_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for BubbleTrouble_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Bugatti_36 Start: 27799, Stop: 27413, Start Num: 82

Candidate Starts for Bugatti_36:

(Start: 82 @27799 has 135 MA's), (129, 27601),

Gene: Bumblebee11_35 Start: 27867, Stop: 27262, Start Num: 55

Candidate Starts for Bumblebee11_35:

(Start: 55 @27867 has 2 MA's), (Start: 89 @27837 has 151 MA's), (164, 27474), (177, 27438), (208, 27369), (213, 27324), (214, 27312),

Gene: Burger_34 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Burger_34:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Burley_64 Start: 46068, Stop: 46514, Start Num: 64

Candidate Starts for Burley_64:

(36, 46002), (48, 46038), (60, 46059), (Start: 64 @46068 has 4 MA's), (Start: 107 @46197 has 1 MA's), (125, 46290), (146, 46398), (155, 46449),

Gene: Burnsey_44 Start: 33066, Stop: 32542, Start Num: 81

Candidate Starts for Burnsey_44:

(57, 33111), (Start: 81 @33066 has 40 MA's), (108, 32967), (118, 32916), (146, 32820), (153, 32781), (163, 32739), (192, 32664), (211, 32622),

Gene: Button_47 Start: 33224, Stop: 32799, Start Num: 83

Candidate Starts for Button_47:

(11, 33473), (Start: 83 @33224 has 11 MA's), (Start: 95 @33191 has 1 MA's), (108, 33125), (136, 32996), (175, 32849), (192, 32810),

Gene: Buttrmlkdreams_46 Start: 33426, Stop: 32959, Start Num: 76

Candidate Starts for Buttrmlkdreams_46:

(Start: 76 @33426 has 19 MA's), (108, 33318), (118, 33267), (134, 33210), (146, 33171), (150, 33156), (153, 33132), (163, 33090), (192, 33015), (198, 33003), (200, 33000), (210, 32976),

Gene: BuzzBuzz_39 Start: 28574, Stop: 28191, Start Num: 82

Candidate Starts for BuzzBuzz_39:

(Start: 66 @28601 has 11 MA's), (Start: 82 @28574 has 135 MA's), (Start: 95 @28547 has 1 MA's), (Start: 98 @28529 has 6 MA's), (131, 28358), (132, 28346),

Gene: Bxz2_38 Start: 28581, Stop: 28198, Start Num: 82

Candidate Starts for Bxz2_38:

(Start: 66 @28608 has 11 MA's), (Start: 82 @28581 has 135 MA's), (Start: 95 @28554 has 1 MA's), (Start: 98 @28536 has 6 MA's), (131, 28365), (132, 28353),

Gene: C3_35 Start: 28082, Stop: 27666, Start Num: 80

Candidate Starts for C3_35:

(9, 28370), (Start: 80 @28082 has 49 MA's), (132, 27851), (163, 27719), (171, 27698), (177, 27680),

Gene: Caelakin_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Caelakin_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Caelum_36 Start: 26653, Stop: 27126, Start Num: 80

Candidate Starts for Caelum_36:

(Start: 80 @26653 has 49 MA's), (Start: 98 @26698 has 6 MA's), (Start: 100 @26707 has 1 MA's), (104, 26731), (Start: 105 @26740 has 2 MA's), (112, 26773), (138, 26923), (150, 26968), (188, 27094), (191, 27103), (194, 27109),

Gene: Caliburn_34 Start: 25785, Stop: 26156, Start Num: 105

Candidate Starts for Caliburn_34:

(40, 25620), (Start: 68 @25668 has 36 MA's), (97, 25740), (Start: 105 @25785 has 2 MA's), (125, 25887), (151, 26004), (188, 26124), (200, 26151),

Gene: Camperdownii_34 Start: 27498, Stop: 26902, Start Num: 89

Candidate Starts for Camperdownii_34:

(Start: 89 @27498 has 151 MA's), (163, 27138), (164, 27135), (168, 27123), (177, 27099), (208, 27030), (213, 26985), (214, 26973),

Gene: Carsonalex_47 Start: 33034, Stop: 32510, Start Num: 81

Candidate Starts for Carsonalex_47:

(57, 33079), (Start: 81 @33034 has 40 MA's), (108, 32935), (118, 32884), (146, 32788), (153, 32749), (163, 32707), (192, 32632), (211, 32590),

Gene: Caviar_35 Start: 27809, Stop: 27381, Start Num: 89

Candidate Starts for Caviar_35:

(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: Celery_38 Start: 27479, Stop: 27883, Start Num: 80

Candidate Starts for Celery_38:

(Start: 80 @27479 has 49 MA's), (Start: 98 @27524 has 6 MA's), (Start: 100 @27533 has 1 MA's), (104, 27557), (Start: 105 @27566 has 2 MA's), (112, 27599), (151, 27800), (163, 27860), (165, 27866),

Gene: Celeste_35 Start: 26508, Stop: 26984, Start Num: 80

Candidate Starts for Celeste_35:

(40, 26442), (Start: 76 @26502 has 19 MA's), (Start: 80 @26508 has 49 MA's), (104, 26586), (Start: 107 @26601 has 1 MA's), (141, 26796), (164, 26895), (188, 26952),

Gene: CentreCat_35 Start: 27807, Stop: 27211, Start Num: 89

Candidate Starts for CentreCat_35:

(Start: 89 @27807 has 151 MA's), (163, 27447), (164, 27444), (177, 27408), (207, 27342), (208, 27339), (213, 27294), (214, 27282),

Gene: Cerulean_37 Start: 28101, Stop: 27661, Start Num: 89

Candidate Starts for Cerulean_37:

(Start: 89 @28101 has 151 MA's), (163, 27741), (164, 27738),

Gene: Chadwick_34 Start: 26587, Stop: 26075, Start Num: 82

Candidate Starts for Chadwick_34:

(Start: 82 @26587 has 135 MA's),

Gene: ChampagnePapi_37 Start: 28100, Stop: 27660, Start Num: 89

Candidate Starts for ChampagnePapi_37:

(Start: 89 @28100 has 151 MA's), (163, 27740), (164, 27737),

Gene: Chaph_35 Start: 27815, Stop: 27219, Start Num: 89

Candidate Starts for Chaph_35:

(Start: 89 @27815 has 151 MA's), (163, 27455), (164, 27452), (177, 27416), (207, 27350), (208, 27347), (213, 27302), (214, 27290),

Gene: Chucky_34 Start: 26060, Stop: 26548, Start Num: 68

Candidate Starts for Chucky_34:

(16, 25880), (20, 25916), (40, 26012), (Start: 68 @26060 has 36 MA's), (97, 26132), (104, 26168), (Start: 105 @26177 has 2 MA's), (115, 26225), (150, 26390), (151, 26396), (188, 26516), (200, 26543),

Gene: Chupacabra_35 Start: 27785, Stop: 27258, Start Num: 89

Candidate Starts for Chupacabra_35:

(Start: 89 @27785 has 151 MA's), (159, 27440), (163, 27425),

Gene: Cici_35 Start: 27852, Stop: 27256, Start Num: 89

Candidate Starts for Cici_35:

(Start: 55 @27882 has 2 MA's), (Start: 89 @27852 has 151 MA's), (164, 27489), (177, 27453), (207, 27387), (208, 27384), (213, 27339), (214, 27327),

Gene: Cindaradix_34 Start: 27606, Stop: 27010, Start Num: 89

Candidate Starts for Cindaradix_34:

(Start: 89 @27606 has 151 MA's), (Start: 98 @27561 has 6 MA's), (104, 27528), (121, 27432), (177, 27207), (208, 27138), (213, 27093), (214, 27081),

Gene: Cintron_35 Start: 27870, Stop: 27274, Start Num: 89

Candidate Starts for Cintron_35:

(Start: 89 @27870 has 151 MA's), (163, 27510), (164, 27507), (168, 27495), (177, 27471), (208, 27402), (213, 27357), (214, 27345),

Gene: Citius_35 Start: 27819, Stop: 27223, Start Num: 89

Candidate Starts for Citius_35:

(Start: 89 @27819 has 151 MA's), (163, 27459), (164, 27456), (177, 27420), (207, 27354), (208, 27351), (213, 27306), (214, 27294),

Gene: Clarenza_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for Clarenza_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208, 27333), (213, 27288), (214, 27276),

Gene: Cleo_39 Start: 32050, Stop: 31601, Start Num: 70

Candidate Starts for Cleo_39:

(Start: 70 @32050 has 1 MA's), (Start: 86 @32023 has 4 MA's), (Start: 95 @31993 has 1 MA's), (Start: 96 @31987 has 3 MA's), (Start: 98 @31975 has 6 MA's), (144, 31786), (150, 31765), (151, 31759), (187, 31639),

Gene: CloudWang3_40 Start: 26388, Stop: 25999, Start Num: 85

Candidate Starts for CloudWang3_40:

(Start: 85 @26388 has 19 MA's), (118, 26244), (126, 26199), (132, 26157), (136, 26130),

Gene: Cocoaberry_35 Start: 27808, Stop: 27212, Start Num: 89

Candidate Starts for Cocoaberry_35:

(Start: 89 @27808 has 151 MA's), (163, 27448), (164, 27445), (177, 27409), (207, 27343), (208, 27340), (213, 27295), (214, 27283),

Gene: Commander_36 Start: 27803, Stop: 27324, Start Num: 89

Candidate Starts for Commander_36:

(Start: 89 @27803 has 151 MA's), (160, 27452), (164, 27440), (190, 27380), (197, 27368),

Gene: Conan_36 Start: 27448, Stop: 27852, Start Num: 80

Candidate Starts for Conan_36:

(16, 27253), (20, 27289), (43, 27388), (Start: 80 @27448 has 49 MA's), (Start: 100 @27502 has 1 MA's), (Start: 105 @27535 has 2 MA's), (112, 27568), (163, 27829), (165, 27835),

Gene: Connomayer_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Connomayer_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Conspiracy_32 Start: 26881, Stop: 26372, Start Num: 81
Candidate Starts for Conspiracy_32:
(Start: 81 @26881 has 40 MA's),

Gene: Coog_32 Start: 27021, Stop: 26512, Start Num: 81
Candidate Starts for Coog_32:
(Start: 81 @27021 has 40 MA's),

Gene: Cookiedough_40 Start: 26610, Stop: 26218, Start Num: 82
Candidate Starts for Cookiedough_40:
(Start: 82 @26610 has 135 MA's), (118, 26463), (126, 26418), (132, 26376), (136, 26349),

Gene: Cozz_42 Start: 32663, Stop: 32139, Start Num: 81
Candidate Starts for Cozz_42:
(Start: 55 @32711 has 2 MA's), (57, 32708), (Start: 81 @32663 has 40 MA's), (108, 32564), (118, 32513), (146, 32417), (153, 32378), (163, 32336), (192, 32261), (211, 32219),

Gene: Cuco_32 Start: 26980, Stop: 26471, Start Num: 81
Candidate Starts for Cuco_32:
(Start: 81 @26980 has 40 MA's),

Gene: Cucurbita_145 Start: 80440, Stop: 80829, Start Num: 87
Candidate Starts for Cucurbita_145:
(Start: 87 @80440 has 16 MA's), (117, 80578), (164, 80800), (170, 80818),

Gene: Cullens_41 Start: 28575, Stop: 28192, Start Num: 82
Candidate Starts for Cullens_41:
(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Culver_146 Start: 78704, Stop: 79093, Start Num: 87
Candidate Starts for Culver_146:
(Start: 87 @78704 has 16 MA's), (117, 78842), (164, 79064), (170, 79082),

Gene: D29_36.1 Start: 27983, Stop: 27597, Start Num: 80
Candidate Starts for D29_36.1:
(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: D32_40 Start: 27983, Stop: 27597, Start Num: 80
Candidate Starts for D32_40:
(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: DBQu4n_40 Start: 27983, Stop: 27597, Start Num: 80
Candidate Starts for DBQu4n_40:
(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: DaHudson_41 Start: 28568, Stop: 28185, Start Num: 82
Candidate Starts for DaHudson_41:
(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: Daishi_39 Start: 27415, Stop: 27032, Start Num: 82

Candidate Starts for Daishi_39:

(Start: 66 @27442 has 11 MA's), (Start: 82 @27415 has 135 MA's), (Start: 95 @27388 has 1 MA's),
(Start: 98 @27370 has 6 MA's), (131, 27199), (132, 27187),

Gene: Danforth_31 Start: 26198, Stop: 25686, Start Num: 82

Candidate Starts for Danforth_31:

(Start: 82 @26198 has 135 MA's), (132, 25967), (169, 25817), (184, 25781),

Gene: Danzina_36 Start: 26809, Stop: 27285, Start Num: 80

Candidate Starts for Danzina_36:

(40, 26743), (Start: 76 @26803 has 19 MA's), (Start: 80 @26809 has 49 MA's), (104, 26887), (Start:
107 @26902 has 1 MA's), (141, 27097), (164, 27196), (188, 27253), (194, 27268), (200, 27280),

Gene: Dattran_36 Start: 26615, Stop: 27091, Start Num: 80

Candidate Starts for Dattran_36:

(40, 26549), (Start: 76 @26609 has 19 MA's), (Start: 80 @26615 has 49 MA's), (104, 26693), (Start:
107 @26708 has 1 MA's), (141, 26903), (164, 27002), (188, 27059),

Gene: Datway_35 Start: 27823, Stop: 27227, Start Num: 89

Candidate Starts for Datway_35:

(Start: 55 @27853 has 2 MA's), (Start: 89 @27823 has 151 MA's), (164, 27460), (177, 27424), (208,
27355), (213, 27310), (214, 27298),

Gene: Daudau_35 Start: 26779, Stop: 27237, Start Num: 79

Candidate Starts for Daudau_35:

(54, 26740), (Start: 79 @26779 has 9 MA's), (Start: 98 @26824 has 6 MA's), (104, 26857), (Start: 105
@26866 has 2 MA's), (106, 26869), (150, 27079), (151, 27085), (156, 27118), (188, 27205), (194,
27220),

Gene: Deano_35 Start: 27812, Stop: 27216, Start Num: 89

Candidate Starts for Deano_35:

(Start: 89 @27812 has 151 MA's), (163, 27452), (164, 27449), (177, 27413), (207, 27347), (208,
27344), (213, 27299), (214, 27287),

Gene: Dennebes_58 Start: 29550, Stop: 29158, Start Num: 96

Candidate Starts for Dennebes_58:

(Start: 90 @29577 has 12 MA's), (Start: 96 @29550 has 3 MA's), (104, 29505), (147, 29295),

Gene: Dexers_34 Start: 27476, Stop: 27880, Start Num: 80

Candidate Starts for Dexers_34:

(Start: 80 @27476 has 49 MA's), (Start: 100 @27530 has 1 MA's), (Start: 105 @27563 has 2 MA's),
(112, 27596), (163, 27857), (165, 27863),

Gene: Dhanush_35 Start: 27807, Stop: 27211, Start Num: 89

Candidate Starts for Dhanush_35:

(Start: 89 @27807 has 151 MA's), (163, 27447), (164, 27444), (172, 27423), (177, 27408), (207,
27342), (208, 27339), (213, 27294), (214, 27282),

Gene: Diane_34 Start: 26663, Stop: 27148, Start Num: 76

Candidate Starts for Diane_34:

(Start: 76 @26663 has 19 MA's), (104, 26747), (Start: 107 @26762 has 1 MA's), (147, 26978), (188, 27116), (194, 27131),

Gene: Dieselweasel_41 Start: 28578, Stop: 28195, Start Num: 82

Candidate Starts for Dieselweasel_41:

(Start: 66 @28605 has 11 MA's), (Start: 82 @28578 has 135 MA's), (Start: 98 @28533 has 6 MA's), (131, 28362), (132, 28350),

Gene: DirtyDunning_35 Start: 27843, Stop: 27268, Start Num: 89

Candidate Starts for DirtyDunning_35:

(Start: 89 @27843 has 151 MA's), (164, 27480), (177, 27444), (208, 27375), (213, 27330), (214, 27318),

Gene: Discoknowium_32 Start: 27090, Stop: 26581, Start Num: 81

Candidate Starts for Discoknowium_32:

(Start: 81 @27090 has 40 MA's),

Gene: Dixon_32 Start: 26307, Stop: 25699, Start Num: 82

Candidate Starts for Dixon_32:

(Start: 82 @26307 has 135 MA's), (160, 25953), (184, 25890), (206, 25839), (209, 25833),

Gene: DontArgue_35 Start: 26801, Stop: 26325, Start Num: 89

Candidate Starts for DontArgue_35:

(23, 26966), (Start: 89 @26801 has 151 MA's), (Start: 98 @26756 has 6 MA's), (104, 26723), (Start: 105 @26714 has 2 MA's), (106, 26711), (146, 26525), (159, 26459), (163, 26444), (169, 26426),

Gene: Dorothea_40 Start: 26617, Stop: 26225, Start Num: 82

Candidate Starts for Dorothea_40:

(Start: 82 @26617 has 135 MA's), (118, 26470), (126, 26425), (132, 26383), (136, 26356),

Gene: Drake94_34 Start: 26656, Stop: 26072, Start Num: 89

Candidate Starts for Drake94_34:

(19, 26851), (Start: 89 @26656 has 151 MA's), (163, 26296), (172, 26278),

Gene: Dre3_39 Start: 31766, Stop: 31344, Start Num: 86

Candidate Starts for Dre3_39:

(Start: 86 @31766 has 4 MA's), (Start: 95 @31736 has 1 MA's), (Start: 96 @31730 has 3 MA's), (Start: 98 @31718 has 6 MA's), (144, 31529), (150, 31508), (151, 31502), (187, 31382),

Gene: DroogsArmy_36 Start: 29992, Stop: 29501, Start Num: 89

Candidate Starts for DroogsArmy_36:

(Start: 89 @29992 has 151 MA's), (121, 29818), (163, 29632), (164, 29629), (199, 29551), (202, 29548),

Gene: Druantia_35 Start: 27807, Stop: 27211, Start Num: 89

Candidate Starts for Druantia_35:

(Start: 89 @27807 has 151 MA's), (163, 27447), (164, 27444), (177, 27408), (207, 27342), (208, 27339), (213, 27294), (214, 27282),

Gene: Dryad_75 Start: 51427, Stop: 51068, Start Num: 98

Candidate Starts for Dryad_75:

(Start: 77 @51487 has 2 MA's), (Start: 98 @51427 has 6 MA's), (104, 51394), (145, 51175),

Gene: Dublin_31 Start: 26952, Stop: 26440, Start Num: 81

Candidate Starts for Dublin_31:

(Start: 81 @26952 has 40 MA's), (163, 26583),

Gene: Duplo_40 Start: 28021, Stop: 27635, Start Num: 80

Candidate Starts for Duplo_40:

(Start: 80 @28021 has 49 MA's), (132, 27790),

Gene: DustyMartin_39 Start: 27581, Stop: 27105, Start Num: 89

Candidate Starts for DustyMartin_39:

(Start: 66 @27617 has 11 MA's), (Start: 89 @27581 has 151 MA's), (Start: 98 @27536 has 6 MA's), (104, 27503), (Start: 105 @27494 has 2 MA's), (106, 27491), (159, 27239), (163, 27224), (169, 27206),

Gene: Dwayne_34 Start: 26047, Stop: 26535, Start Num: 68

Candidate Starts for Dwayne_34:

(16, 25867), (20, 25903), (40, 25999), (Start: 68 @26047 has 36 MA's), (97, 26119), (104, 26155), (Start: 105 @26164 has 2 MA's), (115, 26212), (150, 26377), (151, 26383), (188, 26503), (200, 26530),

Gene: ELB20_33 Start: 27045, Stop: 27530, Start Num: 76

Candidate Starts for ELB20_33:

(Start: 76 @27045 has 19 MA's), (104, 27129), (Start: 107 @27144 has 1 MA's), (118, 27201), (140, 27333), (150, 27372), (188, 27498), (194, 27513),

Gene: Eagle_35 Start: 27823, Stop: 27347, Start Num: 89

Candidate Starts for Eagle_35:

(Start: 89 @27823 has 151 MA's), (Start: 98 @27778 has 6 MA's), (125, 27640), (160, 27475), (164, 27463), (190, 27403), (197, 27391),

Gene: Eapen_35 Start: 27802, Stop: 27206, Start Num: 89

Candidate Starts for Eapen_35:

(Start: 89 @27802 has 151 MA's), (163, 27442), (164, 27439), (177, 27403), (207, 27337), (208, 27334), (213, 27289), (214, 27277),

Gene: Eddasa_35 Start: 26042, Stop: 26530, Start Num: 68

Candidate Starts for Eddasa_35:

(29, 25937), (40, 25994), (Start: 68 @26042 has 36 MA's), (97, 26114), (Start: 105 @26159 has 2 MA's), (125, 26261), (151, 26378), (188, 26498), (200, 26525),

Gene: Edison31_36 Start: 28017, Stop: 27478, Start Num: 75

Candidate Starts for Edison31_36:

(Start: 75 @28017 has 6 MA's), (159, 27660), (163, 27645),

Gene: Ejemplo_33 Start: 25988, Stop: 26476, Start Num: 68

Candidate Starts for Ejemplo_33:

(18, 25820), (39, 25937), (Start: 68 @25988 has 36 MA's), (97, 26060), (104, 26096), (Start: 105 @26105 has 2 MA's), (115, 26153), (150, 26318), (151, 26324), (188, 26444), (200, 26471),

Gene: ElGato_36 Start: 27112, Stop: 27516, Start Num: 80

Candidate Starts for ElGato_36:

(16, 26917), (43, 27052), (Start: 80 @27112 has 49 MA's), (Start: 100 @27166 has 1 MA's), (Start: 105 @27199 has 2 MA's), (112, 27232), (163, 27493), (165, 27499),

Gene: EITiger69_33 Start: 26682, Stop: 26170, Start Num: 82
Candidate Starts for EITiger69_33:
(Start: 82 @26682 has 135 MA's),

Gene: Elliott_44 Start: 32961, Stop: 32437, Start Num: 81
Candidate Starts for Elliott_44:
(57, 33006), (Start: 81 @32961 has 40 MA's), (108, 32862), (118, 32811), (133, 32766), (146, 32715),
(153, 32676), (163, 32634), (192, 32559), (211, 32517),

Gene: Emaanora_37 Start: 26005, Stop: 26493, Start Num: 68
Candidate Starts for Emaanora_37:
(16, 25825), (20, 25861), (40, 25957), (Start: 68 @26005 has 36 MA's), (97, 26077), (104, 26113),
(Start: 105 @26122 has 2 MA's), (115, 26170), (150, 26335), (151, 26341), (188, 26461), (200,
26488),

Gene: Emalyn_43 Start: 32069, Stop: 31614, Start Num: 81
Candidate Starts for Emalyn_43:
(57, 32114), (Start: 81 @32069 has 40 MA's), (108, 31970), (134, 31862), (146, 31823), (153, 31784),
(156, 31769), (158, 31763), (178, 31700), (192, 31667),

Gene: EnochSoames_37 Start: 26037, Stop: 26525, Start Num: 68
Candidate Starts for EnochSoames_37:
(29, 25932), (40, 25989), (Start: 68 @26037 has 36 MA's), (97, 26109), (Start: 105 @26154 has 2
MA's), (125, 26256), (151, 26373), (188, 26493), (200, 26520),

Gene: EpicPhail_41 Start: 28576, Stop: 28193, Start Num: 82
Candidate Starts for EpicPhail_41:
(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's),
(131, 28360), (132, 28348),

Gene: Eris_34 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for Eris_34:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208,
27336), (213, 27291), (214, 27279),

Gene: Eros_35 Start: 27806, Stop: 27210, Start Num: 89
Candidate Starts for Eros_35:
(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208,
27338), (213, 27293), (214, 27281),

Gene: Esperer_34 Start: 25504, Stop: 25992, Start Num: 68
Candidate Starts for Esperer_34:
(40, 25456), (Start: 68 @25504 has 36 MA's), (97, 25576), (Start: 105 @25621 has 2 MA's), (125,
25723), (151, 25840), (188, 25960), (200, 25987),

Gene: Eurydice_36 Start: 27798, Stop: 27322, Start Num: 89
Candidate Starts for Eurydice_36:
(Start: 89 @27798 has 151 MA's), (Start: 98 @27753 has 6 MA's), (125, 27615), (160, 27450), (164,
27438), (190, 27378), (197, 27366),

Gene: Expelliarmus_31 Start: 26184, Stop: 25672, Start Num: 82
Candidate Starts for Expelliarmus_31:

(Start: 82 @26184 has 135 MA's), (132, 25953), (169, 25803), (184, 25767),

Gene: FF47_44A Start: 34701, Stop: 34159, Start Num: 83

Candidate Starts for FF47_44A:

(Start: 83 @34701 has 11 MA's), (Start: 93 @34674 has 2 MA's), (Start: 96 @34662 has 3 MA's), (Start: 105 @34608 has 2 MA's), (110, 34584), (118, 34551), (147, 34452), (158, 34395), (189, 34308),

Gene: Farber_41 Start: 28569, Stop: 28186, Start Num: 82

Candidate Starts for Farber_41:

(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's), (131, 28353), (132, 28341),

Gene: Fernando_41 Start: 28575, Stop: 28192, Start Num: 82

Candidate Starts for Fernando_41:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Florean_35 Start: 27803, Stop: 27207, Start Num: 89

Candidate Starts for Florean_35:

(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208, 27335), (213, 27290), (214, 27278),

Gene: Flux_35 Start: 27806, Stop: 27210, Start Num: 89

Candidate Starts for Flux_35:

(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: ForGetIt_32 Start: 26906, Stop: 26397, Start Num: 81

Candidate Starts for ForGetIt_32:

(Start: 81 @26906 has 40 MA's),

Gene: Fred313_36 Start: 27551, Stop: 27165, Start Num: 82

Candidate Starts for Fred313_36:

(Start: 82 @27551 has 135 MA's), (129, 27353),

Gene: Fribs8_40 Start: 32159, Stop: 31746, Start Num: 85

Candidate Starts for Fribs8_40:

(Start: 85 @32159 has 19 MA's), (Start: 95 @32129 has 1 MA's), (Start: 96 @32123 has 3 MA's), (Start: 98 @32111 has 6 MA's), (134, 31955), (151, 31895), (157, 31859), (164, 31832), (196, 31760),

Gene: Funston_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Funston_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: GMA2_70 Start: 73346, Stop: 72861, Start Num: 79

Candidate Starts for GMA2_70:

(67, 73370), (Start: 79 @73346 has 9 MA's), (Start: 95 @73307 has 1 MA's), (Start: 96 @73301 has 3 MA's), (161, 72983), (164, 72974), (188, 72914), (195, 72896),

Gene: GTE2_36 Start: 32665, Stop: 32207, Start Num: 81

Candidate Starts for GTE2_36:

(57, 32710), (Start: 81 @32665 has 40 MA's), (108, 32566), (109, 32551), (118, 32515), (134, 32458), (146, 32419), (153, 32380), (156, 32365), (163, 32338), (192, 32263), (200, 32248), (209, 32227), (210, 32224),

Gene: Gadost_35 Start: 27808, Stop: 27212, Start Num: 89

Candidate Starts for Gadost_35:

(Start: 89 @27808 has 151 MA's), (163, 27448), (164, 27445), (177, 27409), (207, 27343), (208, 27340), (213, 27295), (214, 27283),

Gene: Gemma_40 Start: 28397, Stop: 28014, Start Num: 82

Candidate Starts for Gemma_40:

(13, 28625), (Start: 66 @28424 has 11 MA's), (Start: 82 @28397 has 135 MA's), (Start: 98 @28352 has 6 MA's), (131, 28181), (132, 28169),

Gene: George_31 Start: 26981, Stop: 26472, Start Num: 81

Candidate Starts for George_31:

(Start: 81 @26981 has 40 MA's),

Gene: Ghouboy_32 Start: 27221, Stop: 26715, Start Num: 88

Candidate Starts for Ghouboy_32:

(Start: 88 @27221 has 5 MA's),

Gene: GiKK_49 Start: 33554, Stop: 33129, Start Num: 83

Candidate Starts for GiKK_49:

(Start: 83 @33554 has 11 MA's), (Start: 95 @33521 has 1 MA's), (108, 33455), (136, 33326), (175, 33179), (192, 33140),

Gene: Gibbous_39 Start: 31766, Stop: 31344, Start Num: 86

Candidate Starts for Gibbous_39:

(Start: 86 @31766 has 4 MA's), (Start: 95 @31736 has 1 MA's), (Start: 96 @31730 has 3 MA's), (Start: 98 @31718 has 6 MA's), (144, 31529), (150, 31508), (151, 31502), (187, 31382),

Gene: Gibson_71 Start: 50674, Stop: 50318, Start Num: 98

Candidate Starts for Gibson_71:

(Start: 77 @50734 has 2 MA's), (Start: 93 @50698 has 2 MA's), (Start: 96 @50686 has 3 MA's), (Start: 98 @50674 has 6 MA's), (99, 50668), (101, 50653), (Start: 105 @50632 has 2 MA's), (133, 50476), (137, 50452), (148, 50413), (149, 50410), (159, 50356), (161, 50347),

Gene: GingkoMaracino_41 Start: 28489, Stop: 28079, Start Num: 66

Candidate Starts for GingkoMaracino_41:

(Start: 66 @28489 has 11 MA's), (Start: 82 @28462 has 135 MA's), (Start: 98 @28417 has 6 MA's), (131, 28246), (132, 28234),

Gene: GirlDinner_34 Start: 26398, Stop: 26871, Start Num: 80

Candidate Starts for GirlDinner_34:

(Start: 80 @26398 has 49 MA's), (Start: 98 @26443 has 6 MA's), (Start: 100 @26452 has 1 MA's), (104, 26476), (112, 26518), (138, 26668), (188, 26839), (194, 26854),

Gene: Gladiator_40 Start: 26599, Stop: 26207, Start Num: 82

Candidate Starts for Gladiator_40:

(Start: 82 @26599 has 135 MA's), (118, 26452), (126, 26407), (132, 26365), (136, 26338),

Gene: Goby_34 Start: 26511, Stop: 26990, Start Num: 78

Candidate Starts for Goby_34:

(Start: 78 @26511 has 5 MA's), (104, 26592), (Start: 107 @26607 has 1 MA's), (141, 26802), (188, 26958), (194, 26973),

Gene: GodonK_189 Start: 98192, Stop: 97662, Start Num: 63

Candidate Starts for GodonK_189:

(Start: 63 @98192 has 2 MA's), (67, 98186), (Start: 96 @98117 has 3 MA's), (109, 98039), (146, 97868), (151, 97847), (164, 97784), (181, 97742), (187, 97730), (205, 97688),

Gene: Godpower_35 Start: 26506, Stop: 26985, Start Num: 78

Candidate Starts for Godpower_35:

(Start: 78 @26506 has 5 MA's), (104, 26587), (Start: 107 @26602 has 1 MA's), (141, 26797), (188, 26953), (194, 26968),

Gene: GoldHunter_45 Start: 33075, Stop: 32551, Start Num: 81

Candidate Starts for GoldHunter_45:

(Start: 55 @33123 has 2 MA's), (57, 33120), (Start: 81 @33075 has 40 MA's), (108, 32976), (118, 32925), (146, 32829), (153, 32790), (163, 32748), (192, 32673),

Gene: Goose_36 Start: 27589, Stop: 27062, Start Num: 89

Candidate Starts for Goose_36:

(Start: 89 @27589 has 151 MA's), (159, 27244), (163, 27229),

Gene: GreenWeasel_36 Start: 26199, Stop: 26711, Start Num: 58

Candidate Starts for GreenWeasel_36:

(40, 26163), (Start: 58 @26199 has 2 MA's), (Start: 80 @26235 has 49 MA's), (Start: 98 @26280 has 6 MA's), (104, 26313), (Start: 105 @26322 has 2 MA's), (109, 26346), (150, 26550), (188, 26679),

Gene: Grif_41 Start: 28650, Stop: 28267, Start Num: 82

Candidate Starts for Grif_41:

(Start: 66 @28677 has 11 MA's), (Start: 82 @28650 has 135 MA's), (Start: 98 @28605 has 6 MA's), (131, 28434), (132, 28422),

Gene: Groundhog_31 Start: 26278, Stop: 25670, Start Num: 82

Candidate Starts for Groundhog_31:

(Start: 82 @26278 has 135 MA's), (160, 25924), (184, 25861), (206, 25810), (209, 25804),

Gene: Groupthink_41 Start: 28401, Stop: 28018, Start Num: 82

Candidate Starts for Groupthink_41:

(13, 28629), (Start: 66 @28428 has 11 MA's), (Start: 82 @28401 has 135 MA's), (Start: 98 @28356 has 6 MA's), (131, 28185), (132, 28173),

Gene: Grub_41 Start: 28595, Stop: 28185, Start Num: 66

Candidate Starts for Grub_41:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: Grum1_41 Start: 28602, Stop: 28192, Start Num: 66

Candidate Starts for Grum1_41:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Gruunaga_40 Start: 26598, Stop: 26206, Start Num: 82

Candidate Starts for Gruunaga_40:

(Start: 82 @26598 has 135 MA's), (118, 26451), (126, 26406), (132, 26364), (136, 26337),

Gene: GtownJaz_41 Start: 28577, Stop: 28194, Start Num: 82

Candidate Starts for GtownJaz_41:

(Start: 66 @28604 has 11 MA's), (Start: 82 @28577 has 135 MA's), (Start: 98 @28532 has 6 MA's), (131, 28361), (132, 28349),

Gene: HINdeR_35 Start: 29947, Stop: 29549, Start Num: 89

Candidate Starts for HINdeR_35:

(Start: 89 @29947 has 151 MA's), (132, 29719), (150, 29653), (163, 29587), (173, 29557),

Gene: Haizum_36 Start: 26732, Stop: 27217, Start Num: 76

Candidate Starts for Haizum_36:

(Start: 76 @26732 has 19 MA's), (104, 26816), (Start: 107 @26831 has 1 MA's), (147, 27047), (188, 27185), (194, 27200),

Gene: HamSlice_34 Start: 27802, Stop: 27206, Start Num: 89

Candidate Starts for HamSlice_34:

(Start: 89 @27802 has 151 MA's), (163, 27442), (177, 27403), (207, 27337), (208, 27334), (213, 27289), (214, 27277),

Gene: Hammer_40 Start: 26429, Stop: 26040, Start Num: 82

Candidate Starts for Hammer_40:

(Start: 82 @26429 has 135 MA's), (132, 26198), (136, 26171), (163, 26066),

Gene: Hank144_36 Start: 26811, Stop: 27266, Start Num: 89

Candidate Starts for Hank144_36:

(Start: 89 @26811 has 151 MA's), (Start: 96 @26844 has 3 MA's), (Start: 98 @26856 has 6 MA's), (104, 26889), (Start: 105 @26898 has 2 MA's), (151, 27117), (188, 27234), (194, 27249),

Gene: Happiness_35 Start: 27809, Stop: 27213, Start Num: 89

Candidate Starts for Happiness_35:

(Start: 89 @27809 has 151 MA's), (163, 27449), (164, 27446), (177, 27410), (207, 27344), (208, 27341), (213, 27296), (214, 27284),

Gene: HashRod_41 Start: 28574, Stop: 28191, Start Num: 82

Candidate Starts for HashRod_41:

(Start: 66 @28601 has 11 MA's), (Start: 82 @28574 has 135 MA's), (Start: 95 @28547 has 1 MA's), (Start: 98 @28529 has 6 MA's), (131, 28358), (132, 28346),

Gene: HaugeAnator_54 Start: 29438, Stop: 29022, Start Num: 90

Candidate Starts for HaugeAnator_54:

(67, 29480), (Start: 90 @29438 has 12 MA's), (Start: 107 @29351 has 1 MA's), (122, 29255), (124, 29252), (126, 29246), (144, 29168),

Gene: HaveUMetTed_41 Start: 28394, Stop: 28011, Start Num: 82

Candidate Starts for HaveUMetTed_41:

(Start: 66 @28421 has 11 MA's), (Start: 82 @28394 has 135 MA's), (Start: 98 @28349 has 6 MA's), (131, 28178), (132, 28166),

Gene: Heathen_36 Start: 27607, Stop: 27221, Start Num: 82

Candidate Starts for Heathen_36:

(Start: 82 @27607 has 135 MA's), (129, 27409),

Gene: HelDan_36 Start: 27859, Stop: 27473, Start Num: 82

Candidate Starts for HelDan_36:

(Start: 82 @27859 has 135 MA's), (129, 27661),

Gene: Heliosoles_40 Start: 28401, Stop: 28018, Start Num: 82

Candidate Starts for Heliosoles_40:

(13, 28632), (Start: 66 @28428 has 11 MA's), (Start: 82 @28401 has 135 MA's), (Start: 98 @28356 has 6 MA's), (131, 28185), (132, 28173),

Gene: Hercules11_41 Start: 28611, Stop: 28201, Start Num: 66

Candidate Starts for Hercules11_41:

(Start: 66 @28611 has 11 MA's), (Start: 82 @28584 has 135 MA's), (Start: 98 @28539 has 6 MA's), (131, 28368), (132, 28356),

Gene: Hexamo_40 Start: 26376, Stop: 25987, Start Num: 85

Candidate Starts for Hexamo_40:

(Start: 85 @26376 has 19 MA's), (118, 26232), (126, 26187), (132, 26145), (136, 26118),

Gene: Hexbug_52 Start: 35640, Stop: 35221, Start Num: 83

Candidate Starts for Hexbug_52:

(Start: 83 @35640 has 11 MA's), (92, 35616), (Start: 95 @35607 has 1 MA's), (104, 35556), (Start: 105 @35547 has 2 MA's), (144, 35394), (151, 35367), (192, 35232),

Gene: Hippo_34 Start: 26056, Stop: 26544, Start Num: 68

Candidate Starts for Hippo_34:

(16, 25876), (20, 25912), (40, 26008), (Start: 68 @26056 has 36 MA's), (97, 26128), (104, 26164), (Start: 105 @26173 has 2 MA's), (115, 26221), (125, 26275), (137, 26350), (150, 26386), (151, 26392), (188, 26512), (200, 26539),

Gene: HippoPololi_41 Start: 32178, Stop: 31756, Start Num: 86

Candidate Starts for HippoPololi_41:

(Start: 70 @32205 has 1 MA's), (Start: 86 @32178 has 4 MA's), (Start: 95 @32148 has 1 MA's), (Start: 96 @32142 has 3 MA's), (Start: 98 @32130 has 6 MA's), (102, 32103), (134, 31974), (135, 31968), (151, 31914), (156, 31881), (158, 31875), (178, 31812),

Gene: Holli_35 Start: 27594, Stop: 26998, Start Num: 89

Candidate Starts for Holli_35:

(Start: 89 @27594 has 151 MA's), (163, 27234), (164, 27231), (177, 27195), (207, 27129), (208, 27126), (213, 27081), (214, 27069),

Gene: Hookmount_35 Start: 27810, Stop: 27382, Start Num: 89

Candidate Starts for Hookmount_35:

(Start: 87 @27813 has 16 MA's), (Start: 89 @27810 has 151 MA's), (Start: 98 @27765 has 6 MA's), (125, 27627), (164, 27450),

Gene: Hoot_40 Start: 26594, Stop: 26202, Start Num: 82

Candidate Starts for Hoot_40:

(Start: 82 @26594 has 135 MA's), (118, 26447), (126, 26402), (132, 26360), (136, 26333),

Gene: Horseradish_46 Start: 32912, Stop: 32445, Start Num: 76

Candidate Starts for Horseradish_46:

(Start: 76 @32912 has 19 MA's), (108, 32804), (118, 32753), (134, 32696), (146, 32657), (150, 32642), (153, 32618), (163, 32576), (192, 32501), (198, 32489), (200, 32486), (210, 32462), (211, 32459),

Gene: Houdini22_35 Start: 27808, Stop: 27212, Start Num: 89

Candidate Starts for Houdini22_35:

(Start: 89 @27808 has 151 MA's), (163, 27448), (164, 27445), (177, 27409), (207, 27343), (208, 27340), (213, 27295), (214, 27283),

Gene: HuhtaEnerson15_32 Start: 26972, Stop: 26463, Start Num: 81

Candidate Starts for HuhtaEnerson15_32:

(Start: 81 @26972 has 40 MA's),

Gene: Huwbert_70 Start: 43330, Stop: 43914, Start Num: 35

Candidate Starts for Huwbert_70:

(Start: 35 @43330 has 2 MA's), (38, 43351), (42, 43357), (69, 43408), (Start: 96 @43474 has 3 MA's), (103, 43531), (114, 43588), (121, 43633), (151, 43765), (152, 43774), (163, 43825), (175, 43861), (178, 43867),

Gene: Hydra_36 Start: 26216, Stop: 26704, Start Num: 68

Candidate Starts for Hydra_36:

(40, 26168), (Start: 68 @26216 has 36 MA's), (97, 26288), (Start: 105 @26333 has 2 MA's), (125, 26435), (151, 26552), (188, 26672), (200, 26699),

Gene: ICleared_35 Start: 27836, Stop: 27261, Start Num: 89

Candidate Starts for ICleared_35:

(Start: 89 @27836 has 151 MA's), (164, 27473), (177, 27437), (208, 27368), (213, 27323), (214, 27311),

Gene: Ibantik_13 Start: 5594, Stop: 5154, Start Num: 82

Candidate Starts for Ibantik_13:

(Start: 82 @5594 has 135 MA's), (151, 5291), (180, 5186),

Gene: Iceman_36 Start: 28093, Stop: 27497, Start Num: 89

Candidate Starts for Iceman_36:

(Start: 89 @28093 has 151 MA's), (163, 27733), (164, 27730), (177, 27694), (207, 27628), (208, 27625), (213, 27580), (214, 27568),

Gene: Idleandcovert_36 Start: 27799, Stop: 27413, Start Num: 82

Candidate Starts for Idleandcovert_36:

(Start: 82 @27799 has 135 MA's), (129, 27601),

Gene: Immanuel3_53 Start: 29441, Stop: 29025, Start Num: 90

Candidate Starts for Immanuel3_53:

(67, 29483), (Start: 90 @29441 has 12 MA's), (Start: 107 @29354 has 1 MA's), (115, 29315), (121, 29264), (126, 29249), (128, 29243),

Gene: Indigo_33 Start: 25684, Stop: 26172, Start Num: 68

Candidate Starts for Indigo_33:

(40, 25636), (Start: 68 @25684 has 36 MA's), (97, 25756), (Start: 105 @25801 has 2 MA's), (125, 25903), (151, 26020), (188, 26140), (200, 26167),

Gene: Indra_42 Start: 26618, Stop: 26226, Start Num: 82

Candidate Starts for Indra_42:

(Start: 82 @26618 has 135 MA's), (118, 26471), (126, 26426), (132, 26384), (136, 26357),

Gene: Iracema64_36 Start: 28062, Stop: 27583, Start Num: 89

Candidate Starts for Iracema64_36:

(Start: 89 @28062 has 151 MA's), (156, 27729), (163, 27702),

Gene: Isca_36 Start: 27568, Stop: 27182, Start Num: 82

Candidate Starts for Isca_36:

(Start: 82 @27568 has 135 MA's),

Gene: Isiphiwo_40 Start: 26688, Stop: 26296, Start Num: 82

Candidate Starts for Isiphiwo_40:

(Start: 82 @26688 has 135 MA's), (118, 26541), (126, 26496), (132, 26454), (136, 26427), (137, 26424),

Gene: Issmi_36 Start: 27365, Stop: 27823, Start Num: 79

Candidate Starts for Issmi_36:

(Start: 79 @27365 has 9 MA's), (Start: 98 @27410 has 6 MA's), (104, 27443), (Start: 105 @27452 has 2 MA's), (150, 27665), (151, 27671), (156, 27704), (188, 27791), (194, 27806),

Gene: Izzy_35 Start: 26089, Stop: 26577, Start Num: 68

Candidate Starts for Izzy_35:

(29, 25984), (40, 26041), (Start: 68 @26089 has 36 MA's), (97, 26161), (Start: 105 @26206 has 2 MA's), (125, 26308), (151, 26425), (188, 26545), (200, 26572),

Gene: JF2_36 Start: 27319, Stop: 26933, Start Num: 82

Candidate Starts for JF2_36:

(Start: 82 @27319 has 135 MA's),

Gene: JF4_36 Start: 27319, Stop: 26933, Start Num: 82

Candidate Starts for JF4_36:

(Start: 82 @27319 has 135 MA's),

Gene: JHC117_41 Start: 28574, Stop: 28191, Start Num: 82

Candidate Starts for JHC117_41:

(Start: 66 @28601 has 11 MA's), (Start: 82 @28574 has 135 MA's), (Start: 98 @28529 has 6 MA's), (131, 28358), (132, 28346),

Gene: Jabiru_33 Start: 26731, Stop: 26219, Start Num: 82

Candidate Starts for Jabiru_33:

(Start: 82 @26731 has 135 MA's), (121, 26554),

Gene: Jamzy_49 Start: 33537, Stop: 33112, Start Num: 83

Candidate Starts for Jamzy_49:

(Start: 83 @33537 has 11 MA's), (Start: 95 @33504 has 1 MA's), (108, 33438), (110, 33420), (136, 33309), (175, 33162), (192, 33123),

Gene: Janus_35 Start: 26738, Stop: 27211, Start Num: 80

Candidate Starts for Janus_35:

(Start: 80 @26738 has 49 MA's), (Start: 98 @26783 has 6 MA's), (Start: 100 @26792 has 1 MA's), (104, 26816), (Start: 105 @26825 has 2 MA's), (112, 26858), (138, 27008), (188, 27179), (194, 27194),

Gene: Jash_35 Start: 26042, Stop: 26530, Start Num: 68

Candidate Starts for Jash_35:

(29, 25937), (40, 25994), (Start: 68 @26042 has 36 MA's), (97, 26114), (Start: 105 @26159 has 2 MA's), (125, 26261), (151, 26378), (188, 26498), (200, 26525),

Gene: Jaykayelowell_35 Start: 27800, Stop: 27204, Start Num: 89

Candidate Starts for Jaykayelowell_35:

(Start: 89 @27800 has 151 MA's), (163, 27440), (164, 27437), (177, 27401), (207, 27335), (208, 27332), (213, 27287), (214, 27275),

Gene: Jeffabunny_40 Start: 26412, Stop: 26023, Start Num: 85

Candidate Starts for Jeffabunny_40:

(Start: 85 @26412 has 19 MA's), (118, 26268), (126, 26223), (132, 26181), (136, 26154),

Gene: JenCasNa_41 Start: 28575, Stop: 28192, Start Num: 82

Candidate Starts for JenCasNa_41:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: JeppNRM_41 Start: 28399, Stop: 28016, Start Num: 82

Candidate Starts for JeppNRM_41:

(13, 28630), (Start: 66 @28426 has 11 MA's), (Start: 82 @28399 has 135 MA's), (Start: 98 @28354 has 6 MA's), (131, 28183), (132, 28171),

Gene: JetBlade_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for JetBlade_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208, 27333), (213, 27288), (214, 27276),

Gene: Jevington_37 Start: 27148, Stop: 27609, Start Num: 79

Candidate Starts for Jevington_37:

(Start: 79 @27148 has 9 MA's), (Start: 98 @27196 has 6 MA's), (104, 27229), (150, 27451), (151, 27457), (156, 27490), (188, 27577), (194, 27592),

Gene: JewelBug_41 Start: 26622, Stop: 26230, Start Num: 82

Candidate Starts for JewelBug_41:

(Start: 82 @26622 has 135 MA's), (118, 26475), (126, 26430), (132, 26388), (136, 26361),

Gene: Jobu08_40 Start: 28405, Stop: 28022, Start Num: 82

Candidate Starts for Jobu08_40:

(Start: 66 @28432 has 11 MA's), (Start: 82 @28405 has 135 MA's), (Start: 98 @28360 has 6 MA's), (131, 28189), (132, 28177),

Gene: JoongJeon_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for JoongJeon_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Jordennis_40 Start: 26606, Stop: 26214, Start Num: 82

Candidate Starts for Jordennis_40:

(Start: 82 @26606 has 135 MA's), (118, 26459), (126, 26414), (132, 26372), (136, 26345),

Gene: Jovo_32 Start: 27162, Stop: 26653, Start Num: 81

Candidate Starts for Jovo_32:

(Start: 81 @27162 has 40 MA's),

Gene: KADY_41 Start: 28574, Stop: 28191, Start Num: 82

Candidate Starts for KADY_41:

(Start: 66 @28601 has 11 MA's), (Start: 82 @28574 has 135 MA's), (Start: 95 @28547 has 1 MA's),
(Start: 98 @28529 has 6 MA's), (131, 28358), (132, 28346),

Gene: KFPoly_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for KFPoly_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208,
27333), (213, 27288), (214, 27276),

Gene: Kachowdy_36 Start: 27859, Stop: 27473, Start Num: 82

Candidate Starts for Kachowdy_36:

(Start: 82 @27859 has 135 MA's), (129, 27661),

Gene: Kaine_36 Start: 27263, Stop: 27667, Start Num: 80

Candidate Starts for Kaine_36:

(Start: 80 @27263 has 49 MA's), (Start: 100 @27317 has 1 MA's), (Start: 105 @27350 has 2 MA's),
(112, 27383), (163, 27644), (165, 27650),

Gene: Kalb97_41 Start: 28400, Stop: 28017, Start Num: 82

Candidate Starts for Kalb97_41:

(13, 28628), (Start: 66 @28427 has 11 MA's), (Start: 82 @28400 has 135 MA's), (Start: 98 @28355
has 6 MA's), (131, 28184), (132, 28172),

Gene: Kalnoky_41 Start: 28401, Stop: 28018, Start Num: 82

Candidate Starts for Kalnoky_41:

(13, 28626), (Start: 66 @28428 has 11 MA's), (Start: 82 @28401 has 135 MA's), (Start: 98 @28356
has 6 MA's), (131, 28185), (132, 28173),

Gene: Katalie_34 Start: 26236, Stop: 26655, Start Num: 80

Candidate Starts for Katalie_34:

(Start: 80 @26236 has 49 MA's), (97, 26281), (Start: 98 @26284 has 6 MA's), (Start: 105 @26326 has
2 MA's), (116, 26377), (118, 26386), (125, 26428), (143, 26530),

Gene: Katalie136_35 Start: 27837, Stop: 27262, Start Num: 89

Candidate Starts for Katalie136_35:

(Start: 55 @27867 has 2 MA's), (Start: 89 @27837 has 151 MA's), (164, 27474), (208, 27369), (213,
27324), (214, 27312),

Gene: Kazan_41 Start: 26622, Stop: 26230, Start Num: 82

Candidate Starts for Kazan_41:

(Start: 82 @26622 has 135 MA's), (118, 26475), (126, 26430), (132, 26388), (136, 26361),

Gene: Kerberos_40 Start: 27983, Stop: 27597, Start Num: 80

Candidate Starts for Kerberos_40:

(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: KimJongPhill_79 Start: 56740, Stop: 57207, Start Num: 87

Candidate Starts for KimJongPhill_79:

(Start: 87 @56740 has 16 MA's), (94, 56767), (Start: 95 @56770 has 1 MA's), (118, 56887), (137, 57016), (155, 57094), (158, 57103), (163, 57124), (175, 57160),

Gene: Kimona_33 Start: 25900, Stop: 25490, Start Num: 87

Candidate Starts for Kimona_33:

(Start: 87 @25900 has 16 MA's), (118, 25753), (132, 25672), (156, 25567),

Gene: Kingmustik0402_35 Start: 27796, Stop: 27200, Start Num: 89

Candidate Starts for Kingmustik0402_35:

(Start: 89 @27796 has 151 MA's), (163, 27436), (164, 27433), (177, 27397), (207, 27331), (208, 27328), (213, 27283), (214, 27271),

Gene: Kipper29_40 Start: 26610, Stop: 26224, Start Num: 85

Candidate Starts for Kipper29_40:

(Start: 85 @26610 has 19 MA's), (132, 26382), (136, 26355),

Gene: KittenMittens_33 Start: 26664, Stop: 26080, Start Num: 89

Candidate Starts for KittenMittens_33:

(19, 26859), (Start: 89 @26664 has 151 MA's), (163, 26304), (172, 26286),

Gene: Koko_40 Start: 26968, Stop: 26579, Start Num: 82

Candidate Starts for Koko_40:

(Start: 82 @26968 has 135 MA's), (132, 26737), (136, 26710), (163, 26605),

Gene: Koreni_34 Start: 27485, Stop: 26910, Start Num: 89

Candidate Starts for Koreni_34:

(Start: 89 @27485 has 151 MA's), (164, 27122), (177, 27086), (208, 27017), (213, 26972), (214, 26960),

Gene: Kratak_35 Start: 27746, Stop: 27267, Start Num: 89

Candidate Starts for Kratak_35:

(Start: 89 @27746 has 151 MA's), (156, 27413), (163, 27386),

Gene: Kremtemulon_35 Start: 27796, Stop: 27317, Start Num: 89

Candidate Starts for Kremtemulon_35:

(Start: 66 @27826 has 11 MA's), (Start: 89 @27796 has 151 MA's), (156, 27463), (163, 27436),

Gene: Kristoff_37 Start: 28181, Stop: 27642, Start Num: 75

Candidate Starts for Kristoff_37:

(Start: 75 @28181 has 6 MA's), (159, 27824), (163, 27809),

Gene: Kumquat_54 Start: 29457, Stop: 29041, Start Num: 90

Candidate Starts for Kumquat_54:

(33, 29580), (Start: 82 @29472 has 135 MA's), (Start: 90 @29457 has 12 MA's), (132, 29229),

Gene: Kyee_35 Start: 27802, Stop: 27206, Start Num: 89

Candidate Starts for Kyee_35:

(Start: 89 @27802 has 151 MA's), (163, 27442), (164, 27439), (177, 27403), (207, 27337), (208, 27334), (213, 27289), (214, 27277),

Gene: LBerry_41 Start: 28576, Stop: 28193, Start Num: 82

Candidate Starts for LBerry_41:

(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's),
(131, 28360), (132, 28348),

Gene: LHTSCC_37 Start: 28100, Stop: 27660, Start Num: 89
Candidate Starts for LHTSCC_37:
(Start: 89 @28100 has 151 MA's), (163, 27740), (164, 27737),

Gene: Lambert1_35 Start: 27809, Stop: 27381, Start Num: 89
Candidate Starts for Lambert1_35:
(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's),
(125, 27626), (164, 27449),

Gene: Lannister_36 Start: 26707, Stop: 27195, Start Num: 68
Candidate Starts for Lannister_36:
(16, 26527), (40, 26659), (Start: 68 @26707 has 36 MA's), (97, 26779), (156, 27076), (188, 27163),
(200, 27190),

Gene: LappelDuVide_35 Start: 27803, Stop: 27207, Start Num: 89
Candidate Starts for LappelDuVide_35:
(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208,
27335), (213, 27290), (214, 27278),

Gene: LarryKay_40 Start: 28576, Stop: 28193, Start Num: 82
Candidate Starts for LarryKay_40:
(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 95 @28549 has 1 MA's),
(Start: 98 @28531 has 6 MA's), (131, 28360), (132, 28348),

Gene: Legacy_34 Start: 25659, Stop: 26147, Start Num: 68
Candidate Starts for Legacy_34:
(40, 25611), (Start: 68 @25659 has 36 MA's), (97, 25731), (Start: 105 @25776 has 2 MA's), (125,
25878), (151, 25995), (188, 26115), (200, 26142),

Gene: Lemur_35 Start: 27801, Stop: 27205, Start Num: 89
Candidate Starts for Lemur_35:
(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208,
27333), (213, 27288), (214, 27276),

Gene: Lev2_32 Start: 26794, Stop: 26285, Start Num: 81
Candidate Starts for Lev2_32:
(Start: 81 @26794 has 40 MA's),

Gene: Leviticus_34 Start: 25688, Stop: 26176, Start Num: 68
Candidate Starts for Leviticus_34:
(40, 25640), (Start: 68 @25688 has 36 MA's), (97, 25760), (Start: 105 @25805 has 2 MA's), (125,
25907), (151, 26024), (188, 26144), (200, 26171),

Gene: Lika_34 Start: 26509, Stop: 26988, Start Num: 78
Candidate Starts for Lika_34:
(Start: 78 @26509 has 5 MA's), (104, 26590), (Start: 107 @26605 has 1 MA's), (141, 26800), (188,
26956), (194, 26971),

Gene: Lilbooboo_46 Start: 33605, Stop: 34009, Start Num: 89
Candidate Starts for Lilbooboo_46:

(27, 33455), (Start: 79 @33593 has 9 MA's), (Start: 89 @33605 has 151 MA's), (Start: 107 @33698 has 1 MA's), (118, 33752), (164, 33974),

Gene: Lilbunny_39 Start: 26386, Stop: 25997, Start Num: 85

Candidate Starts for Lilbunny_39:

(Start: 85 @26386 has 19 MA's), (118, 26242), (126, 26197), (132, 26155), (136, 26128),

Gene: Lilit_41 Start: 28569, Stop: 28186, Start Num: 82

Candidate Starts for Lilit_41:

(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's), (131, 28353), (132, 28341),

Gene: LittleB_35 Start: 27805, Stop: 27209, Start Num: 89

Candidate Starts for LittleB_35:

(Start: 89 @27805 has 151 MA's), (163, 27445), (164, 27442), (177, 27406), (207, 27340), (208, 27337), (213, 27292), (214, 27280),

Gene: LittleCherry_32 Start: 26982, Stop: 26473, Start Num: 81

Candidate Starts for LittleCherry_32:

(Start: 81 @26982 has 40 MA's),

Gene: LittleGuy_35 Start: 27703, Stop: 27230, Start Num: 89

Candidate Starts for LittleGuy_35:

(Start: 89 @27703 has 151 MA's), (160, 27352), (164, 27340), (190, 27280), (197, 27268),

Gene: Lizz_71 Start: 50574, Stop: 50158, Start Num: 77

Candidate Starts for Lizz_71:

(Start: 77 @50574 has 2 MA's), (Start: 96 @50526 has 3 MA's), (Start: 98 @50514 has 6 MA's), (99, 50508), (101, 50493), (104, 50481), (136, 50295), (137, 50292), (149, 50250), (161, 50187), (165, 50175),

Gene: LochMonster_35 Start: 27843, Stop: 27247, Start Num: 89

Candidate Starts for LochMonster_35:

(Start: 89 @27843 has 151 MA's), (163, 27483), (164, 27480), (177, 27444), (207, 27378), (208, 27375), (213, 27330), (214, 27318),

Gene: Loofah_35 Start: 26915, Stop: 27400, Start Num: 76

Candidate Starts for Loofah_35:

(Start: 76 @26915 has 19 MA's), (104, 26999), (Start: 107 @27014 has 1 MA's), (188, 27368), (194, 27383),

Gene: Lorelei_35 Start: 26571, Stop: 27047, Start Num: 80

Candidate Starts for Lorelei_35:

(16, 26373), (20, 26409), (40, 26505), (Start: 76 @26565 has 19 MA's), (Start: 80 @26571 has 49 MA's), (104, 26649), (Start: 107 @26664 has 1 MA's), (141, 26859), (188, 27015), (194, 27030),

Gene: Lorenzo_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Lorenzo_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Louie6_40 Start: 28575, Stop: 28192, Start Num: 82

Candidate Starts for Louie6_40:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 95 @28548 has 1 MA's),
(Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Lozinak_146 Start: 79968, Stop: 80357, Start Num: 87
Candidate Starts for Lozinak_146:
(Start: 87 @79968 has 16 MA's), (117, 80106), (164, 80328), (170, 80346),

Gene: LugYA_43 Start: 28576, Stop: 28193, Start Num: 82
Candidate Starts for LugYA_43:
(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's),
(131, 28360), (132, 28348),

Gene: Lunsford_36 Start: 27801, Stop: 27205, Start Num: 89
Candidate Starts for Lunsford_36:
(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208,
27333), (213, 27288), (214, 27276),

Gene: MA5_36 Start: 27451, Stop: 27065, Start Num: 82
Candidate Starts for MA5_36:
(Start: 82 @27451 has 135 MA's), (129, 27253),

Gene: MK4_36 Start: 27553, Stop: 27167, Start Num: 82
Candidate Starts for MK4_36:
(Start: 82 @27553 has 135 MA's),

Gene: MScarn_48 Start: 33094, Stop: 32627, Start Num: 76
Candidate Starts for MScarn_48:
(Start: 76 @33094 has 19 MA's), (108, 32986), (118, 32935), (134, 32878), (146, 32839), (150,
32824), (153, 32800), (163, 32758), (192, 32683), (209, 32647), (210, 32644),

Gene: MaVan_41 Start: 32460, Stop: 32047, Start Num: 85
Candidate Starts for MaVan_41:
(50, 32523), (Start: 85 @32460 has 19 MA's), (Start: 95 @32430 has 1 MA's), (Start: 96 @32424 has
3 MA's), (Start: 98 @32412 has 6 MA's), (134, 32256), (135, 32250), (151, 32196), (156, 32163), (158,
32157),

Gene: Maco6_43 Start: 34041, Stop: 33499, Start Num: 83
Candidate Starts for Maco6_43:
(Start: 83 @34041 has 11 MA's), (Start: 93 @34014 has 2 MA's), (Start: 96 @34002 has 3 MA's),
(Start: 105 @33948 has 2 MA's), (110, 33924), (118, 33891), (158, 33735), (159, 33729), (189,
33648),

Gene: MadMarie_41 Start: 28578, Stop: 28195, Start Num: 82
Candidate Starts for MadMarie_41:
(Start: 66 @28605 has 11 MA's), (Start: 82 @28578 has 135 MA's), (Start: 98 @28533 has 6 MA's),
(131, 28362), (132, 28350),

Gene: Mainiac_41 Start: 28569, Stop: 28186, Start Num: 82
Candidate Starts for Mainiac_41:
(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's),
(131, 28353), (132, 28341),

Gene: Malinsilva_43 Start: 28568, Stop: 28185, Start Num: 82

Candidate Starts for Malinsilva_43:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: Maneekul_34 Start: 26078, Stop: 26566, Start Num: 68

Candidate Starts for Maneekul_34:

(16, 25898), (40, 26030), (Start: 68 @26078 has 36 MA's), (97, 26150), (104, 26186), (Start: 105 @26195 has 2 MA's), (115, 26243), (150, 26408), (151, 26414), (188, 26534), (200, 26561),

Gene: Manu_41 Start: 28401, Stop: 28018, Start Num: 82

Candidate Starts for Manu_41:

(13, 28629), (Start: 66 @28428 has 11 MA's), (Start: 82 @28401 has 135 MA's), (Start: 98 @28356 has 6 MA's), (131, 28185), (132, 28173),

Gene: Manuel_51 Start: 29161, Stop: 28748, Start Num: 91

Candidate Starts for Manuel_51:

(Start: 91 @29161 has 1 MA's), (Start: 95 @29143 has 1 MA's), (Start: 107 @29077 has 1 MA's), (130, 28960), (147, 28885),

Gene: MarQuardt_41 Start: 28577, Stop: 28194, Start Num: 82

Candidate Starts for MarQuardt_41:

(Start: 66 @28604 has 11 MA's), (Start: 82 @28577 has 135 MA's), (Start: 98 @28532 has 6 MA's), (131, 28361), (132, 28349),

Gene: Marav_38 Start: 27473, Stop: 27934, Start Num: 79

Candidate Starts for Marav_38:

(Start: 79 @27473 has 9 MA's), (Start: 98 @27521 has 6 MA's), (104, 27554), (150, 27776), (151, 27782), (156, 27815), (188, 27902), (194, 27917),

Gene: Marchesa_36 Start: 27857, Stop: 27471, Start Num: 82

Candidate Starts for Marchesa_36:

(Start: 82 @27857 has 135 MA's), (129, 27659),

Gene: Mareelih_173 Start: 101362, Stop: 100859, Start Num: 82

Candidate Starts for Mareelih_173:

(Start: 82 @101362 has 135 MA's), (137, 101086), (146, 101065), (151, 101044), (187, 100924), (200, 100894),

Gene: Margaret_50 Start: 34280, Stop: 33861, Start Num: 83

Candidate Starts for Margaret_50:

(Start: 83 @34280 has 11 MA's), (Start: 95 @34247 has 1 MA's), (104, 34196), (Start: 105 @34187 has 2 MA's), (136, 34058), (144, 34034), (192, 33872),

Gene: Margo_35 Start: 27838, Stop: 27407, Start Num: 87

Candidate Starts for Margo_35:

(Start: 87 @27838 has 16 MA's), (Start: 89 @27835 has 151 MA's), (Start: 98 @27790 has 6 MA's), (125, 27652), (164, 27475),

Gene: Marie_41 Start: 28575, Stop: 28192, Start Num: 82

Candidate Starts for Marie_41:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Marius_41 Start: 28401, Stop: 28018, Start Num: 82
Candidate Starts for Marius_41:
(13, 28626), (Start: 66 @28428 has 11 MA's), (Start: 82 @28401 has 135 MA's), (Start: 98 @28356 has 6 MA's), (131, 28185), (132, 28173),

Gene: MarysWell_31 Start: 27030, Stop: 26521, Start Num: 81
Candidate Starts for MarysWell_31:
(Start: 81 @27030 has 40 MA's),

Gene: Maverick_35 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for Maverick_35:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Maxo_36 Start: 27800, Stop: 27324, Start Num: 89
Candidate Starts for Maxo_36:
(Start: 89 @27800 has 151 MA's), (Start: 98 @27755 has 6 MA's), (125, 27617), (160, 27452), (164, 27440), (190, 27380), (197, 27368),

Gene: Mazhar510_35 Start: 27805, Stop: 27209, Start Num: 89
Candidate Starts for Mazhar510_35:
(Start: 89 @27805 has 151 MA's), (163, 27445), (164, 27442), (177, 27406), (207, 27340), (208, 27337), (213, 27292), (214, 27280),

Gene: McFly_40 Start: 26616, Stop: 26224, Start Num: 82
Candidate Starts for McFly_40:
(Start: 82 @26616 has 135 MA's), (118, 26469), (126, 26424), (132, 26382), (136, 26355),

Gene: Medusa_36 Start: 27803, Stop: 27324, Start Num: 89
Candidate Starts for Medusa_36:
(Start: 89 @27803 has 151 MA's), (160, 27452), (164, 27440), (190, 27380), (197, 27368),

Gene: MeeZee_35 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for MeeZee_35:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Melvin_37 Start: 27802, Stop: 27323, Start Num: 89
Candidate Starts for Melvin_37:
(Start: 89 @27802 has 151 MA's), (160, 27451), (164, 27439), (190, 27379), (197, 27367),

Gene: Methuselah_39 Start: 28570, Stop: 28187, Start Num: 82
Candidate Starts for Methuselah_39:
(Start: 66 @28597 has 11 MA's), (Start: 82 @28570 has 135 MA's), (Start: 95 @28543 has 1 MA's), (Start: 98 @28525 has 6 MA's), (131, 28354), (132, 28342),

Gene: Micasa_32 Start: 26944, Stop: 26438, Start Num: 88
Candidate Starts for Micasa_32:
(Start: 88 @26944 has 5 MA's),

Gene: Microwolf_41 Start: 28577, Stop: 28194, Start Num: 82
Candidate Starts for Microwolf_41:

(Start: 66 @28604 has 11 MA's), (Start: 82 @28577 has 135 MA's), (Start: 98 @28532 has 6 MA's), (131, 28361), (132, 28349),

Gene: Midas2_32 Start: 27021, Stop: 26512, Start Num: 81
Candidate Starts for Midas2_32:
(Start: 81 @27021 has 40 MA's),

Gene: Milcery_32 Start: 26986, Stop: 26477, Start Num: 81
Candidate Starts for Milcery_32:
(Start: 81 @26986 has 40 MA's),

Gene: Millski_34 Start: 27808, Stop: 27212, Start Num: 89
Candidate Starts for Millski_34:
(Start: 89 @27808 has 151 MA's), (163, 27448), (164, 27445), (177, 27409), (207, 27343), (208, 27340), (213, 27295), (214, 27283),

Gene: Miramae_35 Start: 28016, Stop: 27537, Start Num: 71
Candidate Starts for Miramae_35:
(Start: 71 @28016 has 1 MA's), (104, 27938), (Start: 105 @27929 has 2 MA's), (121, 27842), (163, 27656), (169, 27638), (182, 27605),

Gene: Misomonster_42 Start: 28573, Stop: 28190, Start Num: 82
Candidate Starts for Misomonster_42:
(Start: 66 @28600 has 11 MA's), (Start: 82 @28573 has 135 MA's), (Start: 95 @28546 has 1 MA's), (Start: 98 @28528 has 6 MA's), (131, 28357), (132, 28345),

Gene: MoneyMay_41 Start: 28602, Stop: 28192, Start Num: 66
Candidate Starts for MoneyMay_41:
(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Morpher26_35 Start: 27858, Stop: 27262, Start Num: 89
Candidate Starts for Morpher26_35:
(Start: 55 @27888 has 2 MA's), (Start: 89 @27858 has 151 MA's), (163, 27498), (164, 27495), (177, 27459), (207, 27393), (208, 27390), (213, 27345), (214, 27333),

Gene: Morrow_36 Start: 27804, Stop: 27328, Start Num: 89
Candidate Starts for Morrow_36:
(Start: 89 @27804 has 151 MA's), (Start: 98 @27759 has 6 MA's), (125, 27621), (160, 27456), (164, 27444), (190, 27384), (197, 27372),

Gene: MuchMore_43 Start: 28568, Stop: 28185, Start Num: 82
Candidate Starts for MuchMore_43:
(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: Muddy_45 Start: 35273, Stop: 34731, Start Num: 83
Candidate Starts for Muddy_45:
(Start: 83 @35273 has 11 MA's), (Start: 93 @35246 has 2 MA's), (Start: 96 @35234 has 3 MA's), (Start: 105 @35180 has 2 MA's), (110, 35156), (118, 35123), (147, 35024), (158, 34967), (189, 34880),

Gene: Mundrea_35 Start: 27726, Stop: 27247, Start Num: 89

Candidate Starts for Mundrea_35:
(Start: 89 @27726 has 151 MA's), (163, 27366),

Gene: MunkgeeRoachy_42 Start: 32424, Stop: 31900, Start Num: 81
Candidate Starts for MunkgeeRoachy_42:
(57, 32469), (Start: 81 @32424 has 40 MA's), (108, 32325), (118, 32274), (123, 32256), (133, 32229),
(146, 32178), (153, 32139), (156, 32124), (163, 32097), (167, 32085), (192, 32022), (211, 31980),

Gene: MyraDee_33 Start: 25725, Stop: 25126, Start Num: 86
Candidate Starts for MyraDee_33:
(6, 26043), (14, 25971), (Start: 86 @25725 has 4 MA's), (Start: 98 @25677 has 6 MA's), (163, 25362),
(164, 25359), (212, 25227), (215, 25134),

Gene: Nabi_35 Start: 26571, Stop: 27047, Start Num: 80
Candidate Starts for Nabi_35:
(16, 26373), (20, 26409), (40, 26505), (Start: 76 @26565 has 19 MA's), (Start: 80 @26571 has 49
MA's), (104, 26649), (Start: 107 @26664 has 1 MA's), (141, 26859), (188, 27015), (194, 27030),

Gene: Naca_33 Start: 27224, Stop: 26715, Start Num: 82
Candidate Starts for Naca_33:
(Start: 82 @27224 has 135 MA's),

Gene: Naji_40 Start: 27983, Stop: 27597, Start Num: 80
Candidate Starts for Naji_40:
(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: Nanodon_36 Start: 26328, Stop: 26813, Start Num: 76
Candidate Starts for Nanodon_36:
(Start: 76 @26328 has 19 MA's), (104, 26412), (Start: 107 @26427 has 1 MA's), (140, 26616), (145,
26637), (150, 26655), (188, 26781), (194, 26796),

Gene: NearlyHeadless_32 Start: 26237, Stop: 25725, Start Num: 82
Candidate Starts for NearlyHeadless_32:
(Start: 82 @26237 has 135 MA's), (132, 26006), (169, 25856), (184, 25820),

Gene: Nebs_36 Start: 27798, Stop: 27322, Start Num: 89
Candidate Starts for Nebs_36:
(Start: 89 @27798 has 151 MA's), (Start: 98 @27753 has 6 MA's), (125, 27615), (160, 27450), (164,
27438), (190, 27378), (197, 27366),

Gene: Neeharika16_40 Start: 26609, Stop: 26217, Start Num: 82
Candidate Starts for Neeharika16_40:
(Start: 82 @26609 has 135 MA's), (118, 26462), (126, 26417), (132, 26375), (136, 26348),

Gene: Nemo27_35 Start: 27803, Stop: 27207, Start Num: 89
Candidate Starts for Nemo27_35:
(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208,
27335), (213, 27290), (214, 27278),

Gene: Newrala_40 Start: 26609, Stop: 26217, Start Num: 82
Candidate Starts for Newrala_40:
(Start: 82 @26609 has 135 MA's), (118, 26462), (126, 26417), (132, 26375), (136, 26348),

Gene: Nibbles_40 Start: 32147, Stop: 31734, Start Num: 85

Candidate Starts for Nibbles_40:

(50, 32210), (Start: 85 @32147 has 19 MA's), (Start: 95 @32117 has 1 MA's), (Start: 96 @32111 has 3 MA's), (Start: 98 @32099 has 6 MA's), (134, 31943), (135, 31937), (151, 31883), (156, 31850), (158, 31844),

Gene: Nina_43 Start: 33199, Stop: 32675, Start Num: 81

Candidate Starts for Nina_43:

(57, 33244), (Start: 81 @33199 has 40 MA's), (108, 33100), (118, 33049), (146, 32953), (153, 32914), (163, 32872), (192, 32797), (211, 32755),

Gene: Nishikigoi_36 Start: 26732, Stop: 27217, Start Num: 76

Candidate Starts for Nishikigoi_36:

(Start: 76 @26732 has 19 MA's), (Start: 98 @26783 has 6 MA's), (104, 26816), (Start: 107 @26831 has 1 MA's), (147, 27047), (188, 27185), (194, 27200),

Gene: NoPickles_64 Start: 45739, Stop: 46170, Start Num: 95

Candidate Starts for NoPickles_64:

(52, 45655), (Start: 95 @45739 has 1 MA's), (Start: 96 @45745 has 3 MA's), (Start: 107 @45805 has 1 MA's), (110, 45826), (119, 45862), (125, 45898), (139, 45982), (164, 46090), (182, 46138), (185, 46141), (193, 46162),

Gene: NoShow_53 Start: 38273, Stop: 37752, Start Num: 83

Candidate Starts for NoShow_53:

(34, 38381), (74, 38285), (Start: 83 @38273 has 11 MA's), (163, 37946), (166, 37937), (184, 37892), (189, 37880), (192, 37871), (195, 37865),

Gene: Nodigi_52 Start: 35691, Stop: 35272, Start Num: 83

Candidate Starts for Nodigi_52:

(Start: 83 @35691 has 11 MA's), (92, 35667), (Start: 95 @35658 has 1 MA's), (104, 35607), (Start: 105 @35598 has 2 MA's), (144, 35445), (151, 35418), (192, 35283),

Gene: Noella_35 Start: 27813, Stop: 27382, Start Num: 87

Candidate Starts for Noella_35:

(Start: 87 @27813 has 16 MA's), (Start: 89 @27810 has 151 MA's), (Start: 98 @27765 has 6 MA's), (125, 27627), (164, 27450),

Gene: Noelle_35 Start: 27902, Stop: 27306, Start Num: 89

Candidate Starts for Noelle_35:

(21, 28055), (Start: 55 @27932 has 2 MA's), (Start: 89 @27902 has 151 MA's), (164, 27539), (177, 27503), (208, 27434), (213, 27389), (214, 27377),

Gene: Norbert_34 Start: 27812, Stop: 27381, Start Num: 87

Candidate Starts for Norbert_34:

(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: NorthStar_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for NorthStar_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: NotAPhaseMom_35 Start: 27808, Stop: 27212, Start Num: 89

Candidate Starts for NotAPhaseMom_35:

(Start: 89 @27808 has 151 MA's), (163, 27448), (164, 27445), (177, 27409), (207, 27343), (208, 27340), (213, 27295), (214, 27283),

Gene: Nyxis_35 Start: 27697, Stop: 27224, Start Num: 89

Candidate Starts for Nyxis_35:

(Start: 89 @27697 has 151 MA's), (160, 27346), (164, 27334), (190, 27274), (197, 27262),

Gene: OKCentral2016_35 Start: 27492, Stop: 26965, Start Num: 89

Candidate Starts for OKCentral2016_35:

(Start: 89 @27492 has 151 MA's), (159, 27147), (163, 27132),

Gene: Obama12_37 Start: 28102, Stop: 27662, Start Num: 89

Candidate Starts for Obama12_37:

(Start: 89 @28102 has 151 MA's), (163, 27742), (164, 27739),

Gene: OhMyWard_63 Start: 47880, Stop: 48323, Start Num: 64

Candidate Starts for OhMyWard_63:

(36, 47814), (60, 47871), (Start: 64 @47880 has 4 MA's), (Start: 107 @48009 has 1 MA's), (120, 48075), (125, 48102), (146, 48210), (156, 48264),

Gene: Ohfah_36 Start: 27798, Stop: 27322, Start Num: 89

Candidate Starts for Ohfah_36:

(Start: 89 @27798 has 151 MA's), (Start: 98 @27753 has 6 MA's), (125, 27615), (160, 27450), (164, 27438), (190, 27378), (197, 27366),

Gene: OlanP_40 Start: 28582, Stop: 28199, Start Num: 82

Candidate Starts for OlanP_40:

(Start: 66 @28609 has 11 MA's), (Start: 82 @28582 has 135 MA's), (Start: 98 @28537 has 6 MA's), (131, 28366), (132, 28354),

Gene: Olicious_54 Start: 29438, Stop: 29022, Start Num: 90

Candidate Starts for Olicious_54:

(67, 29480), (Start: 90 @29438 has 12 MA's), (Start: 107 @29351 has 1 MA's), (115, 29312), (121, 29261), (126, 29246), (128, 29240),

Gene: Oliynyk_35 Start: 26042, Stop: 26530, Start Num: 68

Candidate Starts for Oliynyk_35:

(29, 25937), (40, 25994), (Start: 68 @26042 has 36 MA's), (97, 26114), (Start: 105 @26159 has 2 MA's), (125, 26261), (151, 26378), (188, 26498), (200, 26525),

Gene: Ollie_41 Start: 28447, Stop: 28064, Start Num: 82

Candidate Starts for Ollie_41:

(Start: 66 @28474 has 11 MA's), (Start: 82 @28447 has 135 MA's), (Start: 98 @28402 has 6 MA's), (131, 28231), (132, 28219),

Gene: Omar_37 Start: 26978, Stop: 27451, Start Num: 80

Candidate Starts for Omar_37:

(Start: 80 @26978 has 49 MA's), (Start: 100 @27032 has 1 MA's), (104, 27056), (Start: 105 @27065 has 2 MA's), (Start: 107 @27071 has 1 MA's), (188, 27419), (194, 27434),

Gene: OneUp_130 Start: 77814, Stop: 78209, Start Num: 82

Candidate Starts for OneUp_130:

(46, 77748), (Start: 82 @77814 has 135 MA's), (117, 77958), (170, 78198),

Gene: Orla_52 Start: 35599, Stop: 35180, Start Num: 83

Candidate Starts for Orla_52:

(Start: 83 @35599 has 11 MA's), (92, 35575), (Start: 95 @35566 has 1 MA's), (104, 35515), (Start: 105 @35506 has 2 MA's), (144, 35353), (151, 35326), (192, 35191),

Gene: Ozzie_34 Start: 25668, Stop: 26156, Start Num: 68

Candidate Starts for Ozzie_34:

(40, 25620), (Start: 68 @25668 has 36 MA's), (97, 25740), (Start: 105 @25785 has 2 MA's), (125, 25887), (151, 26004), (188, 26124), (200, 26151),

Gene: OzzyJ_35 Start: 26047, Stop: 26535, Start Num: 68

Candidate Starts for OzzyJ_35:

(16, 25867), (20, 25903), (40, 25999), (Start: 68 @26047 has 36 MA's), (97, 26119), (104, 26155), (Start: 105 @26164 has 2 MA's), (115, 26212), (150, 26377), (151, 26383), (188, 26503), (200, 26530),

Gene: P28Green_41 Start: 28578, Stop: 28195, Start Num: 82

Candidate Starts for P28Green_41:

(Start: 66 @28605 has 11 MA's), (Start: 82 @28578 has 135 MA's), (Start: 98 @28533 has 6 MA's), (131, 28362), (132, 28350),

Gene: PGHhamlin_43 Start: 28568, Stop: 28185, Start Num: 82

Candidate Starts for PGHhamlin_43:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: PHTowN_71 Start: 50512, Stop: 50156, Start Num: 98

Candidate Starts for PHTowN_71:

(Start: 77 @50572 has 2 MA's), (Start: 96 @50524 has 3 MA's), (Start: 98 @50512 has 6 MA's), (99, 50506), (101, 50491), (104, 50479), (136, 50293), (137, 50290), (149, 50248), (161, 50185), (165, 50173),

Gene: Pablito_34 Start: 26313, Stop: 26771, Start Num: 79

Candidate Starts for Pablito_34:

(Start: 79 @26313 has 9 MA's), (104, 26394), (115, 26451), (150, 26616), (151, 26622), (160, 26673), (188, 26739), (194, 26754),

Gene: Paedore_34 Start: 26900, Stop: 27385, Start Num: 76

Candidate Starts for Paedore_34:

(Start: 76 @26900 has 19 MA's), (104, 26984), (Start: 107 @26999 has 1 MA's), (188, 27353), (194, 27368),

Gene: Palestino_34 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Palestino_34:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Panamaxus_34 Start: 27812, Stop: 27381, Start Num: 87

Candidate Starts for Panamaxus_34:

(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: Paolo_37 Start: 27402, Stop: 27788, Start Num: 105

Candidate Starts for Paolo_37:

(Start: 80 @27315 has 49 MA's), (Start: 98 @27360 has 6 MA's), (Start: 100 @27369 has 1 MA's), (104, 27393), (Start: 105 @27402 has 2 MA's), (Start: 107 @27408 has 1 MA's), (125, 27504), (151, 27636), (188, 27756), (194, 27771),

Gene: Pavo_37 Start: 27721, Stop: 28125, Start Num: 80

Candidate Starts for Pavo_37:

(16, 27526), (43, 27661), (Start: 80 @27721 has 49 MA's), (Start: 100 @27775 has 1 MA's), (Start: 105 @27808 has 2 MA's), (112, 27841), (163, 28102), (165, 28108),

Gene: PeaceMeal1_34 Start: 26665, Stop: 26081, Start Num: 89

Candidate Starts for PeaceMeal1_34:

(19, 26860), (Start: 89 @26665 has 151 MA's), (163, 26305), (172, 26287),

Gene: Peaches_35 Start: 27803, Stop: 27207, Start Num: 89

Candidate Starts for Peaches_35:

(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208, 27335), (213, 27290), (214, 27278),

Gene: Pembroke_41 Start: 28577, Stop: 28194, Start Num: 82

Candidate Starts for Pembroke_41:

(Start: 66 @28604 has 11 MA's), (Start: 82 @28577 has 135 MA's), (Start: 98 @28532 has 6 MA's), (131, 28361), (132, 28349),

Gene: Penny1_41 Start: 28576, Stop: 28193, Start Num: 82

Candidate Starts for Penny1_41:

(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's), (131, 28360), (132, 28348),

Gene: Percastrophe_54 Start: 29372, Stop: 28956, Start Num: 90

Candidate Starts for Percastrophe_54:

(67, 29414), (Start: 90 @29372 has 12 MA's), (Start: 107 @29285 has 1 MA's), (122, 29189), (124, 29186), (126, 29180), (144, 29102),

Gene: Perplexer_35 Start: 27834, Stop: 27259, Start Num: 89

Candidate Starts for Perplexer_35:

(Start: 55 @27864 has 2 MA's), (Start: 89 @27834 has 151 MA's), (164, 27471), (177, 27435), (208, 27366), (213, 27321), (214, 27309),

Gene: PeterPeter_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for PeterPeter_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: PetiteSangsue_35 Start: 27837, Stop: 27262, Start Num: 89

Candidate Starts for PetiteSangsue_35:

(Start: 55 @27867 has 2 MA's), (Start: 89 @27837 has 151 MA's), (164, 27474), (177, 27438), (208, 27369), (213, 27324), (214, 27312),

Gene: PetterN_34 Start: 26587, Stop: 26075, Start Num: 82

Candidate Starts for PetterN_34:

(Start: 82 @26587 has 135 MA's),

Gene: Phacado_35 Start: 27803, Stop: 27207, Start Num: 89

Candidate Starts for Phacado_35:

(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208, 27335), (213, 27290), (214, 27278),

Gene: Phantastic_36 Start: 27584, Stop: 27198, Start Num: 82

Candidate Starts for Phantastic_36:

(Start: 82 @27584 has 135 MA's),

Gene: Phelipe_36 Start: 27804, Stop: 27325, Start Num: 89

Candidate Starts for Phelipe_36:

(Start: 89 @27804 has 151 MA's), (160, 27453), (164, 27441), (190, 27381), (197, 27369),

Gene: Phendrix_177 Start: 96622, Stop: 96095, Start Num: 63

Candidate Starts for Phendrix_177:

(Start: 63 @96622 has 2 MA's), (67, 96616), (Start: 96 @96547 has 3 MA's), (109, 96469), (146, 96298), (151, 96277), (164, 96214), (181, 96172), (187, 96160), (205, 96118),

Gene: Phettuccine_34 Start: 25684, Stop: 26172, Start Num: 68

Candidate Starts for Phettuccine_34:

(40, 25636), (Start: 68 @25684 has 36 MA's), (97, 25756), (Start: 105 @25801 has 2 MA's), (125, 25903), (151, 26020), (188, 26140), (200, 26167),

Gene: Phighter1804_35 Start: 27846, Stop: 27250, Start Num: 89

Candidate Starts for Phighter1804_35:

(Start: 89 @27846 has 151 MA's), (163, 27486), (164, 27483), (177, 27447), (207, 27381), (208, 27378), (213, 27333), (214, 27321),

Gene: Phillis_32 Start: 26263, Stop: 25784, Start Num: 82

Candidate Starts for Phillis_32:

(Start: 82 @26263 has 135 MA's), (132, 26032), (169, 25882), (197, 25816), (204, 25804),

Gene: PhinkBoden_144 Start: 79554, Stop: 79946, Start Num: 82

Candidate Starts for PhinkBoden_144:

(Start: 82 @79554 has 135 MA's), (117, 79695), (164, 79917), (170, 79935),

Gene: PhishRPhriends_39 Start: 27579, Stop: 27196, Start Num: 82

Candidate Starts for PhishRPhriends_39:

(13, 27807), (Start: 66 @27606 has 11 MA's), (Start: 82 @27579 has 135 MA's), (Start: 98 @27534 has 6 MA's), (131, 27363), (132, 27351),

Gene: Phlorence_32 Start: 27081, Stop: 26572, Start Num: 81

Candidate Starts for Phlorence_32:

(Start: 81 @27081 has 40 MA's),

Gene: Phoebe_41 Start: 28568, Stop: 28185, Start Num: 82

Candidate Starts for Phoebe_41:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's), (131, 28352), (132, 28340),

Gene: Phontbonne_35 Start: 27698, Stop: 27225, Start Num: 89

Candidate Starts for Phontbonne_35:

(Start: 89 @27698 has 151 MA's), (160, 27347), (164, 27335), (190, 27275), (197, 27263),

Gene: Phoxy_40 Start: 28571, Stop: 28188, Start Num: 82

Candidate Starts for Phoxy_40:

(Start: 66 @28598 has 11 MA's), (Start: 82 @28571 has 135 MA's), (Start: 95 @28544 has 1 MA's),
(Start: 98 @28526 has 6 MA's), (131, 28355), (132, 28343),

Gene: Phranny_41 Start: 28387, Stop: 28004, Start Num: 82

Candidate Starts for Phranny_41:

(13, 28615), (Start: 66 @28414 has 11 MA's), (Start: 82 @28387 has 135 MA's), (Start: 98 @28342
has 6 MA's), (131, 28171), (132, 28159),

Gene: PickleBack_32 Start: 26795, Stop: 26286, Start Num: 81

Candidate Starts for PickleBack_32:

(Start: 81 @26795 has 40 MA's),

Gene: Pipcraft_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Pipcraft_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208,
27336), (213, 27291), (214, 27279),

Gene: Pistachio_37 Start: 27346, Stop: 26960, Start Num: 82

Candidate Starts for Pistachio_37:

(Start: 82 @27346 has 135 MA's), (129, 27148),

Gene: Pocahontas_35 Start: 27806, Stop: 27378, Start Num: 89

Candidate Starts for Pocahontas_35:

(Start: 87 @27809 has 16 MA's), (Start: 89 @27806 has 151 MA's), (Start: 98 @27761 has 6 MA's),
(125, 27623), (164, 27446),

Gene: Polymorphads_36 Start: 27797, Stop: 27321, Start Num: 89

Candidate Starts for Polymorphads_36:

(Start: 89 @27797 has 151 MA's), (Start: 98 @27752 has 6 MA's), (125, 27614), (160, 27449), (164,
27437), (190, 27377), (197, 27365),

Gene: Pomar16_40 Start: 28024, Stop: 27638, Start Num: 80

Candidate Starts for Pomar16_40:

(Start: 80 @28024 has 49 MA's), (132, 27793),

Gene: Poompha_34 Start: 26663, Stop: 26079, Start Num: 89

Candidate Starts for Poompha_34:

(19, 26858), (Start: 89 @26663 has 151 MA's), (163, 26303), (172, 26285),

Gene: Popcicle_35 Start: 27806, Stop: 27378, Start Num: 89

Candidate Starts for Popcicle_35:

(Start: 87 @27809 has 16 MA's), (Start: 89 @27806 has 151 MA's), (Start: 98 @27761 has 6 MA's),
(125, 27623), (164, 27446),

Gene: PotPie_45 Start: 35409, Stop: 34900, Start Num: 53

Candidate Starts for PotPie_45:

(Start: 53 @35409 has 2 MA's), (118, 35205), (146, 35109), (150, 35094), (158, 35049), (163, 35028),
(192, 34953), (194, 34950), (203, 34935),

Gene: PotatoSplit_42 Start: 28576, Stop: 28193, Start Num: 82
Candidate Starts for PotatoSplit_42:
(Start: 66 @28603 has 11 MA's), (Start: 82 @28576 has 135 MA's), (Start: 98 @28531 has 6 MA's),
(131, 28360), (132, 28348),

Gene: Priamo_41 Start: 26652, Stop: 26263, Start Num: 85
Candidate Starts for Priamo_41:
(Start: 85 @26652 has 19 MA's), (118, 26508), (126, 26463), (132, 26421), (136, 26394),

Gene: Provolone_36 Start: 27103, Stop: 27507, Start Num: 80
Candidate Starts for Provolone_36:
(16, 26908), (43, 27043), (Start: 80 @27103 has 49 MA's), (Start: 100 @27157 has 1 MA's), (Start:
105 @27190 has 2 MA's), (112, 27223), (163, 27484), (165, 27490),

Gene: PsychoKiller_43 Start: 32962, Stop: 32438, Start Num: 81
Candidate Starts for PsychoKiller_43:
(57, 33007), (Start: 81 @32962 has 40 MA's), (108, 32863), (118, 32812), (133, 32767), (146, 32716),
(153, 32677), (163, 32635), (192, 32560), (211, 32518),

Gene: Puginator_37 Start: 27390, Stop: 27809, Start Num: 100
Candidate Starts for Puginator_37:
(Start: 80 @27336 has 49 MA's), (Start: 98 @27381 has 6 MA's), (Start: 100 @27390 has 1 MA's),
(104, 27414), (Start: 105 @27423 has 2 MA's), (Start: 107 @27429 has 1 MA's), (125, 27525), (151,
27657), (188, 27777), (194, 27792),

Gene: Pumbaa_35 Start: 27749, Stop: 27276, Start Num: 89
Candidate Starts for Pumbaa_35:
(Start: 89 @27749 has 151 MA's), (160, 27398), (164, 27386), (190, 27326), (197, 27314),

Gene: Puppy_37 Start: 27416, Stop: 27030, Start Num: 82
Candidate Starts for Puppy_37:
(Start: 82 @27416 has 135 MA's), (129, 27218),

Gene: PurpleHaze_40 Start: 28400, Stop: 28017, Start Num: 82
Candidate Starts for PurpleHaze_40:
(13, 28628), (Start: 66 @28427 has 11 MA's), (Start: 82 @28400 has 135 MA's), (Start: 98 @28355
has 6 MA's), (131, 28184), (132, 28172),

Gene: Quasar_44 Start: 33624, Stop: 33100, Start Num: 81
Candidate Starts for Quasar_44:
(57, 33669), (62, 33660), (Start: 81 @33624 has 40 MA's), (108, 33525), (118, 33474), (146, 33378),
(153, 33339), (163, 33297), (192, 33222), (211, 33180),

Gene: QuinnKiro_34 Start: 27812, Stop: 27381, Start Num: 87
Candidate Starts for QuinnKiro_34:
(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's),
(125, 27626), (164, 27449),

Gene: R4_35 Start: 27055, Stop: 27540, Start Num: 76
Candidate Starts for R4_35:
(Start: 76 @27055 has 19 MA's), (104, 27139), (Start: 107 @27154 has 1 MA's), (118, 27211), (140,
27343), (150, 27382), (188, 27508), (194, 27523),

Gene: Rana_35 Start: 26571, Stop: 27047, Start Num: 80

Candidate Starts for Rana_35:

(16, 26373), (20, 26409), (40, 26505), (Start: 76 @26565 has 19 MA's), (Start: 80 @26571 has 49 MA's), (104, 26649), (Start: 107 @26664 has 1 MA's), (141, 26859), (188, 27015), (194, 27030),

Gene: RanchParmCat_49 Start: 34421, Stop: 34002, Start Num: 83

Candidate Starts for RanchParmCat_49:

(Start: 83 @34421 has 11 MA's), (Start: 95 @34388 has 1 MA's), (104, 34337), (Start: 105 @34328 has 2 MA's), (136, 34199), (144, 34175), (192, 34013),

Gene: Reba_41 Start: 28060, Stop: 27677, Start Num: 82

Candidate Starts for Reba_41:

(13, 28288), (Start: 66 @28087 has 11 MA's), (Start: 82 @28060 has 135 MA's), (Start: 98 @28015 has 6 MA's), (131, 27844), (132, 27832),

Gene: Rebeuca_37 Start: 28182, Stop: 27643, Start Num: 75

Candidate Starts for Rebeuca_37:

(Start: 75 @28182 has 6 MA's), (159, 27825), (163, 27810),

Gene: RedBaron_46 Start: 33291, Stop: 32767, Start Num: 81

Candidate Starts for RedBaron_46:

(57, 33336), (Start: 81 @33291 has 40 MA's), (108, 33192), (118, 33141), (146, 33045), (153, 33006), (163, 32964), (192, 32889), (211, 32847),

Gene: RedBear_35 Start: 26236, Stop: 26655, Start Num: 80

Candidate Starts for RedBear_35:

(Start: 80 @26236 has 49 MA's), (97, 26281), (Start: 98 @26284 has 6 MA's), (Start: 105 @26326 has 2 MA's), (116, 26377), (118, 26386), (125, 26428), (143, 26530),

Gene: Relief_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Relief_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: RemusLoopin_46 Start: 34126, Stop: 34542, Start Num: 79

Candidate Starts for RemusLoopin_46:

(Start: 79 @34126 has 9 MA's), (104, 34216), (Start: 107 @34231 has 1 MA's), (109, 34249),

Gene: ResDef_35 Start: 27812, Stop: 27381, Start Num: 87

Candidate Starts for ResDef_35:

(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: RhynO_36 Start: 27673, Stop: 27197, Start Num: 89

Candidate Starts for RhynO_36:

(Start: 66 @27709 has 11 MA's), (Start: 89 @27673 has 151 MA's), (Start: 98 @27628 has 6 MA's), (104, 27595), (Start: 105 @27586 has 2 MA's), (106, 27583), (159, 27331), (163, 27316), (169, 27298),

Gene: Rifter_40 Start: 26392, Stop: 26003, Start Num: 82

Candidate Starts for Rifter_40:

(Start: 82 @26392 has 135 MA's), (132, 26161), (136, 26134), (163, 26029),

Gene: Roary_32 Start: 26183, Stop: 25671, Start Num: 82
Candidate Starts for Roary_32:
(Start: 82 @26183 has 135 MA's), (132, 25952), (169, 25802), (184, 25766),

Gene: Rockstar_36 Start: 27560, Stop: 27174, Start Num: 82
Candidate Starts for Rockstar_36:
(Start: 82 @27560 has 135 MA's),

Gene: Roksolana_41 Start: 26646, Stop: 26254, Start Num: 82
Candidate Starts for Roksolana_41:
(Start: 82 @26646 has 135 MA's), (118, 26499), (126, 26454), (132, 26412), (136, 26385),

Gene: Romero_54 Start: 29431, Stop: 29015, Start Num: 90
Candidate Starts for Romero_54:
(67, 29473), (Start: 90 @29431 has 12 MA's), (Start: 107 @29344 has 1 MA's), (115, 29305), (121, 29254), (126, 29239), (128, 29233),

Gene: Romney_35 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for Romney_35:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Rooney_71 Start: 50674, Stop: 50294, Start Num: 93
Candidate Starts for Rooney_71:
(Start: 77 @50710 has 2 MA's), (Start: 93 @50674 has 2 MA's), (Start: 96 @50662 has 3 MA's), (Start: 98 @50650 has 6 MA's), (99, 50644), (101, 50629), (Start: 105 @50608 has 2 MA's), (133, 50452), (137, 50428), (148, 50389), (149, 50386), (159, 50332), (161, 50323),

Gene: Roosevelt_35 Start: 27806, Stop: 27210, Start Num: 89
Candidate Starts for Roosevelt_35:
(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: RosePharie_55 Start: 29769, Stop: 29353, Start Num: 90
Candidate Starts for RosePharie_55:
(Start: 83 @29781 has 11 MA's), (Start: 90 @29769 has 12 MA's), (Start: 95 @29748 has 1 MA's), (Start: 107 @29682 has 1 MA's), (147, 29490),

Gene: Rowa_49 Start: 35076, Stop: 35489, Start Num: 79
Candidate Starts for Rowa_49:
(Start: 79 @35076 has 9 MA's), (Start: 105 @35175 has 2 MA's), (109, 35199), (146, 35373), (163, 35454),

Gene: Rowdy_39 Start: 27581, Stop: 27105, Start Num: 89
Candidate Starts for Rowdy_39:
(Start: 66 @27617 has 11 MA's), (Start: 89 @27581 has 151 MA's), (Start: 98 @27536 has 6 MA's), (104, 27503), (Start: 105 @27494 has 2 MA's), (106, 27491), (159, 27239), (163, 27224), (169, 27206),

Gene: Ruin_35 Start: 27800, Stop: 27204, Start Num: 89
Candidate Starts for Ruin_35:

(Start: 89 @27800 has 151 MA's), (163, 27440), (164, 27437), (177, 27401), (207, 27335), (208, 27332), (213, 27287), (214, 27275),

Gene: Rummer_40 Start: 28571, Stop: 28188, Start Num: 82

Candidate Starts for Rummer_40:

(Start: 66 @28598 has 11 MA's), (Start: 82 @28571 has 135 MA's), (Start: 95 @28544 has 1 MA's), (Start: 98 @28526 has 6 MA's), (131, 28355), (132, 28343),

Gene: Rusticus_35 Start: 26042, Stop: 26530, Start Num: 68

Candidate Starts for Rusticus_35:

(29, 25937), (40, 25994), (Start: 68 @26042 has 36 MA's), (97, 26114), (Start: 105 @26159 has 2 MA's), (125, 26261), (151, 26378), (188, 26498), (200, 26525),

Gene: Sabertooth_35 Start: 27803, Stop: 27207, Start Num: 89

Candidate Starts for Sabertooth_35:

(Start: 89 @27803 has 151 MA's), (163, 27443), (164, 27440), (177, 27404), (207, 27338), (208, 27335), (213, 27290), (214, 27278),

Gene: Sabia_41 Start: 28596, Stop: 28186, Start Num: 66

Candidate Starts for Sabia_41:

(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's), (131, 28353), (132, 28341),

Gene: Sabinator_40 Start: 28574, Stop: 28191, Start Num: 82

Candidate Starts for Sabinator_40:

(Start: 66 @28601 has 11 MA's), (Start: 82 @28574 has 135 MA's), (Start: 98 @28529 has 6 MA's), (131, 28358), (132, 28346),

Gene: Saftant_35 Start: 27670, Stop: 28074, Start Num: 80

Candidate Starts for Saftant_35:

(Start: 80 @27670 has 49 MA's), (Start: 100 @27724 has 1 MA's), (Start: 105 @27757 has 2 MA's), (112, 27790), (151, 27991), (163, 28051), (165, 28057),

Gene: Samora_48 Start: 34458, Stop: 34883, Start Num: 79

Candidate Starts for Samora_48:

(Start: 79 @34458 has 9 MA's), (Start: 89 @34470 has 151 MA's), (104, 34548), (Start: 107 @34563 has 1 MA's), (118, 34617), (164, 34839), (168, 34851), (174, 34863), (179, 34875),

Gene: SarahRose_34 Start: 26055, Stop: 26543, Start Num: 68

Candidate Starts for SarahRose_34:

(Start: 68 @26055 has 36 MA's), (97, 26127), (104, 26163), (Start: 105 @26172 has 2 MA's), (115, 26220), (150, 26385), (151, 26391), (188, 26511), (200, 26538),

Gene: SaturnRing_36 Start: 27799, Stop: 27413, Start Num: 82

Candidate Starts for SaturnRing_36:

(Start: 82 @27799 has 135 MA's), (129, 27601),

Gene: Scamp_35 Start: 27806, Stop: 27210, Start Num: 89

Candidate Starts for Scamp_35:

(Start: 89 @27806 has 151 MA's), (163, 27446), (164, 27443), (177, 27407), (207, 27341), (208, 27338), (213, 27293), (214, 27281),

Gene: Schwartz33_66 Start: 46646, Stop: 47134, Start Num: 61

Candidate Starts for Schwartz33_66:

(Start: 58 @46640 has 2 MA's), (Start: 61 @46646 has 2 MA's), (Start: 96 @46724 has 3 MA's), (Start: 107 @46784 has 1 MA's), (132, 46922), (139, 46961),

Gene: Scorpia_34 Start: 26664, Stop: 26152, Start Num: 82

Candidate Starts for Scorpia_34:

(Start: 82 @26664 has 135 MA's),

Gene: Scout_36 Start: 27106, Stop: 26720, Start Num: 82

Candidate Starts for Scout_36:

(Start: 82 @27106 has 135 MA's), (129, 26908),

Gene: Sebastisaurus_45 Start: 34670, Stop: 34981, Start Num: 107

Candidate Starts for Sebastisaurus_45:

(Start: 79 @34565 has 9 MA's), (104, 34655), (Start: 107 @34670 has 1 MA's),

Gene: Secretariat_64 Start: 45608, Stop: 46093, Start Num: 61

Candidate Starts for Secretariat_64:

(17, 45440), (22, 45479), (28, 45497), (45, 45575), (49, 45584), (Start: 61 @45608 has 2 MA's), (Start: 96 @45683 has 3 MA's), (Start: 107 @45743 has 1 MA's), (119, 45800), (132, 45881), (138, 45917), (139, 45920),

Gene: Severus_34 Start: 26663, Stop: 26079, Start Num: 89

Candidate Starts for Severus_34:

(19, 26858), (Start: 89 @26663 has 151 MA's), (163, 26303), (172, 26285), (187, 26249),

Gene: Shaka_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Shaka_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: ShakeNBake_71 Start: 50539, Stop: 50183, Start Num: 98

Candidate Starts for ShakeNBake_71:

(Start: 77 @50599 has 2 MA's), (Start: 96 @50551 has 3 MA's), (Start: 98 @50539 has 6 MA's), (99, 50533), (101, 50518), (104, 50506), (136, 50320), (137, 50317), (149, 50275), (161, 50212), (165, 50200),

Gene: Shapes_39 Start: 27581, Stop: 27105, Start Num: 89

Candidate Starts for Shapes_39:

(Start: 66 @27617 has 11 MA's), (Start: 89 @27581 has 151 MA's), (Start: 98 @27536 has 6 MA's), (104, 27503), (Start: 105 @27494 has 2 MA's), (106, 27491), (159, 27239), (163, 27224), (169, 27206),

Gene: Shawty_45 Start: 33157, Stop: 33510, Start Num: 98

Candidate Starts for Shawty_45:

(59, 33064), (65, 33076), (Start: 77 @33097 has 2 MA's), (Start: 98 @33157 has 6 MA's), (Start: 107 @33205 has 1 MA's), (164, 33481), (174, 33502),

Gene: Sheen_36 Start: 29802, Stop: 29311, Start Num: 89

Candidate Starts for Sheen_36:

(31, 29925), (32, 29916), (65, 29838), (Start: 89 @29802 has 151 MA's), (126, 29616), (136, 29547), (163, 29442), (164, 29439), (169, 29424), (199, 29361), (202, 29358),

Gene: SheldonCooper_37 Start: 28101, Stop: 27661, Start Num: 89

Candidate Starts for SheldonCooper_37:

(Start: 89 @28101 has 151 MA's), (163, 27741), (164, 27738),

Gene: Shrew_86 Start: 46071, Stop: 46502, Start Num: 80

Candidate Starts for Shrew_86:

(Start: 80 @46071 has 49 MA's), (Start: 83 @46074 has 11 MA's), (Start: 93 @46098 has 2 MA's), (Start: 96 @46110 has 3 MA's), (Start: 98 @46122 has 6 MA's), (160, 46407), (161, 46410), (175, 46452), (193, 46491),

Gene: Shygu2_35 Start: 27798, Stop: 27202, Start Num: 89

Candidate Starts for Shygu2_35:

(Start: 89 @27798 has 151 MA's), (163, 27438), (164, 27435), (177, 27399), (207, 27333), (208, 27330), (213, 27285), (214, 27273),

Gene: Sixama_175 Start: 101856, Stop: 101392, Start Num: 96

Candidate Starts for Sixama_175:

(Start: 82 @101895 has 135 MA's), (Start: 96 @101856 has 3 MA's), (137, 101619), (146, 101598), (160, 101526), (162, 101520), (167, 101505), (187, 101457), (200, 101427),

Gene: SketchMex_44 Start: 32979, Stop: 32512, Start Num: 76

Candidate Starts for SketchMex_44:

(Start: 76 @32979 has 19 MA's), (108, 32871), (118, 32820), (134, 32763), (146, 32724), (150, 32709), (153, 32685), (163, 32643), (192, 32568), (198, 32556), (200, 32553), (210, 32529), (211, 32526),

Gene: Skipitt_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for Skipitt_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208, 27333), (213, 27288), (214, 27276),

Gene: Smeadley_32 Start: 26306, Stop: 25698, Start Num: 82

Candidate Starts for Smeadley_32:

(Start: 82 @26306 has 135 MA's), (160, 25952), (184, 25889), (206, 25838), (209, 25832),

Gene: SmellyB_40 Start: 26616, Stop: 26224, Start Num: 82

Candidate Starts for SmellyB_40:

(Start: 82 @26616 has 135 MA's), (118, 26469), (126, 26424), (132, 26382), (136, 26355),

Gene: Smoothie_147 Start: 79538, Stop: 79933, Start Num: 82

Candidate Starts for Smoothie_147:

(1, 78968), (2, 79082), (3, 79109), (4, 79139), (7, 79232), (15, 79331), (24, 79382), (Start: 26 @79394 has 1 MA's), (37, 79445), (41, 79466), (49, 79481), (Start: 82 @79538 has 135 MA's), (117, 79682), (164, 79904), (170, 79922),

Gene: Snorlax_34 Start: 26059, Stop: 26547, Start Num: 68

Candidate Starts for Snorlax_34:

(16, 25879), (20, 25915), (40, 26011), (Start: 68 @26059 has 36 MA's), (97, 26131), (104, 26167), (Start: 105 @26176 has 2 MA's), (115, 26224), (150, 26389), (151, 26395), (188, 26515), (200, 26542),

Gene: SoYo_41 Start: 28514, Stop: 28104, Start Num: 66

Candidate Starts for SoYo_41:

(Start: 66 @28514 has 11 MA's), (Start: 82 @28487 has 135 MA's), (Start: 98 @28442 has 6 MA's), (131, 28271), (132, 28259),

Gene: SoilDragon_40 Start: 28021, Stop: 27638, Start Num: 82

Candidate Starts for SoilDragon_40:

(Start: 66 @28048 has 11 MA's), (Start: 82 @28021 has 135 MA's), (Start: 98 @27976 has 6 MA's), (131, 27805), (132, 27793),

Gene: Sopespian_42 Start: 32963, Stop: 32439, Start Num: 81

Candidate Starts for Sopespian_42:

(57, 33008), (Start: 81 @32963 has 40 MA's), (108, 32864), (118, 32813), (133, 32768), (146, 32717), (153, 32678), (163, 32636), (192, 32561), (211, 32519),

Gene: Soshari_42 Start: 28570, Stop: 28187, Start Num: 82

Candidate Starts for Soshari_42:

(Start: 66 @28597 has 11 MA's), (Start: 82 @28570 has 135 MA's), (Start: 95 @28543 has 1 MA's), (Start: 98 @28525 has 6 MA's), (131, 28354), (132, 28342),

Gene: South40_34 Start: 26236, Stop: 26655, Start Num: 80

Candidate Starts for South40_34:

(Start: 80 @26236 has 49 MA's), (97, 26281), (Start: 98 @26284 has 6 MA's), (Start: 105 @26326 has 2 MA's), (116, 26377), (118, 26386), (125, 26428), (143, 26530),

Gene: Sparxx_36 Start: 27799, Stop: 27323, Start Num: 89

Candidate Starts for Sparxx_36:

(Start: 89 @27799 has 151 MA's), (Start: 98 @27754 has 6 MA's), (125, 27616), (160, 27451), (164, 27439), (190, 27379), (197, 27367),

Gene: Speedwell_42 Start: 28980, Stop: 29384, Start Num: 80

Candidate Starts for Speedwell_42:

(Start: 80 @28980 has 49 MA's), (Start: 100 @29034 has 1 MA's), (104, 29058), (Start: 105 @29067 has 2 MA's), (116, 29118), (125, 29169), (151, 29301), (163, 29361), (165, 29367),

Gene: Spike509_40 Start: 28571, Stop: 28188, Start Num: 82

Candidate Starts for Spike509_40:

(Start: 66 @28598 has 11 MA's), (Start: 82 @28571 has 135 MA's), (Start: 95 @28544 has 1 MA's), (Start: 98 @28526 has 6 MA's), (131, 28355), (132, 28343),

Gene: Spino_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Spino_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: SqueakyClean_34 Start: 26829, Stop: 27302, Start Num: 80

Candidate Starts for SqueakyClean_34:

(Start: 80 @26829 has 49 MA's), (Start: 98 @26874 has 6 MA's), (Start: 100 @26883 has 1 MA's), (104, 26907), (Start: 105 @26916 has 2 MA's), (112, 26949), (138, 27099), (188, 27270), (194, 27285),

Gene: Stagni_41 Start: 28578, Stop: 28195, Start Num: 82

Candidate Starts for Stagni_41:

(Start: 66 @28605 has 11 MA's), (Start: 82 @28578 has 135 MA's), (Start: 98 @28533 has 6 MA's), (131, 28362), (132, 28350),

Gene: StarStuff_40 Start: 27986, Stop: 27600, Start Num: 80

Candidate Starts for StarStuff_40:

(Start: 80 @27986 has 49 MA's), (132, 27755),

Gene: Stasia_36 Start: 28128, Stop: 27649, Start Num: 89

Candidate Starts for Stasia_36:

(Start: 66 @28158 has 11 MA's), (Start: 89 @28128 has 151 MA's), (163, 27768), (169, 27750),

Gene: SteamedHams_44 Start: 32460, Stop: 32005, Start Num: 81

Candidate Starts for SteamedHams_44:

(5, 32844), (12, 32709), (18, 32658), (25, 32616), (47, 32526), (57, 32505), (Start: 81 @32460 has 40 MA's), (108, 32361), (109, 32346), (118, 32310), (134, 32253), (146, 32214), (150, 32199), (153, 32175), (156, 32160), (178, 32091), (192, 32058),

Gene: StepMih_41 Start: 28569, Stop: 28186, Start Num: 82

Candidate Starts for StepMih_41:

(Start: 66 @28596 has 11 MA's), (Start: 82 @28569 has 135 MA's), (Start: 98 @28524 has 6 MA's), (131, 28353), (132, 28341),

Gene: Stephig9_32 Start: 26211, Stop: 25699, Start Num: 82

Candidate Starts for Stephig9_32:

(Start: 82 @26211 has 135 MA's), (132, 25980), (169, 25830), (184, 25794),

Gene: Stink_36 Start: 28296, Stop: 27874, Start Num: 89

Candidate Starts for Stink_36:

(Start: 89 @28296 has 151 MA's), (Start: 98 @28251 has 6 MA's),

Gene: Success_13 Start: 8706, Stop: 8326, Start Num: 98

Candidate Starts for Success_13:

(52, 8814), (59, 8802), (Start: 98 @8706 has 6 MA's), (111, 8634), (113, 8625), (135, 8496), (154, 8421), (163, 8388), (164, 8385), (183, 8337),

Gene: Sujidade_35 Start: 26794, Stop: 27273, Start Num: 78

Candidate Starts for Sujidade_35:

(Start: 78 @26794 has 5 MA's), (104, 26875), (Start: 107 @26890 has 1 MA's), (141, 27085), (188, 27241), (194, 27256),

Gene: SunsetPointe_34 Start: 25675, Stop: 26163, Start Num: 68

Candidate Starts for SunsetPointe_34:

(40, 25627), (Start: 68 @25675 has 36 MA's), (97, 25747), (Start: 105 @25792 has 2 MA's), (125, 25894), (151, 26011), (188, 26131), (200, 26158),

Gene: SuperAwesome_40 Start: 26609, Stop: 26217, Start Num: 82

Candidate Starts for SuperAwesome_40:

(Start: 82 @26609 has 135 MA's), (118, 26462), (126, 26417), (132, 26375), (136, 26348),

Gene: Superstar_38 Start: 27847, Stop: 28332, Start Num: 76

Candidate Starts for Superstar_38:

(Start: 76 @27847 has 19 MA's), (104, 27931), (Start: 107 @27946 has 1 MA's), (140, 28135), (188, 28300), (194, 28315),

Gene: Survivors_41 Start: 32356, Stop: 31943, Start Num: 85

Candidate Starts for Survivors_41:

(50, 32419), (Start: 85 @32356 has 19 MA's), (Start: 95 @32326 has 1 MA's), (Start: 96 @32320 has 3 MA's), (Start: 98 @32308 has 6 MA's), (134, 32152), (135, 32146), (151, 32092), (156, 32059), (158, 32053),

Gene: SweatNTears_45 Start: 32906, Stop: 32448, Start Num: 81

Candidate Starts for SweatNTears_45:

(Start: 81 @32906 has 40 MA's), (108, 32807), (118, 32756), (134, 32699), (146, 32660), (150, 32645), (153, 32621), (163, 32579), (192, 32504), (198, 32492), (200, 32489), (210, 32465), (211, 32462),

Gene: Swirley_32 Start: 26951, Stop: 26445, Start Num: 88

Candidate Starts for Swirley_32:

(Start: 88 @26951 has 5 MA's),

Gene: SydNat_32 Start: 27230, Stop: 26724, Start Num: 88

Candidate Starts for SydNat_32:

(Start: 88 @27230 has 5 MA's),

Gene: TG1_40 Start: 31978, Stop: 32517, Start Num: 89

Candidate Starts for TG1_40:

(Start: 70 @31954 has 1 MA's), (Start: 89 @31978 has 151 MA's), (Start: 95 @32005 has 1 MA's), (Start: 98 @32023 has 6 MA's), (Start: 105 @32065 has 2 MA's), (Start: 107 @32071 has 1 MA's), (109, 32089), (176, 32380),

Gene: TNguyen7_36 Start: 27763, Stop: 27377, Start Num: 82

Candidate Starts for TNguyen7_36:

(Start: 82 @27763 has 135 MA's), (129, 27565),

Gene: TAgePighther_36 Start: 26059, Stop: 26547, Start Num: 68

Candidate Starts for TAgePighther_36:

(16, 25879), (20, 25915), (40, 26011), (Start: 68 @26059 has 36 MA's), (97, 26131), (104, 26167), (Start: 105 @26176 has 2 MA's), (115, 26224), (150, 26389), (151, 26395), (188, 26515), (200, 26542),

Gene: Taquarus_35 Start: 27807, Stop: 27211, Start Num: 89

Candidate Starts for Taquarus_35:

(Start: 89 @27807 has 151 MA's), (163, 27447), (164, 27444), (177, 27408), (207, 27342), (208, 27339), (213, 27294), (214, 27282),

Gene: Tarynearal_31 Start: 26979, Stop: 26470, Start Num: 81

Candidate Starts for Tarynearal_31:

(Start: 81 @26979 has 40 MA's),

Gene: Taurus_41 Start: 28575, Stop: 28192, Start Num: 82

Candidate Starts for Taurus_41:

(Start: 66 @28602 has 11 MA's), (Start: 82 @28575 has 135 MA's), (Start: 98 @28530 has 6 MA's), (131, 28359), (132, 28347),

Gene: Tefunt_36 Start: 26734, Stop: 27219, Start Num: 76

Candidate Starts for Tefunt_36:

(Start: 76 @26734 has 19 MA's), (Start: 98 @26785 has 6 MA's), (104, 26818), (Start: 107 @26833 has 1 MA's), (147, 27049), (188, 27187), (194, 27202),

Gene: Texage_34 Start: 27813, Stop: 27382, Start Num: 87

Candidate Starts for Texage_34:

(Start: 87 @27813 has 16 MA's), (Start: 89 @27810 has 151 MA's), (Start: 98 @27765 has 6 MA's), (125, 27627), (164, 27450),

Gene: Thanksgivukkah_35 Start: 27805, Stop: 27209, Start Num: 89

Candidate Starts for Thanksgivukkah_35:

(Start: 89 @27805 has 151 MA's), (163, 27445), (164, 27442), (177, 27406), (207, 27340), (208, 27337), (213, 27292), (214, 27280),

Gene: Theia_30 Start: 27003, Stop: 26494, Start Num: 81

Candidate Starts for Theia_30:

(Start: 81 @27003 has 40 MA's),

Gene: Thestral_36 Start: 26939, Stop: 27412, Start Num: 80

Candidate Starts for Thestral_36:

(Start: 80 @26939 has 49 MA's), (Start: 98 @26984 has 6 MA's), (Start: 100 @26993 has 1 MA's), (104, 27017), (112, 27059), (125, 27128), (188, 27380), (194, 27395),

Gene: Tiffany_41 Start: 28461, Stop: 28078, Start Num: 82

Candidate Starts for Tiffany_41:

(Start: 66 @28488 has 11 MA's), (Start: 82 @28461 has 135 MA's), (Start: 98 @28416 has 6 MA's), (131, 28245), (132, 28233),

Gene: Tiger_32 Start: 26872, Stop: 26363, Start Num: 81

Candidate Starts for Tiger_32:

(Start: 81 @26872 has 40 MA's),

Gene: Timshel_36 Start: 30226, Stop: 29732, Start Num: 87

Candidate Starts for Timshel_36:

(84, 30229), (Start: 87 @30226 has 16 MA's), (121, 30049), (163, 29863), (164, 29860), (199, 29782), (202, 29779),

Gene: TinaBelcher_35 Start: 26886, Stop: 27359, Start Num: 80

Candidate Starts for TinaBelcher_35:

(Start: 80 @26886 has 49 MA's), (Start: 98 @26931 has 6 MA's), (Start: 100 @26940 has 1 MA's), (104, 26964), (112, 27006), (125, 27075), (188, 27327), (194, 27342),

Gene: TinaFeyge_36 Start: 27799, Stop: 27320, Start Num: 89

Candidate Starts for TinaFeyge_36:

(Start: 89 @27799 has 151 MA's), (160, 27448), (164, 27436), (190, 27376), (197, 27364),

Gene: TiroTheta9_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for TiroTheta9_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208, 27333), (213, 27288), (214, 27276),

Gene: Todacoro_35 Start: 27812, Stop: 27381, Start Num: 87

Candidate Starts for Todacoro_35:

(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: Tolls_45 Start: 32853, Stop: 32398, Start Num: 81

Candidate Starts for Tolls_45:

(5, 33237), (12, 33102), (18, 33051), (25, 33009), (47, 32919), (57, 32898), (Start: 81 @32853 has 40 MA's), (108, 32754), (109, 32739), (118, 32703), (134, 32646), (146, 32607), (150, 32592), (153, 32568), (156, 32553), (163, 32526), (192, 32451),

Gene: Toma_34 Start: 26511, Stop: 26990, Start Num: 78

Candidate Starts for Toma_34:

(Start: 78 @26511 has 5 MA's), (104, 26592), (Start: 107 @26607 has 1 MA's), (141, 26802), (188, 26958), (194, 26973),

Gene: Tomathan_40 Start: 27983, Stop: 27597, Start Num: 80

Candidate Starts for Tomathan_40:

(Start: 80 @27983 has 49 MA's), (132, 27752),

Gene: ToneTone_37 Start: 26318, Stop: 25929, Start Num: 85

Candidate Starts for ToneTone_37:

(Start: 85 @26318 has 19 MA's), (118, 26174), (126, 26129), (132, 26087), (136, 26060),

Gene: Toniann_146 Start: 79300, Stop: 79689, Start Num: 87

Candidate Starts for Toniann_146:

(Start: 87 @79300 has 16 MA's), (117, 79438), (164, 79660), (170, 79678),

Gene: Topanga_36 Start: 28017, Stop: 27481, Start Num: 75

Candidate Starts for Topanga_36:

(Start: 75 @28017 has 6 MA's), (Start: 98 @27960 has 6 MA's), (104, 27927), (Start: 105 @27918 has 2 MA's), (159, 27663), (163, 27648),

Gene: ToriToki_54 Start: 29434, Stop: 29018, Start Num: 90

Candidate Starts for ToriToki_54:

(67, 29476), (Start: 90 @29434 has 12 MA's), (Start: 107 @29347 has 1 MA's), (122, 29251), (124, 29248), (126, 29242), (144, 29164),

Gene: Treat_54 Start: 29375, Stop: 28959, Start Num: 90

Candidate Starts for Treat_54:

(67, 29417), (Start: 90 @29375 has 12 MA's), (Start: 107 @29288 has 1 MA's), (115, 29249), (121, 29198), (126, 29183), (128, 29177),

Gene: Trike_33 Start: 26496, Stop: 25912, Start Num: 89

Candidate Starts for Trike_33:

(Start: 89 @26496 has 151 MA's), (163, 26136), (172, 26118),

Gene: Triscuit_69 Start: 43287, Stop: 43871, Start Num: 35

Candidate Starts for Triscuit_69:

(Start: 35 @43287 has 2 MA's), (38, 43308), (42, 43314), (69, 43365), (Start: 96 @43431 has 3 MA's), (103, 43488), (114, 43545), (118, 43563), (121, 43590), (151, 43722), (152, 43731), (163, 43782), (175, 43818), (178, 43824),

Gene: Triste_34 Start: 26047, Stop: 26535, Start Num: 68

Candidate Starts for Triste_34:

(16, 25867), (20, 25903), (40, 25999), (Start: 68 @26047 has 36 MA's), (97, 26119), (104, 26155), (Start: 105 @26164 has 2 MA's), (115, 26212), (150, 26377), (151, 26383), (188, 26503), (200, 26530),

Gene: Triumph_36 Start: 26636, Stop: 27115, Start Num: 80
Candidate Starts for Triumph_36:
(56, 26600), (Start: 80 @26636 has 49 MA's), (97, 26687), (104, 26723), (Start: 105 @26732 has 2 MA's), (Start: 107 @26738 has 1 MA's), (109, 26756), (188, 27083), (194, 27098),

Gene: Troje_46 Start: 33317, Stop: 32850, Start Num: 76
Candidate Starts for Troje_46:
(Start: 76 @33317 has 19 MA's), (108, 33209), (118, 33158), (134, 33101), (146, 33062), (150, 33047), (153, 33023), (163, 32981), (192, 32906), (198, 32894), (200, 32891), (210, 32867), (211, 32864),

Gene: TroyPia_36 Start: 27802, Stop: 27323, Start Num: 89
Candidate Starts for TroyPia_36:
(Start: 89 @27802 has 151 MA's), (160, 27451), (164, 27439), (190, 27379), (197, 27367),

Gene: TrvxScott_34 Start: 26932, Stop: 27405, Start Num: 80
Candidate Starts for TrvxScott_34:
(Start: 80 @26932 has 49 MA's), (Start: 98 @26977 has 6 MA's), (Start: 100 @26986 has 1 MA's), (104, 27010), (112, 27052), (125, 27121), (188, 27373), (194, 27388),

Gene: TuanPN_33 Start: 25988, Stop: 26476, Start Num: 68
Candidate Starts for TuanPN_33:
(18, 25820), (39, 25937), (Start: 68 @25988 has 36 MA's), (97, 26060), (104, 26096), (Start: 105 @26105 has 2 MA's), (115, 26153), (150, 26318), (151, 26324), (188, 26444), (200, 26471),

Gene: Tucker_40 Start: 26404, Stop: 26015, Start Num: 85
Candidate Starts for Tucker_40:
(Start: 85 @26404 has 19 MA's), (Start: 95 @26377 has 1 MA's), (118, 26260), (126, 26215), (132, 26173), (136, 26146),

Gene: Twister_36 Start: 27928, Stop: 27389, Start Num: 75
Candidate Starts for Twister_36:
(Start: 75 @27928 has 6 MA's), (159, 27571), (163, 27556),

Gene: TygerBlood_35 Start: 27804, Stop: 27208, Start Num: 89
Candidate Starts for TygerBlood_35:
(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208, 27336), (213, 27291), (214, 27279),

Gene: Typhonomachy_44 Start: 32785, Stop: 32261, Start Num: 81
Candidate Starts for Typhonomachy_44:
(57, 32830), (Start: 81 @32785 has 40 MA's), (108, 32686), (118, 32635), (146, 32539), (153, 32500), (163, 32458), (192, 32383), (211, 32341),

Gene: Ulysses_34 Start: 27484, Stop: 27011, Start Num: 89
Candidate Starts for Ulysses_34:
(Start: 89 @27484 has 151 MA's), (160, 27133), (164, 27121), (190, 27061), (197, 27049),

Gene: UnionJack_33 Start: 26328, Stop: 25807, Start Num: 73
Candidate Starts for UnionJack_33:
(51, 26370), (Start: 73 @26328 has 1 MA's), (Start: 81 @26316 has 40 MA's),

Gene: Unstoppable_34 Start: 25679, Stop: 26167, Start Num: 68
Candidate Starts for Unstoppable_34:
(40, 25631), (Start: 68 @25679 has 36 MA's), (97, 25751), (Start: 105 @25796 has 2 MA's), (125, 25898), (151, 26015), (188, 26135), (200, 26162),

Gene: VA6_37 Start: 28094, Stop: 27678, Start Num: 80
Candidate Starts for VA6_37:
(9, 28382), (Start: 80 @28094 has 49 MA's), (132, 27863), (163, 27731), (171, 27710), (177, 27692),

Gene: VC3_40 Start: 28082, Stop: 27666, Start Num: 80
Candidate Starts for VC3_40:
(9, 28370), (Start: 80 @28082 has 49 MA's), (132, 27851), (163, 27719), (171, 27698), (177, 27680),

Gene: Vanseggelen_40 Start: 27232, Stop: 27636, Start Num: 80
Candidate Starts for Vanseggelen_40:
(16, 27037), (43, 27172), (Start: 80 @27232 has 49 MA's), (Start: 98 @27277 has 6 MA's), (Start: 100 @27286 has 1 MA's), (104, 27310), (Start: 105 @27319 has 2 MA's), (112, 27352), (163, 27613), (165, 27619),

Gene: Vardy_63 Start: 46057, Stop: 46503, Start Num: 64
Candidate Starts for Vardy_63:
(36, 45991), (48, 46027), (60, 46048), (Start: 64 @46057 has 4 MA's), (Start: 107 @46189 has 1 MA's), (120, 46255), (125, 46282), (130, 46297), (146, 46390), (155, 46441),

Gene: Vash_45 Start: 33403, Stop: 33828, Start Num: 79
Candidate Starts for Vash_45:
(Start: 79 @33403 has 9 MA's), (Start: 89 @33415 has 151 MA's), (104, 33493), (Start: 107 @33508 has 1 MA's), (109, 33526), (150, 33715), (164, 33784), (168, 33796), (174, 33808), (179, 33820),

Gene: Verabelle_38 Start: 27616, Stop: 28023, Start Num: 80
Candidate Starts for Verabelle_38:
(16, 27421), (29, 27496), (43, 27556), (Start: 80 @27616 has 49 MA's), (Start: 100 @27673 has 1 MA's), (Start: 105 @27706 has 2 MA's), (116, 27757), (125, 27808), (130, 27823), (151, 27940), (163, 28000), (165, 28006),

Gene: Veracruz_34 Start: 27812, Stop: 27381, Start Num: 87
Candidate Starts for Veracruz_34:
(Start: 87 @27812 has 16 MA's), (Start: 89 @27809 has 151 MA's), (Start: 98 @27764 has 6 MA's), (125, 27626), (164, 27449),

Gene: Verse_35 Start: 28380, Stop: 28784, Start Num: 80
Candidate Starts for Verse_35:
(43, 28317), (Start: 80 @28380 has 49 MA's), (Start: 98 @28425 has 6 MA's), (Start: 100 @28434 has 1 MA's), (104, 28458), (116, 28518), (151, 28701), (163, 28761), (165, 28767),

Gene: Vine_48 Start: 35175, Stop: 34666, Start Num: 53
Candidate Starts for Vine_48:
(Start: 53 @35175 has 2 MA's), (127, 34941), (146, 34875), (150, 34860), (158, 34815), (163, 34794), (192, 34719), (194, 34716), (203, 34701),

Gene: Vix_41 Start: 28658, Stop: 28275, Start Num: 82
Candidate Starts for Vix_41:

(Start: 66 @28685 has 11 MA's), (Start: 82 @28658 has 135 MA's), (Start: 98 @28613 has 6 MA's),
(131, 28442), (132, 28430),

Gene: VohminGhazi_40 Start: 26617, Stop: 26225, Start Num: 82

Candidate Starts for VohminGhazi_40:

(Start: 82 @26617 has 135 MA's), (118, 26470), (126, 26425), (132, 26383), (136, 26356),

Gene: WRightOn_58 Start: 29613, Stop: 29197, Start Num: 90

Candidate Starts for WRightOn_58:

(33, 29736), (Start: 82 @29628 has 135 MA's), (Start: 90 @29613 has 12 MA's), (132, 29385),

Gene: WalterMcMickey_36 Start: 27928, Stop: 27389, Start Num: 75

Candidate Starts for WalterMcMickey_36:

(Start: 75 @27928 has 6 MA's), (159, 27571), (163, 27556),

Gene: Wander_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Wander_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208,
27336), (213, 27291), (214, 27279),

Gene: Watson_41 Start: 28595, Stop: 28185, Start Num: 66

Candidate Starts for Watson_41:

(Start: 66 @28595 has 11 MA's), (Start: 82 @28568 has 135 MA's), (Start: 98 @28523 has 6 MA's),
(131, 28352), (132, 28340),

Gene: Wentworth_71 Start: 50670, Stop: 50269, Start Num: 93

Candidate Starts for Wentworth_71:

(Start: 77 @50700 has 2 MA's), (Start: 93 @50670 has 2 MA's), (Start: 96 @50658 has 3 MA's), (Start:
98 @50646 has 6 MA's), (Start: 105 @50604 has 2 MA's), (Start: 107 @50598 has 1 MA's), (133,
50448), (136, 50427), (142, 50397), (148, 50376),

Gene: Werner_34 Start: 26057, Stop: 26545, Start Num: 68

Candidate Starts for Werner_34:

(16, 25877), (20, 25913), (40, 26009), (Start: 68 @26057 has 36 MA's), (97, 26129), (104, 26165),
(Start: 105 @26174 has 2 MA's), (115, 26222), (125, 26276), (137, 26351), (150, 26387), (151,
26393), (188, 26513), (200, 26540),

Gene: Whatever_34 Start: 26057, Stop: 26545, Start Num: 68

Candidate Starts for Whatever_34:

(16, 25877), (20, 25913), (40, 26009), (Start: 68 @26057 has 36 MA's), (97, 26129), (104, 26165),
(115, 26222), (150, 26387), (151, 26393), (188, 26513), (200, 26540),

Gene: Wiks_39 Start: 26386, Stop: 25997, Start Num: 85

Candidate Starts for Wiks_39:

(Start: 85 @26386 has 19 MA's), (118, 26242), (126, 26197), (132, 26155), (136, 26128),

Gene: Wilbur_35 Start: 27804, Stop: 27208, Start Num: 89

Candidate Starts for Wilbur_35:

(Start: 89 @27804 has 151 MA's), (163, 27444), (164, 27441), (177, 27405), (207, 27339), (208,
27336), (213, 27291), (214, 27279),

Gene: Wile_35 Start: 27868, Stop: 27272, Start Num: 89

Candidate Starts for Wile_35:

(Start: 55 @27898 has 2 MA's), (Start: 89 @27868 has 151 MA's), (163, 27508), (164, 27505), (177, 27469), (207, 27403), (208, 27400), (213, 27355), (214, 27343),

Gene: Wilkos_73 Start: 50809, Stop: 50432, Start Num: 98

Candidate Starts for Wilkos_73:

(Start: 77 @50863 has 2 MA's), (Start: 98 @50809 has 6 MA's), (Start: 107 @50761 has 1 MA's), (136, 50590), (142, 50560), (148, 50539), (149, 50536),

Gene: Wizard007_35 Start: 27809, Stop: 27213, Start Num: 89

Candidate Starts for Wizard007_35:

(Start: 89 @27809 has 151 MA's), (163, 27449), (164, 27446), (177, 27410), (207, 27344), (208, 27341), (213, 27296), (214, 27284),

Gene: Wooldri_43 Start: 28514, Stop: 28104, Start Num: 66

Candidate Starts for Wooldri_43:

(Start: 66 @28514 has 11 MA's), (Start: 82 @28487 has 135 MA's), (Start: 98 @28442 has 6 MA's), (131, 28271), (132, 28259),

Gene: WunderPhul_40 Start: 26384, Stop: 25995, Start Num: 85

Candidate Starts for WunderPhul_40:

(Start: 85 @26384 has 19 MA's), (118, 26240), (126, 26195), (132, 26153), (136, 26126),

Gene: Xena_35 Start: 27834, Stop: 27259, Start Num: 89

Candidate Starts for Xena_35:

(Start: 55 @27864 has 2 MA's), (Start: 89 @27834 has 151 MA's), (164, 27471), (177, 27435), (208, 27366), (213, 27321), (214, 27309),

Gene: Yakult_47 Start: 34354, Stop: 33935, Start Num: 83

Candidate Starts for Yakult_47:

(Start: 83 @34354 has 11 MA's), (Start: 95 @34321 has 1 MA's), (108, 34255), (110, 34237), (136, 34132), (163, 34021), (175, 33985), (191, 33949), (192, 33946),

Gene: Yara_67 Start: 49527, Stop: 49126, Start Num: 77

Candidate Starts for Yara_67:

(Start: 77 @49527 has 2 MA's), (104, 49440), (138, 49254), (148, 49221), (165, 49143),

Gene: Yarn_41 Start: 32613, Stop: 32158, Start Num: 81

Candidate Starts for Yarn_41:

(5, 32997), (12, 32862), (18, 32811), (25, 32769), (47, 32679), (57, 32658), (Start: 81 @32613 has 40 MA's), (108, 32514), (109, 32499), (118, 32463), (134, 32406), (146, 32367), (150, 32352), (153, 32328), (156, 32313), (178, 32244), (192, 32211),

Gene: Yasdnii_34 Start: 26106, Stop: 26594, Start Num: 68

Candidate Starts for Yasdnii_34:

(16, 25926), (40, 26058), (Start: 68 @26106 has 36 MA's), (97, 26178), (104, 26214), (Start: 105 @26223 has 2 MA's), (115, 26271), (150, 26436), (151, 26442), (188, 26562), (200, 26589),

Gene: YoSam321_35 Start: 27801, Stop: 27205, Start Num: 89

Candidate Starts for YoSam321_35:

(Start: 89 @27801 has 151 MA's), (163, 27441), (164, 27438), (177, 27402), (207, 27336), (208, 27333), (213, 27288), (214, 27276),

Gene: Yokurt_40 Start: 26386, Stop: 25997, Start Num: 85

Candidate Starts for Yokurt_40:

(Start: 85 @26386 has 19 MA's), (118, 26242), (126, 26197), (132, 26155), (136, 26128),

Gene: Yosif_37 Start: 28173, Stop: 28583, Start Num: 80

Candidate Starts for Yosif_37:

(Start: 80 @28173 has 49 MA's), (Start: 100 @28227 has 1 MA's), (104, 28251), (151, 28494), (163, 28554), (165, 28560),

Gene: Yummy_46 Start: 33026, Stop: 32559, Start Num: 76

Candidate Starts for Yummy_46:

(Start: 76 @33026 has 19 MA's), (108, 32918), (118, 32867), (134, 32810), (146, 32771), (150, 32756), (153, 32732), (163, 32690), (192, 32615), (198, 32603), (200, 32600), (210, 32576), (211, 32573),

Gene: Zainub_37 Start: 27276, Stop: 27749, Start Num: 80

Candidate Starts for Zainub_37:

(Start: 80 @27276 has 49 MA's), (Start: 98 @27321 has 6 MA's), (Start: 100 @27330 has 1 MA's), (104, 27354), (Start: 105 @27363 has 2 MA's), (Start: 107 @27369 has 1 MA's), (125, 27465), (151, 27597), (188, 27717), (194, 27732),

Gene: Zaka_40 Start: 26386, Stop: 25997, Start Num: 85

Candidate Starts for Zaka_40:

(Start: 85 @26386 has 19 MA's), (118, 26242), (126, 26197), (132, 26155), (136, 26128),

Gene: Zareef_43 Start: 32450, Stop: 32037, Start Num: 85

Candidate Starts for Zareef_43:

(50, 32513), (Start: 85 @32450 has 19 MA's), (Start: 95 @32420 has 1 MA's), (Start: 96 @32414 has 3 MA's), (Start: 98 @32402 has 6 MA's), (134, 32246), (135, 32240), (151, 32186), (156, 32153), (158, 32147),

Gene: Zeigle_54 Start: 29457, Stop: 29041, Start Num: 90

Candidate Starts for Zeigle_54:

(33, 29580), (Start: 82 @29472 has 135 MA's), (Start: 90 @29457 has 12 MA's), (132, 29229),

Gene: Zemlya_36 Start: 26609, Stop: 27091, Start Num: 76

Candidate Starts for Zemlya_36:

(30, 26504), (40, 26549), (Start: 76 @26609 has 19 MA's), (Start: 80 @26615 has 49 MA's), (104, 26693), (Start: 107 @26708 has 1 MA's), (141, 26903), (164, 27002), (188, 27059), (194, 27074), (200, 27086),

Gene: Zetzy_40 Start: 28139, Stop: 27756, Start Num: 82

Candidate Starts for Zetzy_40:

(Start: 66 @28166 has 11 MA's), (Start: 82 @28139 has 135 MA's), (Start: 98 @28094 has 6 MA's), (131, 27923), (132, 27911),

Gene: Zolita_31 Start: 27234, Stop: 26728, Start Num: 88

Candidate Starts for Zolita_31:

(Start: 88 @27234 has 5 MA's),

Gene: ZooBear_54 Start: 29438, Stop: 29022, Start Num: 90

Candidate Starts for ZooBear_54:

(67, 29480), (Start: 90 @29438 has 12 MA's), (Start: 107 @29351 has 1 MA's), (122, 29255), (124, 29252), (126, 29246), (144, 29168),

Gene: Zuko_77 Start: 57041, Stop: 57478, Start Num: 95

Candidate Starts for Zuko_77:

(72, 56990), (Start: 87 @57011 has 16 MA's), (Start: 95 @57041 has 1 MA's), (104, 57092), (137, 57287), (155, 57365), (163, 57395),

Gene: Zulu_40 Start: 26385, Stop: 25996, Start Num: 85

Candidate Starts for Zulu_40:

(Start: 85 @26385 has 19 MA's), (Start: 95 @26358 has 1 MA's), (118, 26241), (126, 26196), (132, 26154), (136, 26127),

Gene: phiBT1_20 Start: 34511, Stop: 34861, Start Num: 98

Candidate Starts for phiBT1_20:

(Start: 98 @34511 has 6 MA's), (Start: 105 @34553 has 2 MA's), (Start: 107 @34559 has 1 MA's), (109, 34577), (118, 34613), (164, 34835),

Gene: phiCAM_34 Start: 29556, Stop: 29906, Start Num: 100

Candidate Starts for phiCAM_34:

(Start: 80 @29499 has 49 MA's), (Start: 100 @29556 has 1 MA's), (104, 29580), (Start: 105 @29589 has 2 MA's), (112, 29622), (116, 29640), (138, 29772), (146, 29802), (150, 29817), (159, 29868), (163, 29883), (165, 29889),

Gene: phiHau3_36 Start: 26164, Stop: 26676, Start Num: 58

Candidate Starts for phiHau3_36:

(40, 26128), (Start: 58 @26164 has 2 MA's), (Start: 80 @26200 has 49 MA's), (Start: 98 @26245 has 6 MA's), (104, 26278), (Start: 105 @26287 has 2 MA's), (109, 26311), (188, 26644),