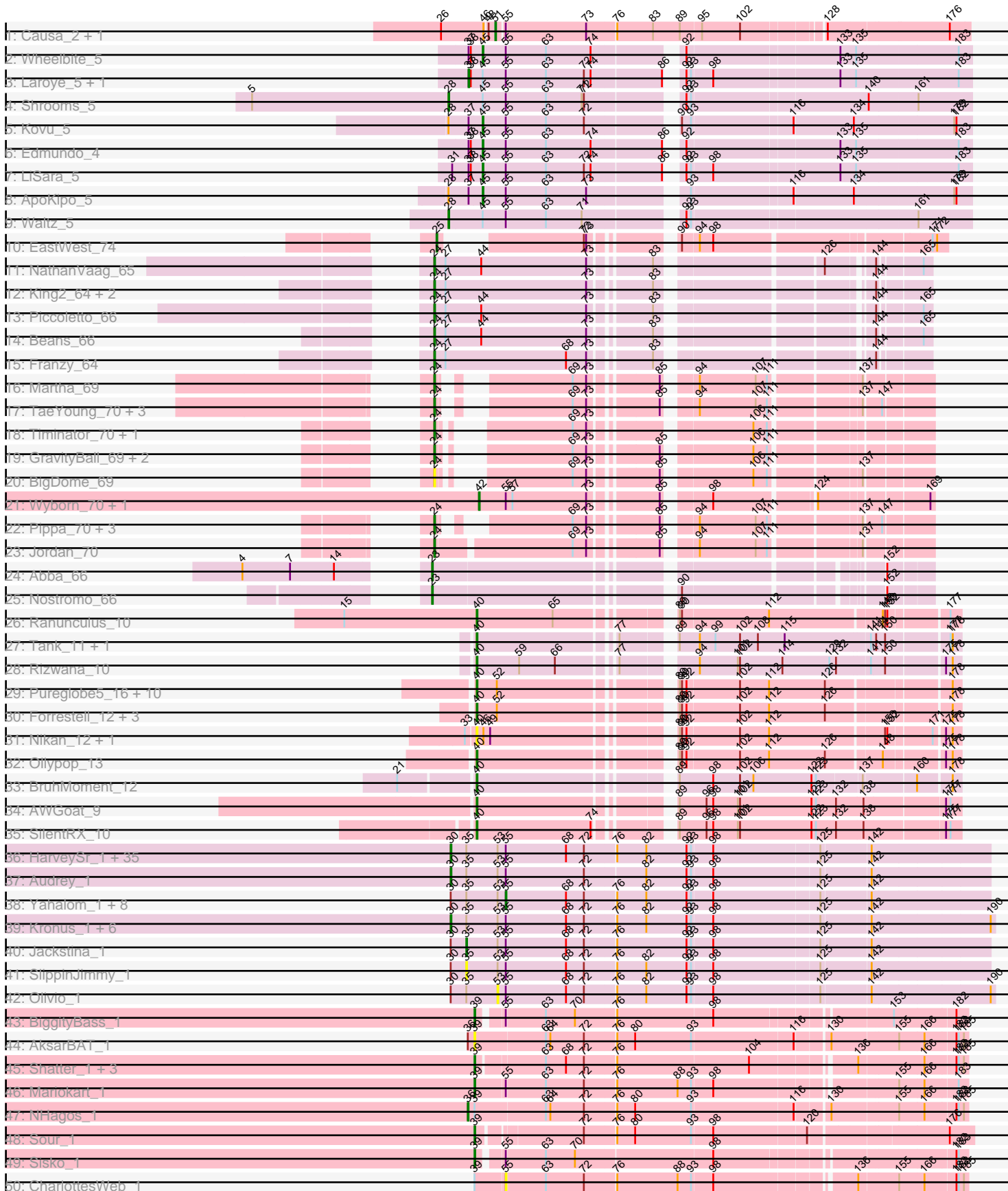
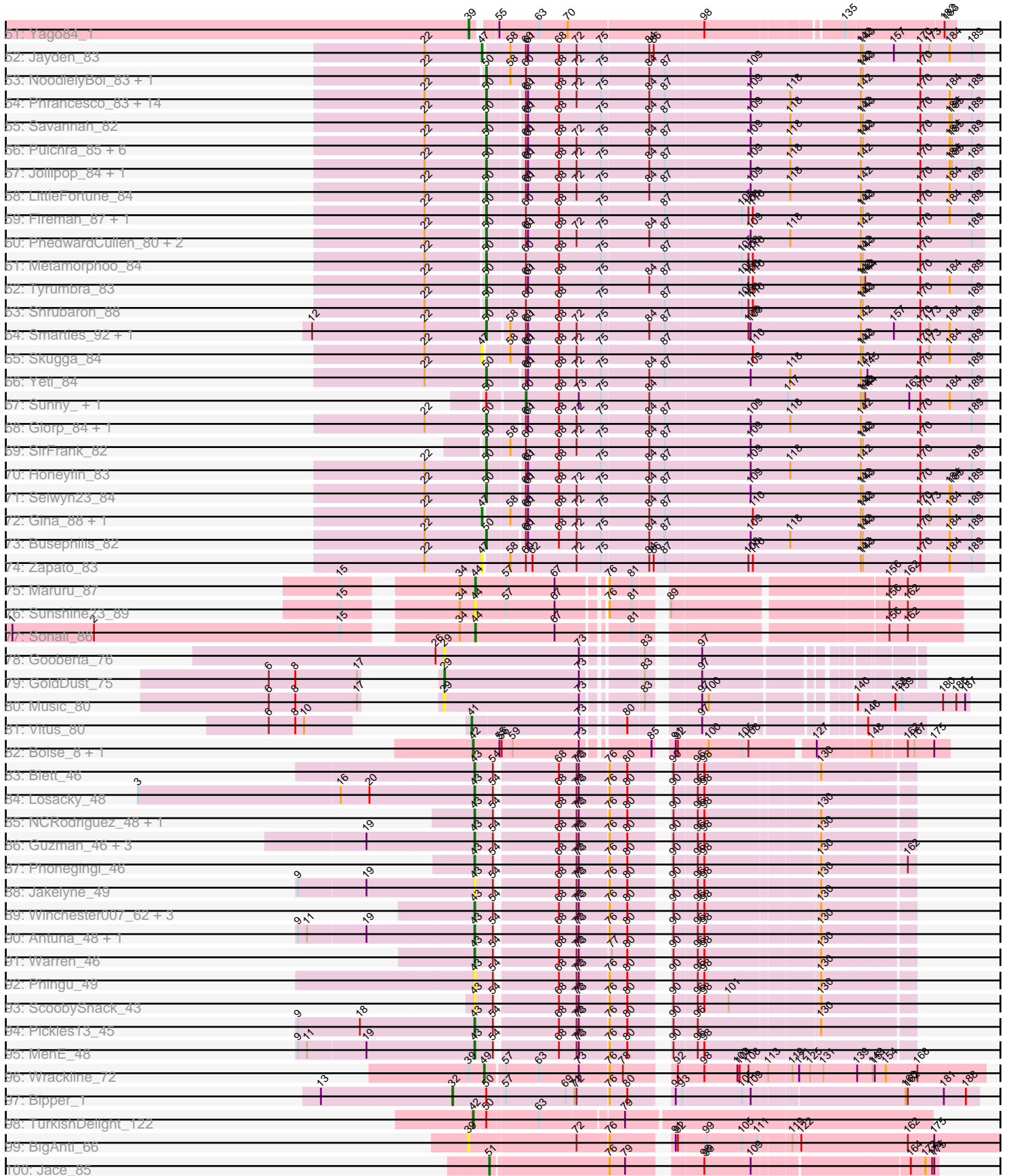


Pham 294420



Pham 294420



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 294420 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294420 has 219 members, 39 are drafts.

Phages represented in each track:

- Track 1 : Causa_2, StAugustine_2
- Track 2 : Wheelbite_5
- Track 3 : Laroye_5, Salgado_5
- Track 4 : Shrooms_5
- Track 5 : Kovu_5
- Track 6 : Edmundo_4
- Track 7 : LiSara_5
- Track 8 : ApoKipo_5
- Track 9 : Waltz_5
- Track 10 : EastWest_74
- Track 11 : NathanVaag_65
- Track 12 : King2_64, Brent_66, Jawnski_65
- Track 13 : Piccoletto_66
- Track 14 : Beans_66
- Track 15 : Franzy_64
- Track 16 : Martha_69
- Track 17 : TaeYoung_70, JKerns_69, Grekaycon_70, BossLady_71
- Track 18 : Timinator_70, LeeroyJ_70
- Track 19 : GravityBall_69, BarretLemon_69, StevieBAY_70
- Track 20 : BigDome_69
- Track 21 : Wyborn_70, Sicarius2_71
- Track 22 : Pippa_70, Shade_69, Sonny_69, Zartrosa_71
- Track 23 : Jordan_70
- Track 24 : Abba_66
- Track 25 : Nostromo_66
- Track 26 : Ranunculus_10
- Track 27 : Tank_11, Wilde_11
- Track 28 : Rizwana_10
- Track 29 : Pureglobe5_16, Hive_13, Beagle_15, PhuzzTulsa_12, Kubulix_15, DogYard_14, Popstraw_13, Odyssey395_16, Pointis_14, RIPWilbur_12, BetaFish_14
- Track 30 : Forrestell_12, NyleyClemson_12, MellowYellow_12, RazzB_11
- Track 31 : Nikan_12, Ren19_10
- Track 32 : Ollypop_13
- Track 33 : BruhMoment_12
- Track 34 : AWGoat_9
- Track 35 : SilentRX_10

- Track 36 : HarveySr_1, Neos5_1, Rita1961_1, Philly_1, Chalmers_1, Devonte_1, ChaChing_1, Abinghost_1, Gadget_1, Briakila_1, Phlyer_1, GlenHope_1, SynergyX_1, Pipefish_1, Heathcliff_1, MmasiCarm_1, Marley1013_1, Baloo_1, RagingRooster_1, RomaT_1, Nozo_1, Compostia_1, Yinz_1, Athena_1, Chandler_1, Corofin_1, Gervas_1, Akoma_1, OrangeOswald_1, Deenasa_1, Obutu_1, Glubnar_1, TinyTerror_1, LestyG_1, Daisy_1, Shenandoah_1
- Track 37 : Audrey_1
- Track 38 : Yahalom_1, Mulaychimus_1, Marlia_1, Morty007_1, Bernardo_1, Tydolla_1, Phaedrus_1, Kamiyu_1, SwainyDoc_1
- Track 39 : Kronus_1, Halfpint_1, Casbah_1, Phayeta_1, Mortcellus_1, Ben11_1, Chentzyk_1
- Track 40 : Jackstina_1
- Track 41 : SlippinJimmy_1
- Track 42 : Olivio_1
- Track 43 : BiggityBass_1
- Track 44 : AksarBAT_1
- Track 45 : Shatter_1, Fresco_1, Axumite_1, Ligma_1
- Track 46 : Mariokart_1
- Track 47 : NHagos_1
- Track 48 : Sour_1
- Track 49 : Sisko_1
- Track 50 : CharlottesWeb_1
- Track 51 : Yago84_1
- Track 52 : Jayden_83
- Track 53 : NoodlelyBoi_83, ClearAsMud_86
- Track 54 : Phrancesco_83, KaiHaiDragon_84, BeagleBug_82, Onika_82, Quhwah_87, EarickHC_84, Ramiel05_82, Shotgun_82, BrazzalePHS_82, Rockwell_82, Paschalis_83, Jefe_83, Kowalski_82, PierreOrion_82, Antares_83
- Track 55 : Savannah_82
- Track 56 : Pulchra_85, Piperis_84, Lucretia_83, Ganandorf_81, Scumberland_85, Crisis_84, Cranjis_84
- Track 57 : Jollipop_84, Hermeonysus_83
- Track 58 : LittleFortune_84
- Track 59 : Fireman_87, RobsFeet_90
- Track 60 : PhedwardCullen_80, PiperSansNom_84, CrazyRich_81
- Track 61 : Metamorphoo_84
- Track 62 : Tyumbra_83
- Track 63 : Shrubaron_88
- Track 64 : Smarties_92, Ariadne_92
- Track 65 : Skugga_84
- Track 66 : Yeti_84
- Track 67 : Sunny_, Merry_
- Track 68 : Glorp_84, Phorgeous_83
- Track 69 : SirFrank_82
- Track 70 : Honeyfin_83
- Track 71 : Selwyn23_84
- Track 72 : Gina_88, Teamocil_88
- Track 73 : Busephilis_82
- Track 74 : Zapato_83
- Track 75 : Maruru_87
- Track 76 : Sunshine23_89
- Track 77 : Sonali_86
- Track 78 : Gooberta_76

- Track 79 : GoldDust_75
- Track 80 : Music_80
- Track 81 : Vitus_80
- Track 82 : Boise_8, RomansRevenge_8
- Track 83 : Blett_46
- Track 84 : Losacky_48
- Track 85 : NCRodriguez_48, Bush_47
- Track 86 : Guzman_46, CookieDog_46, Carrillo_48, Violeta_48
- Track 87 : Phonegingi_46
- Track 88 : Jakelyne_49
- Track 89 : Winchester007_62, Appa_46, PhillyJawn_47, Dropshot_46
- Track 90 : Antuna_48, Mariel_49
- Track 91 : Warren_46
- Track 92 : Phingu_49
- Track 93 : ScoobySnack_43
- Track 94 : Pickles13_45
- Track 95 : MenE_48
- Track 96 : Wrackline_72
- Track 97 : Bipper_1
- Track 98 : TurkishDelight_122
- Track 99 : BigAnti_66
- Track 100 : Jace_85

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

The start number called the most often in the published annotations is 30, it was called in 43 of the 180 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abinghost_1, Akoma_1, Athena_1, Audrey_1, Baloo_1, Ben11_1, Briakila_1, Casbah_1, ChaChing_1, Chalmers_1, Chandler_1, Chentzyk_1, Compostia_1, Corofin_1, Daisy_1, Deenasa_1, Devonte_1, Gadget_1, Gervas_1, GlenHope_1, Glubnar_1, Halfpint_1, HarveySr_1, Heathcliff_1, Kronus_1, LestyG_1, Marley1013_1, MmasiCarm_1, Mortcellus_1, Neos5_1, Nozo_1, Obutu_1, OrangeOswald_1, Phayeta_1, Philly_1, Phlyer_1, Pipefish_1, RagingRooster_1, Rita1961_1, RomaT_1, Shenandoah_1, SynergyX_1, TinyTerror_1, Yinz_1,

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

- Bernardo_1, Jackstina_1, Kamiyu_1, Marlia_1, Morty007_1, Mulaychimus_1, Olivio_1, Phaedrus_1, SlippinJimmy_1, SwainyDoc_1, Tydolla_1, Yahalom_1,

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

- AWGoat_9, Abba_66, AksarBAT_1, Antares_83, Antuna_48, ApoKipo_5, Appa_46, Ariadne_92, Axumite_1, BarretLemon_69, BeagleBug_82, Beagle_15, Beans_66, BetaFish_14, BigAnti_66, BigDome_69, BiggityBass_1, Bipper_1, Blett_46, Boise_8, BossLady_71, BrazzalePHS_82, Brent_66, BruhMoment_12, Busephillis_82, Bush_47, Carrillo_48, Causa_2, CharlottesWeb_1, ClearAsMud_86, CookieDog_46, Cranjis_84, CrazyRich_81, Crisis_84, DogYard_14, Dropshot_46, EarickHC_84, EastWest_74, Edmundo_4, Fireman_87, Forrestell_12, Franzy_64, Fresco_1, Ganandorf_81, Gina_88, Glorp_84, GoldDust_75, Gooberta_76, GravityBall_69,

Grekaycon_70, Guzman_46, Hermeonysus_83, Hive_13, Honeyfin_83, JKerns_69, Jace_85, Jakelyne_49, Jawnski_65, Jayden_83, Jefe_83, Jollipop_84, Jordan_70, KaiHaiDragon_84, King2_64, Kovu_5, Kowalski_82, Kubulix_15, Laroye_5, LeeroyJ_70, LiSara_5, Ligma_1, LittleFortune_84, Losacky_48, Lucretia_83, Mariel_49, Mariokart_1, Martha_69, Maruru_87, MellowYellow_12, MenE_48, Merry_, Metamorphoo_84, Music_80, NCRodriguez_48, NHagos_1, NathanVaag_65, Nikan_12, NoodlelyBoi_83, Nostromo_66, NyleyClemson_12, Odyssey395_16, Ollypop_13, Onika_82, Paschalis_83, PhedwardCullen_80, PhillyJawn_47, Phingu_49, Phonegingi_46, Phorgeous_83, Phrancesco_83, PhuzzTulsa_12, Piccoletto_66, Pickles13_45, PierreOrion_82, PiperSansNom_84, Piperis_84, Pippa_70, Pointis_14, Popstraw_13, Pulchra_85, Pureglobe5_16, Quhwah_87, RIPWilbur_12, Ramiel05_82, Ranunculus_10, RazzB_11, Ren19_10, Rizwana_10, RobsFeet_90, Rockwell_82, RomansRevenge_8, Salgado_5, Savannah_82, ScoobySnack_43, Scumberland_85, Selwyn23_84, Shade_69, Shatter_1, Shotgun_82, Shrooms_5, Shrubaron_88, Sicarius2_71, SilentRX_10, SirFrank_82, Sisko_1, Skugga_84, Smarties_92, Sonali_86, Sonny_69, Sour_1, StAugustine_2, StevieBAY_70, Sunny_, Sunshine23_89, TaeYoung_70, Tank_11, Teamocil_88, Timinator_70, TurkishDelight_122, Tyumbra_83, Violeta_48, Vitus_80, Waltz_5, Warren_46, Wheelbite_5, Wilde_11, Winchester007_62, Wrackline_72, Wyborn_70, Yago84_1, Yeti_84, Zapato_83, Zartrosa_71,

Summary by start number:

Start 23:

- Found in 2 of 219 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_66 (AO3), Nostromo_66 (AO3),

Start 24:

- Found in 23 of 219 (10.5%) of genes in pham
- Manual Annotations of this start: 22 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon_69 (AO2), Beans_66 (AO1), BigDome_69 (AO2), BossLady_71 (AO2), Brent_66 (AO1), Franzy_64 (AO1), GravityBall_69 (AO2), Grekaycon_70 (AO2), JKerns_69 (AO2), Jawnski_65 (AO1), Jordan_70 (AO2), King2_64 (AO1), LeeroyJ_70 (AO2), Martha_69 (AO2), NathanVaag_65 (AO1), Piccoletto_66 (AO1), Pippa_70 (AO2), Shade_69 (AO2), Sonny_69 (AO2), StevieBAY_70 (AO2), TaeYoung_70 (AO2), Timinator_70 (AO2), Zartrosa_71 (AO2),

Start 25:

- Found in 1 of 219 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest_74 (AO),

Start 28:

- Found in 4 of 219 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Shrooms_5 (AL), Waltz_5 (AL),

Start 29:

- Found in 3 of 219 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GoldDust_75 (FL), Gooberta_76 (FL), Music_80 (FL),

Start 30:

- Found in 56 of 219 (25.6%) of genes in pham
- Manual Annotations of this start: 43 of 180
- Called 78.6% of time when present
- Phage (with cluster) where this start called: Abinghost_1 (B3), Akoma_1 (B3), Athena_1 (B3), Audrey_1 (B3), Baloo_1 (B3), Ben11_1 (B3), Briakila_1 (B3), Casbah_1 (B3), ChaChing_1 (B3), Chalmers_1 (B3), Chandler_1 (B3), Chentzyk_1 (B3), Compostia_1 (B3), Corofin_1 (B3), Daisy_1 (B3), Deenasa_1 (B3), Devonte_1 (B3), Gadget_1 (B3), Gervas_1 (B3), GlenHope_1 (B3), Glubnar_1 (B3), Halfpint_1 (B3), HarveySr_1 (B3), Heathcliff_1 (B3), Kronus_1 (B3), LestyG_1 (B3), Marley1013_1 (B3), MmasiCarm_1 (B3), Mortcellus_1 (B3), Neos5_1 (B3), Nozo_1 (B3), Obutu_1 (B3), OrangeOswald_1 (B3), Phayeta_1 (B3), Philly_1 (B3), Phlyer_1 (B3), Pipefish_1 (B3), RagingRooster_1 (B3), Rita1961_1 (B3), RomaT_1 (B3), Shenandoah_1 (B3), SynergyX_1 (B3), TinyTerror_1 (B3), Yinz_1 (B3),

Start 32:

- Found in 1 of 219 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper_1 (Y),

Start 35:

- Found in 56 of 219 (25.6%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Jackstina_1 (B3), SlippinJimmy_1 (B3),

Start 36:

- Found in 2 of 219 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 50.0% of time when present
- Phage (with cluster) where this start called: NHagos_1 (DR),

Start 37:

- Found in 7 of 219 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Laroye_5 (AL), Salgado_5 (AL),

Start 39:

- Found in 14 of 219 (6.4%) of genes in pham
- Manual Annotations of this start: 9 of 180
- Called 78.6% of time when present
- Phage (with cluster) where this start called: AksarBAT_1 (DR), Axumite_1 (DR), BigAnti_66 (singleton), BiggityBass_1 (DR), Fresco_1 (DR), Ligma_1 (DR), Mariokart_1 (DR), Shatter_1 (DR), Sisko_1 (DR), Sour_1 (DR), Yago84_1 (DR),

Start 40:

- Found in 25 of 219 (11.4%) of genes in pham
- Manual Annotations of this start: 17 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_9 (AP4), Beagle_15 (AP2), BetaFish_14 (AP2), BruhMoment_12 (AP3), DogYard_14 (AP2), Forrestell_12 (AP2), Hive_13 (AP2), Kubulix_15 (AP2), MellowYellow_12 (AP2), Nikan_12 (AP2), NyleyClemson_12 (AP2), Odyssey395_16 (AP2), Ollypop_13 (AP2), PhuzzTulsa_12 (AP2), Pointis_14 (AP2), Popstraw_13 (AP2), Pureglobe5_16 (AP2), RIPWilbur_12 (AP2), Ranunculus_10 (AP), RazzB_11 (AP2), Ren19_10 (AP2), Rizwana_10 (AP1), SilentRX_10 (AP4), Tank_11 (AP1), Wilde_11 (AP1),

Start 41:

- Found in 1 of 219 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vitus_80 (FL),

Start 42:

- Found in 5 of 219 (2.3%) of genes in pham
- Manual Annotations of this start: 4 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boise_8 (FT), RomansRevenge_8 (FT), Sicarius2_71 (AO2), TurkishDelight_122 (singleton), Wyborn_70 (AO2),

Start 43:

- Found in 21 of 219 (9.6%) of genes in pham
- Manual Annotations of this start: 11 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_48 (GA), Appa_46 (GA), Blett_46 (GA), Bush_47 (GA), Carrillo_48 (GA), CookieDog_46 (GA), Dropshot_46 (GA), Guzman_46 (GA), Jakelyne_49 (GA), Losacky_48 (GA), Mariel_49 (GA), MenE_48 (GA), NCRodriguez_48 (GA), PhillyJawn_47 (GA), Phingu_49 (GA), Phonegingi_46 (GA), Pickles13_45 (GA), ScoobySnack_43 (GA), Violeta_48 (GA), Warren_46 (GA), Winchester007_62 (GA),

Start 44:

- Found in 6 of 219 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Maruru_87 (FG), Sonali_86 (FG), Sunshine23_89 (FG),

Start 45:

- Found in 9 of 219 (4.1%) of genes in pham
- Manual Annotations of this start: 5 of 180
- Called 55.6% of time when present
- Phage (with cluster) where this start called: ApoKipo_5 (AL), Edmundo_4 (AL), Kovu_5 (AL), LiSara_5 (AL), Wheelbite_5 (AL),

Start 47:

- Found in 5 of 219 (2.3%) of genes in pham

- Manual Annotations of this start: 3 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gina_88 (EC), Jayden_83 (EC), Skugga_84 (EC), Teamocil_88 (EC), Zapato_83 (EC),

Start 49:

- Found in 3 of 219 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Wrackline_72 (GF),

Start 50:

- Found in 49 of 219 (22.4%) of genes in pham
- Manual Annotations of this start: 40 of 180
- Called 91.8% of time when present
- Phage (with cluster) where this start called: Antares_83 (EC), Ariadne_92 (EC), BeagleBug_82 (EC), BrazzalePHS_82 (EC), Busephilis_82 (EC), ClearAsMud_86 (EC), Cranjis_84 (EC), CrazyRich_81 (EC), Crisis_84 (EC), EarickHC_84 (EC), Fireman_87 (EC), Ganandorf_81 (EC), Glorp_84 (EC), Hermeonysus_83 (EC), Honeyfin_83 (EC), Jefe_83 (EC), Jollipop_84 (EC), KaiHaiDragon_84 (EC), Kowalski_82 (EC), LittleFortune_84 (EC), Lucretia_83 (EC), Metamorphoo_84 (EC), NoodlelyBoi_83 (EC), Onika_82 (EC), Paschalis_83 (EC), PhedwardCullen_80 (EC), Phorgeous_83 (EC), Phrancesco_83 (EC), PierreOrion_82 (EC), PiperSansNom_84 (EC), Piperis_84 (EC), Pulchra_85 (EC), Quhwah_87 (EC), Ramiel05_82 (EC), RobsFeet_90 (EC), Rockwell_82 (EC), Savannah_82 (EC), Scumberland_85 (EC), Selwyn23_84 (EC), Shotgun_82 (EC), Shrubaron_88 (EC), SirFrank_82 (EC), Smarties_92 (EC), Tyrumbra_83 (EC), Yeti_84 (EC),

Start 51:

- Found in 3 of 219 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Causa_2 (AI), Jace_85 (singleton), StAugustine_2 (AI),

Start 53:

- Found in 56 of 219 (25.6%) of genes in pham
- No Manual Annotations of this start.
- Called 1.8% of time when present
- Phage (with cluster) where this start called: Olivio_1 (B3),

Start 55:

- Found in 76 of 219 (34.7%) of genes in pham
- Manual Annotations of this start: 6 of 180
- Called 13.2% of time when present
- Phage (with cluster) where this start called: Bernardo_1 (B3), CharlottesWeb_1 (DR), Kamiyu_1 (B3), Marlia_1 (B3), Morty007_1 (B3), Mulaychimus_1 (B3), Phaedrus_1 (B3), SwainyDoc_1 (B3), Tydolla_1 (B3), Yahalom_1 (B3),

Start 60:

- Found in 52 of 219 (23.7%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 3.8% of time when present

- Phage (with cluster) where this start called: Merry_ (EC), Sunny_ (EC),

Summary by clusters:

There are 21 clusters represented in this pham: EC, singleton, AP1, FT, AO1, AP, AP2, DR, FG, AL, AP4, AP3, AO3, GF, AI, AO2, GA, B3, Y, AO, FL,

Info for manual annotations of cluster AI:

- Start number 51 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster AL:

- Start number 28 was manually annotated 2 times for cluster AL.
- Start number 37 was manually annotated 2 times for cluster AL.
- Start number 45 was manually annotated 5 times for cluster AL.

Info for manual annotations of cluster AO:

- Start number 25 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 24 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 24 was manually annotated 15 times for cluster AO2.
- Start number 42 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 23 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AP:

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

Info for manual annotations of cluster AP1:

- Start number 40 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 40 was manually annotated 10 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 40 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 40 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster B3:

- Start number 30 was manually annotated 43 times for cluster B3.
- Start number 35 was manually annotated 1 time for cluster B3.
- Start number 55 was manually annotated 6 times for cluster B3.

Info for manual annotations of cluster DR:

- Start number 36 was manually annotated 1 time for cluster DR.
- Start number 39 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster EC:

- Start number 47 was manually annotated 3 times for cluster EC.
- Start number 50 was manually annotated 40 times for cluster EC.
- Start number 60 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FG:

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

Info for manual annotations of cluster FL:

- Start number 29 was manually annotated 1 time for cluster FL.
- Start number 41 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FT:

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

Info for manual annotations of cluster GA:

- Start number 43 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 49 was manually annotated 1 time for cluster GF.

Info for manual annotations of cluster Y:

- Start number 32 was manually annotated 1 time for cluster Y.

Gene Information:

Gene: AWGoat_9 Start: 3580, Stop: 4173, Start Num: 40

Candidate Starts for AWGoat_9:

(Start: 40 @3580 has 17 MA's), (89, 3808), (96, 3844), (98, 3853), (101, 3886), (102, 3889), (122, 3985), (123, 3991), (132, 4015), (138, 4051), (175, 4153), (177, 4159),

Gene: Abba_66 Start: 41901, Stop: 42479, Start Num: 23

Candidate Starts for Abba_66:

(4, 41721), (7, 41784), (14, 41841), (Start: 23 @41901 has 2 MA's), (152, 42423),

Gene: Abinghost_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Abinghost_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Akoma_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Akoma_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: AksarBAT_1 Start: 10, Stop: 633, Start Num: 39

Candidate Starts for AksarBAT_1:

(Start: 36 @1 has 1 MA's), (Start: 39 @10 has 9 MA's), (63, 103), (64, 109), (72, 154), (76, 193), (80, 217), (93, 292), (116, 424), (130, 463), (155, 547), (166, 580), (182, 619), (183, 622), (185, 628),

Gene: Antares_83 Start: 49113, Stop: 49772, Start Num: 50

Candidate Starts for Antares_83:

(22, 49029), (Start: 50 @49113 has 40 MA's), (Start: 60 @49158 has 2 MA's), (61, 49161), (68, 49203), (72, 49227), (75, 49260), (84, 49323), (87, 49344), (109, 49458), (118, 49512), (142, 49608), (170, 49689), (184, 49728), (189, 49758),

Gene: Antuna_48 Start: 29370, Stop: 29903, Start Num: 43

Candidate Starts for Antuna_48:

(9, 29136), (11, 29148), (19, 29226), (Start: 43 @29370 has 11 MA's), (54, 29394), (68, 29472), (72, 29496), (73, 29499), (76, 29535), (80, 29559), (90, 29598), (96, 29628), (98, 29637), (130, 29784),

Gene: ApoKipo_5 Start: 3227, Stop: 3832, Start Num: 45

Candidate Starts for ApoKipo_5:

(Start: 28 @3182 has 2 MA's), (Start: 37 @3209 has 2 MA's), (Start: 45 @3227 has 5 MA's), (Start: 55 @3257 has 6 MA's), (63, 3308), (73, 3362), (93, 3473), (116, 3602), (134, 3680), (179, 3809), (182, 3812),

Gene: Appa_46 Start: 29135, Stop: 29668, Start Num: 43

Candidate Starts for Appa_46:

(Start: 43 @29135 has 11 MA's), (54, 29159), (68, 29237), (72, 29261), (73, 29264), (76, 29300), (80, 29324), (90, 29363), (96, 29393), (98, 29402), (130, 29549),

Gene: Ariadne_92 Start: 49948, Stop: 50610, Start Num: 50

Candidate Starts for Ariadne_92:

(12, 49711), (22, 49864), (Start: 50 @49948 has 40 MA's), (58, 49975), (Start: 60 @49996 has 2 MA's), (61, 49999), (68, 50041), (72, 50065), (75, 50098), (84, 50161), (87, 50182), (108, 50293), (109, 50296), (142, 50446), (157, 50491), (170, 50527), (173, 50539), (184, 50566), (189, 50596),

Gene: Athena_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Athena_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Audrey_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Audrey_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (72, 175), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Axumite_1 Start: 1, Stop: 606, Start Num: 39

Candidate Starts for Axumite_1:

(Start: 39 @1 has 9 MA's), (63, 85), (68, 112), (72, 136), (76, 175), (104, 349), (136, 472), (166, 553), (182, 592), (183, 595), (185, 601),

Gene: Baloo_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Baloo_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: BarretLemon_69 Start: 44545, Stop: 45120, Start Num: 24

Candidate Starts for BarretLemon_69:

(Start: 24 @44545 has 22 MA's), (69, 44716), (73, 44734), (85, 44809), (106, 44911), (111, 44929),

Gene: Beagle_15 Start: 4696, Stop: 5277, Start Num: 40

Candidate Starts for Beagle_15:

(Start: 40 @4696 has 17 MA's), (52, 4723), (89, 4924), (90, 4927), (92, 4933), (102, 5002), (112, 5041), (126, 5116), (178, 5266),

Gene: BeagleBug_82 Start: 48916, Stop: 49575, Start Num: 50

Candidate Starts for BeagleBug_82:

(22, 48832), (Start: 50 @48916 has 40 MA's), (Start: 60 @48961 has 2 MA's), (61, 48964), (68, 49006), (72, 49030), (75, 49063), (84, 49126), (87, 49147), (109, 49261), (118, 49315), (142, 49411), (170, 49492), (184, 49531), (189, 49561),

Gene: Beans_66 Start: 44464, Stop: 45042, Start Num: 24

Candidate Starts for Beans_66:

(Start: 24 @44464 has 22 MA's), (27, 44479), (Start: 44 @44527 has 2 MA's), (73, 44668), (83, 44737), (144, 44980), (165, 45031),

Gene: Ben11_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Ben11_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: Bernardo_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Bernardo_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: BetaFish_14 Start: 4896, Stop: 5477, Start Num: 40

Candidate Starts for BetaFish_14:

(Start: 40 @4896 has 17 MA's), (52, 4923), (89, 5124), (90, 5127), (92, 5133), (102, 5202), (112, 5241), (126, 5316), (178, 5466),

Gene: BigAnti_66 Start: 50973, Stop: 51656, Start Num: 39

Candidate Starts for BigAnti_66:

(Start: 39 @50973 has 9 MA's), (72, 51114), (76, 51153), (91, 51219), (92, 51222), (99, 51258), (105, 51306), (111, 51327), (119, 51366), (122, 51378), (162, 51519), (175, 51552),

Gene: BigDome_69 Start: 44829, Stop: 45359, Start Num: 24

Candidate Starts for BigDome_69:

(Start: 24 @44829 has 22 MA's), (69, 44955), (73, 44973), (85, 45048), (106, 45150), (111, 45168), (137, 45276),

Gene: BiggityBass_1 Start: 1, Stop: 600, Start Num: 39

Candidate Starts for BiggityBass_1:

(Start: 39 @1 has 9 MA's), (Start: 55 @28 has 6 MA's), (63, 79), (70, 118), (76, 169), (98, 295), (153, 508), (182, 586),

Gene: Bipper_1 Start: 202, Stop: 861, Start Num: 32

Candidate Starts for Bipper_1:

(13, 25), (Start: 32 @202 has 1 MA's), (Start: 50 @247 has 40 MA's), (57, 271), (69, 352), (71, 364), (72, 367), (76, 406), (80, 430), (91, 472), (93, 481), (105, 559), (109, 571), (160, 763), (162, 766), (181, 814), (188, 844),

Gene: Blett_46 Start: 29321, Stop: 29854, Start Num: 43

Candidate Starts for Blett_46:

(Start: 43 @29321 has 11 MA's), (54, 29345), (68, 29423), (72, 29447), (73, 29450), (76, 29486), (80, 29510), (90, 29549), (96, 29579), (98, 29588), (130, 29735),

Gene: Boise_8 Start: 3035, Stop: 3610, Start Num: 42

Candidate Starts for Boise_8:

(Start: 42 @3035 has 4 MA's), (Start: 55 @3071 has 6 MA's), (56, 3074), (59, 3089), (73, 3179), (85, 3254), (91, 3266), (92, 3269), (100, 3308), (105, 3353), (108, 3362), (127, 3443), (148, 3512), (162, 3554), (167, 3563), (175, 3590),

Gene: BossLady_71 Start: 45159, Stop: 45689, Start Num: 24

Candidate Starts for BossLady_71:

(Start: 24 @45159 has 22 MA's), (69, 45285), (73, 45303), (85, 45378), (94, 45408), (107, 45483), (111, 45498), (137, 45606), (147, 45627),

Gene: BrazzalePHS_82 Start: 48913, Stop: 49572, Start Num: 50

Candidate Starts for BrazzalePHS_82:

(22, 48829), (Start: 50 @48913 has 40 MA's), (Start: 60 @48958 has 2 MA's), (61, 48961), (68, 49003), (72, 49027), (75, 49060), (84, 49123), (87, 49144), (109, 49258), (118, 49312), (142, 49408), (170, 49489), (184, 49528), (189, 49558),

Gene: Brent_66 Start: 44549, Stop: 45127, Start Num: 24

Candidate Starts for Brent_66:

(Start: 24 @44549 has 22 MA's), (27, 44564), (73, 44753), (83, 44822), (144, 45065),

Gene: Briakila_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Briakila_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: BruhMoment_12 Start: 4721, Stop: 5308, Start Num: 40

Candidate Starts for BruhMoment_12:

(21, 4628), (Start: 40 @4721 has 17 MA's), (89, 4949), (98, 4994), (102, 5030), (106, 5048), (122, 5126), (123, 5132), (137, 5189), (160, 5255), (178, 5297),

Gene: Busephilis_82 Start: 48820, Stop: 49479, Start Num: 50

Candidate Starts for Busephilis_82:

(22, 48736), (Start: 50 @48820 has 40 MA's), (Start: 60 @48865 has 2 MA's), (61, 48868), (68, 48910), (72, 48934), (75, 48967), (84, 49030), (87, 49051), (109, 49165), (118, 49219), (142, 49315), (143, 49318), (170, 49396), (184, 49435), (189, 49465),

Gene: Bush_47 Start: 29269, Stop: 29802, Start Num: 43

Candidate Starts for Bush_47:

(Start: 43 @29269 has 11 MA's), (54, 29293), (68, 29371), (72, 29395), (73, 29398), (76, 29434), (80, 29458), (90, 29497), (96, 29527), (98, 29536), (130, 29683),

Gene: Carrillo_48 Start: 29243, Stop: 29776, Start Num: 43

Candidate Starts for Carrillo_48:

(19, 29099), (Start: 43 @29243 has 11 MA's), (54, 29267), (68, 29345), (72, 29369), (73, 29372), (76, 29408), (80, 29432), (90, 29471), (96, 29501), (98, 29510), (130, 29657),

Gene: Casbah_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Casbah_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: Causa_2 Start: 428, Stop: 1015, Start Num: 51

Candidate Starts for Causa_2:

(26, 359), (46, 416), (48, 419), (Start: 51 @428 has 3 MA's), (Start: 55 @437 has 6 MA's), (73, 542), (76, 578), (83, 626), (89, 662), (95, 689), (102, 740), (128, 836), (176, 989),

Gene: ChaChing_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for ChaChing_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Chalmers_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Chalmers_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Chandler_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Chandler_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: CharlottesWeb_1 Start: 40, Stop: 612, Start Num: 55

Candidate Starts for CharlottesWeb_1:

(Start: 39 @1 has 9 MA's), (Start: 55 @40 has 6 MA's), (63, 91), (72, 142), (76, 181), (88, 262), (93, 280), (98, 307), (136, 478), (155, 526), (166, 559), (182, 598), (183, 601), (185, 607),

Gene: Chentzyk_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Chentzyk_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: ClearAsMud_86 Start: 49132, Stop: 49797, Start Num: 50

Candidate Starts for ClearAsMud_86:

(22, 49054), (Start: 50 @49132 has 40 MA's), (58, 49162), (Start: 60 @49183 has 2 MA's), (68, 49228), (72, 49252), (75, 49285), (84, 49348), (87, 49369), (109, 49483), (142, 49633), (143, 49636), (170, 49714),

Gene: Compostia_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Compostia_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: CookieDog_46 Start: 29243, Stop: 29776, Start Num: 43

Candidate Starts for CookieDog_46:

(19, 29099), (Start: 43 @29243 has 11 MA's), (54, 29267), (68, 29345), (72, 29369), (73, 29372), (76, 29408), (80, 29432), (90, 29471), (96, 29501), (98, 29510), (130, 29657),

Gene: Corofin_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Corofin_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Cranjis_84 Start: 49100, Stop: 49759, Start Num: 50

Candidate Starts for Cranjis_84:

(22, 49016), (Start: 50 @49100 has 40 MA's), (Start: 60 @49145 has 2 MA's), (61, 49148), (68, 49190), (72, 49214), (75, 49247), (84, 49310), (87, 49331), (109, 49445), (118, 49499), (142, 49595), (143, 49598), (170, 49676), (184, 49715), (185, 49718), (189, 49745),

Gene: CrazyRich_81 Start: 48604, Stop: 49263, Start Num: 50

Candidate Starts for CrazyRich_81:

(22, 48526), (Start: 50 @48604 has 40 MA's), (Start: 60 @48649 has 2 MA's), (61, 48652), (68, 48694), (72, 48718), (75, 48751), (84, 48814), (87, 48835), (109, 48949), (118, 49003), (142, 49099), (170, 49180), (189, 49249),

Gene: Crisis_84 Start: 49056, Stop: 49715, Start Num: 50

Candidate Starts for Crisis_84:

(22, 48972), (Start: 50 @49056 has 40 MA's), (Start: 60 @49101 has 2 MA's), (61, 49104), (68, 49146), (72, 49170), (75, 49203), (84, 49266), (87, 49287), (109, 49401), (118, 49455), (142, 49551), (143, 49554), (170, 49632), (184, 49671), (185, 49674), (189, 49701),

Gene: Daisy_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Daisy_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Deenasa_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Deenasa_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Devonte_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Devonte_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: DogYard_14 Start: 4766, Stop: 5347, Start Num: 40

Candidate Starts for DogYard_14:

(Start: 40 @4766 has 17 MA's), (52, 4793), (89, 4994), (90, 4997), (92, 5003), (102, 5072), (112, 5111), (126, 5186), (178, 5336),

Gene: Dropshot_46 Start: 28970, Stop: 29503, Start Num: 43

Candidate Starts for Dropshot_46:

(Start: 43 @28970 has 11 MA's), (54, 28994), (68, 29072), (72, 29096), (73, 29099), (76, 29135), (80, 29159), (90, 29198), (96, 29228), (98, 29237), (130, 29384),

Gene: EarickHC_84 Start: 48978, Stop: 49637, Start Num: 50

Candidate Starts for EarickHC_84:

(22, 48894), (Start: 50 @48978 has 40 MA's), (Start: 60 @49023 has 2 MA's), (61, 49026), (68, 49068), (72, 49092), (75, 49125), (84, 49188), (87, 49209), (109, 49323), (118, 49377), (142, 49473), (170, 49554), (184, 49593), (189, 49623),

Gene: EastWest_74 Start: 43726, Stop: 44280, Start Num: 25

Candidate Starts for EastWest_74:

(Start: 25 @43726 has 1 MA's), (72, 43861), (73, 43864), (90, 43951), (94, 43972), (98, 43990), (171, 44260), (172, 44266),

Gene: Edmundo_4 Start: 3516, Stop: 4121, Start Num: 45

Candidate Starts for Edmundo_4:

(Start: 37 @3498 has 2 MA's), (38, 3501), (Start: 45 @3516 has 5 MA's), (Start: 55 @3546 has 6 MA's), (63, 3597), (74, 3657), (86, 3747), (92, 3756), (133, 3951), (135, 3972), (183, 4104),

Gene: Fireman_87 Start: 50364, Stop: 51029, Start Num: 50

Candidate Starts for Fireman_87:

(22, 50286), (Start: 50 @50364 has 40 MA's), (Start: 60 @50415 has 2 MA's), (68, 50460), (75, 50517), (87, 50601), (105, 50703), (108, 50712), (110, 50718), (142, 50865), (143, 50868), (170, 50946), (184, 50985), (189, 51015),

Gene: Forrestell_12 Start: 4123, Stop: 4704, Start Num: 40

Candidate Starts for Forrestell_12:

(Start: 40 @4123 has 17 MA's), (52, 4150), (89, 4351), (90, 4354), (92, 4360), (102, 4429), (112, 4468), (126, 4543), (178, 4693),

Gene: Franzy_64 Start: 44565, Stop: 45143, Start Num: 24

Candidate Starts for Franzy_64:

(Start: 24 @44565 has 22 MA's), (27, 44580), (68, 44742), (73, 44769), (83, 44838), (144, 45081),

Gene: Fresco_1 Start: 1, Stop: 606, Start Num: 39

Candidate Starts for Fresco_1:

(Start: 39 @1 has 9 MA's), (63, 85), (68, 112), (72, 136), (76, 175), (104, 349), (136, 472), (166, 553), (182, 592), (183, 595), (185, 601),

Gene: Gadget_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Gadget_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Ganandorf_81 Start: 48464, Stop: 49123, Start Num: 50

Candidate Starts for Ganandorf_81:

(22, 48380), (Start: 50 @48464 has 40 MA's), (Start: 60 @48509 has 2 MA's), (61, 48512), (68, 48554), (72, 48578), (75, 48611), (84, 48674), (87, 48695), (109, 48809), (118, 48863), (142, 48959), (143, 48962), (170, 49040), (184, 49079), (185, 49082), (189, 49109),

Gene: Gervas_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Gervas_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Gina_88 Start: 48970, Stop: 49635, Start Num: 47

Candidate Starts for Gina_88:

(22, 48892), (Start: 47 @48970 has 3 MA's), (58, 49000), (Start: 60 @49021 has 2 MA's), (61, 49024), (68, 49066), (72, 49090), (75, 49123), (84, 49186), (87, 49207), (110, 49324), (142, 49471), (143, 49474), (170, 49552), (173, 49564), (184, 49591), (189, 49621),

Gene: GlenHope_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for GlenHope_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Glorp_84 Start: 48865, Stop: 49524, Start Num: 50

Candidate Starts for Glorp_84:

(22, 48781), (Start: 50 @48865 has 40 MA's), (Start: 60 @48910 has 2 MA's), (61, 48913), (68, 48955), (72, 48979), (75, 49012), (84, 49075), (87, 49096), (109, 49210), (118, 49264), (142, 49360), (170, 49441), (189, 49510),

Gene: Glubnar_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Glubnar_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: GoldDust_75 Start: 47538, Stop: 48089, Start Num: 29

Candidate Starts for GoldDust_75:

(6, 47406), (8, 47442), (17, 47526), (Start: 29 @47538 has 1 MA's), (73, 47721), (83, 47787), (97, 47841),

Gene: Gooberta_76 Start: 48265, Stop: 48816, Start Num: 29

Candidate Starts for Gooberta_76:

(26, 48253), (Start: 29 @48265 has 1 MA's), (73, 48448), (83, 48514), (97, 48568),

Gene: GravityBall_69 Start: 44845, Stop: 45375, Start Num: 24

Candidate Starts for GravityBall_69:

(Start: 24 @44845 has 22 MA's), (69, 44971), (73, 44989), (85, 45064), (106, 45166), (111, 45184),

Gene: Grekaycon_70 Start: 45072, Stop: 45602, Start Num: 24

Candidate Starts for Grekaycon_70:

(Start: 24 @45072 has 22 MA's), (69, 45198), (73, 45216), (85, 45291), (94, 45321), (107, 45396), (111, 45411), (137, 45519), (147, 45540),

Gene: Guzman_46 Start: 29226, Stop: 29759, Start Num: 43

Candidate Starts for Guzman_46:

(19, 29082), (Start: 43 @29226 has 11 MA's), (54, 29250), (68, 29328), (72, 29352), (73, 29355), (76, 29391), (80, 29415), (90, 29454), (96, 29484), (98, 29493), (130, 29640),

Gene: Halfpint_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Halfpint_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: HarveySr_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for HarveySr_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Heathcliff_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Heathcliff_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Hermeonysus_83 Start: 48821, Stop: 49480, Start Num: 50

Candidate Starts for Hermeonysus_83:

(22, 48737), (Start: 50 @48821 has 40 MA's), (Start: 60 @48866 has 2 MA's), (61, 48869), (68, 48911), (72, 48935), (75, 48968), (84, 49031), (87, 49052), (109, 49166), (118, 49220), (142, 49316), (170, 49397), (184, 49436), (185, 49439), (189, 49466),

Gene: Hive_13 Start: 4780, Stop: 5361, Start Num: 40

Candidate Starts for Hive_13:

(Start: 40 @4780 has 17 MA's), (52, 4807), (89, 5008), (90, 5011), (92, 5017), (102, 5086), (112, 5125), (126, 5200), (178, 5350),

Gene: Honeyfin_83 Start: 48654, Stop: 49313, Start Num: 50

Candidate Starts for Honeyfin_83:

(22, 48570), (Start: 50 @48654 has 40 MA's), (Start: 60 @48699 has 2 MA's), (61, 48702), (68, 48744), (75, 48801), (84, 48864), (87, 48885), (109, 48999), (118, 49053), (142, 49149), (170, 49230), (189, 49299),

Gene: JKerns_69 Start: 45051, Stop: 45626, Start Num: 24

Candidate Starts for JKerns_69:

(Start: 24 @45051 has 22 MA's), (69, 45222), (73, 45240), (85, 45315), (94, 45345), (107, 45420), (111, 45435), (137, 45543), (147, 45564),

Gene: Jace_85 Start: 47046, Stop: 47594, Start Num: 51

Candidate Starts for Jace_85:

(Start: 51 @47046 has 3 MA's), (76, 47202), (79, 47223), (98, 47304), (99, 47307), (109, 47367), (164, 47559), (172, 47577), (174, 47586), (175, 47589),

Gene: Jackstina_1 Start: 22, Stop: 693, Start Num: 35

Candidate Starts for Jackstina_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Jakelyne_49 Start: 29336, Stop: 29869, Start Num: 43

Candidate Starts for Jakelyne_49:

(9, 29102), (19, 29192), (Start: 43 @29336 has 11 MA's), (54, 29360), (68, 29438), (72, 29462), (73, 29465), (76, 29501), (80, 29525), (90, 29564), (96, 29594), (98, 29603), (130, 29750),

Gene: Jawnski_65 Start: 44074, Stop: 44652, Start Num: 24

Candidate Starts for Jawnski_65:

(Start: 24 @44074 has 22 MA's), (27, 44089), (73, 44278), (83, 44347), (144, 44590),

Gene: Jayden_83 Start: 48575, Stop: 49243, Start Num: 47

Candidate Starts for Jayden_83:

(22, 48497), (Start: 47 @48575 has 3 MA's), (58, 48608), (Start: 60 @48629 has 2 MA's), (61, 48632), (68, 48674), (72, 48698), (75, 48731), (84, 48794), (86, 48800), (142, 49079), (143, 49082), (157, 49124), (170, 49160), (173, 49172), (184, 49199), (189, 49229),

Gene: Jefe_83 Start: 48876, Stop: 49535, Start Num: 50

Candidate Starts for Jefe_83:

(22, 48792), (Start: 50 @48876 has 40 MA's), (Start: 60 @48921 has 2 MA's), (61, 48924), (68, 48966), (72, 48990), (75, 49023), (84, 49086), (87, 49107), (109, 49221), (118, 49275), (142, 49371), (170, 49452), (184, 49491), (189, 49521),

Gene: Jollipop_84 Start: 49241, Stop: 49900, Start Num: 50

Candidate Starts for Jollipop_84:

(22, 49157), (Start: 50 @49241 has 40 MA's), (Start: 60 @49286 has 2 MA's), (61, 49289), (68, 49331), (72, 49355), (75, 49388), (84, 49451), (87, 49472), (109, 49586), (118, 49640), (142, 49736), (170, 49817), (184, 49856), (185, 49859), (189, 49886),

Gene: Jordan_70 Start: 45176, Stop: 45751, Start Num: 24

Candidate Starts for Jordan_70:

(Start: 24 @45176 has 22 MA's), (69, 45347), (73, 45365), (85, 45440), (94, 45470), (107, 45545), (111, 45560), (137, 45668),

Gene: KaiHaiDragon_84 Start: 48978, Stop: 49637, Start Num: 50

Candidate Starts for KaiHaiDragon_84:

(22, 48894), (Start: 50 @48978 has 40 MA's), (Start: 60 @49023 has 2 MA's), (61, 49026), (68, 49068), (72, 49092), (75, 49125), (84, 49188), (87, 49209), (109, 49323), (118, 49377), (142, 49473), (170, 49554), (184, 49593), (189, 49623),

Gene: Kamiyu_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Kamiyu_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: King2_64 Start: 44610, Stop: 45188, Start Num: 24

Candidate Starts for King2_64:

(Start: 24 @44610 has 22 MA's), (27, 44625), (73, 44814), (83, 44883), (144, 45126),

Gene: Kovu_5 Start: 3470, Stop: 4075, Start Num: 45

Candidate Starts for Kovu_5:

(Start: 28 @3425 has 2 MA's), (Start: 37 @3452 has 2 MA's), (Start: 45 @3470 has 5 MA's), (Start: 55 @3500 has 6 MA's), (63, 3551), (72, 3602), (90, 3704), (93, 3716), (116, 3845), (134, 3923), (179, 4052), (182, 4055),

Gene: Kowalski_82 Start: 48908, Stop: 49567, Start Num: 50

Candidate Starts for Kowalski_82:

(22, 48824), (Start: 50 @48908 has 40 MA's), (Start: 60 @48953 has 2 MA's), (61, 48956), (68, 48998), (72, 49022), (75, 49055), (84, 49118), (87, 49139), (109, 49253), (118, 49307), (142, 49403), (170, 49484), (184, 49523), (189, 49553),

Gene: Kronus_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Kronus_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: Kubulix_15 Start: 4895, Stop: 5476, Start Num: 40

Candidate Starts for Kubulix_15:

(Start: 40 @4895 has 17 MA's), (52, 4922), (89, 5123), (90, 5126), (92, 5132), (102, 5201), (112, 5240), (126, 5315), (178, 5465),

Gene: Laroye_5 Start: 3276, Stop: 3899, Start Num: 37

Candidate Starts for Laroye_5:

(Start: 37 @3276 has 2 MA's), (38, 3279), (Start: 45 @3294 has 5 MA's), (Start: 55 @3324 has 6 MA's), (63, 3375), (72, 3426), (74, 3435), (86, 3525), (92, 3534), (93, 3540), (98, 3567), (133, 3729), (135, 3750), (183, 3882),

Gene: LeeroyJ_70 Start: 44774, Stop: 45304, Start Num: 24

Candidate Starts for LeeroyJ_70:

(Start: 24 @44774 has 22 MA's), (69, 44900), (73, 44918), (106, 45095), (111, 45113),

Gene: LestyG_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for LestyG_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: LiSara_5 Start: 3325, Stop: 3930, Start Num: 45

Candidate Starts for LiSara_5:

(31, 3286), (Start: 37 @3307 has 2 MA's), (38, 3310), (Start: 45 @3325 has 5 MA's), (Start: 55 @3355 has 6 MA's), (63, 3406), (72, 3457), (74, 3466), (86, 3556), (92, 3565), (93, 3571), (98, 3598), (133, 3760), (135, 3781), (183, 3913),

Gene: Ligma_1 Start: 1, Stop: 606, Start Num: 39

Candidate Starts for Ligma_1:

(Start: 39 @1 has 9 MA's), (63, 85), (68, 112), (72, 136), (76, 175), (104, 349), (136, 472), (166, 553), (182, 592), (183, 595), (185, 601),

Gene: LittleFortune_84 Start: 48891, Stop: 49550, Start Num: 50

Candidate Starts for LittleFortune_84:

(22, 48813), (Start: 50 @48891 has 40 MA's), (Start: 60 @48936 has 2 MA's), (61, 48939), (68, 48981), (72, 49005), (75, 49038), (84, 49101), (87, 49122), (109, 49236), (118, 49290), (142, 49386), (170, 49467), (184, 49506), (189, 49536),

Gene: Losacky_48 Start: 29501, Stop: 30034, Start Num: 43

Candidate Starts for Losacky_48:

(3, 29048), (16, 29321), (20, 29360), (Start: 43 @29501 has 11 MA's), (54, 29525), (68, 29603), (72, 29627), (73, 29630), (76, 29666), (80, 29690), (90, 29729), (96, 29759), (98, 29768),

Gene: Lucretia_83 Start: 48950, Stop: 49609, Start Num: 50

Candidate Starts for Lucretia_83:

(22, 48866), (Start: 50 @48950 has 40 MA's), (Start: 60 @48995 has 2 MA's), (61, 48998), (68, 49040), (72, 49064), (75, 49097), (84, 49160), (87, 49181), (109, 49295), (118, 49349), (142, 49445), (143, 49448), (170, 49526), (184, 49565), (185, 49568), (189, 49595),

Gene: Mariel_49 Start: 29708, Stop: 30241, Start Num: 43

Candidate Starts for Mariel_49:

(9, 29474), (11, 29486), (19, 29564), (Start: 43 @29708 has 11 MA's), (54, 29732), (68, 29810), (72, 29834), (73, 29837), (76, 29873), (80, 29897), (90, 29936), (96, 29966), (98, 29975), (130, 30122),

Gene: Mariokart_1 Start: 1, Stop: 612, Start Num: 39

Candidate Starts for Mariokart_1:

(Start: 39 @1 has 9 MA's), (Start: 55 @40 has 6 MA's), (63, 91), (72, 142), (76, 181), (88, 262), (93, 280), (98, 307), (155, 526), (166, 559), (183, 601),

Gene: Marley1013_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Marley1013_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Marlia_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Marlia_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Martha_69 Start: 45008, Stop: 45538, Start Num: 24

Candidate Starts for Martha_69:

(Start: 24 @45008 has 22 MA's), (69, 45134), (73, 45152), (85, 45227), (94, 45257), (107, 45332), (111, 45347), (137, 45455),

Gene: Maruru_87 Start: 52831, Stop: 53424, Start Num: 44

Candidate Starts for Maruru_87:

(15, 52684), (34, 52810), (Start: 44 @52831 has 2 MA's), (57, 52873), (67, 52939), (76, 52993), (81, 53023), (156, 53326), (162, 53350),

Gene: MellowYellow_12 Start: 4153, Stop: 4734, Start Num: 40

Candidate Starts for MellowYellow_12:

(Start: 40 @4153 has 17 MA's), (52, 4180), (89, 4381), (90, 4384), (92, 4390), (102, 4459), (112, 4498), (126, 4573), (178, 4723),

Gene: MenE_48 Start: 29392, Stop: 29925, Start Num: 43

Candidate Starts for MenE_48:

(9, 29158), (11, 29170), (19, 29248), (Start: 43 @29392 has 11 MA's), (54, 29416), (68, 29494), (72, 29518), (73, 29521), (76, 29557), (80, 29581), (90, 29620), (96, 29650), (98, 29659),

Gene: Merry_ Start: 49109, Stop: 49729, Start Num: 60

Candidate Starts for Merry_:

(Start: 50 @49061 has 40 MA's), (Start: 60 @49109 has 2 MA's), (68, 49154), (73, 49181), (75, 49211), (84, 49274), (117, 49460), (142, 49559), (143, 49562), (144, 49565), (163, 49625), (170, 49640), (184, 49679), (189, 49709),

Gene: Metamorphoo_84 Start: 49657, Stop: 50322, Start Num: 50

Candidate Starts for Metamorphoo_84:

(22, 49579), (Start: 50 @49657 has 40 MA's), (Start: 60 @49708 has 2 MA's), (68, 49753), (75, 49810), (87, 49894), (105, 49996), (108, 50005), (110, 50011), (142, 50158), (143, 50161), (170, 50239),

Gene: MmasiCarm_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for MmasiCarm_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Mortcellus_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Mortcellus_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: Morty007_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Morty007_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Mulaychimus_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Mulaychimus_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Music_80 Start: 47968, Stop: 48591, Start Num: 29

Candidate Starts for Music_80:

(6, 47836), (8, 47872), (17, 47956), (Start: 29 @47968 has 1 MA's), (73, 48151), (83, 48217), (97, 48271), (100, 48280), (140, 48445), (158, 48493), (159, 48502), (180, 48556), (186, 48574), (187, 48586),

Gene: NCRodriguez_48 Start: 29462, Stop: 29995, Start Num: 43

Candidate Starts for NCRodriguez_48:

(Start: 43 @29462 has 11 MA's), (54, 29486), (68, 29564), (72, 29588), (73, 29591), (76, 29627), (80, 29651), (90, 29690), (96, 29720), (98, 29729), (130, 29876),

Gene: NHagos_1 Start: 1, Stop: 633, Start Num: 36

Candidate Starts for NHagos_1:

(Start: 36 @1 has 1 MA's), (Start: 39 @10 has 9 MA's), (63, 103), (64, 109), (72, 154), (76, 193), (80, 217), (93, 292), (116, 424), (130, 463), (155, 547), (166, 580), (182, 619), (183, 622), (185, 628),

Gene: NathanVaag_65 Start: 44298, Stop: 44876, Start Num: 24

Candidate Starts for NathanVaag_65:

(Start: 24 @44298 has 22 MA's), (27, 44313), (Start: 44 @44361 has 2 MA's), (73, 44502), (83, 44571), (126, 44763), (144, 44814), (165, 44865),

Gene: Neos5_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Neos5_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Nikan_12 Start: 4634, Stop: 5215, Start Num: 40

Candidate Starts for Nikan_12:

(33, 4622), (Start: 40 @4634 has 17 MA's), (46, 4643), (Start: 49 @4652 has 1 MA's), (89, 4862), (90, 4865), (92, 4871), (102, 4940), (112, 4979), (150, 5126), (152, 5129), (171, 5183), (175, 5195), (178, 5204),

Gene: NoodlelyBoi_83 Start: 49237, Stop: 49902, Start Num: 50

Candidate Starts for NoodlelyBoi_83:

(22, 49159), (Start: 50 @49237 has 40 MA's), (58, 49267), (Start: 60 @49288 has 2 MA's), (68, 49333), (72, 49357), (75, 49390), (84, 49453), (87, 49474), (109, 49588), (142, 49738), (143, 49741), (170, 49819),

Gene: Nostromo_66 Start: 42650, Stop: 43228, Start Num: 23

Candidate Starts for Nostromo_66:

(Start: 23 @42650 has 2 MA's), (90, 42941), (152, 43172),

Gene: Nozo_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Nozo_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: NyleyClemson_12 Start: 4095, Stop: 4676, Start Num: 40

Candidate Starts for NyleyClemson_12:

(Start: 40 @4095 has 17 MA's), (52, 4122), (89, 4323), (90, 4326), (92, 4332), (102, 4401), (112, 4440), (126, 4515), (178, 4665),

Gene: Obutu_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Obutu_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Odyssey395_16 Start: 4894, Stop: 5475, Start Num: 40

Candidate Starts for Odyssey395_16:

(Start: 40 @4894 has 17 MA's), (52, 4921), (89, 5122), (90, 5125), (92, 5131), (102, 5200), (112, 5239), (126, 5314), (178, 5464),

Gene: Olivio_1 Start: 64, Stop: 699, Start Num: 53

Candidate Starts for Olivio_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: Ollypop_13 Start: 4602, Stop: 5183, Start Num: 40

Candidate Starts for Ollypop_13:

(Start: 40 @4602 has 17 MA's), (89, 4830), (90, 4833), (92, 4839), (102, 4908), (112, 4947), (126, 5022), (148, 5091), (175, 5163), (178, 5172),

Gene: Onika_82 Start: 48879, Stop: 49538, Start Num: 50

Candidate Starts for Onika_82:

(22, 48795), (Start: 50 @48879 has 40 MA's), (Start: 60 @48924 has 2 MA's), (61, 48927), (68, 48969), (72, 48993), (75, 49026), (84, 49089), (87, 49110), (109, 49224), (118, 49278), (142, 49374), (170, 49455), (184, 49494), (189, 49524),

Gene: OrangeOswald_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for OrangeOswald_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Paschalis_83 Start: 48906, Stop: 49565, Start Num: 50

Candidate Starts for Paschalis_83:

(22, 48822), (Start: 50 @48906 has 40 MA's), (Start: 60 @48951 has 2 MA's), (61, 48954), (68, 48996), (72, 49020), (75, 49053), (84, 49116), (87, 49137), (109, 49251), (118, 49305), (142, 49401), (170, 49482), (184, 49521), (189, 49551),

Gene: Phaedrus_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Phaedrus_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Phayeta_1 Start: 1, Stop: 699, Start Num: 30

Candidate Starts for Phayeta_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541), (190, 694),

Gene: PhedwardCullen_80 Start: 48351, Stop: 49010, Start Num: 50

Candidate Starts for PhedwardCullen_80:

(22, 48273), (Start: 50 @48351 has 40 MA's), (Start: 60 @48396 has 2 MA's), (61, 48399), (68, 48441), (72, 48465), (75, 48498), (84, 48561), (87, 48582), (109, 48696), (118, 48750), (142, 48846), (170, 48927), (189, 48996),

Gene: Philly_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Philly_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: PhillyJawn_47 Start: 29132, Stop: 29665, Start Num: 43

Candidate Starts for PhillyJawn_47:

(Start: 43 @29132 has 11 MA's), (54, 29156), (68, 29234), (72, 29258), (73, 29261), (76, 29297), (80, 29321), (90, 29360), (96, 29390), (98, 29399), (130, 29546),

Gene: Phingu_49 Start: 29357, Stop: 29890, Start Num: 43

Candidate Starts for Phingu_49:

(Start: 43 @29357 has 11 MA's), (54, 29381), (68, 29459), (72, 29483), (73, 29486), (76, 29522), (80, 29546), (90, 29585), (96, 29615), (98, 29624), (130, 29771),

Gene: Phlyer_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Phlyer_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Phonegingi_46 Start: 29171, Stop: 29704, Start Num: 43

Candidate Starts for Phonegingi_46:

(Start: 43 @29171 has 11 MA's), (54, 29195), (68, 29273), (72, 29297), (73, 29300), (76, 29336), (80, 29360), (90, 29399), (96, 29429), (98, 29438), (130, 29585), (162, 29693),

Gene: Phorgeous_83 Start: 48695, Stop: 49354, Start Num: 50

Candidate Starts for Phorgeous_83:

(22, 48611), (Start: 50 @48695 has 40 MA's), (Start: 60 @48740 has 2 MA's), (61, 48743), (68, 48785), (72, 48809), (75, 48842), (84, 48905), (87, 48926), (109, 49040), (118, 49094), (142, 49190), (170, 49271), (189, 49340),

Gene: Phrancesco_83 Start: 49006, Stop: 49665, Start Num: 50

Candidate Starts for Phrancesco_83:

(22, 48922), (Start: 50 @49006 has 40 MA's), (Start: 60 @49051 has 2 MA's), (61, 49054), (68, 49096), (72, 49120), (75, 49153), (84, 49216), (87, 49237), (109, 49351), (118, 49405), (142, 49501), (170, 49582), (184, 49621), (189, 49651),

Gene: PhuzzTulsa_12 Start: 4684, Stop: 5265, Start Num: 40

Candidate Starts for PhuzzTulsa_12:

(Start: 40 @4684 has 17 MA's), (52, 4711), (89, 4912), (90, 4915), (92, 4921), (102, 4990), (112, 5029), (126, 5104), (178, 5254),

Gene: Piccoletto_66 Start: 44460, Stop: 45038, Start Num: 24

Candidate Starts for Piccoletto_66:

(Start: 24 @44460 has 22 MA's), (27, 44475), (Start: 44 @44523 has 2 MA's), (73, 44664), (83, 44733), (144, 44976), (165, 45027),

Gene: Pickles13_45 Start: 29439, Stop: 29972, Start Num: 43

Candidate Starts for Pickles13_45:

(9, 29202), (18, 29286), (Start: 43 @29439 has 11 MA's), (54, 29463), (68, 29541), (72, 29565), (73, 29568), (76, 29604), (80, 29628), (90, 29667), (96, 29697), (130, 29853),

Gene: PierreOrion_82 Start: 48715, Stop: 49374, Start Num: 50

Candidate Starts for PierreOrion_82:

(22, 48631), (Start: 50 @48715 has 40 MA's), (Start: 60 @48760 has 2 MA's), (61, 48763), (68, 48805), (72, 48829), (75, 48862), (84, 48925), (87, 48946), (109, 49060), (118, 49114), (142, 49210), (170, 49291), (184, 49330), (189, 49360),

Gene: Pipefish_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Pipefish_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: PiperSansNom_84 Start: 49209, Stop: 49868, Start Num: 50

Candidate Starts for PiperSansNom_84:

(22, 49131), (Start: 50 @49209 has 40 MA's), (Start: 60 @49254 has 2 MA's), (61, 49257), (68, 49299), (72, 49323), (75, 49356), (84, 49419), (87, 49440), (109, 49554), (118, 49608), (142, 49704), (170, 49785), (189, 49854),

Gene: Piperis_84 Start: 48814, Stop: 49473, Start Num: 50

Candidate Starts for Piperis_84:

(22, 48730), (Start: 50 @48814 has 40 MA's), (Start: 60 @48859 has 2 MA's), (61, 48862), (68, 48904), (72, 48928), (75, 48961), (84, 49024), (87, 49045), (109, 49159), (118, 49213), (142, 49309), (143, 49312), (170, 49390), (184, 49429), (185, 49432), (189, 49459),

Gene: Pippa_70 Start: 45043, Stop: 45573, Start Num: 24

Candidate Starts for Pippa_70:

(Start: 24 @45043 has 22 MA's), (69, 45169), (73, 45187), (85, 45262), (94, 45292), (107, 45367), (111, 45382), (137, 45490), (147, 45511),

Gene: Pointis_14 Start: 4895, Stop: 5476, Start Num: 40

Candidate Starts for Pointis_14:

(Start: 40 @4895 has 17 MA's), (52, 4922), (89, 5123), (90, 5126), (92, 5132), (102, 5201), (112, 5240), (126, 5315), (178, 5465),

Gene: Popstraw_13 Start: 4684, Stop: 5265, Start Num: 40

Candidate Starts for Popstraw_13:

(Start: 40 @4684 has 17 MA's), (52, 4711), (89, 4912), (90, 4915), (92, 4921), (102, 4990), (112, 5029), (126, 5104), (178, 5254),

Gene: Pulchra_85 Start: 49381, Stop: 50040, Start Num: 50

Candidate Starts for Pulchra_85:

(22, 49297), (Start: 50 @49381 has 40 MA's), (Start: 60 @49426 has 2 MA's), (61, 49429), (68, 49471), (72, 49495), (75, 49528), (84, 49591), (87, 49612), (109, 49726), (118, 49780), (142, 49876), (143, 49879), (170, 49957), (184, 49996), (185, 49999), (189, 50026),

Gene: Pureglobe5_16 Start: 4908, Stop: 5489, Start Num: 40

Candidate Starts for Pureglobe5_16:

(Start: 40 @4908 has 17 MA's), (52, 4935), (89, 5136), (90, 5139), (92, 5145), (102, 5214), (112, 5253), (126, 5328), (178, 5478),

Gene: Quhwah_87 Start: 49535, Stop: 50194, Start Num: 50

Candidate Starts for Quhwah_87:

(22, 49451), (Start: 50 @49535 has 40 MA's), (Start: 60 @49580 has 2 MA's), (61, 49583), (68, 49625), (72, 49649), (75, 49682), (84, 49745), (87, 49766), (109, 49880), (118, 49934), (142, 50030), (170, 50111), (184, 50150), (189, 50180),

Gene: RIPWilbur_12 Start: 4548, Stop: 5129, Start Num: 40

Candidate Starts for RIPWilbur_12:

(Start: 40 @4548 has 17 MA's), (52, 4575), (89, 4776), (90, 4779), (92, 4785), (102, 4854), (112, 4893), (126, 4968), (178, 5118),

Gene: RagingRooster_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for RagingRooster_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Ramiel05_82 Start: 48908, Stop: 49567, Start Num: 50

Candidate Starts for Ramiel05_82:

(22, 48824), (Start: 50 @48908 has 40 MA's), (Start: 60 @48953 has 2 MA's), (61, 48956), (68, 48998), (72, 49022), (75, 49055), (84, 49118), (87, 49139), (109, 49253), (118, 49307), (142, 49403), (170, 49484), (184, 49523), (189, 49553),

Gene: Ranunculus_10 Start: 4388, Stop: 4969, Start Num: 40

Candidate Starts for Ranunculus_10:

(15, 4211), (Start: 40 @4388 has 17 MA's), (65, 4490), (89, 4616), (90, 4619), (112, 4733), (148, 4877), (150, 4880), (152, 4883), (177, 4955),

Gene: RazzB_11 Start: 3923, Stop: 4504, Start Num: 40

Candidate Starts for RazzB_11:

(Start: 40 @3923 has 17 MA's), (52, 3950), (89, 4151), (90, 4154), (92, 4160), (102, 4229), (112, 4268), (126, 4343), (178, 4493),

Gene: Ren19_10 Start: 4634, Stop: 5215, Start Num: 40

Candidate Starts for Ren19_10:

(33, 4622), (Start: 40 @4634 has 17 MA's), (46, 4643), (Start: 49 @4652 has 1 MA's), (89, 4862), (90, 4865), (92, 4871), (102, 4940), (112, 4979), (150, 5126), (152, 5129), (171, 5183), (175, 5195), (178, 5204),

Gene: Rita1961_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Rita1961_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Rizwana_10 Start: 4484, Stop: 5074, Start Num: 40

Candidate Starts for Rizwana_10:

(Start: 40 @4484 has 17 MA's), (59, 4541), (66, 4589), (77, 4655), (94, 4739), (101, 4790), (102, 4793), (114, 4850), (129, 4913), (132, 4922), (141, 4964), (150, 4982), (175, 5054), (178, 5063),

Gene: RobsFeet_90 Start: 49974, Stop: 50639, Start Num: 50

Candidate Starts for RobsFeet_90:

(22, 49896), (Start: 50 @49974 has 40 MA's), (Start: 60 @50025 has 2 MA's), (68, 50070), (75, 50127), (87, 50211), (105, 50313), (108, 50322), (110, 50328), (142, 50475), (143, 50478), (170, 50556), (184, 50595), (189, 50625),

Gene: Rockwell_82 Start: 48932, Stop: 49591, Start Num: 50

Candidate Starts for Rockwell_82:

(22, 48848), (Start: 50 @48932 has 40 MA's), (Start: 60 @48977 has 2 MA's), (61, 48980), (68, 49022), (72, 49046), (75, 49079), (84, 49142), (87, 49163), (109, 49277), (118, 49331), (142, 49427), (170, 49508), (184, 49547), (189, 49577),

Gene: RomaT_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for RomaT_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: RomansRevenge_8 Start: 3035, Stop: 3610, Start Num: 42

Candidate Starts for RomansRevenge_8:

(Start: 42 @3035 has 4 MA's), (Start: 55 @3071 has 6 MA's), (56, 3074), (59, 3089), (73, 3179), (85, 3254), (91, 3266), (92, 3269), (100, 3308), (105, 3353), (108, 3362), (127, 3443), (148, 3512), (162, 3554), (167, 3563), (175, 3590),

Gene: Salgado_5 Start: 3284, Stop: 3907, Start Num: 37

Candidate Starts for Salgado_5:

(Start: 37 @3284 has 2 MA's), (38, 3287), (Start: 45 @3302 has 5 MA's), (Start: 55 @3332 has 6 MA's), (63, 3383), (72, 3434), (74, 3443), (86, 3533), (92, 3542), (93, 3548), (98, 3575), (133, 3737), (135, 3758), (183, 3890),

Gene: Savannah_82 Start: 49100, Stop: 49759, Start Num: 50

Candidate Starts for Savannah_82:

(22, 49016), (Start: 50 @49100 has 40 MA's), (Start: 60 @49145 has 2 MA's), (61, 49148), (68, 49190), (75, 49247), (84, 49310), (87, 49331), (109, 49445), (118, 49499), (142, 49595), (143, 49598), (170, 49676), (184, 49715), (185, 49718), (189, 49745),

Gene: ScoobySnack_43 Start: 28932, Stop: 29465, Start Num: 43

Candidate Starts for ScoobySnack_43:

(Start: 43 @28932 has 11 MA's), (54, 28956), (68, 29034), (72, 29058), (73, 29061), (76, 29097), (80, 29121), (90, 29160), (96, 29190), (98, 29199), (101, 29232), (130, 29346),

Gene: Scumberland_85 Start: 49154, Stop: 49813, Start Num: 50

Candidate Starts for Scumberland_85:

(22, 49070), (Start: 50 @49154 has 40 MA's), (Start: 60 @49199 has 2 MA's), (61, 49202), (68, 49244), (72, 49268), (75, 49301), (84, 49364), (87, 49385), (109, 49499), (118, 49553), (142, 49649), (143, 49652), (170, 49730), (184, 49769), (185, 49772), (189, 49799),

Gene: Selwyn23_84 Start: 49039, Stop: 49698, Start Num: 50

Candidate Starts for Selwyn23_84:

(22, 48955), (Start: 50 @49039 has 40 MA's), (Start: 60 @49084 has 2 MA's), (61, 49087), (68, 49129), (72, 49153), (75, 49186), (84, 49249), (87, 49270), (109, 49384), (142, 49534), (143, 49537), (170, 49615), (184, 49654), (185, 49657), (189, 49684),

Gene: Shade_69 Start: 44814, Stop: 45389, Start Num: 24

Candidate Starts for Shade_69:

(Start: 24 @44814 has 22 MA's), (69, 44985), (73, 45003), (85, 45078), (94, 45108), (107, 45183), (111, 45198), (137, 45306), (147, 45327),

Gene: Shatter_1 Start: 1, Stop: 606, Start Num: 39

Candidate Starts for Shatter_1:

(Start: 39 @1 has 9 MA's), (63, 85), (68, 112), (72, 136), (76, 175), (104, 349), (136, 472), (166, 553), (182, 592), (183, 595), (185, 601),

Gene: Shenandoah_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Shenandoah_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Shotgun_82 Start: 48410, Stop: 49069, Start Num: 50

Candidate Starts for Shotgun_82:

(22, 48326), (Start: 50 @48410 has 40 MA's), (Start: 60 @48455 has 2 MA's), (61, 48458), (68, 48500), (72, 48524), (75, 48557), (84, 48620), (87, 48641), (109, 48755), (118, 48809), (142, 48905), (170, 48986), (184, 49025), (189, 49055),

Gene: Shrooms_5 Start: 3310, Stop: 3960, Start Num: 28

Candidate Starts for Shrooms_5:

(5, 3046), (Start: 28 @3310 has 2 MA's), (Start: 45 @3355 has 5 MA's), (Start: 55 @3385 has 6 MA's), (63, 3436), (71, 3484), (72, 3487), (92, 3595), (93, 3601), (140, 3826), (161, 3889),

Gene: Shrubaron_88 Start: 49564, Stop: 50229, Start Num: 50

Candidate Starts for Shrubaron_88:

(22, 49486), (Start: 50 @49564 has 40 MA's), (Start: 60 @49615 has 2 MA's), (68, 49660), (75, 49717), (87, 49801), (105, 49903), (108, 49912), (110, 49918), (142, 50065), (143, 50068), (170, 50146), (189, 50215),

Gene: Sicarius2_71 Start: 43199, Stop: 43729, Start Num: 42

Candidate Starts for Sicarius2_71:

(Start: 42 @43199 has 4 MA's), (Start: 55 @43235 has 6 MA's), (57, 43244), (73, 43343), (85, 43421), (98, 43469), (124, 43592), (169, 43724),

Gene: SilentRX_10 Start: 3301, Stop: 3894, Start Num: 40

Candidate Starts for SilentRX_10:

(Start: 40 @3301 has 17 MA's), (74, 3454), (89, 3529), (96, 3565), (98, 3574), (101, 3607), (102, 3610), (122, 3706), (123, 3712), (132, 3736), (138, 3772), (175, 3874), (177, 3880),

Gene: SirFrank_82 Start: 48824, Stop: 49489, Start Num: 50

Candidate Starts for SirFrank_82:

(Start: 50 @48824 has 40 MA's), (58, 48854), (Start: 60 @48875 has 2 MA's), (68, 48920), (72, 48944), (75, 48977), (84, 49040), (87, 49061), (109, 49175), (142, 49325), (143, 49328), (170, 49406),

Gene: Sisko_1 Start: 1, Stop: 600, Start Num: 39

Candidate Starts for Sisko_1:

(Start: 39 @1 has 9 MA's), (Start: 55 @28 has 6 MA's), (63, 79), (70, 118), (98, 295), (182, 586), (183, 589),

Gene: Skugga_84 Start: 49246, Stop: 49911, Start Num: 47

Candidate Starts for Skugga_84:

(22, 49168), (Start: 47 @49246 has 3 MA's), (58, 49276), (Start: 60 @49297 has 2 MA's), (61, 49300), (68, 49342), (72, 49366), (75, 49399), (87, 49483), (110, 49600), (142, 49747), (143, 49750), (170, 49828), (173, 49840), (184, 49867), (189, 49897),

Gene: SlippinJimmy_1 Start: 22, Stop: 693, Start Num: 35

Candidate Starts for SlippinJimmy_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Smarties_92 Start: 49945, Stop: 50607, Start Num: 50

Candidate Starts for Smarties_92:

(12, 49708), (22, 49861), (Start: 50 @49945 has 40 MA's), (58, 49972), (Start: 60 @49993 has 2 MA's), (61, 49996), (68, 50038), (72, 50062), (75, 50095), (84, 50158), (87, 50179), (108, 50290), (109, 50293), (142, 50443), (157, 50488), (170, 50524), (173, 50536), (184, 50563), (189, 50593),

Gene: Sonali_86 Start: 53450, Stop: 54043, Start Num: 44

Candidate Starts for Sonali_86:

(1, 52859), (2, 52970), (15, 53303), (34, 53429), (Start: 44 @53450 has 2 MA's), (67, 53558), (81, 53642), (156, 53945), (162, 53969),

Gene: Sonny_69 Start: 44737, Stop: 45312, Start Num: 24

Candidate Starts for Sonny_69:

(Start: 24 @44737 has 22 MA's), (69, 44908), (73, 44926), (85, 45001), (94, 45031), (107, 45106), (111, 45121), (137, 45229), (147, 45250),

Gene: Sour_1 Start: 1, Stop: 615, Start Num: 39

Candidate Starts for Sour_1:

(Start: 39 @1 has 9 MA's), (72, 130), (76, 169), (80, 193), (93, 268), (98, 295), (120, 415), (176, 583),

Gene: StAugustine_2 Start: 428, Stop: 1015, Start Num: 51

Candidate Starts for StAugustine_2:

(26, 359), (46, 416), (48, 419), (Start: 51 @428 has 3 MA's), (Start: 55 @437 has 6 MA's), (73, 542), (76, 578), (83, 626), (89, 662), (95, 689), (102, 740), (128, 836), (176, 989),

Gene: StevieBAY_70 Start: 45067, Stop: 45597, Start Num: 24

Candidate Starts for StevieBAY_70:

(Start: 24 @45067 has 22 MA's), (69, 45193), (73, 45211), (85, 45286), (106, 45388), (111, 45406),

Gene: Sunny_ Start: 49111, Stop: 49731, Start Num: 60

Candidate Starts for Sunny_:

(Start: 50 @49063 has 40 MA's), (Start: 60 @49111 has 2 MA's), (68, 49156), (73, 49183), (75, 49213), (84, 49276), (117, 49462), (142, 49561), (143, 49564), (144, 49567), (163, 49627), (170, 49642), (184, 49681), (189, 49711),

Gene: Sunshine23_89 Start: 53186, Stop: 53779, Start Num: 44

Candidate Starts for Sunshine23_89:

(15, 53039), (34, 53165), (Start: 44 @53186 has 2 MA's), (57, 53228), (67, 53294), (76, 53348), (81, 53378), (89, 53408), (156, 53681), (162, 53705),

Gene: SwainyDoc_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for SwainyDoc_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: SynergyX_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for SynergyX_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: TaeYoung_70 Start: 44980, Stop: 45510, Start Num: 24

Candidate Starts for TaeYoung_70:

(Start: 24 @44980 has 22 MA's), (69, 45106), (73, 45124), (85, 45199), (94, 45229), (107, 45304), (111, 45319), (137, 45427), (147, 45448),

Gene: Tank_11 Start: 4502, Stop: 5092, Start Num: 40

Candidate Starts for Tank_11:

(Start: 40 @4502 has 17 MA's), (77, 4673), (89, 4730), (94, 4757), (99, 4778), (102, 4811), (108, 4835), (115, 4871), (141, 4982), (144, 4988), (150, 5000), (177, 5078), (178, 5081),

Gene: Teamocil_88 Start: 49063, Stop: 49728, Start Num: 47

Candidate Starts for Teamocil_88:

(22, 48985), (Start: 47 @49063 has 3 MA's), (58, 49093), (Start: 60 @49114 has 2 MA's), (61, 49117), (68, 49159), (72, 49183), (75, 49216), (84, 49279), (87, 49300), (110, 49417), (142, 49564), (143, 49567), (170, 49645), (173, 49657), (184, 49684), (189, 49714),

Gene: Timinator_70 Start: 44887, Stop: 45417, Start Num: 24

Candidate Starts for Timinator_70:

(Start: 24 @44887 has 22 MA's), (69, 45013), (73, 45031), (106, 45208), (111, 45226),

Gene: TinyTerror_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for TinyTerror_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: TurkishDelight_122 Start: 89500, Stop: 90093, Start Num: 42

Candidate Starts for TurkishDelight_122:

(Start: 42 @89500 has 4 MA's), (Start: 50 @89518 has 40 MA's), (63, 89584), (79, 89689),

Gene: Tydolla_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Tydolla_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Tyrumbra_83 Start: 49578, Stop: 50243, Start Num: 50

Candidate Starts for Tyrumbra_83:

(22, 49500), (Start: 50 @49578 has 40 MA's), (Start: 60 @49629 has 2 MA's), (61, 49632), (68, 49674), (75, 49731), (84, 49794), (87, 49815), (105, 49917), (108, 49926), (110, 49932), (142, 50079), (143, 50082), (144, 50085), (170, 50160), (184, 50199), (189, 50229),

Gene: Violeta_48 Start: 29234, Stop: 29767, Start Num: 43

Candidate Starts for Violeta_48:

(19, 29090), (Start: 43 @29234 has 11 MA's), (54, 29258), (68, 29336), (72, 29360), (73, 29363), (76, 29399), (80, 29423), (90, 29462), (96, 29492), (98, 29501), (130, 29648),

Gene: Vitus_80 Start: 46317, Stop: 46829, Start Num: 41

Candidate Starts for Vitus_80:

(6, 46197), (8, 46233), (10, 46245), (Start: 41 @46317 has 1 MA's), (73, 46458), (80, 46503), (97, 46578), (146, 46764),

Gene: Waltz_5 Start: 3398, Stop: 4048, Start Num: 28

Candidate Starts for Waltz_5:

(Start: 28 @3398 has 2 MA's), (Start: 45 @3443 has 5 MA's), (Start: 55 @3473 has 6 MA's), (63, 3524), (71, 3572), (92, 3683), (93, 3689), (161, 3977),

Gene: Warren_46 Start: 29178, Stop: 29711, Start Num: 43

Candidate Starts for Warren_46:

(Start: 43 @29178 has 11 MA's), (54, 29202), (68, 29280), (72, 29304), (73, 29307), (77, 29346), (80, 29367), (90, 29406), (96, 29436), (98, 29445), (130, 29592),

Gene: Wheelbite_5 Start: 3393, Stop: 3998, Start Num: 45

Candidate Starts for Wheelbite_5:

(Start: 37 @3375 has 2 MA's), (38, 3378), (Start: 45 @3393 has 5 MA's), (Start: 55 @3423 has 6 MA's), (63, 3474), (74, 3534), (92, 3633), (133, 3828), (135, 3849), (183, 3981),

Gene: Wilde_11 Start: 4430, Stop: 5020, Start Num: 40

Candidate Starts for Wilde_11:

(Start: 40 @4430 has 17 MA's), (77, 4601), (89, 4658), (94, 4685), (99, 4706), (102, 4739), (108, 4763), (115, 4799), (141, 4910), (144, 4916), (150, 4928), (177, 5006), (178, 5009),

Gene: Winchester007_62 Start: 35247, Stop: 35780, Start Num: 43

Candidate Starts for Winchester007_62:

(Start: 43 @35247 has 11 MA's), (54, 35271), (68, 35349), (72, 35373), (73, 35376), (76, 35412), (80, 35436), (90, 35475), (96, 35505), (98, 35514), (130, 35661),

Gene: Wrackline_72 Start: 37846, Stop: 38481, Start Num: 49

Candidate Starts for Wrackline_72:

(Start: 39 @37825 has 9 MA's), (Start: 49 @37846 has 1 MA's), (57, 37867), (63, 37912), (73, 37966), (76, 38002), (78, 38020), (92, 38071), (98, 38104), (103, 38149), (104, 38152), (108, 38164), (113, 38191), (119, 38221), (121, 38230), (125, 38245), (131, 38263), (139, 38308), (149, 38329), (151, 38332), (154, 38347), (168, 38389),

Gene: Wyborn_70 Start: 43934, Stop: 44464, Start Num: 42

Candidate Starts for Wyborn_70:

(Start: 42 @43934 has 4 MA's), (Start: 55 @43970 has 6 MA's), (57, 43979), (73, 44078), (85, 44156), (98, 44204), (124, 44327), (169, 44459),

Gene: Yago84_1 Start: 1, Stop: 600, Start Num: 39

Candidate Starts for Yago84_1:

(Start: 39 @1 has 9 MA's), (Start: 55 @28 has 6 MA's), (63, 79), (70, 118), (98, 295), (135, 463), (182, 586), (183, 589),

Gene: Yahalom_1 Start: 73, Stop: 693, Start Num: 55

Candidate Starts for Yahalom_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Yeti_84 Start: 48436, Stop: 49095, Start Num: 50

Candidate Starts for Yeti_84:

(22, 48352), (Start: 50 @48436 has 40 MA's), (Start: 60 @48481 has 2 MA's), (61, 48484), (68, 48526), (72, 48550), (75, 48583), (84, 48646), (87, 48667), (109, 48781), (118, 48835), (142, 48931), (145, 48940), (170, 49012), (189, 49081),

Gene: Yinz_1 Start: 1, Stop: 693, Start Num: 30

Candidate Starts for Yinz_1:

(Start: 30 @1 has 43 MA's), (Start: 35 @22 has 1 MA's), (53, 64), (Start: 55 @73 has 6 MA's), (68, 151), (72, 175), (76, 214), (82, 253), (92, 307), (93, 313), (98, 340), (125, 478), (142, 541),

Gene: Zapato_83 Start: 48903, Stop: 49568, Start Num: 47

Candidate Starts for Zapato_83:

(22, 48825), (Start: 47 @48903 has 3 MA's), (58, 48933), (Start: 60 @48954 has 2 MA's), (62, 48963), (72, 49023), (75, 49056), (84, 49119), (86, 49125), (87, 49140), (108, 49251), (110, 49257), (142, 49404), (143, 49407), (170, 49485), (184, 49524), (189, 49554),

Gene: Zartrosa_71 Start: 45067, Stop: 45642, Start Num: 24

Candidate Starts for Zartrosa_71:

(Start: 24 @45067 has 22 MA's), (69, 45238), (73, 45256), (85, 45331), (94, 45361), (107, 45436), (111, 45451), (137, 45559), (147, 45580),