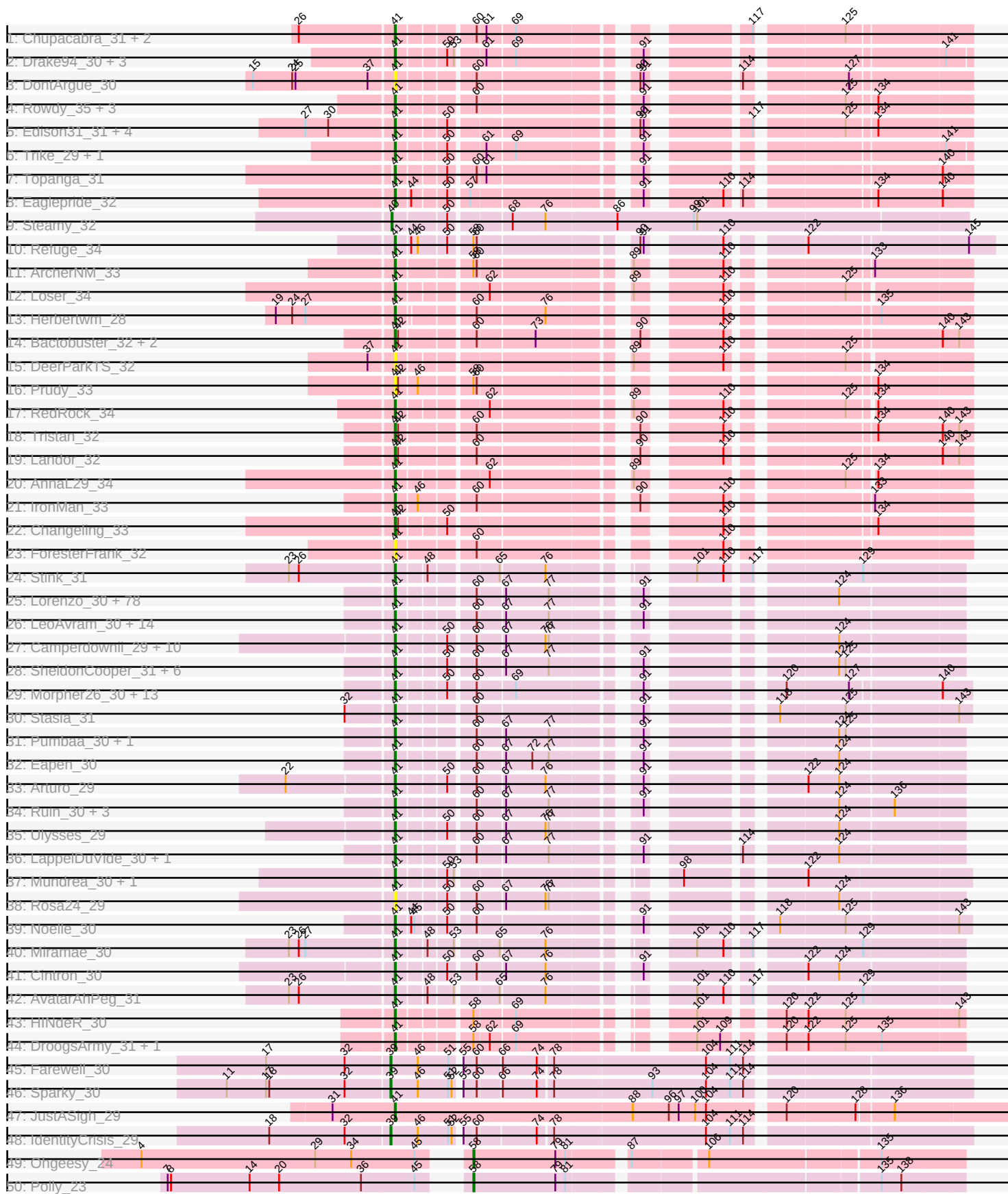
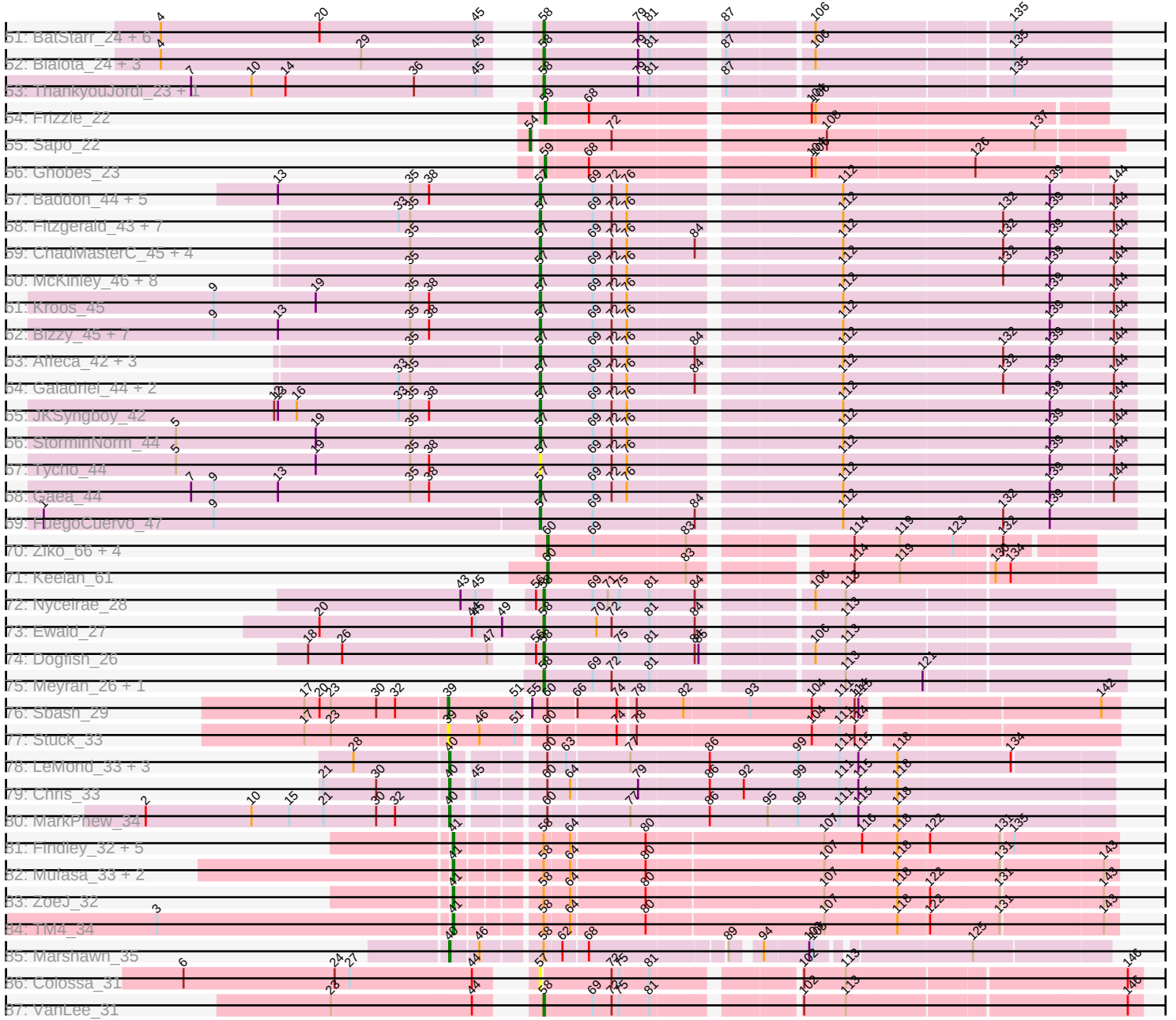


Pham 280031



Pham 280031



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 280031 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280031 has 291 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Chupacabra_31, Goose_31, OKCentral2016_31
- Track 2 : Drake94_30, PeaceMeal1_30, KittenMittens_30, Poompha_30
- Track 3 : DontArgue_30
- Track 4 : Rowdy_35, RhynO_32, Shapes_35, DustyMartin_35
- Track 5 : Edison31_31, Kristoff_32, Rebeuca_32, Twister_31, WalterMcMickey_31
- Track 6 : Trike_29, Severus_30
- Track 7 : Topanga_31
- Track 8 : Eaglepride_32
- Track 9 : Steamy_32
- Track 10 : Refuge_34
- Track 11 : ArcherNM_33
- Track 12 : Loser_34
- Track 13 : Herbertwm_28
- Track 14 : Bactobuster_32, Jaan_34, Phaded_34
- Track 15 : DeerParkTS_32
- Track 16 : Prudy_33
- Track 17 : RedRock_34
- Track 18 : Tristan_32
- Track 19 : Landor_32
- Track 20 : AnnaL29_34
- Track 21 : IronMan_33
- Track 22 : Changeling_33
- Track 23 : ForesterFrank_32
- Track 24 : Stink_31
- Track 25 : Lorenzo_30, Florean_30, Mayonnaise_30, Cocoaberry_30, Bartimeaus_30, Avle17_30, Bombshell_30, ICleared_30, Koreni_29, Dhanush_30, Gadost_30, Taquarus_30, Alberto7_31, SteMason_29, Relief_30, Bruiser_29, Pipcraft_30, CentreCat_30, TinaFeyge_30, Holli_30, Funston_30, TygerBlood_30, Caelakin_30, Albee_30, Citius_30, HamSlice_29, Lemur_30, Flux_30, NotAPhaseMom_30, Eris_29, LittleB_30, Lunsford_31, Blackmoor_30, SenorClean_30, Annyong_30, Chaph_30, Medusa_30, RockieBear_29, Druantia_30, Wander_30, Sparxx_30, ChampagnePapi_31, Baby16_30, TiroTheta9_30, Sabertooth_30, BubbleTrouble_30, Iceman_31, OKaNui_31, Houdini22_30, Maverick_30, Scamp_30, Sultana_30, NorthStar_30, Mazhar510_30, Koan_30, TroyPia_30, Melvin_30, Peaches_30, Eros_30, Romney_30, Wilbur_30, Clarenza_30, KekoraPapaka_29, Millski_29, MeeZee_30, PeterPeter_30, Deano_30, Burger_29, Palestino_29, YoSam321_30, Spino_30, Roosevelt_30, JoongJeon_30,

Kingmustik0402_30, Broseidon_30, JetBlade_30, Connomayer_30, Wizard007_30, Phelipe_30

- Track 26 : LeoAvram_30, Commander_30, Maxo_30, LittleGuy_30, BellusTerra_30, Eurydice_30, Nebs_30, Phontbonne_30, Polymorphads_30, Morrow_30, Kamy_30, Abdiel_29, Nyxis_30, Jaykayelowell_30, Ohfah_30
- Track 27 : Camperdownii_29, Kyee_30, DirtyDunning_30, Thanksgivukkah_30, Phighter1804_30, Tinybot_29, Kratark_30, Iracema64_31, LochMonster_30, Huxley_30, KFPoly_30
- Track 28 : SheldonCooper_31, BangNhom_30, Cerulean_31, Obama12_31, Eagle_29, Happiness_30, LHTSCC_31
- Track 29 : Morpher26_30, Perplexer_30, Bumblebee11_30, Shygu2_30, Datway_30, Badger_30, Cici_30, Backyardigan_30, Xena_30, PetiteSangsue_30, AbbysRanger_30, Wile_30, Katalie136_30, Achebe_29
- Track 30 : Stasia_31
- Track 31 : Pumbaa_30, Shaka_30
- Track 32 : Eapen_30
- Track 33 : Arturo_29
- Track 34 : Ruin_30, Nemo27_30, Kremtemulon_30, Phacado_30
- Track 35 : Ulysses_29
- Track 36 : LappelDuVide_30, Skipitt_30
- Track 37 : Mundrea_30, Cindaradix_29
- Track 38 : Rosa24_29
- Track 39 : Noelle_30
- Track 40 : Miramae_30
- Track 41 : Cintron_30
- Track 42 : AvatarAhPeg_31
- Track 43 : HINdeR_30
- Track 44 : DroogsArmy_31, Timshel_31
- Track 45 : Farewell_30
- Track 46 : Sparky_30
- Track 47 : JustASigh_29
- Track 48 : IdentityCrisis_29
- Track 49 : Ohgeesy_24
- Track 50 : Polly_23
- Track 51 : BatStarr_24, Nymphadora_24, TimTam_24, Bosnia_24, Hugley_24, Herod_24, Eviarto_24
- Track 52 : Bialota_24, Madavieve_24, Madeline_24, Zirinka_24
- Track 53 : ThankyouJordi_23, WelcomeAyanna_23
- Track 54 : Frizzle_22
- Track 55 : Sapo_22
- Track 56 : Ghobes_23
- Track 57 : Baddon_44, Gustavo_44, Saronaya_44, Derg_40, YorkOnyx_45, Ashertheman_45
- Track 58 : Fitzgerald_43, Nordenberg_39, Tangent_45, Brandonk123_46, Sanjuju_43, BobBob_42, Charming_45, Rofo_45
- Track 59 : ChadMasterC_45, MoontowerMania_44, Barsten_45, Jabberwocky_43, Shivanishola_44
- Track 60 : McKinley_46, Kamashten_42, Vivi2_47, Geodirt_43, Love_48, Thing3_42, Kewpiedoll_44, Stultus_43, Fosterous_42
- Track 61 : Kroos_45
- Track 62 : Bizzy_45, SchottB_43, Baumdotcom_43, Tangerine_44, Flatwoods_45, Kwobi_46, Ribeye_45, LilHam_42
- Track 63 : Affeca_42, Lennon_44, Sitar_44, Angelicage_42

- Track 64 : Galadriel_44, McCrothy_44, Paries_47
- Track 65 : JKSyngboy_42
- Track 66 : StorminNorm_44
- Track 67 : Tycho_44
- Track 68 : Gaea_44
- Track 69 : FuegoCuervo_47
- Track 70 : Ziko_66, Fryberger_63, Ronaldo_66, Guey18_69, Volt_66
- Track 71 : Keelan_61
- Track 72 : Nyceirae_28
- Track 73 : Ewald_27
- Track 74 : Dogfish_26
- Track 75 : Meyran_26, Vordorf_27
- Track 76 : Sbash_29
- Track 77 : Stuck_33
- Track 78 : LeMond_33, KiSi_33, Oscar_33, Scarlett_33
- Track 79 : Chris_33
- Track 80 : MarkPhew_34
- Track 81 : Findley_32, DismalStressor_32, Strobilo_32, Milly_32, DismalFunk_32, Marcoliusprime_32
- Track 82 : Mufasa_33, Doughnut_33, BoostSeason_33
- Track 83 : ZoeJ_32
- Track 84 : TM4_34
- Track 85 : Marshawn_35
- Track 86 : Colossa_31
- Track 87 : VanLee_31

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

The start number called the most often in the published annotations is 41, it was called in 186 of the 272 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AbbysRanger_30, Abdiel_29, Achebe_29, Albee_30, Alberto7_31, AnnaL29_34, Annyong_30, ArcherNM_33, Arturo_29, AvatarAhPeg_31, Avle17_30, Baby16_30, Backyardigan_30, Bactobuster_32, Badger_30, BangNhom_30, Bartimeaus_30, BellusTerra_30, Blackmoor_30, Bombshell_30, BoostSeason_33, Broseidon_30, Bruiser_29, BubbleTrouble_30, Bumblebee11_30, Burger_29, Caelakin_30, Camperdownii_29, CentreCat_30, Cerulean_31, ChampagnePapi_31, Changeling_33, Chaph_30, Chupacabra_31, Cici_30, Cindaradix_29, Cintron_30, Citius_30, Clarenza_30, Cocoaberry_30, Commander_30, Connomayer_30, Datway_30, Deano_30, DeerParkTS_32, Dhanush_30, DirtyDunning_30, DismalFunk_32, DismalStressor_32, DontArgue_30, Doughnut_33, Drake94_30, DroogsArmy_31, Druantia_30, DustyMartin_35, Eagle_29, Eaglepride_32, Eapen_30, Edison31_31, Eris_29, Eros_30, Eurydice_30, Findley_32, Florean_30, Flux_30, ForesterFrank_32, Funston_30, Gadost_30, Goose_31, HINdeR_30, HamSlice_29, Happiness_30, Herbertwm_28, Holli_30, Houdini22_30, Huxley_30, ICleared_30, Iceman_31, Iracema64_31, IronMan_33, Jaan_34, Jaykayelowell_30, JetBlade_30, JoongJeon_30, JustASigh_29, KFPoly_30, Kamy_30, Katalie136_30, KekoraPapaka_29, Kingmustik0402_30, KittenMittens_30, Koan_30, Koreni_29, Kratark_30, Kremtemulon_30, Kristoff_32, Kyee_30, LHTSCC_31, Landor_32,

LappelDuVide_30, Lemur_30, LeoAvram_30, LittleB_30, LittleGuy_30, LochMonster_30, Lorenzo_30, Loser_34, Lunsford_31, Marcoliusprime_32, Maverick_30, Maxo_30, Mayonnaise_30, Mazhar510_30, Medusa_30, MeeZee_30, Melvin_30, Millski_29, Milly_32, Miramae_30, Morpher26_30, Morrow_30, Mufasa_33, Mundrea_30, Nebs_30, Nemo27_30, Noelle_30, NorthStar_30, NotAPhaseMom_30, Nyxis_30, OKCentral2016_31, OKaNui_31, Obama12_31, Ohfah_30, Palestino_29, PeaceMeal1_30, Peaches_30, Perplexer_30, PeterPeter_30, PetiteSangsue_30, Phacado_30, Phaded_34, Phelipe_30, Phighter1804_30, Phontbonne_30, Pipcraft_30, Polymorphads_30, Poompha_30, Prudy_33, Pumbaa_30, Rebeuca_32, RedRock_34, Refuge_34, Relief_30, RhynO_32, RockieBear_29, Romney_30, Roosevelt_30, Rosa24_29, Rowdy_35, Ruin_30, Sabertooth_30, Scamp_30, SenorClean_30, Severus_30, Shaka_30, Shapes_35, SheldonCooper_31, Shygu2_30, Skipitt_30, Sparxx_30, Spino_30, Stasia_31, SteMason_29, Stink_31, Strobilo_32, Sultana_30, TM4_34, Taquarus_30, Thanksgivukkah_30, Timshel_31, TinaFeyge_30, Tinybot_29, TiroTheta9_30, Topanga_31, Trike_29, Tristan_32, TroyPia_30, Twister_31, TygerBlood_30, Ulysses_29, WalterMcMickey_31, Wander_30, Wilbur_30, Wile_30, Wizard007_30, Xena_30, YoSam321_30, ZoeJ_32,

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

-

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

- Affeca_42, Angelicage_42, Ashertheman_45, Baddon_44, Barsten_45, BatStarr_24, Baumdotcom_43, Bialota_24, Bizzy_45, BobBob_42, Bosnia_24, Brandonk123_46, ChadMasterC_45, Charming_45, Chris_33, Colossa_31, Derg_40, Dogfish_26, Eviarto_24, Ewald_27, Farewell_30, Fitzgerald_43, Flatwoods_45, Fosterous_42, Frizzle_22, Fryberger_63, FuegoCuervo_47, Gaea_44, Galadriel_44, Geodirt_43, Ghobes_23, Guey18_69, Gustavo_44, Herod_24, Hugley_24, IdentityCrisis_29, JKSyngboy_42, Jabberwocky_43, Kamashten_42, Keelan_61, Kewpiedoll_44, KiSi_33, Kroos_45, Kwobi_46, LeMond_33, Lennon_44, LilHam_42, Love_48, Madavieve_24, Madeline_24, MarkPhew_34, Marshawn_35, McCrothy_44, McKinley_46, Meyran_26, MoontowerMania_44, Nordenberg_39, Nyceirae_28, Nymphadora_24, Ohgeesy_24, Oscar_33, Paries_47, Polly_23, Ribeye_45, Rofo_45, Ronaldo_66, Sanjuju_43, Sapo_22, Saronaya_44, Sbash_29, Scarlett_33, SchottB_43, Shivanishola_44, Sitar_44, Sparky_30, Steamy_32, StorminNorm_44, Stuck_33, Stultus_43, Tangent_45, Tangerine_44, ThankyouJordi_23, Thing3_42, TimTam_24, Tycho_44, VanLee_31, Vivi2_47, Volt_66, Vordorf_27, WelcomeAyanna_23, YorkOnyx_45, Ziko_66, Zirinka_24,

Summary by start number:

Start 39:

- Found in 5 of 291 (1.7%) of genes in pham
- Manual Annotations of this start: 4 of 272
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_30 (AF), IdentityCrisis_29 (AJ), Sbash_29 (I2), Sparky_30 (AF), Stuck_33 (I2),

Start 40:

- Found in 8 of 291 (2.7%) of genes in pham
- Manual Annotations of this start: 8 of 272
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Chris_33 (K1), KiSi_33 (K1), LeMond_33 (K1), MarkPhew_34 (K1), Marshawn_35 (K6), Oscar_33 (K1), Scarlett_33 (K1), Steamy_32 (A12),

Start 41:

- Found in 198 of 291 (68.0%) of genes in pham
- Manual Annotations of this start: 186 of 272
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger_30 (A4), Abdiel_29 (A4), Achebe_29 (A4), Albee_30 (A4), Alberto7_31 (A4), AnnaL29_34 (A2), Annyong_30 (A4), ArcherNM_33 (A2), Arturo_29 (A4), AvatarAhPeg_31 (A4), Avle17_30 (A4), Baby16_30 (A4), Backyardigan_30 (A4), Bactobuster_32 (A2), Badger_30 (A4), BangNhom_30 (A4), Bartimeaus_30 (A4), BellusTerra_30 (A4), Blackmoor_30 (A4), Bombshell_30 (A4), BoostSeason_33 (K2), Broseidon_30 (A4), Bruiser_29 (A4), BubbleTrouble_30 (A4), Bumblebee11_30 (A4), Burger_29 (A4), Caelakin_30 (A4), Camperdownii_29 (A4), CentreCat_30 (A4), Cerulean_31 (A4), ChampagnePapi_31 (A4), Changeling_33 (A2), Chaph_30 (A4), Chupacabra_31 (A10), Cici_30 (A4), Cindaradix_29 (A4), Cintron_30 (A4), Citius_30 (A4), Clarenza_30 (A4), CocoaBerry_30 (A4), Commander_30 (A4), Connomayer_30 (A4), Datway_30 (A4), Deano_30 (A4), DeerParkTS_32 (A2), Dhanush_30 (A4), DirtyDunning_30 (A4), DismalFunk_32 (K2), DismalStressor_32 (K2), DontArgue_30 (A10), Doughnut_33 (K2), Drake94_30 (A10), DroogsArmy_31 (A7), Druantia_30 (A4), DustyMartin_35 (A10), Eagle_29 (A4), Eaglepride_32 (A10), Eapen_30 (A4), Edison31_31 (A10), Eris_29 (A4), Eros_30 (A4), Eurydice_30 (A4), Findley_32 (K2), Florean_30 (A4), Flux_30 (A4), ForesterFrank_32 (A2), Funston_30 (A4), Gadost_30 (A4), Goose_31 (A10), HINdeR_30 (A7), HamSlice_29 (A4), Happiness_30 (A4), Herbertwm_28 (A2), Holli_30 (A4), Houdini22_30 (A4), Huxley_30 (A4), ICleared_30 (A4), Iceman_31 (A4), Iracema64_31 (A4), IronMan_33 (A2), Jaan_34 (A2), Jaykayelowell_30 (A4), JetBlade_30 (A4), JoongJeon_30 (A4), JustASigh_29 (A4), KFPoly_30 (A4), Kamy_30 (A4), Katalie136_30 (A4), KekoraPapaka_29 (A4), Kingmustik0402_30 (A4), KittenMittens_30 (A10), Koan_30 (A4), Koreni_29 (A4), Kratark_30 (A4), Kremtemulon_30 (A4), Kristoff_32 (A10), Kyee_30 (A4), LHTSCC_31 (A4), Landor_32 (A2), LappelDuVide_30 (A4), Lemur_30 (A4), LeoAvram_30 (A4), LittleB_30 (A4), LittleGuy_30 (A4), LochMonster_30 (A4), Lorenzo_30 (A4), Loser_34 (A2), Lunsford_31 (A4), Marcoliusprime_32 (K2), Maverick_30 (A4), Maxo_30 (A4), Mayonnaise_30 (A4), Mazhar510_30 (A4), Medusa_30 (A4), MeeZee_30 (A4), Melvin_30 (A4), Millski_29 (A4), Milly_32 (K2), Miramae_30 (A4), Morpher26_30 (A4), Morrow_30 (A4), Mufasa_33 (K2), Mundrea_30 (A4), Nebs_30 (A4), Nemo27_30 (A4), Noelle_30 (A4), NorthStar_30 (A4), NotAPhaseMom_30 (A4), Nyxis_30 (A4), OKCentral2016_31 (A10), OKaNui_31 (A4), Obama12_31 (A4), Ohfah_30 (A4), Palestino_29 (A4), PeaceMeal1_30 (A10), Peaches_30 (A4), Perplexer_30 (A4), PeterPeter_30 (A4), PetiteSangsue_30 (A4), Phacado_30 (A4), Phaded_34 (A2), Felipe_30 (A4), Phighter1804_30 (A4), Phontbonne_30 (A4), Pipcraft_30 (A4), Polymorphads_30 (A4), Poompha_30 (A10), Prudy_33 (A2), Pumbaa_30 (A4), Rebeuca_32 (A10), RedRock_34 (A2), Refuge_34 (A12), Relief_30 (A4), RhynO_32 (A10), RockieBear_29 (A4), Romney_30 (A4), Roosevelt_30 (A4), Rosa24_29 (A4), Rowdy_35 (A10), Ruin_30 (A4), Sabertooth_30 (A4), Scamp_30 (A4), SenorClean_30 (A4), Severus_30 (A10), Shaka_30 (A4), Shapes_35 (A10), SheldonCooper_31 (A4), Shygu2_30 (A4), Skipitt_30 (A4), Sparxx_30 (A4), Spino_30 (A4), Stasia_31 (A4), SteMason_29 (A4), Stink_31 (A4), Strobilo_32 (K2), Sultana_30 (A4), TM4_34 (K2), Taquarus_30 (A4), Thanksgivukkah_30 (A4), Timshel_31 (A7), TinaFeyge_30 (A4), Tinybot_29 (A4), TiroTheta9_30 (A4), Topanga_31 (A10), Trike_29 (A10), Tristan_32 (A2), TroyPia_30 (A4), Twister_31 (A10), TygerBlood_30

(A4), Ulysses_29 (A4), WalterMcMickey_31 (A10), Wander_30 (A4), Wilbur_30 (A4), Wile_30 (A4), Wizard007_30 (A4), Xena_30 (A4), YoSam321_30 (A4), ZoeJ_32 (K2),

Start 54:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 272
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sapo_22 (DA),

Start 57:

- Found in 51 of 291 (17.5%) of genes in pham
- Manual Annotations of this start: 47 of 272
- Called 98.0% of time when present
- Phage (with cluster) where this start called: Affeca_42 (DE1), Angelicage_42 (DE1), Ashertheman_45 (DE1), Baddon_44 (DE1), Barsten_45 (DE1), Baumdotcom_43 (DE1), Bizzy_45 (DE1), BobBob_42 (DE1), Brandonk123_46 (DE1), ChadMasterC_45 (DE1), Charming_45 (DE1), Colossa_31 (KA), Derg_40 (DE1), Fitzgerald_43 (DE1), Flatwoods_45 (DE1), Fosterous_42 (DE1), FuegoCuervo_47 (DE1), Gaea_44 (DE1), Galadriel_44 (DE1), Geodirt_43 (DE1), Gustavo_44 (DE1), JKSyngboy_42 (DE1), Jabberwocky_43 (DE1), Kamashten_42 (DE1), Kewpiedoll_44 (DE1), Kroos_45 (DE1), Kwobi_46 (DE1), Lennon_44 (DE1), LilHam_42 (DE1), Love_48 (DE1), McCrothy_44 (DE1), McKinley_46 (DE1), MoontowerMania_44 (DE1), Nordenberg_39 (DE1), Paries_47 (DE1), Ribeye_45 (DE1), Rofo_45 (DE1), Sanjuju_43 (DE1), Saronaya_44 (DE1), SchottB_43 (DE1), Shivanishola_44 (DE1), Sitar_44 (DE1), StorminNorm_44 (DE1), Stultus_43 (DE1), Tangent_45 (DE1), Tangerine_44 (DE1), Thing3_42 (DE1), Tycho_44 (DE1), Vivi2_47 (DE1), YorkOnyx_45 (DE1),

Start 58:

- Found in 39 of 291 (13.4%) of genes in pham
- Manual Annotations of this start: 18 of 272
- Called 53.8% of time when present
- Phage (with cluster) where this start called: BatStarr_24 (CZ1), Bialota_24 (CZ1), Bosnia_24 (CZ1), Dogfish_26 (DT), Eviarto_24 (CZ1), Ewald_27 (DT), Herod_24 (CZ1), Hugley_24 (CZ1), Madavieve_24 (CZ1), Madeline_24 (CZ1), Meyran_26 (DT), Nyceirae_28 (DT), Nymphadora_24 (CZ1), Ohgeesy_24 (CZ), Polly_23 (CZ1), ThankyouJordi_23 (CZ1), TimTam_24 (CZ1), VanLee_31 (KA), Vordorf_27 (DT), WelcomeAyanna_23 (CZ1), Zirinka_24 (CZ1),

Start 59:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 272
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frizzle_22 (DA), Ghobes_23 (DA),

Start 60:

- Found in 178 of 291 (61.2%) of genes in pham
- Manual Annotations of this start: 6 of 272
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Fryberger_63 (DP), Guey18_69 (DP), Keelan_61 (DP), Ronaldo_66 (DP), Volt_66 (DP), Ziko_66 (DP),

Summary by clusters:

There are 19 clusters represented in this pham: KA, CZ1, A10, A12, DE1, I2, AJ, DA, K2, K1, A2, A4, A7, AH, CZ, DT, AF, DP, K6,

Info for manual annotations of cluster A10:

- Start number 41 was manually annotated 17 times for cluster A10.

Info for manual annotations of cluster A12:

- Start number 40 was manually annotated 1 time for cluster A12.
- Start number 41 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A2:

- Start number 41 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A4:

- Start number 41 was manually annotated 141 times for cluster A4.

Info for manual annotations of cluster A7:

- Start number 41 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster AF:

- Start number 39 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AH:

- Start number 41 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster AJ:

- Start number 39 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster CZ:

- Start number 58 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 58 was manually annotated 12 times for cluster CZ1.

Info for manual annotations of cluster DA:

- Start number 54 was manually annotated 1 time for cluster DA.
- Start number 59 was manually annotated 2 times for cluster DA.

Info for manual annotations of cluster DE1:

- Start number 57 was manually annotated 47 times for cluster DE1.

Info for manual annotations of cluster DP:

- Start number 60 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster DT:

- Start number 58 was manually annotated 4 times for cluster DT.

Info for manual annotations of cluster I2:

- Start number 39 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster K1:

- Start number 40 was manually annotated 6 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 41 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K6:

- Start number 40 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster KA:

- Start number 58 was manually annotated 1 time for cluster KA.

Gene Information:

Gene: AbbysRanger_30 Start: 22547, Stop: 22978, Start Num: 41

Candidate Starts for AbbysRanger_30:

(Start: 41 @22547 has 186 MA's), (50, 22586), (Start: 60 @22607 has 6 MA's), (69, 22637), (91, 22730), (120, 22820), (127, 22874), (140, 22952),

Gene: Abdiel_29 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Abdiel_29:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Achebe_29 Start: 22530, Stop: 22961, Start Num: 41

Candidate Starts for Achebe_29:

(Start: 41 @22530 has 186 MA's), (50, 22569), (Start: 60 @22590 has 6 MA's), (69, 22620), (91, 22713), (120, 22803), (127, 22857), (140, 22935),

Gene: Affeca_42 Start: 39008, Stop: 39457, Start Num: 57

Candidate Starts for Affeca_42:

(35, 38912), (Start: 57 @39008 has 47 MA's), (69, 39050), (72, 39065), (76, 39077), (84, 39128), (112, 39230), (132, 39353), (139, 39389), (144, 39440),

Gene: Albee_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Albee_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Alberto7_31 Start: 22820, Stop: 23248, Start Num: 41

Candidate Starts for Alberto7_31:

(Start: 41 @22820 has 186 MA's), (Start: 60 @22880 has 6 MA's), (67, 22901), (77, 22940), (91, 23003), (124, 23138),

Gene: Angelicage_42 Start: 39426, Stop: 39875, Start Num: 57

Candidate Starts for Angelicage_42:

(35, 39330), (Start: 57 @39426 has 47 MA's), (69, 39468), (72, 39483), (76, 39495), (84, 39546), (112, 39648), (132, 39771), (139, 39807), (144, 39858),

Gene: AnnaL29_34 Start: 24675, Stop: 25103, Start Num: 41

Candidate Starts for AnnaL29_34:

(Start: 41 @24675 has 186 MA's), (62, 24744), (89, 24849), (125, 24999), (134, 25020),

Gene: Annyong_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Annyong_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: ArcherNM_33 Start: 24619, Stop: 25053, Start Num: 41

Candidate Starts for ArcherNM_33:

(Start: 41 @24619 has 186 MA's), (Start: 58 @24679 has 18 MA's), (Start: 60 @24682 has 6 MA's), (89, 24796), (110, 24859), (133, 24967),

Gene: Arturo_29 Start: 22627, Stop: 23055, Start Num: 41

Candidate Starts for Arturo_29:

(22, 22534), (Start: 41 @22627 has 186 MA's), (50, 22666), (Start: 60 @22687 has 6 MA's), (67, 22708), (76, 22744), (91, 22810), (122, 22918), (124, 22945),

Gene: Ashertheman_45 Start: 39429, Stop: 39875, Start Num: 57

Candidate Starts for Ashertheman_45:

(13, 39222), (35, 39327), (38, 39342), (Start: 57 @39429 has 47 MA's), (69, 39471), (72, 39486), (76, 39498), (112, 39651), (139, 39810), (144, 39858),

Gene: AvatarAhPeg_31 Start: 22800, Stop: 23225, Start Num: 41

Candidate Starts for AvatarAhPeg_31:

(23, 22707), (26, 22716), (Start: 41 @22800 has 186 MA's), (48, 22824), (53, 22845), (65, 22878), (76, 22917), (101, 23010), (110, 23034), (117, 23052), (129, 23136),

Gene: Avle17_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Avle17_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Baby16_30 Start: 22527, Stop: 22955, Start Num: 41

Candidate Starts for Baby16_30:

(Start: 41 @22527 has 186 MA's), (Start: 60 @22587 has 6 MA's), (67, 22608), (77, 22647), (91, 22710), (124, 22845),

Gene: Backyardigan_30 Start: 22542, Stop: 22973, Start Num: 41

Candidate Starts for Backyardigan_30:

(Start: 41 @22542 has 186 MA's), (50, 22581), (Start: 60 @22602 has 6 MA's), (69, 22632), (91, 22725), (120, 22815), (127, 22869), (140, 22947),

Gene: Bactobuster_32 Start: 24432, Stop: 24866, Start Num: 41

Candidate Starts for Bactobuster_32:

(Start: 41 @24432 has 186 MA's), (42, 24435), (Start: 60 @24495 has 6 MA's), (73, 24543), (90, 24615), (110, 24672), (140, 24840), (143, 24855),

Gene: Baddon_44 Start: 39967, Stop: 40413, Start Num: 57

Candidate Starts for Baddon_44:

(13, 39760), (35, 39865), (38, 39880), (Start: 57 @39967 has 47 MA's), (69, 40009), (72, 40024), (76, 40036), (112, 40189), (139, 40348), (144, 40396),

Gene: Badger_30 Start: 22531, Stop: 22962, Start Num: 41

Candidate Starts for Badger_30:

(Start: 41 @22531 has 186 MA's), (50, 22570), (Start: 60 @22591 has 6 MA's), (69, 22621), (91, 22714), (120, 22804), (127, 22858), (140, 22936),

Gene: BangNhom_30 Start: 22832, Stop: 23260, Start Num: 41

Candidate Starts for BangNhom_30:

(Start: 41 @22832 has 186 MA's), (50, 22871), (Start: 60 @22892 has 6 MA's), (67, 22913), (77, 22952), (91, 23015), (124, 23150), (125, 23156),

Gene: Barsten_45 Start: 39581, Stop: 40030, Start Num: 57

Candidate Starts for Barsten_45:

(35, 39482), (Start: 57 @39581 has 47 MA's), (69, 39623), (72, 39638), (76, 39650), (84, 39701), (112, 39803), (132, 39926), (139, 39962), (144, 40013),

Gene: Bartimeaus_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Bartimeaus_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: BatStarr_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for BatStarr_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Baumdotcom_43 Start: 38818, Stop: 39264, Start Num: 57

Candidate Starts for Baumdotcom_43:

(9, 38560), (13, 38611), (35, 38716), (38, 38731), (Start: 57 @38818 has 47 MA's), (69, 38860), (72, 38875), (76, 38887), (112, 39040), (139, 39199), (144, 39247),

Gene: BellusTerra_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for BellusTerra_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Bialota_24 Start: 21911, Stop: 22324, Start Num: 58

Candidate Starts for Bialota_24:

(4, 21641), (29, 21800), (45, 21890), (Start: 58 @21911 has 18 MA's), (79, 21986), (81, 21995), (87, 22040), (106, 22103), (135, 22250),

Gene: Bizzy_45 Start: 39124, Stop: 39570, Start Num: 57

Candidate Starts for Bizzy_45:

(9, 38866), (13, 38917), (35, 39022), (38, 39037), (Start: 57 @39124 has 47 MA's), (69, 39166), (72, 39181), (76, 39193), (112, 39346), (139, 39505), (144, 39553),

Gene: Blackmoor_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Blackmoor_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: BobBob_42 Start: 38700, Stop: 39149, Start Num: 57

Candidate Starts for BobBob_42:

(33, 38592), (35, 38601), (Start: 57 @38700 has 47 MA's), (69, 38742), (72, 38757), (76, 38769), (112, 38922), (132, 39045), (139, 39081), (144, 39132),

Gene: Bombshell_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Bombshell_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: BoostSeason_33 Start: 26994, Stop: 27485, Start Num: 41

Candidate Starts for BoostSeason_33:

(Start: 41 @26994 has 186 MA's), (Start: 58 @27051 has 18 MA's), (64, 27069), (80, 27126), (107, 27261), (118, 27318), (131, 27396), (143, 27474),

Gene: Bosnia_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for Bosnia_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Brandonk123_46 Start: 39835, Stop: 40284, Start Num: 57

Candidate Starts for Brandonk123_46:

(33, 39727), (35, 39736), (Start: 57 @39835 has 47 MA's), (69, 39877), (72, 39892), (76, 39904), (112, 40057), (132, 40180), (139, 40216), (144, 40267),

Gene: Broseidon_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Broseidon_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Bruiser_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Bruiser_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: BubbleTrouble_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for BubbleTrouble_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Bumblebee11_30 Start: 22533, Stop: 22964, Start Num: 41

Candidate Starts for Bumblebee11_30:

(Start: 41 @22533 has 186 MA's), (50, 22572), (Start: 60 @22593 has 6 MA's), (69, 22623), (91, 22716), (120, 22806), (127, 22860), (140, 22938),

Gene: Burger_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Burger_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Caelakin_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Caelakin_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Camperdownii_29 Start: 22137, Stop: 22565, Start Num: 41

Candidate Starts for Camperdownii_29:

(Start: 41 @22137 has 186 MA's), (50, 22176), (Start: 60 @22197 has 6 MA's), (67, 22218), (76, 22254), (77, 22257), (124, 22455),

Gene: CentreCat_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for CentreCat_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: Cerulean_31 Start: 22833, Stop: 23261, Start Num: 41

Candidate Starts for Cerulean_31:

(Start: 41 @22833 has 186 MA's), (50, 22872), (Start: 60 @22893 has 6 MA's), (67, 22914), (77, 22953), (91, 23016), (124, 23151), (125, 23157),

Gene: ChadMasterC_45 Start: 40980, Stop: 41429, Start Num: 57

Candidate Starts for ChadMasterC_45:

(35, 40881), (Start: 57 @40980 has 47 MA's), (69, 41022), (72, 41037), (76, 41049), (84, 41100), (112, 41202), (132, 41325), (139, 41361), (144, 41412),

Gene: ChampagnePapi_31 Start: 22832, Stop: 23260, Start Num: 41

Candidate Starts for ChampagnePapi_31:

(Start: 41 @22832 has 186 MA's), (Start: 60 @22892 has 6 MA's), (67, 22913), (77, 22952), (91, 23015), (124, 23150),

Gene: Changeling_33 Start: 24673, Stop: 25104, Start Num: 41

Candidate Starts for Changeling_33:

(Start: 41 @24673 has 186 MA's), (42, 24676), (50, 24712), (110, 24910), (134, 25021),

Gene: Chaph_30 Start: 22527, Stop: 22955, Start Num: 41

Candidate Starts for Chaph_30:

(Start: 41 @22527 has 186 MA's), (Start: 60 @22587 has 6 MA's), (67, 22608), (77, 22647), (91, 22710), (124, 22845),

Gene: Charming_45 Start: 39336, Stop: 39785, Start Num: 57

Candidate Starts for Charming_45:

(33, 39228), (35, 39237), (Start: 57 @39336 has 47 MA's), (69, 39378), (72, 39393), (76, 39405), (112, 39558), (132, 39681), (139, 39717), (144, 39768),

Gene: Chris_33 Start: 27363, Stop: 27860, Start Num: 40

Candidate Starts for Chris_33:

(21, 27267), (30, 27309), (Start: 40 @27363 has 8 MA's), (45, 27378), (Start: 60 @27426 has 6 MA's), (64, 27441), (79, 27492), (86, 27546), (92, 27573), (99, 27615), (111, 27648), (115, 27663), (118, 27693),

Gene: Chupacabra_31 Start: 22824, Stop: 23255, Start Num: 41

Candidate Starts for Chupacabra_31:

(26, 22740), (Start: 41 @22824 has 186 MA's), (Start: 60 @22884 has 6 MA's), (61, 22890), (69, 22914), (117, 23079), (125, 23148),

Gene: Cici_30 Start: 22527, Stop: 22958, Start Num: 41

Candidate Starts for Cici_30:

(Start: 41 @22527 has 186 MA's), (50, 22566), (Start: 60 @22587 has 6 MA's), (69, 22617), (91, 22710), (120, 22800), (127, 22854), (140, 22932),

Gene: Cindaradix_29 Start: 22245, Stop: 22676, Start Num: 41

Candidate Starts for Cindaradix_29:

(Start: 41 @22245 has 186 MA's), (50, 22284), (53, 22290), (98, 22443), (122, 22533),

Gene: Cintron_30 Start: 22563, Stop: 22991, Start Num: 41

Candidate Starts for Cintron_30:

(Start: 41 @22563 has 186 MA's), (50, 22602), (Start: 60 @22623 has 6 MA's), (67, 22644), (76, 22680), (91, 22746), (122, 22854), (124, 22881),

Gene: Citius_30 Start: 22533, Stop: 22961, Start Num: 41

Candidate Starts for Citius_30:

(Start: 41 @22533 has 186 MA's), (Start: 60 @22593 has 6 MA's), (67, 22614), (77, 22653), (91, 22716), (124, 22851),

Gene: Clarenza_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Clarenza_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Cocoaberry_30 Start: 22522, Stop: 22950, Start Num: 41

Candidate Starts for Cocoaberry_30:

(Start: 41 @22522 has 186 MA's), (Start: 60 @22582 has 6 MA's), (67, 22603), (77, 22642), (91, 22705), (124, 22840),

Gene: Colossa_31 Start: 26024, Stop: 26461, Start Num: 57

Candidate Starts for Colossa_31:

(6, 25772), (24, 25892), (27, 25904), (44, 26000), (Start: 57 @26024 has 47 MA's), (72, 26078), (75, 26084), (81, 26108), (102, 26207), (113, 26240), (146, 26450),

Gene: Commander_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Commander_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701),

Gene: Connomayer_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Connomayer_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Datway_30 Start: 22542, Stop: 22973, Start Num: 41

Candidate Starts for Datway_30:

(Start: 41 @22542 has 186 MA's), (50, 22581), (Start: 60 @22602 has 6 MA's), (69, 22632), (91, 22725), (120, 22815), (127, 22869), (140, 22947),

Gene: Deano_30 Start: 22526, Stop: 22954, Start Num: 41

Candidate Starts for Deano_30:

(Start: 41 @22526 has 186 MA's), (Start: 60 @22586 has 6 MA's), (67, 22607), (77, 22646), (91, 22709), (124, 22844),

Gene: DeerParkTS_32 Start: 22892, Stop: 23320, Start Num: 41

Candidate Starts for DeerParkTS_32:

(37, 22871), (Start: 41 @22892 has 186 MA's), (89, 23066), (110, 23129), (125, 23216),

Gene: Derg_40 Start: 38716, Stop: 39162, Start Num: 57

Candidate Starts for Derg_40:

(13, 38509), (35, 38614), (38, 38629), (Start: 57 @38716 has 47 MA's), (69, 38758), (72, 38773), (76, 38785), (112, 38938), (139, 39097), (144, 39145),

Gene: Dhanush_30 Start: 22521, Stop: 22949, Start Num: 41

Candidate Starts for Dhanush_30:

(Start: 41 @22521 has 186 MA's), (Start: 60 @22581 has 6 MA's), (67, 22602), (77, 22641), (91, 22704), (124, 22839),

Gene: DirtyDunning_30 Start: 22511, Stop: 22939, Start Num: 41

Candidate Starts for DirtyDunning_30:

(Start: 41 @22511 has 186 MA's), (50, 22550), (Start: 60 @22571 has 6 MA's), (67, 22592), (76, 22628), (77, 22631), (124, 22829),

Gene: DismalFunk_32 Start: 26906, Stop: 27397, Start Num: 41

Candidate Starts for DismalFunk_32:

(Start: 41 @26906 has 186 MA's), (Start: 58 @26963 has 18 MA's), (64, 26981), (80, 27038), (107, 27173), (116, 27203), (118, 27230), (122, 27254), (131, 27308), (135, 27317),

Gene: DismalStressor_32 Start: 26906, Stop: 27397, Start Num: 41

Candidate Starts for DismalStressor_32:

(Start: 41 @26906 has 186 MA's), (Start: 58 @26963 has 18 MA's), (64, 26981), (80, 27038), (107, 27173), (116, 27203), (118, 27230), (122, 27254), (131, 27308), (135, 27317),

Gene: Dogfish_26 Start: 22166, Stop: 22594, Start Num: 58

Candidate Starts for Dogfish_26:

(18, 22007), (26, 22034), (47, 22148), (56, 22160), (Start: 58 @22166 has 18 MA's), (75, 22226), (81, 22250), (84, 22283), (85, 22286), (106, 22358), (113, 22382),

Gene: DontArgue_30 Start: 21211, Stop: 21642, Start Num: 41

Candidate Starts for DontArgue_30:

(15, 21085), (24, 21121), (25, 21124), (37, 21190), (Start: 41 @21211 has 186 MA's), (Start: 60 @21271 has 6 MA's), (90, 21391), (91, 21394), (114, 21457), (127, 21538),

Gene: Doughnut_33 Start: 26987, Stop: 27478, Start Num: 41

Candidate Starts for Doughnut_33:

(Start: 41 @26987 has 186 MA's), (Start: 58 @27044 has 18 MA's), (64, 27062), (80, 27119), (107, 27254), (118, 27311), (131, 27389), (143, 27467),

Gene: Drake94_30 Start: 20956, Stop: 21384, Start Num: 41

Candidate Starts for Drake94_30:

(Start: 41 @20956 has 186 MA's), (50, 20995), (53, 21001), (61, 21022), (69, 21046), (91, 21139), (141, 21364),

Gene: DroogsArmy_31 Start: 25323, Stop: 25751, Start Num: 41

Candidate Starts for DroogsArmy_31:

(Start: 41 @25323 has 186 MA's), (Start: 58 @25380 has 18 MA's), (62, 25392), (69, 25413), (101, 25533), (109, 25554), (120, 25593), (122, 25611), (125, 25644), (135, 25677),

Gene: Druantia_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Druantia_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: DustyMartin_35 Start: 22921, Stop: 23352, Start Num: 41

Candidate Starts for DustyMartin_35:

(Start: 41 @22921 has 186 MA's), (Start: 60 @22981 has 6 MA's), (91, 23104), (125, 23245), (134, 23269),

Gene: Eagle_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Eagle_29:

(Start: 41 @22518 has 186 MA's), (50, 22557), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836), (125, 22842),

Gene: Eaglepride_32 Start: 22834, Stop: 23265, Start Num: 41

Candidate Starts for Eaglepride_32:

(Start: 41 @22834 has 186 MA's), (44, 22846), (50, 22873), (Start: 57 @22888 has 47 MA's), (91, 23017), (110, 23071), (114, 23080), (134, 23182), (140, 23239),

Gene: Eapen_30 Start: 22517, Stop: 22945, Start Num: 41

Candidate Starts for Eapen_30:

(Start: 41 @22517 has 186 MA's), (Start: 60 @22577 has 6 MA's), (67, 22598), (72, 22622), (77, 22637), (91, 22700), (124, 22835),

Gene: Edison31_31 Start: 22864, Stop: 23295, Start Num: 41

Candidate Starts for Edison31_31:

(27, 22786), (30, 22807), (Start: 41 @22864 has 186 MA's), (50, 22903), (90, 23044), (91, 23047), (117, 23119), (125, 23188), (134, 23212),

Gene: Eris_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Eris_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Eros_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Eros_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Eurydice_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Eurydice_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Eviarto_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for Eviarto_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Ewald_27 Start: 22552, Stop: 22968, Start Num: 58

Candidate Starts for Ewald_27:

(20, 22375), (44, 22495), (45, 22498), (49, 22519), (Start: 58 @22552 has 18 MA's), (70, 22594), (72, 22606), (81, 22636), (84, 22669), (113, 22768),

Gene: Farewell_30 Start: 27478, Stop: 27966, Start Num: 39

Candidate Starts for Farewell_30:

(17, 27367), (32, 27439), (Start: 39 @27478 has 4 MA's), (46, 27502), (51, 27529), (55, 27535), (Start: 60 @27547 has 6 MA's), (66, 27565), (74, 27595), (78, 27607), (104, 27742), (111, 27763), (114, 27775),

Gene: Findley_32 Start: 26898, Stop: 27389, Start Num: 41

Candidate Starts for Findley_32:

(Start: 41 @26898 has 186 MA's), (Start: 58 @26955 has 18 MA's), (64, 26973), (80, 27030), (107, 27165), (116, 27195), (118, 27222), (122, 27246), (131, 27300), (135, 27309),

Gene: Fitzgerald_43 Start: 40238, Stop: 40687, Start Num: 57

Candidate Starts for Fitzgerald_43:

(33, 40130), (35, 40139), (Start: 57 @40238 has 47 MA's), (69, 40280), (72, 40295), (76, 40307), (112, 40460), (132, 40583), (139, 40619), (144, 40670),

Gene: Flatwoods_45 Start: 39068, Stop: 39514, Start Num: 57

Candidate Starts for Flatwoods_45:

(9, 38810), (13, 38861), (35, 38966), (38, 38981), (Start: 57 @39068 has 47 MA's), (69, 39110), (72, 39125), (76, 39137), (112, 39290), (139, 39449), (144, 39497),

Gene: Florean_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Florean_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Flux_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Flux_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: ForesterFrank_32 Start: 24334, Stop: 24768, Start Num: 41

Candidate Starts for ForesterFrank_32:

(Start: 41 @24334 has 186 MA's), (Start: 60 @24397 has 6 MA's), (110, 24574),

Gene: Fosterous_42 Start: 38797, Stop: 39246, Start Num: 57

Candidate Starts for Fosterous_42:

(35, 38698), (Start: 57 @38797 has 47 MA's), (69, 38839), (72, 38854), (76, 38866), (112, 39019), (132, 39142), (139, 39178), (144, 39229),

Gene: Frizzle_22 Start: 19556, Stop: 19969, Start Num: 59

Candidate Starts for Frizzle_22:

(Start: 59 @19556 has 2 MA's), (68, 19589), (104, 19748), (106, 19751),

Gene: Fryberger_63 Start: 35468, Stop: 35857, Start Num: 60

Candidate Starts for Fryberger_63:

(Start: 60 @35468 has 6 MA's), (69, 35504), (83, 35576), (114, 35681), (119, 35717), (123, 35759), (132, 35792),

Gene: FuegoCuervo_47 Start: 38665, Stop: 39114, Start Num: 57

Candidate Starts for FuegoCuervo_47:

(1, 38278), (9, 38413), (Start: 57 @38665 has 47 MA's), (69, 38707), (84, 38785), (112, 38887), (132, 39010), (139, 39046),

Gene: Funston_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Funston_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Gadost_30 Start: 22522, Stop: 22950, Start Num: 41

Candidate Starts for Gadost_30:

(Start: 41 @22522 has 186 MA's), (Start: 60 @22582 has 6 MA's), (67, 22603), (77, 22642), (91, 22705), (124, 22840),

Gene: Gaea_44 Start: 38712, Stop: 39158, Start Num: 57

Candidate Starts for Gaea_44:

(7, 38436), (9, 38454), (13, 38505), (35, 38610), (38, 38625), (Start: 57 @38712 has 47 MA's), (69, 38754), (72, 38769), (76, 38781), (112, 38934), (139, 39093), (144, 39141),

Gene: Galadriel_44 Start: 39604, Stop: 40053, Start Num: 57

Candidate Starts for Galadriel_44:

(33, 39496), (35, 39505), (Start: 57 @39604 has 47 MA's), (69, 39646), (72, 39661), (76, 39673), (84, 39724), (112, 39826), (132, 39949), (139, 39985), (144, 40036),

Gene: Geodirt_43 Start: 40216, Stop: 40665, Start Num: 57

Candidate Starts for Geodirt_43:

(35, 40117), (Start: 57 @40216 has 47 MA's), (69, 40258), (72, 40273), (76, 40285), (112, 40438), (132, 40561), (139, 40597), (144, 40648),

Gene: Ghobes_23 Start: 19556, Stop: 19969, Start Num: 59

Candidate Starts for Ghobes_23:

(Start: 59 @19556 has 2 MA's), (68, 19589), (104, 19748), (106, 19751), (126, 19874),

Gene: Goose_31 Start: 22825, Stop: 23256, Start Num: 41

Candidate Starts for Goose_31:

(26, 22741), (Start: 41 @22825 has 186 MA's), (Start: 60 @22885 has 6 MA's), (61, 22891), (69, 22915), (117, 23080), (125, 23149),

Gene: Guey18_69 Start: 36988, Stop: 37377, Start Num: 60

Candidate Starts for Guey18_69:

(Start: 60 @36988 has 6 MA's), (69, 37024), (83, 37096), (114, 37201), (119, 37237), (123, 37279), (132, 37312),

Gene: Gustavo_44 Start: 38884, Stop: 39330, Start Num: 57

Candidate Starts for Gustavo_44:

(13, 38677), (35, 38782), (38, 38797), (Start: 57 @38884 has 47 MA's), (69, 38926), (72, 38941), (76, 38953), (112, 39106), (139, 39265), (144, 39313),

Gene: HINdeR_30 Start: 25427, Stop: 25855, Start Num: 41

Candidate Starts for HINdeR_30:

(Start: 41 @25427 has 186 MA's), (Start: 58 @25484 has 18 MA's), (69, 25517), (101, 25637), (120, 25697), (122, 25715), (125, 25748), (143, 25850),

Gene: HamSlice_29 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for HamSlice_29:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699), (124, 22834),

Gene: Happiness_30 Start: 22524, Stop: 22952, Start Num: 41

Candidate Starts for Happiness_30:

(Start: 41 @22524 has 186 MA's), (50, 22563), (Start: 60 @22584 has 6 MA's), (67, 22605), (77, 22644), (91, 22707), (124, 22842), (125, 22848),

Gene: Herbertwm_28 Start: 21463, Stop: 21894, Start Num: 41

Candidate Starts for Herbertwm_28:

(19, 21358), (24, 21373), (27, 21385), (Start: 41 @21463 has 186 MA's), (Start: 60 @21523 has 6 MA's), (76, 21580), (110, 21700), (135, 21814),

Gene: Herod_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for Herod_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Holli_30 Start: 22308, Stop: 22736, Start Num: 41

Candidate Starts for Holli_30:

(Start: 41 @22308 has 186 MA's), (Start: 60 @22368 has 6 MA's), (67, 22389), (77, 22428), (91, 22491), (124, 22626),

Gene: Houdini22_30 Start: 22522, Stop: 22950, Start Num: 41

Candidate Starts for Houdini22_30:

(Start: 41 @22522 has 186 MA's), (Start: 60 @22582 has 6 MA's), (67, 22603), (77, 22642), (91, 22705), (124, 22840),

Gene: Hugley_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for Hugley_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Huxley_30 Start: 22579, Stop: 23007, Start Num: 41

Candidate Starts for Huxley_30:

(Start: 41 @22579 has 186 MA's), (50, 22618), (Start: 60 @22639 has 6 MA's), (67, 22660), (76, 22696), (77, 22699), (124, 22897),

Gene: ICleared_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for ICleared_30:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699), (124, 22834),

Gene: Iceman_31 Start: 22807, Stop: 23235, Start Num: 41

Candidate Starts for Iceman_31:

(Start: 41 @22807 has 186 MA's), (Start: 60 @22867 has 6 MA's), (67, 22888), (77, 22927), (91, 22990), (124, 23125),

Gene: IdentityCrisis_29 Start: 23867, Stop: 24355, Start Num: 39

Candidate Starts for IdentityCrisis_29:

(18, 23759), (32, 23828), (Start: 39 @23867 has 4 MA's), (46, 23891), (51, 23918), (52, 23921), (55, 23924), (Start: 60 @23936 has 6 MA's), (74, 23984), (78, 23996), (104, 24131), (111, 24152), (114, 24164),

Gene: Iracema64_31 Start: 22826, Stop: 23254, Start Num: 41

Candidate Starts for Iracema64_31:

(Start: 41 @22826 has 186 MA's), (50, 22865), (Start: 60 @22886 has 6 MA's), (67, 22907), (76, 22943), (77, 22946), (124, 23144),

Gene: IronMan_33 Start: 24398, Stop: 24832, Start Num: 41

Candidate Starts for IronMan_33:

(Start: 41 @24398 has 186 MA's), (46, 24416), (Start: 60 @24461 has 6 MA's), (90, 24581), (110, 24638), (133, 24746),

Gene: JKSyngboy_42 Start: 39483, Stop: 39929, Start Num: 57

Candidate Starts for JKSyngboy_42:

(12, 39273), (13, 39276), (16, 39291), (33, 39372), (35, 39381), (38, 39396), (Start: 57 @39483 has 47 MA's), (69, 39525), (72, 39540), (76, 39552), (112, 39705), (139, 39864), (144, 39912),

Gene: Jaan_34 Start: 24787, Stop: 25221, Start Num: 41

Candidate Starts for Jaan_34:

(Start: 41 @24787 has 186 MA's), (42, 24790), (Start: 60 @24850 has 6 MA's), (73, 24898), (90, 24970), (110, 25027), (140, 25195), (143, 25210),

Gene: Jabberwocky_43 Start: 40642, Stop: 41091, Start Num: 57

Candidate Starts for Jabberwocky_43:

(35, 40543), (Start: 57 @40642 has 47 MA's), (69, 40684), (72, 40699), (76, 40711), (84, 40762), (112, 40864), (132, 40987), (139, 41023), (144, 41074),

Gene: Jaykayelowell_30 Start: 22514, Stop: 22942, Start Num: 41

Candidate Starts for Jaykayelowell_30:

(Start: 41 @22514 has 186 MA's), (Start: 60 @22574 has 6 MA's), (67, 22595), (77, 22634), (91, 22697),

Gene: JetBlade_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for JetBlade_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: JoongJeon_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for JoongJeon_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: JustASigh_29 Start: 27967, Stop: 28506, Start Num: 41

Candidate Starts for JustASigh_29:

(31, 27910), (Start: 41 @27967 has 186 MA's), (88, 28183), (96, 28216), (97, 28225), (100, 28240), (104, 28249), (120, 28309), (128, 28369), (136, 28399),

Gene: KFPoly_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for KFPoly_30:

(Start: 41 @22515 has 186 MA's), (50, 22554), (Start: 60 @22575 has 6 MA's), (67, 22596), (76, 22632), (77, 22635), (124, 22833),

Gene: Kamashten_42 Start: 38577, Stop: 39026, Start Num: 57

Candidate Starts for Kamashten_42:

(35, 38478), (Start: 57 @38577 has 47 MA's), (69, 38619), (72, 38634), (76, 38646), (112, 38799), (132, 38922), (139, 38958), (144, 39009),

Gene: Kamy_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for Kamy_30:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699),

Gene: Katalie136_30 Start: 22533, Stop: 22964, Start Num: 41

Candidate Starts for Katalie136_30:

(Start: 41 @22533 has 186 MA's), (50, 22572), (Start: 60 @22593 has 6 MA's), (69, 22623), (91, 22716), (120, 22806), (127, 22860), (140, 22938),

Gene: Keelan_61 Start: 35707, Stop: 36102, Start Num: 60

Candidate Starts for Keelan_61:

(Start: 60 @35707 has 6 MA's), (83, 35815), (114, 35920), (119, 35956), (130, 36025), (134, 36037),

Gene: KekoraPapaka_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for KekoraPapaka_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Kewpiedoll_44 Start: 39518, Stop: 39967, Start Num: 57

Candidate Starts for Kewpiedoll_44:

(35, 39419), (Start: 57 @39518 has 47 MA's), (69, 39560), (72, 39575), (76, 39587), (112, 39740), (132, 39863), (139, 39899), (144, 39950),

Gene: KiSi_33 Start: 27241, Stop: 27735, Start Num: 40

Candidate Starts for KiSi_33:

(28, 27169), (Start: 40 @27241 has 8 MA's), (Start: 60 @27304 has 6 MA's), (63, 27316), (77, 27364), (86, 27424), (99, 27493), (111, 27526), (115, 27541), (118, 27571), (134, 27658),

Gene: Kingmustik0402_30 Start: 22510, Stop: 22938, Start Num: 41

Candidate Starts for Kingmustik0402_30:

(Start: 41 @22510 has 186 MA's), (Start: 60 @22570 has 6 MA's), (67, 22591), (77, 22630), (91, 22693), (124, 22828),

Gene: KittenMittens_30 Start: 20964, Stop: 21392, Start Num: 41

Candidate Starts for KittenMittens_30:

(Start: 41 @20964 has 186 MA's), (50, 21003), (53, 21009), (61, 21030), (69, 21054), (91, 21147), (141, 21372),

Gene: Koan_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Koan_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Koreni_29 Start: 22164, Stop: 22592, Start Num: 41

Candidate Starts for Koreni_29:

(Start: 41 @22164 has 186 MA's), (Start: 60 @22224 has 6 MA's), (67, 22245), (77, 22284), (91, 22347), (124, 22482),

Gene: Kratark_30 Start: 22510, Stop: 22938, Start Num: 41

Candidate Starts for Kratak_30:

(Start: 41 @22510 has 186 MA's), (50, 22549), (Start: 60 @22570 has 6 MA's), (67, 22591), (76, 22627), (77, 22630), (124, 22828),

Gene: Kremtemulon_30 Start: 22566, Stop: 22994, Start Num: 41

Candidate Starts for Kremtemulon_30:

(Start: 41 @22566 has 186 MA's), (Start: 60 @22626 has 6 MA's), (67, 22647), (77, 22686), (91, 22749), (124, 22884), (136, 22932),

Gene: Kristoff_32 Start: 23028, Stop: 23459, Start Num: 41

Candidate Starts for Kristoff_32:

(27, 22950), (30, 22971), (Start: 41 @23028 has 186 MA's), (50, 23067), (90, 23208), (91, 23211), (117, 23283), (125, 23352), (134, 23376),

Gene: Kroos_45 Start: 39624, Stop: 40070, Start Num: 57

Candidate Starts for Kroos_45:

(9, 39366), (19, 39447), (35, 39522), (38, 39537), (Start: 57 @39624 has 47 MA's), (69, 39666), (72, 39681), (76, 39693), (112, 39846), (139, 40005), (144, 40053),

Gene: Kwobi_46 Start: 39610, Stop: 40056, Start Num: 57

Candidate Starts for Kwobi_46:

(9, 39352), (13, 39403), (35, 39508), (38, 39523), (Start: 57 @39610 has 47 MA's), (69, 39652), (72, 39667), (76, 39679), (112, 39832), (139, 39991), (144, 40039),

Gene: Kyee_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for Kyee_30:

(Start: 41 @22516 has 186 MA's), (50, 22555), (Start: 60 @22576 has 6 MA's), (67, 22597), (76, 22633), (77, 22636), (124, 22834),

Gene: LHTSCC_31 Start: 22832, Stop: 23260, Start Num: 41

Candidate Starts for LHTSCC_31:

(Start: 41 @22832 has 186 MA's), (50, 22871), (Start: 60 @22892 has 6 MA's), (67, 22913), (77, 22952), (91, 23015), (124, 23150), (125, 23156),

Gene: Landor_32 Start: 24439, Stop: 24873, Start Num: 41

Candidate Starts for Landor_32:

(Start: 41 @24439 has 186 MA's), (42, 24442), (Start: 60 @24502 has 6 MA's), (90, 24622), (110, 24679), (140, 24847), (143, 24862),

Gene: LappelDuVide_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for LappelDuVide_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (114, 22761), (124, 22833),

Gene: LeMond_33 Start: 27312, Stop: 27806, Start Num: 40

Candidate Starts for LeMond_33:

(28, 27240), (Start: 40 @27312 has 8 MA's), (Start: 60 @27375 has 6 MA's), (63, 27387), (77, 27435), (86, 27495), (99, 27564), (111, 27597), (115, 27612), (118, 27642), (134, 27729),

Gene: Lemur_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Lemur_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Lennon_44 Start: 40321, Stop: 40770, Start Num: 57

Candidate Starts for Lennon_44:

(35, 40225), (Start: 57 @40321 has 47 MA's), (69, 40363), (72, 40378), (76, 40390), (84, 40441), (112, 40543), (132, 40666), (139, 40702), (144, 40753),

Gene: LeoAvram_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for LeoAvram_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: LilHam_42 Start: 38211, Stop: 38657, Start Num: 57

Candidate Starts for LilHam_42:

(9, 37953), (13, 38004), (35, 38109), (38, 38124), (Start: 57 @38211 has 47 MA's), (69, 38253), (72, 38268), (76, 38280), (112, 38433), (139, 38592), (144, 38640),

Gene: LittleB_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for LittleB_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: LittleGuy_30 Start: 22461, Stop: 22889, Start Num: 41

Candidate Starts for LittleGuy_30:

(Start: 41 @22461 has 186 MA's), (Start: 60 @22521 has 6 MA's), (67, 22542), (77, 22581), (91, 22644),

Gene: LochMonster_30 Start: 22490, Stop: 22918, Start Num: 41

Candidate Starts for LochMonster_30:

(Start: 41 @22490 has 186 MA's), (50, 22529), (Start: 60 @22550 has 6 MA's), (67, 22571), (76, 22607), (77, 22610), (124, 22808),

Gene: Lorenzo_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Lorenzo_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Loser_34 Start: 24594, Stop: 25022, Start Num: 41

Candidate Starts for Loser_34:

(Start: 41 @24594 has 186 MA's), (62, 24663), (89, 24768), (110, 24831), (125, 24918),

Gene: Love_48 Start: 40769, Stop: 41218, Start Num: 57

Candidate Starts for Love_48:

(35, 40670), (Start: 57 @40769 has 47 MA's), (69, 40811), (72, 40826), (76, 40838), (112, 40991), (132, 41114), (139, 41150), (144, 41201),

Gene: Lunsford_31 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Lunsford_31:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Madavieve_24 Start: 22179, Stop: 22592, Start Num: 58

Candidate Starts for Madavieve_24:

(4, 21909), (29, 22068), (45, 22158), (Start: 58 @22179 has 18 MA's), (79, 22254), (81, 22263), (87, 22308), (106, 22371), (135, 22518),

Gene: Madeline_24 Start: 22197, Stop: 22610, Start Num: 58

Candidate Starts for Madeline_24:

(4, 21927), (29, 22086), (45, 22176), (Start: 58 @22197 has 18 MA's), (79, 22272), (81, 22281), (87, 22326), (106, 22389), (135, 22536),

Gene: Marcoliusprime_32 Start: 26906, Stop: 27397, Start Num: 41

Candidate Starts for Marcoliusprime_32:

(Start: 41 @26906 has 186 MA's), (Start: 58 @26963 has 18 MA's), (64, 26981), (80, 27038), (107, 27173), (116, 27203), (118, 27230), (122, 27254), (131, 27308), (135, 27317),

Gene: MarkPhew_34 Start: 27210, Stop: 27707, Start Num: 40

Candidate Starts for MarkPhew_34:

(2, 26973), (10, 27057), (15, 27087), (21, 27114), (30, 27156), (32, 27171), (Start: 40 @27210 has 8 MA's), (Start: 60 @27273 has 6 MA's), (77, 27333), (86, 27393), (95, 27438), (99, 27462), (111, 27495), (115, 27510), (118, 27540),

Gene: Marshawn_35 Start: 27905, Stop: 28363, Start Num: 40

Candidate Starts for Marshawn_35:

(Start: 40 @27905 has 8 MA's), (46, 27926), (Start: 58 @27968 has 18 MA's), (62, 27980), (68, 27998), (89, 28097), (94, 28115), (103, 28148), (105, 28151), (125, 28259),

Gene: Maverick_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Maverick_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Maxo_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for Maxo_30:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699),

Gene: Mayonnaise_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Mayonnaise_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Mazhar510_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Mazhar510_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: McCrothy_44 Start: 39928, Stop: 40377, Start Num: 57

Candidate Starts for McCrothy_44:

(33, 39820), (35, 39829), (Start: 57 @39928 has 47 MA's), (69, 39970), (72, 39985), (76, 39997), (84, 40048), (112, 40150), (132, 40273), (139, 40309), (144, 40360),

Gene: McKinley_46 Start: 40142, Stop: 40591, Start Num: 57

Candidate Starts for McKinley_46:

(35, 40043), (Start: 57 @40142 has 47 MA's), (69, 40184), (72, 40199), (76, 40211), (112, 40364), (132, 40487), (139, 40523), (144, 40574),

Gene: Medusa_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Medusa_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: MeeZee_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for MeeZee_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Melvin_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Melvin_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Meyran_26 Start: 23021, Stop: 23446, Start Num: 58

Candidate Starts for Meyran_26:

(Start: 58 @23021 has 18 MA's), (69, 23060), (72, 23075), (81, 23105), (113, 23237), (121, 23297),

Gene: Millski_29 Start: 22521, Stop: 22949, Start Num: 41

Candidate Starts for Millski_29:

(Start: 41 @22521 has 186 MA's), (Start: 60 @22581 has 6 MA's), (67, 22602), (77, 22641), (91, 22704), (124, 22839),

Gene: Milly_32 Start: 26879, Stop: 27370, Start Num: 41

Candidate Starts for Milly_32:

(Start: 41 @26879 has 186 MA's), (Start: 58 @26936 has 18 MA's), (64, 26954), (80, 27011), (107, 27146), (116, 27176), (118, 27203), (122, 27227), (131, 27281), (135, 27290),

Gene: Miramae_30 Start: 22464, Stop: 22889, Start Num: 41

Candidate Starts for Miramae_30:

(23, 22371), (26, 22380), (27, 22386), (Start: 41 @22464 has 186 MA's), (48, 22488), (53, 22509), (65, 22542), (76, 22581), (101, 22674), (110, 22698), (117, 22716), (129, 22800),

Gene: MoontowerMania_44 Start: 39977, Stop: 40426, Start Num: 57

Candidate Starts for MoontowerMania_44:

(35, 39878), (Start: 57 @39977 has 47 MA's), (69, 40019), (72, 40034), (76, 40046), (84, 40097), (112, 40199), (132, 40322), (139, 40358), (144, 40409),

Gene: Morpher26_30 Start: 22533, Stop: 22964, Start Num: 41

Candidate Starts for Morpher26_30:

(Start: 41 @22533 has 186 MA's), (50, 22572), (Start: 60 @22593 has 6 MA's), (69, 22623), (91, 22716), (120, 22806), (127, 22860), (140, 22938),

Gene: Morrow_30 Start: 22521, Stop: 22949, Start Num: 41

Candidate Starts for Morrow_30:

(Start: 41 @22521 has 186 MA's), (Start: 60 @22581 has 6 MA's), (67, 22602), (77, 22641), (91, 22704),

Gene: Mufasa_33 Start: 26987, Stop: 27478, Start Num: 41

Candidate Starts for Mufasa_33:

(Start: 41 @26987 has 186 MA's), (Start: 58 @27044 has 18 MA's), (64, 27062), (80, 27119), (107, 27254), (118, 27311), (131, 27389), (143, 27467),

Gene: Mundrea_30 Start: 22485, Stop: 22916, Start Num: 41

Candidate Starts for Mundrea_30:

(Start: 41 @22485 has 186 MA's), (50, 22524), (53, 22530), (98, 22683), (122, 22773),

Gene: Nebs_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Nebs_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Nemo27_30 Start: 22517, Stop: 22945, Start Num: 41

Candidate Starts for Nemo27_30:

(Start: 41 @22517 has 186 MA's), (Start: 60 @22577 has 6 MA's), (67, 22598), (77, 22637), (91, 22700), (124, 22835), (136, 22883),

Gene: Noelle_30 Start: 22590, Stop: 23024, Start Num: 41

Candidate Starts for Noelle_30:

(Start: 41 @22590 has 186 MA's), (44, 22602), (45, 22605), (50, 22629), (Start: 60 @22650 has 6 MA's), (91, 22773), (118, 22857), (125, 22914), (143, 23013),

Gene: Nordenberg_39 Start: 38962, Stop: 39411, Start Num: 57

Candidate Starts for Nordenberg_39:

(33, 38854), (35, 38863), (Start: 57 @38962 has 47 MA's), (69, 39004), (72, 39019), (76, 39031), (112, 39184), (132, 39307), (139, 39343), (144, 39394),

Gene: NorthStar_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for NorthStar_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: NotAPhaseMom_30 Start: 22522, Stop: 22950, Start Num: 41

Candidate Starts for NotAPhaseMom_30:

(Start: 41 @22522 has 186 MA's), (Start: 60 @22582 has 6 MA's), (67, 22603), (77, 22642), (91, 22705), (124, 22840),

Gene: Nyceirae_28 Start: 22758, Stop: 23174, Start Num: 58

Candidate Starts for Nyceirae_28:

(43, 22719), (45, 22731), (56, 22752), (Start: 58 @22758 has 18 MA's), (69, 22797), (71, 22809), (75, 22818), (81, 22842), (84, 22875), (106, 22950), (113, 22974),

Gene: Nymphadora_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for Nymphadora_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Nyxis_30 Start: 22461, Stop: 22889, Start Num: 41

Candidate Starts for Nyxis_30:

(Start: 41 @22461 has 186 MA's), (Start: 60 @22521 has 6 MA's), (67, 22542), (77, 22581), (91, 22644),

Gene: OKCentral2016_31 Start: 22531, Stop: 22962, Start Num: 41

Candidate Starts for OKCentral2016_31:

(26, 22447), (Start: 41 @22531 has 186 MA's), (Start: 60 @22591 has 6 MA's), (61, 22597), (69, 22621), (117, 22786), (125, 22855),

Gene: OKaNui_31 Start: 22571, Stop: 22999, Start Num: 41

Candidate Starts for OKaNui_31:

(Start: 41 @22571 has 186 MA's), (Start: 60 @22631 has 6 MA's), (67, 22652), (77, 22691), (91, 22754), (124, 22889),

Gene: Obama12_31 Start: 22834, Stop: 23262, Start Num: 41

Candidate Starts for Obama12_31:

(Start: 41 @22834 has 186 MA's), (50, 22873), (Start: 60 @22894 has 6 MA's), (67, 22915), (77, 22954), (91, 23017), (124, 23152), (125, 23158),

Gene: Ohfah_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Ohfah_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Ohgeesy_24 Start: 21522, Stop: 21935, Start Num: 58

Candidate Starts for Ohgeesy_24:

(4, 21252), (29, 21411), (34, 21444), (45, 21501), (Start: 58 @21522 has 18 MA's), (79, 21597), (81, 21606), (87, 21651), (106, 21714), (135, 21861),

Gene: Oscar_33 Start: 27313, Stop: 27807, Start Num: 40

Candidate Starts for Oscar_33:

(28, 27241), (Start: 40 @27313 has 8 MA's), (Start: 60 @27376 has 6 MA's), (63, 27388), (77, 27436), (86, 27496), (99, 27565), (111, 27598), (115, 27613), (118, 27643), (134, 27730),

Gene: Palestino_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Palestino_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Paries_47 Start: 40431, Stop: 40880, Start Num: 57

Candidate Starts for Paries_47:

(33, 40323), (35, 40332), (Start: 57 @40431 has 47 MA's), (69, 40473), (72, 40488), (76, 40500), (84, 40551), (112, 40653), (132, 40776), (139, 40812), (144, 40863),

Gene: PeaceMeal1_30 Start: 20965, Stop: 21393, Start Num: 41

Candidate Starts for PeaceMeal1_30:

(Start: 41 @20965 has 186 MA's), (50, 21004), (53, 21010), (61, 21031), (69, 21055), (91, 21148), (141, 21373),

Gene: Peaches_30 Start: 22517, Stop: 22945, Start Num: 41

Candidate Starts for Peaches_30:

(Start: 41 @22517 has 186 MA's), (Start: 60 @22577 has 6 MA's), (67, 22598), (77, 22637), (91, 22700), (124, 22835),

Gene: Perplexer_30 Start: 22530, Stop: 22961, Start Num: 41

Candidate Starts for Perplexer_30:

(Start: 41 @22530 has 186 MA's), (50, 22569), (Start: 60 @22590 has 6 MA's), (69, 22620), (91, 22713), (120, 22803), (127, 22857), (140, 22935),

Gene: PeterPeter_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for PeterPeter_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: PetiteSangsue_30 Start: 22533, Stop: 22964, Start Num: 41

Candidate Starts for PetiteSangsue_30:

(Start: 41 @22533 has 186 MA's), (50, 22572), (Start: 60 @22593 has 6 MA's), (69, 22623), (91, 22716), (120, 22806), (127, 22860), (140, 22938),

Gene: Phacado_30 Start: 22517, Stop: 22945, Start Num: 41

Candidate Starts for Phacado_30:

(Start: 41 @22517 has 186 MA's), (Start: 60 @22577 has 6 MA's), (67, 22598), (77, 22637), (91, 22700), (124, 22835), (136, 22883),

Gene: Phaded_34 Start: 24786, Stop: 25220, Start Num: 41

Candidate Starts for Phaded_34:

(Start: 41 @24786 has 186 MA's), (42, 24789), (Start: 60 @24849 has 6 MA's), (73, 24897), (90, 24969), (110, 25026), (140, 25194), (143, 25209),

Gene: Phelipe_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Phelipe_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Phighter1804_30 Start: 22493, Stop: 22921, Start Num: 41

Candidate Starts for Phighter1804_30:

(Start: 41 @22493 has 186 MA's), (50, 22532), (Start: 60 @22553 has 6 MA's), (67, 22574), (76, 22610), (77, 22613), (124, 22811),

Gene: Phontbonne_30 Start: 22462, Stop: 22890, Start Num: 41

Candidate Starts for Phontbonne_30:

(Start: 41 @22462 has 186 MA's), (Start: 60 @22522 has 6 MA's), (67, 22543), (77, 22582), (91, 22645),

Gene: Pipcraft_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Pipcraft_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Polly_23 Start: 21339, Stop: 21752, Start Num: 58

Candidate Starts for Polly_23:

(7, 21093), (8, 21096), (14, 21168), (20, 21195), (36, 21270), (45, 21318), (Start: 58 @21339 has 18 MA's), (79, 21414), (81, 21423), (135, 21678), (138, 21696),

Gene: Polymorphads_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Polymorphads_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698),

Gene: Poompha_30 Start: 20963, Stop: 21391, Start Num: 41

Candidate Starts for Poompha_30:

(Start: 41 @20963 has 186 MA's), (50, 21002), (53, 21008), (61, 21029), (69, 21053), (91, 21146), (141, 21371),

Gene: Prudy_33 Start: 24685, Stop: 25119, Start Num: 41

Candidate Starts for Prudy_33:

(Start: 41 @24685 has 186 MA's), (42, 24688), (46, 24703), (Start: 58 @24745 has 18 MA's), (Start: 60 @24748 has 6 MA's), (134, 25036),

Gene: Pumbaa_30 Start: 22493, Stop: 22921, Start Num: 41

Candidate Starts for Pumbaa_30:

(Start: 41 @22493 has 186 MA's), (Start: 60 @22553 has 6 MA's), (67, 22574), (77, 22613), (91, 22676), (124, 22811), (125, 22817),

Gene: Rebeuca_32 Start: 23029, Stop: 23460, Start Num: 41

Candidate Starts for Rebeuca_32:

(27, 22951), (30, 22972), (Start: 41 @23029 has 186 MA's), (50, 23068), (90, 23209), (91, 23212), (117, 23284), (125, 23353), (134, 23377),

Gene: RedRock_34 Start: 24752, Stop: 25180, Start Num: 41

Candidate Starts for RedRock_34:

(Start: 41 @24752 has 186 MA's), (62, 24821), (89, 24926), (110, 24989), (125, 25076), (134, 25097),

Gene: Refuge_34 Start: 25756, Stop: 26211, Start Num: 41

Candidate Starts for Refuge_34:

(Start: 41 @25756 has 186 MA's), (44, 25768), (46, 25774), (50, 25798), (Start: 58 @25816 has 18 MA's), (Start: 60 @25819 has 6 MA's), (90, 25939), (91, 25942), (110, 25996), (122, 26050), (145, 26188),

Gene: Relief_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for Relief_30:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699), (124, 22834),

Gene: RhynO_32 Start: 23010, Stop: 23441, Start Num: 41

Candidate Starts for RhynO_32:

(Start: 41 @23010 has 186 MA's), (Start: 60 @23070 has 6 MA's), (91, 23193), (125, 23334), (134, 23358),

Gene: Ribeye_45 Start: 40042, Stop: 40488, Start Num: 57

Candidate Starts for Ribeye_45:

(9, 39784), (13, 39835), (35, 39940), (38, 39955), (Start: 57 @40042 has 47 MA's), (69, 40084), (72, 40099), (76, 40111), (112, 40264), (139, 40423), (144, 40471),

Gene: RockieBear_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for RockieBear_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Rofo_45 Start: 39757, Stop: 40206, Start Num: 57

Candidate Starts for Rofo_45:

(33, 39649), (35, 39658), (Start: 57 @39757 has 47 MA's), (69, 39799), (72, 39814), (76, 39826), (112, 39979), (132, 40102), (139, 40138), (144, 40189),

Gene: Romney_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Romney_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Ronaldo_66 Start: 36367, Stop: 36756, Start Num: 60

Candidate Starts for Ronaldo_66:

(Start: 60 @36367 has 6 MA's), (69, 36403), (83, 36475), (114, 36580), (119, 36616), (123, 36658), (132, 36691),

Gene: Roosevelt_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Roosevelt_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Rosa24_29 Start: 22493, Stop: 22921, Start Num: 41

Candidate Starts for Rosa24_29:

(Start: 41 @22493 has 186 MA's), (50, 22532), (Start: 60 @22553 has 6 MA's), (67, 22574), (76, 22610), (77, 22613), (124, 22811),

Gene: Rowdy_35 Start: 22921, Stop: 23352, Start Num: 41

Candidate Starts for Rowdy_35:

(Start: 41 @22921 has 186 MA's), (Start: 60 @22981 has 6 MA's), (91, 23104), (125, 23245), (134, 23269),

Gene: Ruin_30 Start: 22514, Stop: 22942, Start Num: 41

Candidate Starts for Ruin_30:

(Start: 41 @22514 has 186 MA's), (Start: 60 @22574 has 6 MA's), (67, 22595), (77, 22634), (91, 22697), (124, 22832), (136, 22880),

Gene: Sabertooth_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Sabertooth_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Sanjuju_43 Start: 40371, Stop: 40820, Start Num: 57

Candidate Starts for Sanjuju_43:

(33, 40263), (35, 40272), (Start: 57 @40371 has 47 MA's), (69, 40413), (72, 40428), (76, 40440), (112, 40593), (132, 40716), (139, 40752), (144, 40803),

Gene: Sapo_22 Start: 19503, Stop: 19937, Start Num: 54

Candidate Starts for Sapo_22:

(Start: 54 @19503 has 1 MA's), (72, 19560), (108, 19713), (137, 19872),

Gene: Saronaya_44 Start: 38884, Stop: 39330, Start Num: 57

Candidate Starts for Saronaya_44:

(13, 38677), (35, 38782), (38, 38797), (Start: 57 @38884 has 47 MA's), (69, 38926), (72, 38941), (76, 38953), (112, 39106), (139, 39265), (144, 39313),

Gene: Sbash_29 Start: 26224, Stop: 26712, Start Num: 39

Candidate Starts for Sbash_29:

(17, 26113), (20, 26125), (23, 26134), (30, 26170), (32, 26185), (Start: 39 @26224 has 4 MA's), (51, 26275), (55, 26281), (Start: 60 @26293 has 6 MA's), (66, 26311), (74, 26341), (78, 26353), (82,

26389), (93, 26440), (104, 26488), (111, 26509), (114, 26521), (115, 26524), (142, 26698),

Gene: Scamp_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Scamp_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Scarlett_33 Start: 27314, Stop: 27808, Start Num: 40

Candidate Starts for Scarlett_33:

(28, 27242), (Start: 40 @27314 has 8 MA's), (Start: 60 @27377 has 6 MA's), (63, 27389), (77, 27437), (86, 27497), (99, 27566), (111, 27599), (115, 27614), (118, 27644), (134, 27731),

Gene: SchottB_43 Start: 39884, Stop: 40330, Start Num: 57

Candidate Starts for SchottB_43:

(9, 39626), (13, 39677), (35, 39782), (38, 39797), (Start: 57 @39884 has 47 MA's), (69, 39926), (72, 39941), (76, 39953), (112, 40106), (139, 40265), (144, 40313),

Gene: SenorClean_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for SenorClean_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Severus_30 Start: 20963, Stop: 21391, Start Num: 41

Candidate Starts for Severus_30:

(Start: 41 @20963 has 186 MA's), (50, 21002), (61, 21029), (69, 21053), (91, 21146), (141, 21371),

Gene: Shaka_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Shaka_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836), (125, 22842),

Gene: Shapes_35 Start: 22921, Stop: 23352, Start Num: 41

Candidate Starts for Shapes_35:

(Start: 41 @22921 has 186 MA's), (Start: 60 @22981 has 6 MA's), (91, 23104), (125, 23245), (134, 23269),

Gene: SheldonCooper_31 Start: 22833, Stop: 23261, Start Num: 41

Candidate Starts for SheldonCooper_31:

(Start: 41 @22833 has 186 MA's), (50, 22872), (Start: 60 @22893 has 6 MA's), (67, 22914), (77, 22953), (91, 23016), (124, 23151), (125, 23157),

Gene: Shivanishola_44 Start: 38638, Stop: 39087, Start Num: 57

Candidate Starts for Shivanishola_44:

(35, 38539), (Start: 57 @38638 has 47 MA's), (69, 38680), (72, 38695), (76, 38707), (84, 38758), (112, 38860), (132, 38983), (139, 39019), (144, 39070),

Gene: Shygu2_30 Start: 22524, Stop: 22955, Start Num: 41

Candidate Starts for Shygu2_30:

(Start: 41 @22524 has 186 MA's), (50, 22563), (Start: 60 @22584 has 6 MA's), (69, 22614), (91, 22707), (120, 22797), (127, 22851), (140, 22929),

Gene: Sitar_44 Start: 40321, Stop: 40770, Start Num: 57

Candidate Starts for Sitar_44:

(35, 40225), (Start: 57 @40321 has 47 MA's), (69, 40363), (72, 40378), (76, 40390), (84, 40441), (112, 40543), (132, 40666), (139, 40702), (144, 40753),

Gene: Skipitt_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for Skipitt_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (114, 22761), (124, 22833),

Gene: Sparky_30 Start: 27513, Stop: 28001, Start Num: 39

Candidate Starts for Sparky_30:

(11, 27366), (17, 27402), (18, 27405), (32, 27474), (Start: 39 @27513 has 4 MA's), (46, 27537), (51, 27564), (52, 27567), (55, 27570), (Start: 60 @27582 has 6 MA's), (66, 27600), (74, 27630), (78, 27642), (93, 27729), (104, 27777), (111, 27798), (114, 27810),

Gene: Sparxx_30 Start: 22516, Stop: 22944, Start Num: 41

Candidate Starts for Sparxx_30:

(Start: 41 @22516 has 186 MA's), (Start: 60 @22576 has 6 MA's), (67, 22597), (77, 22636), (91, 22699), (124, 22834),

Gene: Spino_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Spino_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Stasia_31 Start: 22953, Stop: 23387, Start Num: 41

Candidate Starts for Stasia_31:

(32, 22911), (Start: 41 @22953 has 186 MA's), (Start: 60 @23013 has 6 MA's), (91, 23136), (118, 23220), (125, 23277), (143, 23376),

Gene: SteMason_29 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for SteMason_29:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Steamy_32 Start: 23901, Stop: 24398, Start Num: 40

Candidate Starts for Steamy_32:

(Start: 40 @23901 has 8 MA's), (50, 23946), (68, 23994), (76, 24024), (86, 24087), (99, 24156), (101, 24159),

Gene: Stink_31 Start: 22801, Stop: 23226, Start Num: 41

Candidate Starts for Stink_31:

(23, 22708), (26, 22717), (Start: 41 @22801 has 186 MA's), (48, 22825), (65, 22879), (76, 22918), (101, 23011), (110, 23035), (117, 23053), (129, 23137),

Gene: StorminNorm_44 Start: 38975, Stop: 39421, Start Num: 57

Candidate Starts for StorminNorm_44:

(5, 38687), (19, 38798), (35, 38873), (Start: 57 @38975 has 47 MA's), (69, 39017), (72, 39032), (76, 39044), (112, 39197), (139, 39356), (144, 39404),

Gene: Strobilo_32 Start: 26879, Stop: 27370, Start Num: 41

Candidate Starts for Strobilo_32:

(Start: 41 @26879 has 186 MA's), (Start: 58 @26936 has 18 MA's), (64, 26954), (80, 27011), (107, 27146), (116, 27176), (118, 27203), (122, 27227), (131, 27281), (135, 27290),

Gene: Stuck_33 Start: 26569, Stop: 27057, Start Num: 39

Candidate Starts for Stuck_33:

(17, 26458), (23, 26479), (Start: 39 @26569 has 4 MA's), (46, 26593), (51, 26620), (Start: 60 @26638 has 6 MA's), (74, 26686), (78, 26698), (104, 26833), (111, 26854), (114, 26866),

Gene: Stultus_43 Start: 39274, Stop: 39723, Start Num: 57

Candidate Starts for Stultus_43:

(35, 39175), (Start: 57 @39274 has 47 MA's), (69, 39316), (72, 39331), (76, 39343), (112, 39496), (132, 39619), (139, 39655), (144, 39706),

Gene: Sultana_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Sultana_30:

(Start: 41 @22519 has 186 MA's), (Start: 60 @22579 has 6 MA's), (67, 22600), (77, 22639), (91, 22702), (124, 22837),

Gene: TM4_34 Start: 27085, Stop: 27576, Start Num: 41

Candidate Starts for TM4_34:

(3, 26857), (Start: 41 @27085 has 186 MA's), (Start: 58 @27142 has 18 MA's), (64, 27160), (80, 27217), (107, 27352), (118, 27409), (122, 27433), (131, 27487), (143, 27565),

Gene: Tangent_45 Start: 39348, Stop: 39797, Start Num: 57

Candidate Starts for Tangent_45:

(33, 39240), (35, 39249), (Start: 57 @39348 has 47 MA's), (69, 39390), (72, 39405), (76, 39417), (112, 39570), (132, 39693), (139, 39729), (144, 39780),

Gene: Tangerine_44 Start: 38756, Stop: 39202, Start Num: 57

Candidate Starts for Tangerine_44:

(9, 38498), (13, 38549), (35, 38654), (38, 38669), (Start: 57 @38756 has 47 MA's), (69, 38798), (72, 38813), (76, 38825), (112, 38978), (139, 39137), (144, 39185),

Gene: Taquarus_30 Start: 22521, Stop: 22949, Start Num: 41

Candidate Starts for Taquarus_30:

(Start: 41 @22521 has 186 MA's), (Start: 60 @22581 has 6 MA's), (67, 22602), (77, 22641), (91, 22704), (124, 22839),

Gene: Thanksgivukkah_30 Start: 22519, Stop: 22947, Start Num: 41

Candidate Starts for Thanksgivukkah_30:

(Start: 41 @22519 has 186 MA's), (50, 22558), (Start: 60 @22579 has 6 MA's), (67, 22600), (76, 22636), (77, 22639), (124, 22837),

Gene: ThankyouJordi_23 Start: 21874, Stop: 22287, Start Num: 58

Candidate Starts for ThankyouJordi_23:

(7, 21628), (10, 21676), (14, 21703), (36, 21805), (45, 21853), (Start: 58 @21874 has 18 MA's), (79, 21949), (81, 21958), (87, 22003), (135, 22213),

Gene: Thing3_42 Start: 38577, Stop: 39026, Start Num: 57

Candidate Starts for Thing3_42:

(35, 38478), (Start: 57 @38577 has 47 MA's), (69, 38619), (72, 38634), (76, 38646), (112, 38799), (132, 38922), (139, 38958), (144, 39009),

Gene: TimTam_24 Start: 21899, Stop: 22312, Start Num: 58

Candidate Starts for TimTam_24:

(4, 21629), (20, 21755), (45, 21878), (Start: 58 @21899 has 18 MA's), (79, 21974), (81, 21983), (87, 22028), (106, 22091), (135, 22238),

Gene: Timshel_31 Start: 25553, Stop: 25981, Start Num: 41

Candidate Starts for Timshel_31:

(Start: 41 @25553 has 186 MA's), (Start: 58 @25610 has 18 MA's), (62, 25622), (69, 25643), (101, 25763), (109, 25784), (120, 25823), (122, 25841), (125, 25874), (135, 25907),

Gene: TinaFeyge_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for TinaFeyge_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Tinybot_29 Start: 22495, Stop: 22923, Start Num: 41

Candidate Starts for Tinybot_29:

(Start: 41 @22495 has 186 MA's), (50, 22534), (Start: 60 @22555 has 6 MA's), (67, 22576), (76, 22612), (77, 22615), (124, 22813),

Gene: TiroTheta9_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for TiroTheta9_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: Topanga_31 Start: 22953, Stop: 23384, Start Num: 41

Candidate Starts for Topanga_31:

(Start: 41 @22953 has 186 MA's), (50, 22992), (Start: 60 @23013 has 6 MA's), (61, 23019), (91, 23136), (140, 23358),

Gene: Trike_29 Start: 20971, Stop: 21399, Start Num: 41

Candidate Starts for Trike_29:

(Start: 41 @20971 has 186 MA's), (50, 21010), (61, 21037), (69, 21061), (91, 21154), (141, 21379),

Gene: Tristan_32 Start: 24458, Stop: 24892, Start Num: 41

Candidate Starts for Tristan_32:

(Start: 41 @24458 has 186 MA's), (42, 24461), (Start: 60 @24521 has 6 MA's), (90, 24641), (110, 24698), (134, 24809), (140, 24866), (143, 24881),

Gene: TroyPia_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for TroyPia_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Twister_31 Start: 22862, Stop: 23293, Start Num: 41

Candidate Starts for Twister_31:

(27, 22784), (30, 22805), (Start: 41 @22862 has 186 MA's), (50, 22901), (90, 23042), (91, 23045), (117, 23117), (125, 23186), (134, 23210),

Gene: Tycho_44 Start: 38843, Stop: 39289, Start Num: 57

Candidate Starts for Tycho_44:

(5, 38555), (19, 38666), (35, 38741), (38, 38756), (Start: 57 @38843 has 47 MA's), (69, 38885), (72, 38900), (76, 38912), (112, 39065), (139, 39224), (144, 39272),

Gene: TygerBlood_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for TygerBlood_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Ulysses_29 Start: 22236, Stop: 22664, Start Num: 41

Candidate Starts for Ulysses_29:

(Start: 41 @22236 has 186 MA's), (50, 22275), (Start: 60 @22296 has 6 MA's), (67, 22317), (76, 22353), (77, 22356), (124, 22554),

Gene: VanLee_31 Start: 26056, Stop: 26493, Start Num: 58

Candidate Starts for VanLee_31:

(23, 25918), (44, 26029), (Start: 58 @26056 has 18 MA's), (69, 26095), (72, 26110), (75, 26116), (81, 26140), (102, 26239), (113, 26272), (146, 26482),

Gene: Vivi2_47 Start: 40374, Stop: 40823, Start Num: 57

Candidate Starts for Vivi2_47:

(35, 40275), (Start: 57 @40374 has 47 MA's), (69, 40416), (72, 40431), (76, 40443), (112, 40596), (132, 40719), (139, 40755), (144, 40806),

Gene: Volt_66 Start: 36531, Stop: 36920, Start Num: 60

Candidate Starts for Volt_66:

(Start: 60 @36531 has 6 MA's), (69, 36567), (83, 36639), (114, 36744), (119, 36780), (123, 36822), (132, 36855),

Gene: Vordorf_27 Start: 22487, Stop: 22912, Start Num: 58

Candidate Starts for Vordorf_27:

(Start: 58 @22487 has 18 MA's), (69, 22526), (72, 22541), (81, 22571), (113, 22703), (121, 22763),

Gene: WalterMcMickey_31 Start: 22862, Stop: 23293, Start Num: 41

Candidate Starts for WalterMcMickey_31:

(27, 22784), (30, 22805), (Start: 41 @22862 has 186 MA's), (50, 22901), (90, 23042), (91, 23045), (117, 23117), (125, 23186), (134, 23210),

Gene: Wander_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Wander_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: WelcomeAyanna_23 Start: 21874, Stop: 22287, Start Num: 58

Candidate Starts for WelcomeAyanna_23:

(7, 21628), (10, 21676), (14, 21703), (36, 21805), (45, 21853), (Start: 58 @21874 has 18 MA's), (79, 21949), (81, 21958), (87, 22003), (135, 22213),

Gene: Wilbur_30 Start: 22518, Stop: 22946, Start Num: 41

Candidate Starts for Wilbur_30:

(Start: 41 @22518 has 186 MA's), (Start: 60 @22578 has 6 MA's), (67, 22599), (77, 22638), (91, 22701), (124, 22836),

Gene: Wile_30 Start: 22543, Stop: 22974, Start Num: 41

Candidate Starts for Wile_30:

(Start: 41 @22543 has 186 MA's), (50, 22582), (Start: 60 @22603 has 6 MA's), (69, 22633), (91, 22726), (120, 22816), (127, 22870), (140, 22948),

Gene: Wizard007_30 Start: 22520, Stop: 22948, Start Num: 41

Candidate Starts for Wizard007_30:

(Start: 41 @22520 has 186 MA's), (Start: 60 @22580 has 6 MA's), (67, 22601), (77, 22640), (91, 22703), (124, 22838),

Gene: Xena_30 Start: 22530, Stop: 22961, Start Num: 41

Candidate Starts for Xena_30:

(Start: 41 @22530 has 186 MA's), (50, 22569), (Start: 60 @22590 has 6 MA's), (69, 22620), (91, 22713), (120, 22803), (127, 22857), (140, 22935),

Gene: YoSam321_30 Start: 22515, Stop: 22943, Start Num: 41

Candidate Starts for YoSam321_30:

(Start: 41 @22515 has 186 MA's), (Start: 60 @22575 has 6 MA's), (67, 22596), (77, 22635), (91, 22698), (124, 22833),

Gene: YorkOnyx_45 Start: 39100, Stop: 39546, Start Num: 57

Candidate Starts for YorkOnyx_45:

(13, 38893), (35, 38998), (38, 39013), (Start: 57 @39100 has 47 MA's), (69, 39142), (72, 39157), (76, 39169), (112, 39322), (139, 39481), (144, 39529),

Gene: Ziko_66 Start: 36353, Stop: 36742, Start Num: 60

Candidate Starts for Ziko_66:

(Start: 60 @36353 has 6 MA's), (69, 36389), (83, 36461), (114, 36566), (119, 36602), (123, 36644), (132, 36677),

Gene: Zirinka_24 Start: 21911, Stop: 22324, Start Num: 58

Candidate Starts for Zirinka_24:

(4, 21641), (29, 21800), (45, 21890), (Start: 58 @21911 has 18 MA's), (79, 21986), (81, 21995), (87, 22040), (106, 22103), (135, 22250),

Gene: ZoeJ_32 Start: 26884, Stop: 27375, Start Num: 41

Candidate Starts for ZoeJ_32:

(Start: 41 @26884 has 186 MA's), (Start: 58 @26941 has 18 MA's), (64, 26959), (80, 27016), (107, 27151), (118, 27208), (122, 27232), (131, 27286), (143, 27364),