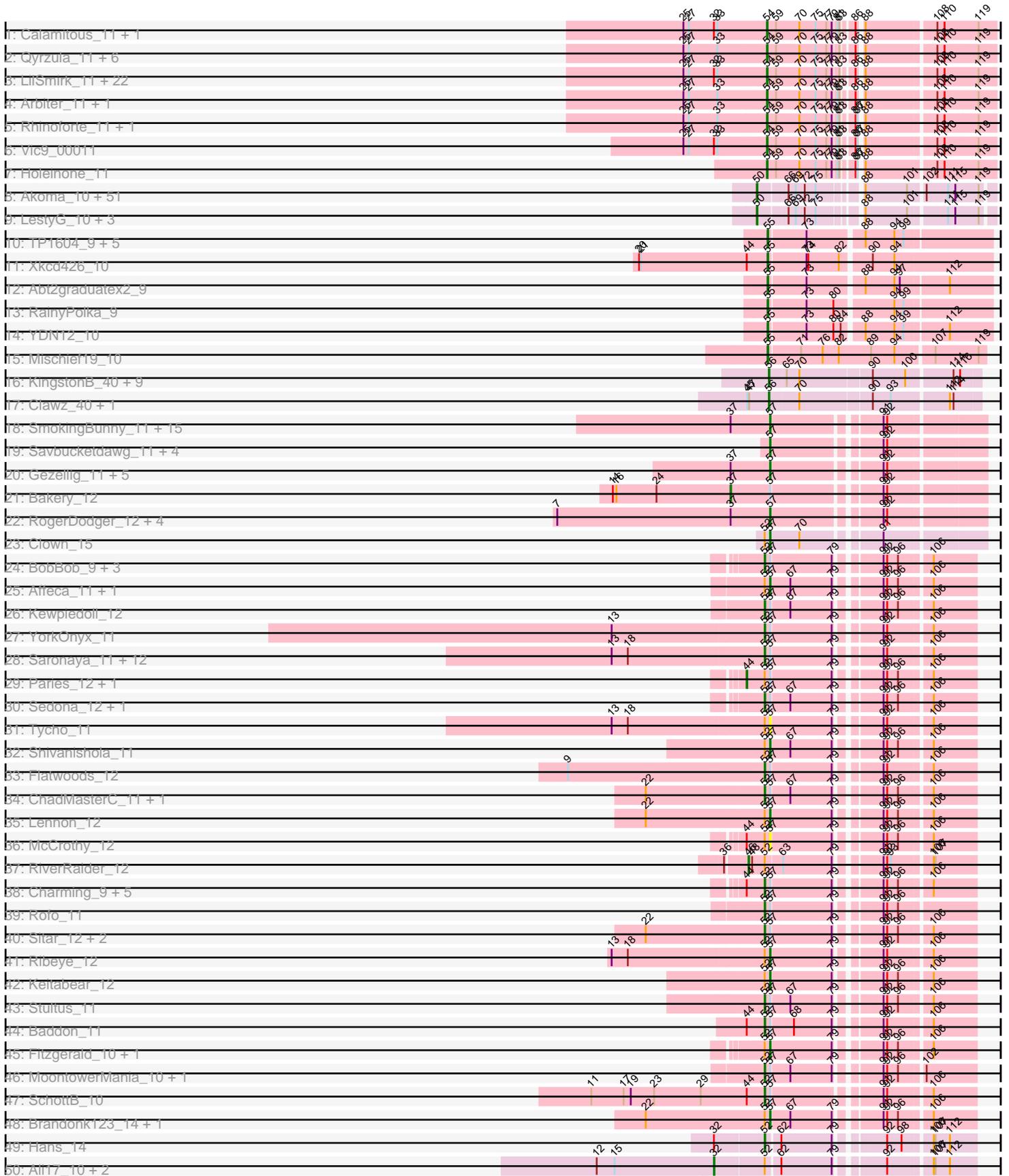
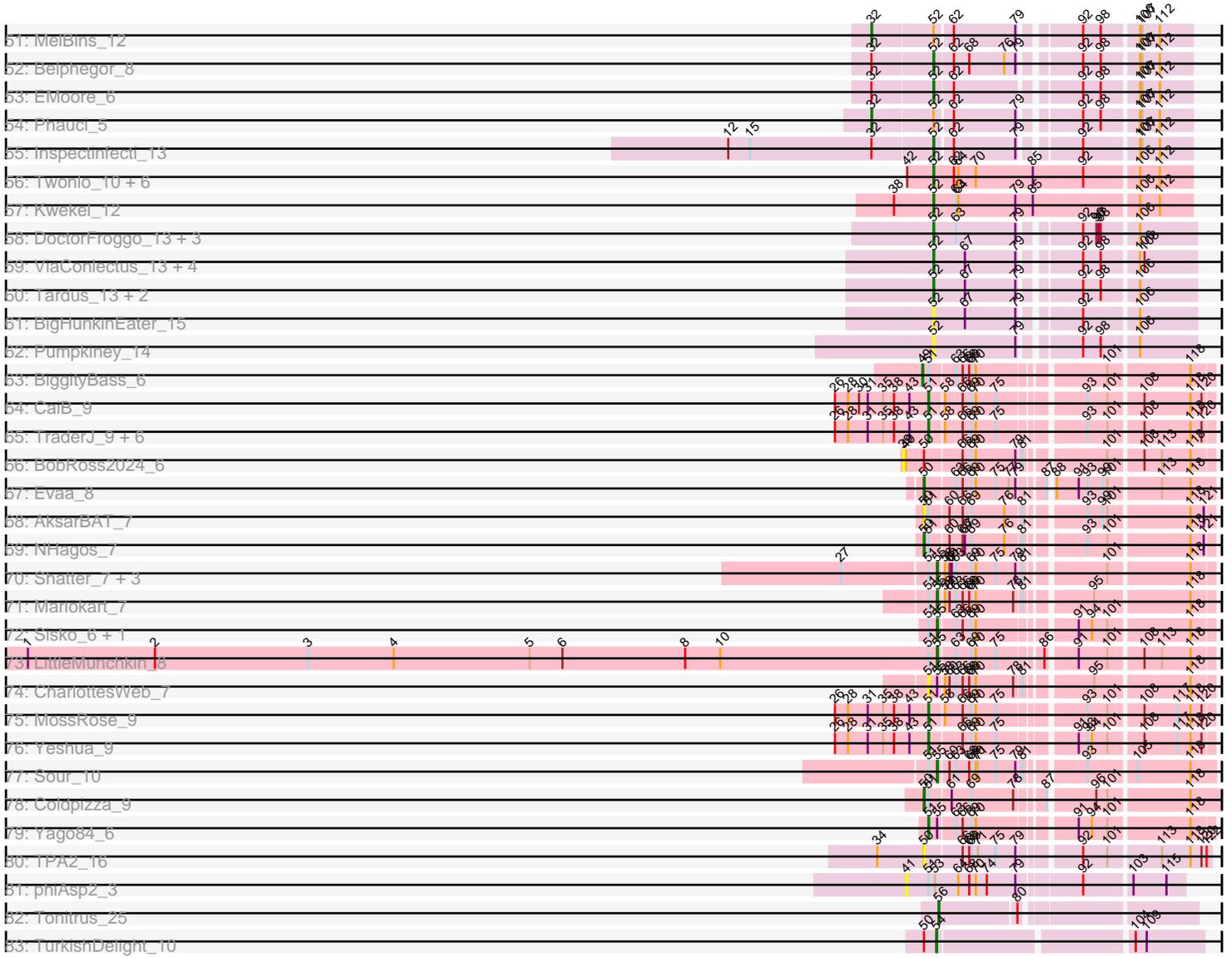


Pham 283441



Pham 283441



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 283441 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283441 has 267 members, 33 are drafts.

Phages represented in each track:

- Track 1 : Calamitous_11, Laurie_11
- Track 2 : Qyrzula_11, Tres_11, Godines_11, Blocker23_11, LizLemon_11, PrinceCharming_11, Lars_11
- Track 3 : LilSmirk_11, Brownie5_11, Hedgerow_11, Boyle_11, Kolhan_11, Kheth_11, Opia_11, Ares_11, Rosebush_11, Eaglehorse_11, Glass_11, ItsyBitsy1_11, Lephleur_11, Sabella_11, Faze9_11, MasterPo_11, Bananafish_11, FrenchFry_11, West99_11, Tinciduntolum_12, Kaleb_11, Coffee_11, Phantasmagoria_11
- Track 4 : Arbiter_11, TA17A_11
- Track 5 : Rhinoforte_11, Allegro_11
- Track 6 : Vic9_00011
- Track 7 : Holeinone_11
- Track 8 : Akoma_10, Marley1013_10, Gervas_10, OrangeOswald_10, HarveySr_10, Philly_9, Abinghost_10, Mulaychimus_10, Phlyer_10, Yinz_10, ChaChing_10, Tydolla_10, Briakila_10, Heathcliff_10, Corofin_10, Kronus_9, Bernardo_10, TinyTerror_10, Rita1961_10, Neos5_10, Casbah_9, Yahalom_10, GlenHope_11, Chandler_10, SynergyX_10, Baloo_10, Chalmers_10, Deenasa_10, Morty007_10, Mortcellus_9, Gadget_11, Devonte_10, Audrey_10, Phaedrus_9, Obutu_10, Pipefish_10, MmasiCarm_10, Ben11_9, Marlia_10, Phayeta_10, Chentzyk_9, Jackstina_9, Daisy_10, SlippinJimmy_10, Olivio_9, Shenandoah_10, Halfpint_9, RomaT_10, Kamiyu_10, RagingRooster_10, Compostia_10, Nozo_10
- Track 9 : LestyG_10, SwainyDoc_10, Glubnar_10, Athena_11
- Track 10 : TP1604_9, Asis_9, BabyGotBac_9, Saletе_9, Maih_9, BayC_9
- Track 11 : Xkcd426_10
- Track 12 : Abt2graduatex2_9
- Track 13 : RainyPolka_9
- Track 14 : YDN12_10
- Track 15 : Mischief19_10
- Track 16 : KingstonB_40, ColdSoup_41, Jollymon_40, Grumio_40, Soos_36, Sting_39, Stillion_40, DonTron_40, Amo99_41, Purplicious_38
- Track 17 : Clawz_40, Makar_41
- Track 18 : SmokingBunny_11, Salvador_11, Arri_12, Danyall_11, Fugax_11, VanDeWege_12, PinkCoffee_11, Nubi_11, CoveyB_11, Mutzi_11, Evamon_11, KimmyK_11, Twister6_11, ClamChowder_11, Togo_11, Barb_11
- Track 19 : Savbucketdawg_11, TillyBobJoe_11, Jambalaya_11, Shinji_11, Portcullis_11

- Track 20 : Gezellig_11, Phlop_11, Egi03_11, Wizard_11, PullumCavea_11, Fireball_12
- Track 21 : Bakery_12
- Track 22 : RogerDodger_12, CherryCola_13, YungMoney_11, Valary_12, Halo3_12
- Track 23 : Clown_15
- Track 24 : BobBob_9, Sanjuju_10, Angelicage_11, Jabberwocky_10
- Track 25 : Affeca_11, McKinley_12
- Track 26 : Kewpiedoll_12
- Track 27 : YorkOnyx_11
- Track 28 : Saronaya_11, Kwobi_11, Kroos_11, Derg_7, Gustavo_11, Gaea_11, StorminNorm_11, Ashertheman_11, Baumdotcom_11, Tangerine_11, LilHam_9, Bizzy_12, JKSyngboy_10
- Track 29 : Paries_12, Tangent_9
- Track 30 : Sedona_12, Bibwit_11
- Track 31 : Tycho_11
- Track 32 : Shivanishola_11
- Track 33 : Flatwoods_12
- Track 34 : ChadMasterC_11, Barsten_12
- Track 35 : Lennon_12
- Track 36 : McCrothy_12
- Track 37 : RiverRaider_12
- Track 38 : Charming_9, Fosterous_9, Galadriel_13, Kamashten_12, Thing3_12, Nordenberg_6
- Track 39 : Rofo_11
- Track 40 : Sitar_12, FuegoCuervo_15, Vivi2_10
- Track 41 : Ribeye_12
- Track 42 : Keitabear_12
- Track 43 : Stultus_11
- Track 44 : Baddon_11
- Track 45 : Fitzgerald_10, Ailee_11
- Track 46 : MoontowerMania_10, Love_13
- Track 47 : SchottB_10
- Track 48 : Brandonk123_14, Geodirt_11
- Track 49 : Hans_14
- Track 50 : Ali17_10, Phinally_12, Leonard_12
- Track 51 : MelBins_12
- Track 52 : Belphegor_8
- Track 53 : EMoore_6
- Track 54 : Phauci_5
- Track 55 : Inspectinfecti_13
- Track 56 : Twonlo_10, Tiamoceli_13, GTE6_13, Dexdert_13, Chickadee_12, RoadKill_10, EdmundFerry_11
- Track 57 : Kwekel_12
- Track 58 : DoctorFroggo_13, Verity_13, Delrey21_13, Zipp_13
- Track 59 : ViaConlectus_13, Natkenzie_13, Sampson_13, Scioto_13, Abblin_13
- Track 60 : Tardus_13, APunk_14, Zitch_14
- Track 61 : BigHunkinEater_15
- Track 62 : Pumpkiney_14
- Track 63 : BiggityBass_6
- Track 64 : CaiB_9
- Track 65 : TraderJ_9, CloverMinnie_9, Wooper_9, MakoManhole_9, FelixTres_9, AnarQue_9, Blackpen_9
- Track 66 : BobRoss2024_6

- Track 67 : Evaa_8
- Track 68 : AksarBAT_7
- Track 69 : NHagos_7
- Track 70 : Shatter_7, Axumite_7, Fresco_7, Ligma_7
- Track 71 : Mariokart_7
- Track 72 : Sisko_6, AnClar_6
- Track 73 : LittleMunchkin_8
- Track 74 : CharlottesWeb_7
- Track 75 : MossRose_9
- Track 76 : Yeshua_9
- Track 77 : Sour_10
- Track 78 : Coldpizza_9
- Track 79 : Yago84_6
- Track 80 : TPA2_16
- Track 81 : phiAsp2_3
- Track 82 : Tonitrus_25
- Track 83 : TurkishDelight_10

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

The start number called the most often in the published annotations is 52, it was called in 59 of the 234 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- APunk_14, Abblin_13, Angelicage_11, Ashertheman_11, Baddon_11, Barsten_12, Baumdotcom_11, Belphegor_8, Bibwit_11, BigHunkinEater_15, Bizzy_12, BobBob_9, ChadMasterC_11, Charming_9, Chickadee_12, Delrey21_13, Derg_7, Dextert_13, DoctorFroggo_13, EMOore_6, EdmundFerry_11, Flatwoods_12, Fosterous_9, FuegoCuervo_15, GTE6_13, Gaea_11, Galadriel_13, Gustavo_11, Hans_14, Inspectinfecti_13, JKSyngboy_10, Jabberwocky_10, Kamashten_12, Kewpiedoll_12, Kroos_11, Kwekel_12, Kwobi_11, LilHam_9, Love_13, MoontowerMania_10, Natkenzie_13, Nordenberg_6, Pumpkiney_14, RoadKill_10, Rofo_11, Sampson_13, Sanjuju_10, Saronaya_11, SchottB_10, Scioto_13, Sedona_12, Sitar_12, StorminNorm_11, Stultus_11, Tangerine_11, Tardus_13, Thing3_12, Tiamoceli_13, Twonlo_10, Verity_13, ViaConlectus_13, Vivi2_10, YorkOnyx_11, Zipp_13, Zitch_14,

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

- Affeca_11, Ailee_11, Ali17_10, Brandonk123_14, Clown_15, Fitzgerald_10, Geodirt_11, Keitabear_12, Lennon_12, Leonard_12, McCrothy_12, McKinley_12, MelBins_12, Paries_12, Phauci_5, Phinally_12, Ribeye_12, RiverRaider_12, Shivanishola_11, Tangent_9, Tycho_11,

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

- Abinghost_10, Abt2graduatex2_9, Akoma_10, AksarBAT_7, Allegro_11, Amo99_41, AnClar_6, AnarQue_9, Arbiter_11, Ares_11, Arri_12, Asis_9, Athena_11, Audrey_10, Axumite_7, BabyGotBac_9, Bakery_12, Baloo_10, Bananafish_11, Barb_11, BayC_9, Ben11_9, Bernardo_10, BiggityBass_6, Blackpen_9, Blocker23_11, BobRoss2024_6, Boyle_11, Briakila_10, Brownie5_11, CaiB_9, Calamitous_11, Casbah_9, ChaChing_10, Chalmers_10, Chandler_10, CharlottesWeb_7, Chentzyk_9, CherryCola_13, ClamChowder_11, Clawz_40, CloverMinnie_9,

Coffee_11, ColdSoup_41, Coldpizza_9, Compostia_10, Corofin_10, CoveyB_11, Daisy_10, Danyall_11, Deenasa_10, Devonte_10, DonTron_40, Eaglehorse_11, Egi03_11, Evaa_8, Evamon_11, Faze9_11, FelixTres_9, Fireball_12, FrenchFry_11, Fresco_7, Fugax_11, Gadget_11, Gervas_10, Gezellig_11, Glass_11, GlenHope_11, Glubnar_10, Godines_11, Grumio_40, Halfpint_9, Halo3_12, HarveySr_10, Heathcliff_10, Hedgerow_11, Holeinone_11, ItsyBitsy1_11, Jackstina_9, Jambalaya_11, Jollymon_40, Kaleb_11, Kamiyu_10, Kheth_11, KimmyK_11, KingstonB_40, Kolhan_11, Kronus_9, Lars_11, Laurie_11, Lephleur_11, LestyG_10, Ligma_7, LilSmirk_11, LittleMunchkin_8, LizLemon_11, Maih_9, Makar_41, MakoManhole_9, Mariokart_7, Marley1013_10, Marlia_10, MasterPo_11, Mischief19_10, MmasiCarm_10, Mortcellus_9, Morty007_10, MossRose_9, Mulaychimus_10, Mutzi_11, NHagos_7, Neos5_10, Nozo_10, Nubi_11, Obutu_10, Olivio_9, Opia_11, OrangeOswald_10, Phaedrus_9, Phantasmagoria_11, Phayeta_10, Philly_9, Phlop_11, Phlyer_10, PinkCoffee_11, Pipefish_10, Portcullis_11, PrinceCharming_11, PullumCavea_11, Purplicious_38, Qyrzula_11, RagingRooster_10, RainyPolka_9, Rhinoforte_11, Rita1961_10, RogerDodger_12, RomaT_10, Rosebush_11, Sabella_11, Salete_9, Salvador_11, Savbucketdawg_11, Shatter_7, Shenandoah_10, Shinji_11, Sisko_6, SlippinJimmy_10, SmokingBunny_11, Soos_36, Sour_10, Stillion_40, Sting_39, SwainyDoc_10, SynergyX_10, TA17A_11, TP1604_9, TPA2_16, TillyBobJoe_11, Tinciduntolum_12, TinyTerror_10, Togo_11, Tonitrus_25, TraderJ_9, Tres_11, TurkishDelight_10, Twister6_11, Tydolla_10, Valary_12, VanDeWege_12, Vic9_00011, West99_11, Wizard_11, Wooper_9, Xkcd426_10, YDN12_10, Yago84_6, Yahalom_10, Yeshua_9, Yinz_10, YungMoney_11, phiAsp2_3,

Summary by start number:

Start 32:

- Found in 35 of 267 (13.1%) of genes in pham
- Manual Annotations of this start: 5 of 234
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Ali17_10 (DE2), Leonard_12 (DE2), MelBins_12 (DE2), Phauci_5 (DE2), Phinally_12 (DE2),

Start 37:

- Found in 28 of 267 (10.5%) of genes in pham
- Manual Annotations of this start: 1 of 234
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Bakery_12 (DC1),

Start 39:

- Found in 1 of 267 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024_6 (DR),

Start 41:

- Found in 1 of 267 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiAsp2_3 (singleton),

Start 44:

- Found in 12 of 267 (4.5%) of genes in pham
- Manual Annotations of this start: 2 of 234
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Paries_12 (DE1), Tangent_9 (DE1),

Start 46:

- Found in 1 of 267 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 234
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RiverRaider_12 (DE1),

Start 49:

- Found in 1 of 267 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 234
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiggityBass_6 (DR),

Start 50:

- Found in 63 of 267 (23.6%) of genes in pham
- Manual Annotations of this start: 53 of 234
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Abinghost_10 (B3), Akoma_10 (B3), AksarBAT_7 (DR), Athena_11 (B3), Audrey_10 (B3), Baloo_10 (B3), Ben11_9 (B3), Bernardo_10 (B3), Briakila_10 (B3), Casbah_9 (B3), ChaChing_10 (B3), Chalmers_10 (B3), Chandler_10 (B3), Chentzyk_9 (B3), Coldpizza_9 (DR), Compostia_10 (B3), Corofin_10 (B3), Daisy_10 (B3), Deenasa_10 (B3), Devonte_10 (B3), Evaa_8 (DR), Gadjet_11 (B3), Gervas_10 (B3), GlenHope_11 (B3), Glubnar_10 (B3), Halfpint_9 (B3), HarveySr_10 (B3), Heathcliff_10 (B3), Jackstina_9 (B3), Kamiyu_10 (B3), Kronus_9 (B3), LestyG_10 (B3), Marley1013_10 (B3), Marlia_10 (B3), MmasiCarm_10 (B3), Mortcellus_9 (B3), Morty007_10 (B3), Mulaychimus_10 (B3), NHagos_7 (DR), Neos5_10 (B3), Nozo_10 (B3), Obutu_10 (B3), Olivio_9 (B3), OrangeOswald_10 (B3), Phaedrus_9 (B3), Phayeta_10 (B3), Philly_9 (B3), Phlyer_10 (B3), Pipefish_10 (B3), RagingRooster_10 (B3), Rita1961_10 (B3), RomaT_10 (B3), Shenandoah_10 (B3), SlippinJimmy_10 (B3), SwainyDoc_10 (B3), SynergyX_10 (B3), TPA2_16 (singleton), TinyTerror_10 (B3), Tydolla_10 (B3), Yahalom_10 (B3), Yinz_10 (B3),

Start 51:

- Found in 26 of 267 (9.7%) of genes in pham
- Manual Annotations of this start: 8 of 234
- Called 46.2% of time when present
- Phage (with cluster) where this start called: AnarQue_9 (DR), Blackpen_9 (DR), CaiB_9 (DR), CharlottesWeb_7 (DR), CloverMinnie_9 (DR), FelixTres_9 (DR), MakoManhole_9 (DR), MossRose_9 (DR), TraderJ_9 (DR), Wooper_9 (DR), Yago84_6 (DR), Yeshua_9 (DR),

Start 52:

- Found in 86 of 267 (32.2%) of genes in pham
- Manual Annotations of this start: 59 of 234
- Called 75.6% of time when present
- Phage (with cluster) where this start called: APunk_14 (DE4), Abblin_13 (DE4), Angelicage_11 (DE1), Ashertheman_11 (DE1), Baddon_11 (DE1), Barsten_12 (DE1), Baumdotcom_11 (DE1), Belphegor_8 (DE2), Bibwit_11 (DE1), BigHunkinEater_15

(DE4), Bizzy_12 (DE1), BobBob_9 (DE1), ChadMasterC_11 (DE1), Charming_9 (DE1), Chickadee_12 (DE3), Delrey21_13 (DE4), Derg_7 (DE1), Dexdert_13 (DE3), DoctorFroggo_13 (DE4), EMoore_6 (DE2), EdmundFerry_11 (DE3), Flatwoods_12 (DE1), Fosterous_9 (DE1), FuegoCuervo_15 (DE1), GTE6_13 (DE3), Gaea_11 (DE1), Galadriel_13 (DE1), Gustavo_11 (DE1), Hans_14 (DE2), Inspectinfecti_13 (DE2), JKSyngboy_10 (DE1), Jabberwocky_10 (DE1), Kamashten_12 (DE1), Kewpiedoll_12 (DE1), Kroos_11 (DE1), Kwekel_12 (DE3), Kwobi_11 (DE1), LilHam_9 (DE1), Love_13 (DE1), MoontowerMania_10 (DE1), Natkenzie_13 (DE4), Nordenberg_6 (DE1), Pumpkiney_14 (DE4), RoadKill_10 (DE3), Rofo_11 (DE1), Sampson_13 (DE4), Sanjuju_10 (DE1), Saronaya_11 (DE1), SchottB_10 (DE1), Scioto_13 (DE4), Sedona_12 (DE1), Sitar_12 (DE1), StorminNorm_11 (DE1), Stultus_11 (DE1), Tangerine_11 (DE1), Tardus_13 (DE4), Thing3_12 (DE1), Tiamoceli_13 (DE3), Twonlo_10 (DE3), Verity_13 (DE4), ViaConlectus_13 (DE4), Vivi2_10 (DE1), YorkOnyx_11 (DE1), Zipp_13 (DE4), Zitch_14 (DE4),

Start 54:

- Found in 39 of 267 (14.6%) of genes in pham
- Manual Annotations of this start: 37 of 234
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_11 (B2), Arbitrator_11 (B2), Ares_11 (B2), Bananafish_11 (B2), Blocker23_11 (B2), Boyle_11 (B2), Brownie5_11 (B2), Calamitous_11 (B2), Coffee_11 (B2), Eaglehorse_11 (B2), Faze9_11 (B2), FrenchFry_11 (B2), Glass_11 (B2), Godines_11 (B2), Hedgerow_11 (B2), Holeinone_11 (B2), ItsyBitsy1_11 (B2), Kaleb_11 (B2), Kheth_11 (B2), Kolhan_11 (B2), Lars_11 (B2), Laurie_11 (B2), Lephleur_11 (B2), LilSmirk_11 (B2), LizLemon_11 (B2), MasterPo_11 (B2), Opia_11 (B2), Phantasmagoria_11 (B2), PrinceCharming_11 (B2), Qyrzula_11 (B2), Rhinoforte_11 (B2), Rosebush_11 (B2), Sabella_11 (B2), TA17A_11 (B2), Tinciduntolum_12 (B2), Tres_11 (B2), TurkishDelight_10 (singleton), Vic9_00011 (B2), West99_11 (B2),

Start 55:

- Found in 22 of 267 (8.2%) of genes in pham
- Manual Annotations of this start: 20 of 234
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_9 (BG), AnClar_6 (DR), Asis_9 (BG), Axumite_7 (DR), BabyGotBac_9 (BG), BayC_9 (BG), Fresco_7 (DR), Ligma_7 (DR), LittleMunchkin_8 (DR), Maih_9 (BG), Mariokart_7 (DR), Mischief19_10 (BG), RainyPolka_9 (BG), Salet_9 (BG), Shatter_7 (DR), Sisko_6 (DR), Sour_10 (DR), TP1604_9 (BG), Xkcd426_10 (BG), YDN12_10 (BG),

Start 56:

- Found in 13 of 267 (4.9%) of genes in pham
- Manual Annotations of this start: 6 of 234
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amo99_41 (CP), Clawz_40 (CP), ColdSoup_41 (CP), DonTron_40 (CP), Grumio_40 (CP), Jollymon_40 (CP), KingstonB_40 (CP), Makar_41 (CP), Purplicious_38 (CP), Soos_36 (CP), Stillion_40 (CP), Sting_39 (CP), Tonitrus_25 (singleton),

Start 57:

- Found in 87 of 267 (32.6%) of genes in pham
- Manual Annotations of this start: 41 of 234
- Called 51.7% of time when present

- Phage (with cluster) where this start called: Affeca_11 (DE1), Ailee_11 (DE1), Arri_12 (DC1), Barb_11 (DC1), Brandonk123_14 (DE1), CherryCola_13 (DC1), ClamChowder_11 (DC1), Clown_15 (DC2), CoveyB_11 (DC1), Danyall_11 (DC1), Egi03_11 (DC1), Evamon_11 (DC1), Fireball_12 (DC1), Fitzgerald_10 (DE1), Fugax_11 (DC1), Geodirt_11 (DE1), Gezellig_11 (DC1), Halo3_12 (DC1), Jambalaya_11 (DC1), Keitabear_12 (DE1), KimmyK_11 (DC1), Lennon_12 (DE1), McCrothy_12 (DE1), McKinley_12 (DE1), Mutzi_11 (DC1), Nubi_11 (DC1), Phlop_11 (DC1), PinkCoffee_11 (DC1), Portcullis_11 (DC1), PullumCavea_11 (DC1), Ribeye_12 (DE1), RogerDodger_12 (DC1), Salvador_11 (DC1), Savbucketdawg_11 (DC1), Shinji_11 (DC1), Shivanishola_11 (DE1), SmokingBunny_11 (DC1), TillyBobJoe_11 (DC1), Togo_11 (DC1), Twister6_11 (DC1), Tycho_11 (DE1), Valary_12 (DC1), VanDeWege_12 (DC1), Wizard_11 (DC1), YungMoney_11 (DC1),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, BG, DE1, DE2, DE3, DE4, DC2, B2, B3, CP, DR, DC1,

Info for manual annotations of cluster B2:

- Start number 54 was manually annotated 36 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 50 was manually annotated 50 times for cluster B3.

Info for manual annotations of cluster BG:

- Start number 55 was manually annotated 11 times for cluster BG.

Info for manual annotations of cluster CP:

- Start number 56 was manually annotated 5 times for cluster CP.

Info for manual annotations of cluster DC1:

- Start number 37 was manually annotated 1 time for cluster DC1.
- Start number 57 was manually annotated 30 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 57 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 44 was manually annotated 2 times for cluster DE1.
- Start number 46 was manually annotated 1 time for cluster DE1.
- Start number 52 was manually annotated 39 times for cluster DE1.
- Start number 57 was manually annotated 10 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 32 was manually annotated 5 times for cluster DE2.
- Start number 52 was manually annotated 4 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 52 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 52 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DR:

- Start number 49 was manually annotated 1 time for cluster DR.
- Start number 50 was manually annotated 3 times for cluster DR.
- Start number 51 was manually annotated 8 times for cluster DR.
- Start number 55 was manually annotated 9 times for cluster DR.

Gene Information:

Gene: APunk_14 Start: 7109, Stop: 7426, Start Num: 52

Candidate Starts for APunk_14:

(Start: 52 @7109 has 59 MA's), (67, 7151), (79, 7220), (92, 7283), (98, 7307), (106, 7349),

Gene: Abblin_13 Start: 6625, Stop: 6942, Start Num: 52

Candidate Starts for Abblin_13:

(Start: 52 @6625 has 59 MA's), (67, 6667), (79, 6736), (92, 6799), (98, 6823), (106, 6865), (108, 6871),

Gene: Abinghost_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Abinghost_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Abt2graduatex2_9 Start: 7673, Stop: 8023, Start Num: 55

Candidate Starts for Abt2graduatex2_9:

(Start: 55 @7673 has 20 MA's), (73, 7733), (88, 7820), (94, 7868), (97, 7877), (112, 7952),

Gene: Affeca_11 Start: 6351, Stop: 6650, Start Num: 57

Candidate Starts for Affeca_11:

(Start: 52 @6342 has 59 MA's), (Start: 57 @6351 has 41 MA's), (67, 6381), (79, 6450), (91, 6507), (92, 6513), (96, 6531), (106, 6579),

Gene: Ailee_11 Start: 7213, Stop: 7512, Start Num: 57

Candidate Starts for Ailee_11:

(Start: 52 @7204 has 59 MA's), (Start: 57 @7213 has 41 MA's), (79, 7312), (91, 7369), (92, 7375), (96, 7393), (106, 7441),

Gene: Akoma_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Akoma_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: AksarBAT_7 Start: 4896, Stop: 5237, Start Num: 50

Candidate Starts for AksarBAT_7:

(Start: 50 @4896 has 53 MA's), (Start: 51 @4902 has 8 MA's), (60, 4926), (66, 4941), (69, 4953), (76, 4998), (81, 5019), (93, 5082), (99, 5103), (101, 5109), (118, 5208), (121, 5226),

Gene: Ali17_10 Start: 6021, Stop: 6407, Start Num: 32

Candidate Starts for Ali17_10:

(12, 5826), (15, 5856), (Start: 32 @6021 has 5 MA's), (Start: 52 @6102 has 59 MA's), (62, 6123), (79, 6207), (92, 6270), (106, 6336), (107, 6339), (112, 6363),

Gene: Allegro_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Allegro_11:

(25, 7225), (27, 7234), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (81, 7477), (83, 7480), (86, 7495), (87, 7498), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Amo99_41 Start: 17853, Stop: 18179, Start Num: 56

Candidate Starts for Amo99_41:

(Start: 56 @17853 has 6 MA's), (65, 17880), (70, 17901), (90, 18012), (100, 18066), (114, 18138), (116, 18147),

Gene: AnClar_6 Start: 5256, Stop: 5579, Start Num: 55

Candidate Starts for AnClar_6:

(Start: 51 @5244 has 8 MA's), (Start: 55 @5256 has 20 MA's), (63, 5274), (66, 5283), (69, 5295), (70, 5301), (91, 5412), (94, 5430), (101, 5451), (118, 5550),

Gene: AnarQue_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for AnarQue_9:

(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Angelicage_11 Start: 6771, Stop: 7079, Start Num: 52

Candidate Starts for Angelicage_11:

(Start: 52 @6771 has 59 MA's), (Start: 57 @6780 has 41 MA's), (79, 6879), (91, 6936), (92, 6942), (96, 6960), (106, 7008),

Gene: Arbiter_11 Start: 7453, Stop: 7791, Start Num: 54

Candidate Starts for Arbiter_11:

(25, 7315), (27, 7324), (33, 7372), (Start: 54 @7453 has 37 MA's), (59, 7468), (70, 7507), (75, 7534), (77, 7552), (79, 7561), (81, 7567), (83, 7570), (86, 7585), (88, 7591), (108, 7696), (110, 7708), (119, 7762),

Gene: Ares_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Ares_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Arri_12 Start: 5316, Stop: 5630, Start Num: 57

Candidate Starts for Arri_12:

(Start: 37 @5253 has 1 MA's), (Start: 57 @5316 has 41 MA's), (91, 5472), (92, 5478),

Gene: Ashertheman_11 Start: 5950, Stop: 6258, Start Num: 52

Candidate Starts for Ashertheman_11:

(13, 5698), (18, 5725), (Start: 52 @5950 has 59 MA's), (Start: 57 @5959 has 41 MA's), (79, 6058), (91, 6115), (92, 6121), (106, 6187),

Gene: Asis_9 Start: 7730, Stop: 8080, Start Num: 55

Candidate Starts for Asis_9:

(Start: 55 @7730 has 20 MA's), (73, 7790), (88, 7877), (94, 7925), (99, 7940),

Gene: Athena_11 Start: 6712, Stop: 7047, Start Num: 50

Candidate Starts for Athena_11:

(Start: 50 @6712 has 53 MA's), (66, 6754), (69, 6766), (72, 6781), (75, 6799), (88, 6856), (101, 6922), (111, 6979), (115, 6991), (119, 7027),

Gene: Audrey_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Audrey_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Axumite_7 Start: 4953, Stop: 5276, Start Num: 55

Candidate Starts for Axumite_7:

(27, 4833), (Start: 51 @4941 has 8 MA's), (Start: 55 @4953 has 20 MA's), (58, 4959), (60, 4965), (61, 4968), (63, 4971), (69, 4992), (70, 4998), (75, 5025), (79, 5052), (81, 5058), (101, 5148), (118, 5247),

Gene: BabyGotBac_9 Start: 7730, Stop: 8080, Start Num: 55

Candidate Starts for BabyGotBac_9:

(Start: 55 @7730 has 20 MA's), (73, 7790), (88, 7877), (94, 7925), (99, 7940),

Gene: Baddon_11 Start: 6660, Stop: 6968, Start Num: 52

Candidate Starts for Baddon_11:

(Start: 44 @6630 has 2 MA's), (Start: 52 @6660 has 59 MA's), (Start: 57 @6669 has 41 MA's), (68, 6705), (79, 6768), (91, 6825), (92, 6831), (106, 6897),

Gene: Bakery_12 Start: 4954, Stop: 5331, Start Num: 37

Candidate Starts for Bakery_12:

(14, 4762), (16, 4768), (24, 4834), (Start: 37 @4954 has 1 MA's), (Start: 57 @5017 has 41 MA's), (91, 5173), (92, 5179),

Gene: Baloo_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Baloo_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Bananafish_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Bananafish_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Barb_11 Start: 5272, Stop: 5586, Start Num: 57

Candidate Starts for Barb_11:

(Start: 37 @5209 has 1 MA's), (Start: 57 @5272 has 41 MA's), (91, 5428), (92, 5434),

Gene: Barsten_12 Start: 6156, Stop: 6464, Start Num: 52

Candidate Starts for Barsten_12:

(22, 5964), (Start: 52 @6156 has 59 MA's), (Start: 57 @6165 has 41 MA's), (67, 6195), (79, 6264), (91, 6321), (92, 6327), (96, 6345), (106, 6393),

Gene: Baumdotcom_11 Start: 5973, Stop: 6281, Start Num: 52

Candidate Starts for Baumdotcom_11:

(13, 5721), (18, 5748), (Start: 52 @5973 has 59 MA's), (Start: 57 @5982 has 41 MA's), (79, 6081), (91, 6138), (92, 6144), (106, 6210),

Gene: BayC_9 Start: 7730, Stop: 8080, Start Num: 55

Candidate Starts for BayC_9:

(Start: 55 @7730 has 20 MA's), (73, 7790), (88, 7877), (94, 7925), (99, 7940),

Gene: Belphegor_8 Start: 3927, Stop: 4235, Start Num: 52

Candidate Starts for Belphegor_8:

(Start: 32 @3846 has 5 MA's), (Start: 52 @3927 has 59 MA's), (62, 3951), (68, 3972), (76, 4020), (79, 4035), (92, 4098), (98, 4122), (106, 4164), (107, 4167), (112, 4191),

Gene: Ben11_9 Start: 5797, Stop: 6132, Start Num: 50

Candidate Starts for Ben11_9:

(Start: 50 @5797 has 53 MA's), (66, 5839), (69, 5851), (72, 5866), (75, 5884), (88, 5941), (101, 6007), (102, 6028), (111, 6064), (115, 6076), (119, 6112),

Gene: Bernardo_10 Start: 5977, Stop: 6312, Start Num: 50

Candidate Starts for Bernardo_10:

(Start: 50 @5977 has 53 MA's), (66, 6019), (69, 6031), (72, 6046), (75, 6064), (88, 6121), (101, 6187), (102, 6208), (111, 6244), (115, 6256), (119, 6292),

Gene: Bibwit_11 Start: 7027, Stop: 7335, Start Num: 52

Candidate Starts for Bibwit_11:

(Start: 52 @7027 has 59 MA's), (Start: 57 @7036 has 41 MA's), (67, 7066), (79, 7135), (91, 7192), (92, 7198), (96, 7216), (106, 7264),

Gene: BigHunkinEater_15 Start: 6556, Stop: 6873, Start Num: 52

Candidate Starts for BigHunkinEater_15:

(Start: 52 @6556 has 59 MA's), (67, 6598), (79, 6667), (92, 6730), (106, 6796),

Gene: BiggityBass_6 Start: 4749, Stop: 5090, Start Num: 49

Candidate Starts for BiggityBass_6:

(Start: 49 @4749 has 1 MA's), (Start: 51 @4755 has 8 MA's), (63, 4785), (66, 4794), (68, 4803), (69, 4806), (70, 4812), (101, 4962), (118, 5061),

Gene: Bizzy_12 Start: 6147, Stop: 6455, Start Num: 52

Candidate Starts for Bizzy_12:

(13, 5895), (18, 5922), (Start: 52 @6147 has 59 MA's), (Start: 57 @6156 has 41 MA's), (79, 6255), (91, 6312), (92, 6318), (106, 6384),

Gene: Blackpen_9 Start: 5908, Stop: 6246, Start Num: 51

Candidate Starts for Blackpen_9:

(26, 5785), (28, 5803), (31, 5830), (35, 5851), (38, 5863), (43, 5884), (Start: 51 @5908 has 8 MA's), (58, 5926), (66, 5947), (69, 5959), (70, 5965), (75, 5992), (93, 6091), (101, 6118), (108, 6157), (118, 6217), (120, 6232),

Gene: Blocker23_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Blocker23_11:

(25, 7342), (27, 7351), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: BobBob_9 Start: 5693, Stop: 6001, Start Num: 52

Candidate Starts for BobBob_9:

(Start: 52 @5693 has 59 MA's), (Start: 57 @5702 has 41 MA's), (79, 5801), (91, 5858), (92, 5864), (96, 5882), (106, 5930),

Gene: BobRoss2024_6 Start: 4746, Stop: 5114, Start Num: 39

Candidate Starts for BobRoss2024_6:

(39, 4746), (40, 4749), (Start: 50 @4773 has 53 MA's), (66, 4818), (69, 4830), (70, 4836), (79, 4890), (81, 4896), (101, 4986), (108, 5025), (113, 5049), (118, 5085),

Gene: Boyle_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Boyle_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Brandonk123_14 Start: 6849, Stop: 7148, Start Num: 57

Candidate Starts for Brandonk123_14:

(22, 6648), (Start: 52 @6840 has 59 MA's), (Start: 57 @6849 has 41 MA's), (67, 6879), (79, 6948), (91, 7005), (92, 7011), (96, 7029), (106, 7077),

Gene: Briakila_10 Start: 6738, Stop: 7073, Start Num: 50

Candidate Starts for Briakila_10:

(Start: 50 @6738 has 53 MA's), (66, 6780), (69, 6792), (72, 6807), (75, 6825), (88, 6882), (101, 6948), (102, 6969), (111, 7005), (115, 7017), (119, 7053),

Gene: Brownie5_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Brownie5_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: CaiB_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for CaiB_9:

(26, 6293), (28, 6311), (30, 6326), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Calamitous_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Calamitous_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (81, 7477), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Casbah_9 Start: 5798, Stop: 6133, Start Num: 50

Candidate Starts for Casbah_9:

(Start: 50 @5798 has 53 MA's), (66, 5840), (69, 5852), (72, 5867), (75, 5885), (88, 5942), (101, 6008), (102, 6029), (111, 6065), (115, 6077), (119, 6113),

Gene: ChaChing_10 Start: 5964, Stop: 6299, Start Num: 50

Candidate Starts for ChaChing_10:

(Start: 50 @5964 has 53 MA's), (66, 6006), (69, 6018), (72, 6033), (75, 6051), (88, 6108), (101, 6174), (102, 6195), (111, 6231), (115, 6243), (119, 6279),

Gene: ChadMasterC_11 Start: 6428, Stop: 6736, Start Num: 52

Candidate Starts for ChadMasterC_11:

(22, 6236), (Start: 52 @6428 has 59 MA's), (Start: 57 @6437 has 41 MA's), (67, 6467), (79, 6536), (91, 6593), (92, 6599), (96, 6617), (106, 6665),

Gene: Chalmers_10 Start: 6739, Stop: 7074, Start Num: 50

Candidate Starts for Chalmers_10:

(Start: 50 @6739 has 53 MA's), (66, 6781), (69, 6793), (72, 6808), (75, 6826), (88, 6883), (101, 6949), (102, 6970), (111, 7006), (115, 7018), (119, 7054),

Gene: Chandler_10 Start: 6712, Stop: 7047, Start Num: 50

Candidate Starts for Chandler_10:

(Start: 50 @6712 has 53 MA's), (66, 6754), (69, 6766), (72, 6781), (75, 6799), (88, 6856), (101, 6922), (102, 6943), (111, 6979), (115, 6991), (119, 7027),

Gene: CharlottesWeb_7 Start: 4948, Stop: 5283, Start Num: 51

Candidate Starts for CharlottesWeb_7:

(Start: 51 @4948 has 8 MA's), (Start: 55 @4960 has 20 MA's), (58, 4966), (60, 4972), (63, 4978), (66, 4987), (68, 4996), (69, 4999), (70, 5005), (78, 5056), (81, 5065), (95, 5137), (118, 5254),

Gene: Charming_9 Start: 5695, Stop: 6003, Start Num: 52

Candidate Starts for Charming_9:

(Start: 44 @5665 has 2 MA's), (Start: 52 @5695 has 59 MA's), (Start: 57 @5704 has 41 MA's), (79, 5803), (91, 5860), (92, 5866), (96, 5884), (106, 5932),

Gene: Chentzyk_9 Start: 5825, Stop: 6160, Start Num: 50

Candidate Starts for Chentzyk_9:

(Start: 50 @5825 has 53 MA's), (66, 5867), (69, 5879), (72, 5894), (75, 5912), (88, 5969), (101, 6035), (102, 6056), (111, 6092), (115, 6104), (119, 6140),

Gene: CherryCola_13 Start: 5508, Stop: 5822, Start Num: 57

Candidate Starts for CherryCola_13:

(7, 5157), (Start: 37 @5445 has 1 MA's), (Start: 57 @5508 has 41 MA's), (91, 5664), (92, 5670),

Gene: Chickadee_12 Start: 5433, Stop: 5771, Start Num: 52

Candidate Starts for Chickadee_12:

(42, 5397), (Start: 52 @5433 has 59 MA's), (62, 5460), (64, 5466), (70, 5490), (85, 5568), (92, 5634), (106, 5700), (112, 5727),

Gene: ClamChowder_11 Start: 5272, Stop: 5586, Start Num: 57

Candidate Starts for ClamChowder_11:

(Start: 37 @5209 has 1 MA's), (Start: 57 @5272 has 41 MA's), (91, 5428), (92, 5434),

Gene: Clawz_40 Start: 17751, Stop: 18077, Start Num: 56

Candidate Starts for Clawz_40:

(45, 17715), (47, 17718), (Start: 56 @17751 has 6 MA's), (70, 17799), (90, 17910), (93, 17940), (112, 18030), (114, 18036),

Gene: CloverMinnie_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for CloverMinnie_9:

(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Clown_15 Start: 8549, Stop: 8863, Start Num: 57

Candidate Starts for Clown_15:

(Start: 52 @8540 has 59 MA's), (Start: 57 @8549 has 41 MA's), (70, 8594), (91, 8705),

Gene: Coffee_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Coffee_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: ColdSoup_41 Start: 17853, Stop: 18179, Start Num: 56

Candidate Starts for ColdSoup_41:

(Start: 56 @17853 has 6 MA's), (65, 17880), (70, 17901), (90, 18012), (100, 18066), (114, 18138), (116, 18147),

Gene: Coldpizza_9 Start: 6855, Stop: 7208, Start Num: 50

Candidate Starts for Coldpizza_9:

(Start: 50 @6855 has 53 MA's), (Start: 51 @6861 has 8 MA's), (61, 6888), (69, 6912), (78, 6969), (87, 6999), (96, 7053), (101, 7068), (118, 7167),

Gene: Compostia_10 Start: 5957, Stop: 6292, Start Num: 50

Candidate Starts for Compostia_10:

(Start: 50 @5957 has 53 MA's), (66, 5999), (69, 6011), (72, 6026), (75, 6044), (88, 6101), (101, 6167), (102, 6188), (111, 6224), (115, 6236), (119, 6272),

Gene: Corofin_10 Start: 5974, Stop: 6309, Start Num: 50

Candidate Starts for Corofin_10:

(Start: 50 @5974 has 53 MA's), (66, 6016), (69, 6028), (72, 6043), (75, 6061), (88, 6118), (101, 6184), (102, 6205), (111, 6241), (115, 6253), (119, 6289),

Gene: CoveyB_11 Start: 5144, Stop: 5458, Start Num: 57

Candidate Starts for CoveyB_11:

(Start: 37 @5081 has 1 MA's), (Start: 57 @5144 has 41 MA's), (91, 5300), (92, 5306),

Gene: Daisy_10 Start: 5952, Stop: 6287, Start Num: 50

Candidate Starts for Daisy_10:

(Start: 50 @5952 has 53 MA's), (66, 5994), (69, 6006), (72, 6021), (75, 6039), (88, 6096), (101, 6162), (102, 6183), (111, 6219), (115, 6231), (119, 6267),

Gene: Danyall_11 Start: 5144, Stop: 5458, Start Num: 57

Candidate Starts for Danyall_11:

(Start: 37 @5081 has 1 MA's), (Start: 57 @5144 has 41 MA's), (91, 5300), (92, 5306),

Gene: Deenasa_10 Start: 6712, Stop: 7047, Start Num: 50

Candidate Starts for Deenasa_10:

(Start: 50 @6712 has 53 MA's), (66, 6754), (69, 6766), (72, 6781), (75, 6799), (88, 6856), (101, 6922), (102, 6943), (111, 6979), (115, 6991), (119, 7027),

Gene: Delrey21_13 Start: 6898, Stop: 7215, Start Num: 52

Candidate Starts for Delrey21_13:

(Start: 52 @6898 has 59 MA's), (63, 6928), (79, 7009), (92, 7072), (96, 7090), (97, 7093), (98, 7096), (106, 7138),

Gene: Derg_7 Start: 5277, Stop: 5585, Start Num: 52

Candidate Starts for Derg_7:

(13, 5025), (18, 5052), (Start: 52 @5277 has 59 MA's), (Start: 57 @5286 has 41 MA's), (79, 5385), (91, 5442), (92, 5448), (106, 5514),

Gene: Devonte_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Devonte_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Dxdert_13 Start: 5891, Stop: 6229, Start Num: 52

Candidate Starts for Dxdert_13:

(42, 5855), (Start: 52 @5891 has 59 MA's), (62, 5918), (64, 5924), (70, 5948), (85, 6026), (92, 6092), (106, 6158), (112, 6185),

Gene: DoctorFroggo_13 Start: 6898, Stop: 7215, Start Num: 52

Candidate Starts for DoctorFroggo_13:

(Start: 52 @6898 has 59 MA's), (63, 6928), (79, 7009), (92, 7072), (96, 7090), (97, 7093), (98, 7096), (106, 7138),

Gene: DonTron_40 Start: 17923, Stop: 18249, Start Num: 56

Candidate Starts for DonTron_40:

(Start: 56 @17923 has 6 MA's), (65, 17950), (70, 17971), (90, 18082), (100, 18136), (114, 18208), (116, 18217),

Gene: EMOore_6 Start: 4085, Stop: 4393, Start Num: 52

Candidate Starts for EMOore_6:

(Start: 32 @4004 has 5 MA's), (Start: 52 @4085 has 59 MA's), (62, 4109), (92, 4256), (98, 4280), (106, 4322), (107, 4325), (112, 4349),

Gene: Eaglehorse_11 Start: 7381, Stop: 7719, Start Num: 54

Candidate Starts for Eaglehorse_11:

(25, 7243), (27, 7252), (Start: 32 @7294 has 5 MA's), (33, 7300), (Start: 54 @7381 has 37 MA's), (59, 7396), (70, 7435), (75, 7462), (77, 7480), (79, 7489), (83, 7498), (86, 7513), (88, 7519), (108, 7624), (110, 7636), (119, 7690),

Gene: EdmundFerry_11 Start: 5448, Stop: 5786, Start Num: 52

Candidate Starts for EdmundFerry_11:

(42, 5412), (Start: 52 @5448 has 59 MA's), (62, 5475), (64, 5481), (70, 5505), (85, 5583), (92, 5649), (106, 5715), (112, 5742),

Gene: Egi03_11 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for Egi03_11:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Evaa_8 Start: 6248, Stop: 6592, Start Num: 50

Candidate Starts for Evaa_8:

(Start: 50 @6248 has 53 MA's), (63, 6284), (66, 6293), (69, 6305), (70, 6311), (75, 6338), (77, 6356), (79, 6365), (87, 6392), (88, 6395), (91, 6422), (93, 6434), (99, 6455), (101, 6461), (113, 6524), (118, 6560),

Gene: Evamon_11 Start: 5125, Stop: 5439, Start Num: 57

Candidate Starts for Evamon_11:

(Start: 37 @5062 has 1 MA's), (Start: 57 @5125 has 41 MA's), (91, 5281), (92, 5287),

Gene: Faze9_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Faze9_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: FelixTres_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for FelixTres_9:

(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Fireball_12 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for Fireball_12:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Fitzgerald_10 Start: 6630, Stop: 6929, Start Num: 57

Candidate Starts for Fitzgerald_10:

(Start: 52 @6621 has 59 MA's), (Start: 57 @6630 has 41 MA's), (79, 6729), (91, 6786), (92, 6792), (96, 6810), (106, 6858),

Gene: Flatwoods_12 Start: 6151, Stop: 6459, Start Num: 52

Candidate Starts for Flatwoods_12:

(9, 5824), (Start: 52 @6151 has 59 MA's), (Start: 57 @6160 has 41 MA's), (79, 6259), (91, 6316), (92, 6322), (106, 6388),

Gene: Fosterous_9 Start: 5693, Stop: 6001, Start Num: 52

Candidate Starts for Fosterous_9:

(Start: 44 @5663 has 2 MA's), (Start: 52 @5693 has 59 MA's), (Start: 57 @5702 has 41 MA's), (79, 5801), (91, 5858), (92, 5864), (96, 5882), (106, 5930),

Gene: FrenchFry_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for FrenchFry_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Fresco_7 Start: 4953, Stop: 5276, Start Num: 55

Candidate Starts for Fresco_7:

(27, 4833), (Start: 51 @4941 has 8 MA's), (Start: 55 @4953 has 20 MA's), (58, 4959), (60, 4965), (61, 4968), (63, 4971), (69, 4992), (70, 4998), (75, 5025), (79, 5052), (81, 5058), (101, 5148), (118, 5247),

Gene: FuegoCuervo_15 Start: 6443, Stop: 6751, Start Num: 52

Candidate Starts for FuegoCuervo_15:

(22, 6251), (Start: 52 @6443 has 59 MA's), (Start: 57 @6452 has 41 MA's), (79, 6551), (91, 6608), (92, 6614), (96, 6632), (106, 6680),

Gene: Fugax_11 Start: 5272, Stop: 5586, Start Num: 57

Candidate Starts for Fugax_11:

(Start: 37 @5209 has 1 MA's), (Start: 57 @5272 has 41 MA's), (91, 5428), (92, 5434),

Gene: GTE6_13 Start: 5949, Stop: 6287, Start Num: 52

Candidate Starts for GTE6_13:

(42, 5913), (Start: 52 @5949 has 59 MA's), (62, 5976), (64, 5982), (70, 6006), (85, 6084), (92, 6150), (106, 6216), (112, 6243),

Gene: Gadget_11 Start: 5953, Stop: 6288, Start Num: 50

Candidate Starts for Gadget_11:

(Start: 50 @5953 has 53 MA's), (66, 5995), (69, 6007), (72, 6022), (75, 6040), (88, 6097), (101, 6163), (102, 6184), (111, 6220), (115, 6232), (119, 6268),

Gene: Gaea_11 Start: 5953, Stop: 6261, Start Num: 52

Candidate Starts for Gaea_11:

(13, 5701), (18, 5728), (Start: 52 @5953 has 59 MA's), (Start: 57 @5962 has 41 MA's), (79, 6061), (91, 6118), (92, 6124), (106, 6190),

Gene: Galadriel_13 Start: 6461, Stop: 6769, Start Num: 52

Candidate Starts for Galadriel_13:

(Start: 44 @6431 has 2 MA's), (Start: 52 @6461 has 59 MA's), (Start: 57 @6470 has 41 MA's), (79, 6569), (91, 6626), (92, 6632), (96, 6650), (106, 6698),

Gene: Geodirt_11 Start: 6477, Stop: 6776, Start Num: 57

Candidate Starts for Geodirt_11:

(22, 6276), (Start: 52 @6468 has 59 MA's), (Start: 57 @6477 has 41 MA's), (67, 6507), (79, 6576), (91, 6633), (92, 6639), (96, 6657), (106, 6705),

Gene: Gervas_10 Start: 5944, Stop: 6279, Start Num: 50

Candidate Starts for Gervas_10:

(Start: 50 @5944 has 53 MA's), (66, 5986), (69, 5998), (72, 6013), (75, 6031), (88, 6088), (101, 6154), (102, 6175), (111, 6211), (115, 6223), (119, 6259),

Gene: Gezellig_11 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for Gezellig_11:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Glass_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Glass_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: GlenHope_11 Start: 5963, Stop: 6298, Start Num: 50

Candidate Starts for GlenHope_11:

(Start: 50 @5963 has 53 MA's), (66, 6005), (69, 6017), (72, 6032), (75, 6050), (88, 6107), (101, 6173), (102, 6194), (111, 6230), (115, 6242), (119, 6278),

Gene: Glubnar_10 Start: 5953, Stop: 6288, Start Num: 50

Candidate Starts for Glubnar_10:

(Start: 50 @5953 has 53 MA's), (66, 5995), (69, 6007), (72, 6022), (75, 6040), (88, 6097), (101, 6163), (111, 6220), (115, 6232), (119, 6268),

Gene: Godines_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Godines_11:

(25, 7225), (27, 7234), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Grumio_40 Start: 17361, Stop: 17687, Start Num: 56

Candidate Starts for Grumio_40:

(Start: 56 @17361 has 6 MA's), (65, 17388), (70, 17409), (90, 17520), (100, 17574), (114, 17646), (116, 17655),

Gene: Gustavo_11 Start: 5950, Stop: 6258, Start Num: 52

Candidate Starts for Gustavo_11:

(13, 5698), (18, 5725), (Start: 52 @5950 has 59 MA's), (Start: 57 @5959 has 41 MA's), (79, 6058), (91, 6115), (92, 6121), (106, 6187),

Gene: Halfpint_9 Start: 5798, Stop: 6133, Start Num: 50

Candidate Starts for Halfpint_9:

(Start: 50 @5798 has 53 MA's), (66, 5840), (69, 5852), (72, 5867), (75, 5885), (88, 5942), (101, 6008), (102, 6029), (111, 6065), (115, 6077), (119, 6113),

Gene: Halo3_12 Start: 5583, Stop: 5888, Start Num: 57

Candidate Starts for Halo3_12:

(7, 5232), (Start: 37 @5520 has 1 MA's), (Start: 57 @5583 has 41 MA's), (91, 5739), (92, 5745),

Gene: Hans_14 Start: 6642, Stop: 6947, Start Num: 52

Candidate Starts for Hans_14:

(Start: 32 @6561 has 5 MA's), (Start: 52 @6642 has 59 MA's), (62, 6663), (79, 6747), (92, 6810), (98, 6834), (106, 6876), (107, 6879), (112, 6903),

Gene: HarveySr_10 Start: 5950, Stop: 6285, Start Num: 50

Candidate Starts for HarveySr_10:

(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160), (102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: Heathcliff_10 Start: 5944, Stop: 6279, Start Num: 50

Candidate Starts for Heathcliff_10:

(Start: 50 @5944 has 53 MA's), (66, 5986), (69, 5998), (72, 6013), (75, 6031), (88, 6088), (101, 6154), (102, 6175), (111, 6211), (115, 6223), (119, 6259),

Gene: Hedgerow_11 Start: 7462, Stop: 7800, Start Num: 54

Candidate Starts for Hedgerow_11:

(25, 7324), (27, 7333), (Start: 32 @7375 has 5 MA's), (33, 7381), (Start: 54 @7462 has 37 MA's), (59, 7477), (70, 7516), (75, 7543), (77, 7561), (79, 7570), (83, 7579), (86, 7594), (88, 7600), (108, 7705), (110, 7717), (119, 7771),

Gene: Holeinone_11 Start: 7362, Stop: 7700, Start Num: 54

Candidate Starts for Holeinone_11:

(Start: 54 @7362 has 37 MA's), (59, 7377), (70, 7416), (75, 7443), (77, 7461), (79, 7470), (81, 7476), (83, 7479), (86, 7494), (87, 7497), (88, 7500), (108, 7605), (110, 7617), (119, 7671),

Gene: Inspectinfecti_13 Start: 7159, Stop: 7464, Start Num: 52

Candidate Starts for Inspectinfecti_13:

(12, 6883), (15, 6913), (Start: 32 @7078 has 5 MA's), (Start: 52 @7159 has 59 MA's), (62, 7180), (79, 7264), (92, 7327), (106, 7393), (107, 7396), (112, 7420),

Gene: ItsyBitsy1_11 Start: 7354, Stop: 7692, Start Num: 54

Candidate Starts for ItsyBitsy1_11:

(25, 7216), (27, 7225), (Start: 32 @7267 has 5 MA's), (33, 7273), (Start: 54 @7354 has 37 MA's), (59, 7369), (70, 7408), (75, 7435), (77, 7453), (79, 7462), (83, 7471), (86, 7486), (88, 7492), (108, 7597), (110, 7609), (119, 7663),

Gene: JKSyngboy_10 Start: 6461, Stop: 6769, Start Num: 52

Candidate Starts for JKSyngboy_10:

(13, 6209), (18, 6236), (Start: 52 @6461 has 59 MA's), (Start: 57 @6470 has 41 MA's), (79, 6569), (91, 6626), (92, 6632), (106, 6698),

Gene: Jabberwocky_10 Start: 6623, Stop: 6931, Start Num: 52

Candidate Starts for Jabberwocky_10:

(Start: 52 @6623 has 59 MA's), (Start: 57 @6632 has 41 MA's), (79, 6731), (91, 6788), (92, 6794), (96, 6812), (106, 6860),

Gene: Jackstina_9 Start: 5866, Stop: 6201, Start Num: 50

Candidate Starts for Jackstina_9:

(Start: 50 @5866 has 53 MA's), (66, 5908), (69, 5920), (72, 5935), (75, 5953), (88, 6010), (101, 6076), (102, 6097), (111, 6133), (115, 6145), (119, 6181),

Gene: Jambalaya_11 Start: 4956, Stop: 5270, Start Num: 57

Candidate Starts for Jambalaya_11:

(Start: 57 @4956 has 41 MA's), (91, 5112), (92, 5118),

Gene: Jollymon_40 Start: 17853, Stop: 18179, Start Num: 56

Candidate Starts for Jollymon_40:

(Start: 56 @17853 has 6 MA's), (65, 17880), (70, 17901), (90, 18012), (100, 18066), (114, 18138), (116, 18147),

Gene: Kaleb_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Kaleb_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Kamashten_12 Start: 6782, Stop: 7090, Start Num: 52

Candidate Starts for Kamashten_12:

(Start: 44 @6752 has 2 MA's), (Start: 52 @6782 has 59 MA's), (Start: 57 @6791 has 41 MA's), (79, 6890), (91, 6947), (92, 6953), (96, 6971), (106, 7019),

Gene: Kamiyu_10 Start: 5944, Stop: 6279, Start Num: 50

Candidate Starts for Kamiyu_10:

(Start: 50 @5944 has 53 MA's), (66, 5986), (69, 5998), (72, 6013), (75, 6031), (88, 6088), (101, 6154), (102, 6175), (111, 6211), (115, 6223), (119, 6259),

Gene: Keitabear_12 Start: 7843, Stop: 8142, Start Num: 57

Candidate Starts for Keitabear_12:

(Start: 52 @7834 has 59 MA's), (Start: 57 @7843 has 41 MA's), (79, 7942), (91, 7999), (92, 8005), (96, 8023), (106, 8071),

Gene: Kewpiedoll_12 Start: 6184, Stop: 6492, Start Num: 52

Candidate Starts for Kewpiedoll_12:

(Start: 52 @6184 has 59 MA's), (Start: 57 @6193 has 41 MA's), (67, 6223), (79, 6292), (91, 6349), (92, 6355), (96, 6373), (106, 6421),

Gene: Kheth_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Kheth_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: KimmyK_11 Start: 5272, Stop: 5586, Start Num: 57

Candidate Starts for KimmyK_11:

(Start: 37 @5209 has 1 MA's), (Start: 57 @5272 has 41 MA's), (91, 5428), (92, 5434),

Gene: KingstonB_40 Start: 17361, Stop: 17687, Start Num: 56

Candidate Starts for KingstonB_40:

(Start: 56 @17361 has 6 MA's), (65, 17388), (70, 17409), (90, 17520), (100, 17574), (114, 17646), (116, 17655),

Gene: Kolhan_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Kolhan_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Kronus_9 Start: 6559, Stop: 6894, Start Num: 50

Candidate Starts for Kronus_9:

(Start: 50 @6559 has 53 MA's), (66, 6601), (69, 6613), (72, 6628), (75, 6646), (88, 6703), (101, 6769), (102, 6790), (111, 6826), (115, 6838), (119, 6874),

Gene: Kroos_11 Start: 6114, Stop: 6422, Start Num: 52

Candidate Starts for Kroos_11:

(13, 5862), (18, 5889), (Start: 52 @6114 has 59 MA's), (Start: 57 @6123 has 41 MA's), (79, 6222), (91, 6279), (92, 6285), (106, 6351),

Gene: Kwekel_12 Start: 5442, Stop: 5780, Start Num: 52

Candidate Starts for Kwekel_12:

(38, 5388), (Start: 52 @5442 has 59 MA's), (63, 5472), (64, 5475), (79, 5553), (85, 5577), (106, 5709), (112, 5736),

Gene: Kwobi_11 Start: 5953, Stop: 6261, Start Num: 52

Candidate Starts for Kwobi_11:

(13, 5701), (18, 5728), (Start: 52 @5953 has 59 MA's), (Start: 57 @5962 has 41 MA's), (79, 6061), (91, 6118), (92, 6124), (106, 6190),

Gene: Lars_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Lars_11:

(25, 7342), (27, 7351), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Laurie_11 Start: 7364, Stop: 7702, Start Num: 54

Candidate Starts for Laurie_11:

(25, 7226), (27, 7235), (Start: 32 @7277 has 5 MA's), (33, 7283), (Start: 54 @7364 has 37 MA's), (59, 7379), (70, 7418), (75, 7445), (77, 7463), (79, 7472), (81, 7478), (83, 7481), (86, 7496), (88, 7502), (108, 7607), (110, 7619), (119, 7673),

Gene: Lennon_12 Start: 7052, Stop: 7351, Start Num: 57

Candidate Starts for Lennon_12:

(22, 6851), (Start: 52 @7043 has 59 MA's), (Start: 57 @7052 has 41 MA's), (79, 7151), (91, 7208), (92, 7214), (96, 7232), (106, 7280),

Gene: Leonard_12 Start: 6673, Stop: 7059, Start Num: 32

Candidate Starts for Leonard_12:

(12, 6478), (15, 6508), (Start: 32 @6673 has 5 MA's), (Start: 52 @6754 has 59 MA's), (62, 6775), (79, 6859), (92, 6922), (106, 6988), (107, 6991), (112, 7015),

Gene: Lephleur_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Lephleur_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: LestyG_10 Start: 5953, Stop: 6288, Start Num: 50

Candidate Starts for LestyG_10:

(Start: 50 @5953 has 53 MA's), (66, 5995), (69, 6007), (72, 6022), (75, 6040), (88, 6097), (101, 6163), (111, 6220), (115, 6232), (119, 6268),

Gene: Ligma_7 Start: 4953, Stop: 5276, Start Num: 55

Candidate Starts for Ligma_7:

(27, 4833), (Start: 51 @4941 has 8 MA's), (Start: 55 @4953 has 20 MA's), (58, 4959), (60, 4965), (61, 4968), (63, 4971), (69, 4992), (70, 4998), (75, 5025), (79, 5052), (81, 5058), (101, 5148), (118, 5247),

Gene: LilHam_9 Start: 5269, Stop: 5577, Start Num: 52

Candidate Starts for LilHam_9:

(13, 5017), (18, 5044), (Start: 52 @5269 has 59 MA's), (Start: 57 @5278 has 41 MA's), (79, 5377), (91, 5434), (92, 5440), (106, 5506),

Gene: LilSmirk_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for LilSmirk_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: LittleMunchkin_8 Start: 6237, Stop: 6560, Start Num: 55

Candidate Starts for LittleMunchkin_8:

(1, 4998), (2, 5172), (3, 5382), (4, 5499), (5, 5685), (6, 5730), (8, 5898), (10, 5946), (Start: 51 @6225 has 8 MA's), (Start: 55 @6237 has 20 MA's), (63, 6255), (69, 6276), (70, 6282), (75, 6309), (86, 6360), (91, 6393), (101, 6432), (108, 6471), (113, 6495), (118, 6531),

Gene: LizLemon_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for LizLemon_11:

(25, 7342), (27, 7351), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Love_13 Start: 6772, Stop: 7080, Start Num: 52

Candidate Starts for Love_13:

(Start: 52 @6772 has 59 MA's), (Start: 57 @6781 has 41 MA's), (67, 6811), (79, 6880), (91, 6937), (92, 6943), (96, 6961), (102, 6997),

Gene: Maih_9 Start: 7729, Stop: 8079, Start Num: 55
Candidate Starts for Maih_9:
(Start: 55 @7729 has 20 MA's), (73, 7789), (88, 7876), (94, 7924), (99, 7939),

Gene: Makar_41 Start: 17820, Stop: 18146, Start Num: 56
Candidate Starts for Makar_41:
(45, 17784), (47, 17787), (Start: 56 @17820 has 6 MA's), (70, 17868), (90, 17979), (93, 18009), (112, 18099), (114, 18105),

Gene: MakoManhole_9 Start: 6416, Stop: 6754, Start Num: 51
Candidate Starts for MakoManhole_9:
(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Mariokart_7 Start: 4960, Stop: 5283, Start Num: 55
Candidate Starts for Mariokart_7:
(Start: 51 @4948 has 8 MA's), (Start: 55 @4960 has 20 MA's), (58, 4966), (60, 4972), (63, 4978), (66, 4987), (68, 4996), (69, 4999), (70, 5005), (78, 5056), (81, 5065), (95, 5137), (118, 5254),

Gene: Marley1013_10 Start: 6739, Stop: 7074, Start Num: 50
Candidate Starts for Marley1013_10:
(Start: 50 @6739 has 53 MA's), (66, 6781), (69, 6793), (72, 6808), (75, 6826), (88, 6883), (101, 6949), (102, 6970), (111, 7006), (115, 7018), (119, 7054),

Gene: Marlia_10 Start: 5944, Stop: 6279, Start Num: 50
Candidate Starts for Marlia_10:
(Start: 50 @5944 has 53 MA's), (66, 5986), (69, 5998), (72, 6013), (75, 6031), (88, 6088), (101, 6154), (102, 6175), (111, 6211), (115, 6223), (119, 6259),

Gene: MasterPo_11 Start: 7363, Stop: 7701, Start Num: 54
Candidate Starts for MasterPo_11:
(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: McCrothy_12 Start: 6647, Stop: 6946, Start Num: 57
Candidate Starts for McCrothy_12:
(Start: 44 @6608 has 2 MA's), (Start: 52 @6638 has 59 MA's), (Start: 57 @6647 has 41 MA's), (79, 6746), (91, 6803), (92, 6809), (96, 6827), (106, 6875),

Gene: McKinley_12 Start: 7140, Stop: 7439, Start Num: 57
Candidate Starts for McKinley_12:
(Start: 52 @7131 has 59 MA's), (Start: 57 @7140 has 41 MA's), (67, 7170), (79, 7239), (91, 7296), (92, 7302), (96, 7320), (106, 7368),

Gene: MelBins_12 Start: 6449, Stop: 6835, Start Num: 32
Candidate Starts for MelBins_12:
(Start: 32 @6449 has 5 MA's), (Start: 52 @6530 has 59 MA's), (62, 6551), (79, 6635), (92, 6698), (98, 6722), (106, 6764), (107, 6767), (112, 6791),

Gene: Mischief19_10 Start: 9272, Stop: 9619, Start Num: 55
Candidate Starts for Mischief19_10:

(Start: 55 @9272 has 20 MA's), (71, 9323), (76, 9359), (82, 9386), (89, 9440), (94, 9479), (107, 9536), (119, 9608),

Gene: MmasiCarm_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for MmasiCarm_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: MoontowerMania_10 Start: 6171, Stop: 6479, Start Num: 52

Candidate Starts for MoontowerMania_10:

(Start: 52 @6171 has 59 MA's), (Start: 57 @6180 has 41 MA's), (67, 6210), (79, 6279), (91, 6336), (92, 6342), (96, 6360), (102, 6396),

Gene: Mortcellus_9 Start: 6587, Stop: 6922, Start Num: 50

Candidate Starts for Mortcellus_9:

(Start: 50 @6587 has 53 MA's), (66, 6629), (69, 6641), (72, 6656), (75, 6674), (88, 6731), (101, 6797), (102, 6818), (111, 6854), (115, 6866), (119, 6902),

Gene: Morty007_10 Start: 6739, Stop: 7074, Start Num: 50

Candidate Starts for Morty007_10:

(Start: 50 @6739 has 53 MA's), (66, 6781), (69, 6793), (72, 6808), (75, 6826), (88, 6883), (101, 6949), (102, 6970), (111, 7006), (115, 7018), (119, 7054),

Gene: MossRose_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for MossRose_9:

(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (117, 6707), (118, 6725), (120, 6740),

Gene: Mulaychimus_10 Start: 5950, Stop: 6285, Start Num: 50

Candidate Starts for Mulaychimus_10:

(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160), (102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: Mutzi_11 Start: 5144, Stop: 5458, Start Num: 57

Candidate Starts for Mutzi_11:

(Start: 37 @5081 has 1 MA's), (Start: 57 @5144 has 41 MA's), (91, 5300), (92, 5306),

Gene: NHagos_7 Start: 4896, Stop: 5237, Start Num: 50

Candidate Starts for NHagos_7:

(Start: 50 @4896 has 53 MA's), (Start: 51 @4902 has 8 MA's), (60, 4926), (66, 4941), (67, 4944), (69, 4953), (76, 4998), (81, 5019), (93, 5082), (101, 5109), (118, 5208), (121, 5226),

Gene: Natkenzie_13 Start: 6625, Stop: 6942, Start Num: 52

Candidate Starts for Natkenzie_13:

(Start: 52 @6625 has 59 MA's), (67, 6667), (79, 6736), (92, 6799), (98, 6823), (106, 6865), (108, 6871),

Gene: Neos5_10 Start: 6739, Stop: 7074, Start Num: 50

Candidate Starts for Neos5_10:

(Start: 50 @6739 has 53 MA's), (66, 6781), (69, 6793), (72, 6808), (75, 6826), (88, 6883), (101, 6949), (102, 6970), (111, 7006), (115, 7018), (119, 7054),

Gene: Nordenberg_6 Start: 4315, Stop: 4623, Start Num: 52

Candidate Starts for Nordenberg_6:

(Start: 44 @4285 has 2 MA's), (Start: 52 @4315 has 59 MA's), (Start: 57 @4324 has 41 MA's), (79, 4423), (91, 4480), (92, 4486), (96, 4504), (106, 4552),

Gene: Nozo_10 Start: 6711, Stop: 7046, Start Num: 50

Candidate Starts for Nozo_10:

(Start: 50 @6711 has 53 MA's), (66, 6753), (69, 6765), (72, 6780), (75, 6798), (88, 6855), (101, 6921), (102, 6942), (111, 6978), (115, 6990), (119, 7026),

Gene: Nubi_11 Start: 5144, Stop: 5449, Start Num: 57

Candidate Starts for Nubi_11:

(Start: 37 @5081 has 1 MA's), (Start: 57 @5144 has 41 MA's), (91, 5300), (92, 5306),

Gene: Obutu_10 Start: 5950, Stop: 6285, Start Num: 50

Candidate Starts for Obutu_10:

(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160), (102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: Olivio_9 Start: 5798, Stop: 6133, Start Num: 50

Candidate Starts for Olivio_9:

(Start: 50 @5798 has 53 MA's), (66, 5840), (69, 5852), (72, 5867), (75, 5885), (88, 5942), (101, 6008), (102, 6029), (111, 6065), (115, 6077), (119, 6113),

Gene: Opia_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Opia_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: OrangeOswald_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for OrangeOswald_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Paries_12 Start: 6433, Stop: 6771, Start Num: 44

Candidate Starts for Paries_12:

(Start: 44 @6433 has 2 MA's), (Start: 52 @6463 has 59 MA's), (Start: 57 @6472 has 41 MA's), (79, 6571), (91, 6628), (92, 6634), (96, 6652), (106, 6700),

Gene: Phaedrus_9 Start: 5866, Stop: 6201, Start Num: 50

Candidate Starts for Phaedrus_9:

(Start: 50 @5866 has 53 MA's), (66, 5908), (69, 5920), (72, 5935), (75, 5953), (88, 6010), (101, 6076), (102, 6097), (111, 6133), (115, 6145), (119, 6181),

Gene: Phantasmagoria_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Phantasmagoria_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Phauci_5 Start: 3202, Stop: 3588, Start Num: 32

Candidate Starts for Phauci_5:

(Start: 32 @3202 has 5 MA's), (Start: 52 @3283 has 59 MA's), (62, 3304), (79, 3388), (92, 3451), (98, 3475), (106, 3517), (107, 3520), (112, 3544),

Gene: Phayeta_10 Start: 5825, Stop: 6160, Start Num: 50

Candidate Starts for Phayeta_10:

(Start: 50 @5825 has 53 MA's), (66, 5867), (69, 5879), (72, 5894), (75, 5912), (88, 5969), (101, 6035), (102, 6056), (111, 6092), (115, 6104), (119, 6140),

Gene: Philly_9 Start: 5839, Stop: 6174, Start Num: 50

Candidate Starts for Philly_9:

(Start: 50 @5839 has 53 MA's), (66, 5881), (69, 5893), (72, 5908), (75, 5926), (88, 5983), (101, 6049), (102, 6070), (111, 6106), (115, 6118), (119, 6154),

Gene: Phinally_12 Start: 6670, Stop: 7056, Start Num: 32

Candidate Starts for Phinally_12:

(12, 6475), (15, 6505), (Start: 32 @6670 has 5 MA's), (Start: 52 @6751 has 59 MA's), (62, 6772), (79, 6856), (92, 6919), (106, 6985), (107, 6988), (112, 7012),

Gene: Phlop_11 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for Phlop_11:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Phlyer_10 Start: 6706, Stop: 7041, Start Num: 50

Candidate Starts for Phlyer_10:

(Start: 50 @6706 has 53 MA's), (66, 6748), (69, 6760), (72, 6775), (75, 6793), (88, 6850), (101, 6916), (102, 6937), (111, 6973), (115, 6985), (119, 7021),

Gene: PinkCoffee_11 Start: 5281, Stop: 5595, Start Num: 57

Candidate Starts for PinkCoffee_11:

(Start: 37 @5218 has 1 MA's), (Start: 57 @5281 has 41 MA's), (91, 5437), (92, 5443),

Gene: Pipefish_10 Start: 6844, Stop: 7179, Start Num: 50

Candidate Starts for Pipefish_10:

(Start: 50 @6844 has 53 MA's), (66, 6886), (69, 6898), (72, 6913), (75, 6931), (88, 6988), (101, 7054), (102, 7075), (111, 7111), (115, 7123), (119, 7159),

Gene: Portcullis_11 Start: 5204, Stop: 5518, Start Num: 57

Candidate Starts for Portcullis_11:

(Start: 57 @5204 has 41 MA's), (91, 5360), (92, 5366),

Gene: PrinceCharming_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for PrinceCharming_11:

(25, 7342), (27, 7351), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: PullumCavea_11 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for PullumCavea_11:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Pumpkiney_14 Start: 5859, Stop: 6176, Start Num: 52

Candidate Starts for Pumpkiney_14:

(Start: 52 @5859 has 59 MA's), (79, 5970), (92, 6033), (98, 6057), (106, 6099),

Gene: Purplicious_38 Start: 17102, Stop: 17428, Start Num: 56
Candidate Starts for Purplicious_38:
(Start: 56 @17102 has 6 MA's), (65, 17129), (70, 17150), (90, 17261), (100, 17315), (114, 17387),
(116, 17396),

Gene: Qyrzula_11 Start: 7453, Stop: 7791, Start Num: 54
Candidate Starts for Qyrzula_11:
(25, 7315), (27, 7324), (33, 7372), (Start: 54 @7453 has 37 MA's), (59, 7468), (70, 7507), (75, 7534),
(77, 7552), (79, 7561), (83, 7570), (86, 7585), (88, 7591), (108, 7696), (110, 7708), (119, 7762),

Gene: RagingRooster_10 Start: 5950, Stop: 6285, Start Num: 50
Candidate Starts for RagingRooster_10:
(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160),
(102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: RainyPolka_9 Start: 7682, Stop: 8032, Start Num: 55
Candidate Starts for RainyPolka_9:
(Start: 55 @7682 has 20 MA's), (73, 7742), (80, 7787), (94, 7877), (99, 7892),

Gene: Rhinoforte_11 Start: 7480, Stop: 7818, Start Num: 54
Candidate Starts for Rhinoforte_11:
(25, 7342), (27, 7351), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561),
(77, 7579), (79, 7588), (81, 7594), (83, 7597), (86, 7612), (87, 7615), (88, 7618), (108, 7723), (110,
7735), (119, 7789),

Gene: Ribeye_12 Start: 6157, Stop: 6456, Start Num: 57
Candidate Starts for Ribeye_12:
(13, 5896), (18, 5923), (Start: 52 @6148 has 59 MA's), (Start: 57 @6157 has 41 MA's), (79, 6256), (91,
6313), (92, 6319), (106, 6385),

Gene: Rita1961_10 Start: 5950, Stop: 6285, Start Num: 50
Candidate Starts for Rita1961_10:
(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160),
(102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: RiverRaider_12 Start: 5677, Stop: 6012, Start Num: 46
Candidate Starts for RiverRaider_12:
(36, 5644), (Start: 46 @5677 has 1 MA's), (48, 5683), (Start: 52 @5704 has 59 MA's), (63, 5731), (79,
5812), (91, 5869), (92, 5875), (93, 5881), (106, 5941), (107, 5944),

Gene: RoadKill_10 Start: 4904, Stop: 5242, Start Num: 52
Candidate Starts for RoadKill_10:
(42, 4868), (Start: 52 @4904 has 59 MA's), (62, 4931), (64, 4937), (70, 4961), (85, 5039), (92, 5105),
(106, 5171), (112, 5198),

Gene: Rofo_11 Start: 6703, Stop: 7011, Start Num: 52
Candidate Starts for Rofo_11:
(Start: 52 @6703 has 59 MA's), (Start: 57 @6712 has 41 MA's), (79, 6811), (91, 6868), (92, 6874), (96,
6892),

Gene: RogerDodger_12 Start: 5508, Stop: 5822, Start Num: 57
Candidate Starts for RogerDodger_12:
(7, 5157), (Start: 37 @5445 has 1 MA's), (Start: 57 @5508 has 41 MA's), (91, 5664), (92, 5670),

Gene: RomaT_10 Start: 6712, Stop: 7047, Start Num: 50

Candidate Starts for RomaT_10:

(Start: 50 @6712 has 53 MA's), (66, 6754), (69, 6766), (72, 6781), (75, 6799), (88, 6856), (101, 6922), (102, 6943), (111, 6979), (115, 6991), (119, 7027),

Gene: Rosebush_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for Rosebush_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723), (110, 7735), (119, 7789),

Gene: Sabella_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Sabella_11:

(25, 7225), (27, 7234), (Start: 32 @7276 has 5 MA's), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: Salete_9 Start: 7730, Stop: 8080, Start Num: 55

Candidate Starts for Salete_9:

(Start: 55 @7730 has 20 MA's), (73, 7790), (88, 7877), (94, 7925), (99, 7940),

Gene: Salvador_11 Start: 5123, Stop: 5437, Start Num: 57

Candidate Starts for Salvador_11:

(Start: 37 @5060 has 1 MA's), (Start: 57 @5123 has 41 MA's), (91, 5279), (92, 5285),

Gene: Sampson_13 Start: 6570, Stop: 6887, Start Num: 52

Candidate Starts for Sampson_13:

(Start: 52 @6570 has 59 MA's), (67, 6612), (79, 6681), (92, 6744), (98, 6768), (106, 6810), (108, 6816),

Gene: Sanjuju_10 Start: 6661, Stop: 6969, Start Num: 52

Candidate Starts for Sanjuju_10:

(Start: 52 @6661 has 59 MA's), (Start: 57 @6670 has 41 MA's), (79, 6769), (91, 6826), (92, 6832), (96, 6850), (106, 6898),

Gene: Saronaya_11 Start: 5950, Stop: 6258, Start Num: 52

Candidate Starts for Saronaya_11:

(13, 5698), (18, 5725), (Start: 52 @5950 has 59 MA's), (Start: 57 @5959 has 41 MA's), (79, 6058), (91, 6115), (92, 6121), (106, 6187),

Gene: Savbucketdawg_11 Start: 4956, Stop: 5270, Start Num: 57

Candidate Starts for Savbucketdawg_11:

(Start: 57 @4956 has 41 MA's), (91, 5112), (92, 5118),

Gene: SchottB_10 Start: 6126, Stop: 6434, Start Num: 52

Candidate Starts for SchottB_10:

(11, 5841), (17, 5895), (19, 5907), (23, 5946), (29, 6024), (Start: 44 @6096 has 2 MA's), (Start: 52 @6126 has 59 MA's), (Start: 57 @6135 has 41 MA's), (91, 6291), (92, 6297), (106, 6363),

Gene: Scioto_13 Start: 6625, Stop: 6942, Start Num: 52

Candidate Starts for Scioto_13:

(Start: 52 @6625 has 59 MA's), (67, 6667), (79, 6736), (92, 6799), (98, 6823), (106, 6865), (108, 6871),

Gene: Sedona_12 Start: 7669, Stop: 7977, Start Num: 52

Candidate Starts for Sedona_12:

(Start: 52 @7669 has 59 MA's), (Start: 57 @7678 has 41 MA's), (67, 7708), (79, 7777), (91, 7834), (92, 7840), (96, 7858), (106, 7906),

Gene: Shatter_7 Start: 4953, Stop: 5276, Start Num: 55

Candidate Starts for Shatter_7:

(27, 4833), (Start: 51 @4941 has 8 MA's), (Start: 55 @4953 has 20 MA's), (58, 4959), (60, 4965), (61, 4968), (63, 4971), (69, 4992), (70, 4998), (75, 5025), (79, 5052), (81, 5058), (101, 5148), (118, 5247),

Gene: Shenandoah_10 Start: 5949, Stop: 6284, Start Num: 50

Candidate Starts for Shenandoah_10:

(Start: 50 @5949 has 53 MA's), (66, 5991), (69, 6003), (72, 6018), (75, 6036), (88, 6093), (101, 6159), (102, 6180), (111, 6216), (115, 6228), (119, 6264),

Gene: Shinji_11 Start: 5145, Stop: 5459, Start Num: 57

Candidate Starts for Shinji_11:

(Start: 57 @5145 has 41 MA's), (91, 5301), (92, 5307),

Gene: Shivanishola_11 Start: 6886, Stop: 7185, Start Num: 57

Candidate Starts for Shivanishola_11:

(Start: 52 @6877 has 59 MA's), (Start: 57 @6886 has 41 MA's), (67, 6916), (79, 6985), (91, 7042), (92, 7048), (96, 7066), (106, 7114),

Gene: Sisko_6 Start: 4758, Stop: 5081, Start Num: 55

Candidate Starts for Sisko_6:

(Start: 51 @4746 has 8 MA's), (Start: 55 @4758 has 20 MA's), (63, 4776), (66, 4785), (69, 4797), (70, 4803), (91, 4914), (94, 4932), (101, 4953), (118, 5052),

Gene: Sitar_12 Start: 7043, Stop: 7351, Start Num: 52

Candidate Starts for Sitar_12:

(22, 6851), (Start: 52 @7043 has 59 MA's), (Start: 57 @7052 has 41 MA's), (79, 7151), (91, 7208), (92, 7214), (96, 7232), (106, 7280),

Gene: SlippinJimmy_10 Start: 6711, Stop: 7046, Start Num: 50

Candidate Starts for SlippinJimmy_10:

(Start: 50 @6711 has 53 MA's), (66, 6753), (69, 6765), (72, 6780), (75, 6798), (88, 6855), (101, 6921), (102, 6942), (111, 6978), (115, 6990), (119, 7026),

Gene: SmokingBunny_11 Start: 5123, Stop: 5437, Start Num: 57

Candidate Starts for SmokingBunny_11:

(Start: 37 @5060 has 1 MA's), (Start: 57 @5123 has 41 MA's), (91, 5279), (92, 5285),

Gene: Soos_36 Start: 17090, Stop: 17416, Start Num: 56

Candidate Starts for Soos_36:

(Start: 56 @17090 has 6 MA's), (65, 17117), (70, 17138), (90, 17249), (100, 17303), (114, 17375), (116, 17384),

Gene: Sour_10 Start: 6612, Stop: 6938, Start Num: 55

Candidate Starts for Sour_10:

(Start: 51 @6600 has 8 MA's), (Start: 55 @6612 has 20 MA's), (60, 6624), (63, 6630), (68, 6648), (69, 6651), (70, 6657), (71, 6660), (75, 6684), (79, 6711), (81, 6717), (93, 6780), (105, 6837), (118, 6906),

Gene: Stillion_40 Start: 17675, Stop: 18001, Start Num: 56
Candidate Starts for Stillion_40:
(Start: 56 @17675 has 6 MA's), (65, 17702), (70, 17723), (90, 17834), (100, 17888), (114, 17960),
(116, 17969),

Gene: Sting_39 Start: 17529, Stop: 17855, Start Num: 56
Candidate Starts for Sting_39:
(Start: 56 @17529 has 6 MA's), (65, 17556), (70, 17577), (90, 17688), (100, 17742), (114, 17814),
(116, 17823),

Gene: StorminNorm_11 Start: 5953, Stop: 6261, Start Num: 52
Candidate Starts for StorminNorm_11:
(13, 5701), (18, 5728), (Start: 52 @5953 has 59 MA's), (Start: 57 @5962 has 41 MA's), (79, 6061), (91,
6118), (92, 6124), (106, 6190),

Gene: Stultus_11 Start: 6867, Stop: 7175, Start Num: 52
Candidate Starts for Stultus_11:
(Start: 52 @6867 has 59 MA's), (Start: 57 @6876 has 41 MA's), (67, 6906), (79, 6975), (91, 7032), (92,
7038), (96, 7056), (106, 7104),

Gene: SwainyDoc_10 Start: 5947, Stop: 6282, Start Num: 50
Candidate Starts for SwainyDoc_10:
(Start: 50 @5947 has 53 MA's), (66, 5989), (69, 6001), (72, 6016), (75, 6034), (88, 6091), (101, 6157),
(111, 6214), (115, 6226), (119, 6262),

Gene: SynergyX_10 Start: 5950, Stop: 6285, Start Num: 50
Candidate Starts for SynergyX_10:
(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160),
(102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: TA17A_11 Start: 7363, Stop: 7701, Start Num: 54
Candidate Starts for TA17A_11:
(25, 7225), (27, 7234), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444),
(77, 7462), (79, 7471), (81, 7477), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119,
7672),

Gene: TP1604_9 Start: 7730, Stop: 8080, Start Num: 55
Candidate Starts for TP1604_9:
(Start: 55 @7730 has 20 MA's), (73, 7790), (88, 7877), (94, 7925), (99, 7940),

Gene: TPA2_16 Start: 7599, Stop: 7940, Start Num: 50
Candidate Starts for TPA2_16:
(34, 7536), (Start: 50 @7599 has 53 MA's), (66, 7644), (68, 7653), (69, 7656), (71, 7665), (75, 7689),
(79, 7716), (92, 7782), (101, 7815), (113, 7878), (118, 7914), (120, 7929), (122, 7935),

Gene: Tangent_9 Start: 5665, Stop: 6003, Start Num: 44
Candidate Starts for Tangent_9:
(Start: 44 @5665 has 2 MA's), (Start: 52 @5695 has 59 MA's), (Start: 57 @5704 has 41 MA's), (79,
5803), (91, 5860), (92, 5866), (96, 5884), (106, 5932),

Gene: Tangerine_11 Start: 5962, Stop: 6270, Start Num: 52
Candidate Starts for Tangerine_11:

(13, 5710), (18, 5737), (Start: 52 @5962 has 59 MA's), (Start: 57 @5971 has 41 MA's), (79, 6070), (91, 6127), (92, 6133), (106, 6199),

Gene: Tardus_13 Start: 5665, Stop: 5982, Start Num: 52

Candidate Starts for Tardus_13:

(Start: 52 @5665 has 59 MA's), (67, 5707), (79, 5776), (92, 5839), (98, 5863), (106, 5905),

Gene: Thing3_12 Start: 6782, Stop: 7090, Start Num: 52

Candidate Starts for Thing3_12:

(Start: 44 @6752 has 2 MA's), (Start: 52 @6782 has 59 MA's), (Start: 57 @6791 has 41 MA's), (79, 6890), (91, 6947), (92, 6953), (96, 6971), (106, 7019),

Gene: Tiamoceli_13 Start: 6287, Stop: 6625, Start Num: 52

Candidate Starts for Tiamoceli_13:

(42, 6251), (Start: 52 @6287 has 59 MA's), (62, 6314), (64, 6320), (70, 6344), (85, 6422), (92, 6488), (106, 6554), (112, 6581),

Gene: TillyBobJoe_11 Start: 4959, Stop: 5273, Start Num: 57

Candidate Starts for TillyBobJoe_11:

(Start: 57 @4959 has 41 MA's), (91, 5115), (92, 5121),

Gene: Tinciduntolum_12 Start: 7479, Stop: 7817, Start Num: 54

Candidate Starts for Tinciduntolum_12:

(25, 7341), (27, 7350), (Start: 32 @7392 has 5 MA's), (33, 7398), (Start: 54 @7479 has 37 MA's), (59, 7494), (70, 7533), (75, 7560), (77, 7578), (79, 7587), (83, 7596), (86, 7611), (88, 7617), (108, 7722), (110, 7734), (119, 7788),

Gene: TinyTerror_10 Start: 5952, Stop: 6287, Start Num: 50

Candidate Starts for TinyTerror_10:

(Start: 50 @5952 has 53 MA's), (66, 5994), (69, 6006), (72, 6021), (75, 6039), (88, 6096), (101, 6162), (102, 6183), (111, 6219), (115, 6231), (119, 6267),

Gene: Togo_11 Start: 5123, Stop: 5437, Start Num: 57

Candidate Starts for Togo_11:

(Start: 37 @5060 has 1 MA's), (Start: 57 @5123 has 41 MA's), (91, 5279), (92, 5285),

Gene: Tonitrus_25 Start: 14059, Stop: 14370, Start Num: 56

Candidate Starts for Tonitrus_25:

(Start: 56 @14059 has 6 MA's), (80, 14158),

Gene: TraderJ_9 Start: 6413, Stop: 6751, Start Num: 51

Candidate Starts for TraderJ_9:

(26, 6290), (28, 6308), (31, 6335), (35, 6356), (38, 6368), (43, 6389), (Start: 51 @6413 has 8 MA's), (58, 6431), (66, 6452), (69, 6464), (70, 6470), (75, 6497), (93, 6596), (101, 6623), (108, 6662), (118, 6722), (120, 6737),

Gene: Tres_11 Start: 7363, Stop: 7701, Start Num: 54

Candidate Starts for Tres_11:

(25, 7225), (27, 7234), (33, 7282), (Start: 54 @7363 has 37 MA's), (59, 7378), (70, 7417), (75, 7444), (77, 7462), (79, 7471), (83, 7480), (86, 7495), (88, 7501), (108, 7606), (110, 7618), (119, 7672),

Gene: TurkishDelight_10 Start: 6065, Stop: 6391, Start Num: 54

Candidate Starts for TurkishDelight_10:

(Start: 50 @6050 has 53 MA's), (Start: 54 @6065 has 37 MA's), (104, 6305), (109, 6317),

Gene: Twister6_11 Start: 5055, Stop: 5369, Start Num: 57

Candidate Starts for Twister6_11:

(Start: 37 @4992 has 1 MA's), (Start: 57 @5055 has 41 MA's), (91, 5211), (92, 5217),

Gene: Twonlo_10 Start: 4904, Stop: 5242, Start Num: 52

Candidate Starts for Twonlo_10:

(42, 4868), (Start: 52 @4904 has 59 MA's), (62, 4931), (64, 4937), (70, 4961), (85, 5039), (92, 5105), (106, 5171), (112, 5198),

Gene: Tycho_11 Start: 5971, Stop: 6270, Start Num: 57

Candidate Starts for Tycho_11:

(13, 5710), (18, 5737), (Start: 52 @5962 has 59 MA's), (Start: 57 @5971 has 41 MA's), (79, 6070), (91, 6127), (92, 6133), (106, 6199),

Gene: Tydolla_10 Start: 6711, Stop: 7046, Start Num: 50

Candidate Starts for Tydolla_10:

(Start: 50 @6711 has 53 MA's), (66, 6753), (69, 6765), (72, 6780), (75, 6798), (88, 6855), (101, 6921), (102, 6942), (111, 6978), (115, 6990), (119, 7026),

Gene: Valary_12 Start: 5508, Stop: 5822, Start Num: 57

Candidate Starts for Valary_12:

(7, 5157), (Start: 37 @5445 has 1 MA's), (Start: 57 @5508 has 41 MA's), (91, 5664), (92, 5670),

Gene: VanDeWege_12 Start: 5436, Stop: 5750, Start Num: 57

Candidate Starts for VanDeWege_12:

(Start: 37 @5373 has 1 MA's), (Start: 57 @5436 has 41 MA's), (91, 5592), (92, 5598),

Gene: Verity_13 Start: 6898, Stop: 7215, Start Num: 52

Candidate Starts for Verity_13:

(Start: 52 @6898 has 59 MA's), (63, 6928), (79, 7009), (92, 7072), (96, 7090), (97, 7093), (98, 7096), (106, 7138),

Gene: ViaConlectus_13 Start: 6625, Stop: 6942, Start Num: 52

Candidate Starts for ViaConlectus_13:

(Start: 52 @6625 has 59 MA's), (67, 6667), (79, 6736), (92, 6799), (98, 6823), (106, 6865), (108, 6871),

Gene: Vic9_00011 Start: 7806, Stop: 8144, Start Num: 54

Candidate Starts for Vic9_00011:

(25, 7668), (27, 7677), (Start: 32 @7719 has 5 MA's), (33, 7725), (Start: 54 @7806 has 37 MA's), (59, 7821), (70, 7860), (75, 7887), (77, 7905), (79, 7914), (81, 7920), (83, 7923), (86, 7938), (87, 7941), (88, 7944), (108, 8049), (110, 8061), (119, 8115),

Gene: Vivi2_10 Start: 5856, Stop: 6164, Start Num: 52

Candidate Starts for Vivi2_10:

(22, 5664), (Start: 52 @5856 has 59 MA's), (Start: 57 @5865 has 41 MA's), (79, 5964), (91, 6021), (92, 6027), (96, 6045), (106, 6093),

Gene: West99_11 Start: 7480, Stop: 7818, Start Num: 54

Candidate Starts for West99_11:

(25, 7342), (27, 7351), (Start: 32 @7393 has 5 MA's), (33, 7399), (Start: 54 @7480 has 37 MA's), (59, 7495), (70, 7534), (75, 7561), (77, 7579), (79, 7588), (83, 7597), (86, 7612), (88, 7618), (108, 7723),

(110, 7735), (119, 7789),

Gene: Wizard_11 Start: 5251, Stop: 5565, Start Num: 57

Candidate Starts for Wizard_11:

(Start: 37 @5188 has 1 MA's), (Start: 57 @5251 has 41 MA's), (91, 5407), (92, 5413),

Gene: Wooper_9 Start: 6416, Stop: 6754, Start Num: 51

Candidate Starts for Wooper_9:

(26, 6293), (28, 6311), (31, 6338), (35, 6359), (38, 6371), (43, 6392), (Start: 51 @6416 has 8 MA's), (58, 6434), (66, 6455), (69, 6467), (70, 6473), (75, 6500), (93, 6599), (101, 6626), (108, 6665), (118, 6725), (120, 6740),

Gene: Xkcd426_10 Start: 8759, Stop: 9115, Start Num: 55

Candidate Starts for Xkcd426_10:

(20, 8549), (21, 8552), (Start: 44 @8729 has 2 MA's), (Start: 55 @8759 has 20 MA's), (73, 8819), (74, 8822), (82, 8873), (90, 8918), (94, 8954),

Gene: YDN12_10 Start: 7676, Stop: 8026, Start Num: 55

Candidate Starts for YDN12_10:

(Start: 55 @7676 has 20 MA's), (73, 7736), (80, 7781), (84, 7793), (88, 7823), (94, 7871), (99, 7886), (112, 7955),

Gene: Yago84_6 Start: 4755, Stop: 5090, Start Num: 51

Candidate Starts for Yago84_6:

(Start: 51 @4755 has 8 MA's), (Start: 55 @4767 has 20 MA's), (63, 4785), (66, 4794), (69, 4806), (70, 4812), (91, 4923), (94, 4941), (101, 4962), (118, 5061),

Gene: Yahalom_10 Start: 5950, Stop: 6285, Start Num: 50

Candidate Starts for Yahalom_10:

(Start: 50 @5950 has 53 MA's), (66, 5992), (69, 6004), (72, 6019), (75, 6037), (88, 6094), (101, 6160), (102, 6181), (111, 6217), (115, 6229), (119, 6265),

Gene: Yeshua_9 Start: 6420, Stop: 6758, Start Num: 51

Candidate Starts for Yeshua_9:

(26, 6297), (28, 6315), (31, 6342), (35, 6363), (38, 6375), (43, 6396), (Start: 51 @6420 has 8 MA's), (66, 6459), (69, 6471), (70, 6477), (75, 6504), (91, 6591), (93, 6603), (94, 6609), (101, 6630), (108, 6669), (117, 6711), (118, 6729), (120, 6744),

Gene: Yinz_10 Start: 5976, Stop: 6311, Start Num: 50

Candidate Starts for Yinz_10:

(Start: 50 @5976 has 53 MA's), (66, 6018), (69, 6030), (72, 6045), (75, 6063), (88, 6120), (101, 6186), (102, 6207), (111, 6243), (115, 6255), (119, 6291),

Gene: YorkOnyx_11 Start: 5911, Stop: 6219, Start Num: 52

Candidate Starts for YorkOnyx_11:

(13, 5659), (Start: 52 @5911 has 59 MA's), (Start: 57 @5920 has 41 MA's), (79, 6019), (91, 6076), (92, 6082), (106, 6148),

Gene: YungMoney_11 Start: 6205, Stop: 6510, Start Num: 57

Candidate Starts for YungMoney_11:

(7, 5854), (Start: 37 @6142 has 1 MA's), (Start: 57 @6205 has 41 MA's), (91, 6361), (92, 6367),

Gene: Zipp_13 Start: 7043, Stop: 7360, Start Num: 52

Candidate Starts for Zipp_13:

(Start: 52 @7043 has 59 MA's), (63, 7073), (79, 7154), (92, 7217), (96, 7235), (97, 7238), (98, 7241), (106, 7283),

Gene: Zitch_14 Start: 6362, Stop: 6679, Start Num: 52

Candidate Starts for Zitch_14:

(Start: 52 @6362 has 59 MA's), (67, 6404), (79, 6473), (92, 6536), (98, 6560), (106, 6602),

Gene: phiAsp2_3 Start: 663, Stop: 1013, Start Num: 41

Candidate Starts for phiAsp2_3:

(41, 663), (Start: 51 @693 has 8 MA's), (53, 702), (64, 732), (68, 747), (70, 756), (74, 771), (79, 810), (92, 888), (103, 945), (115, 990),