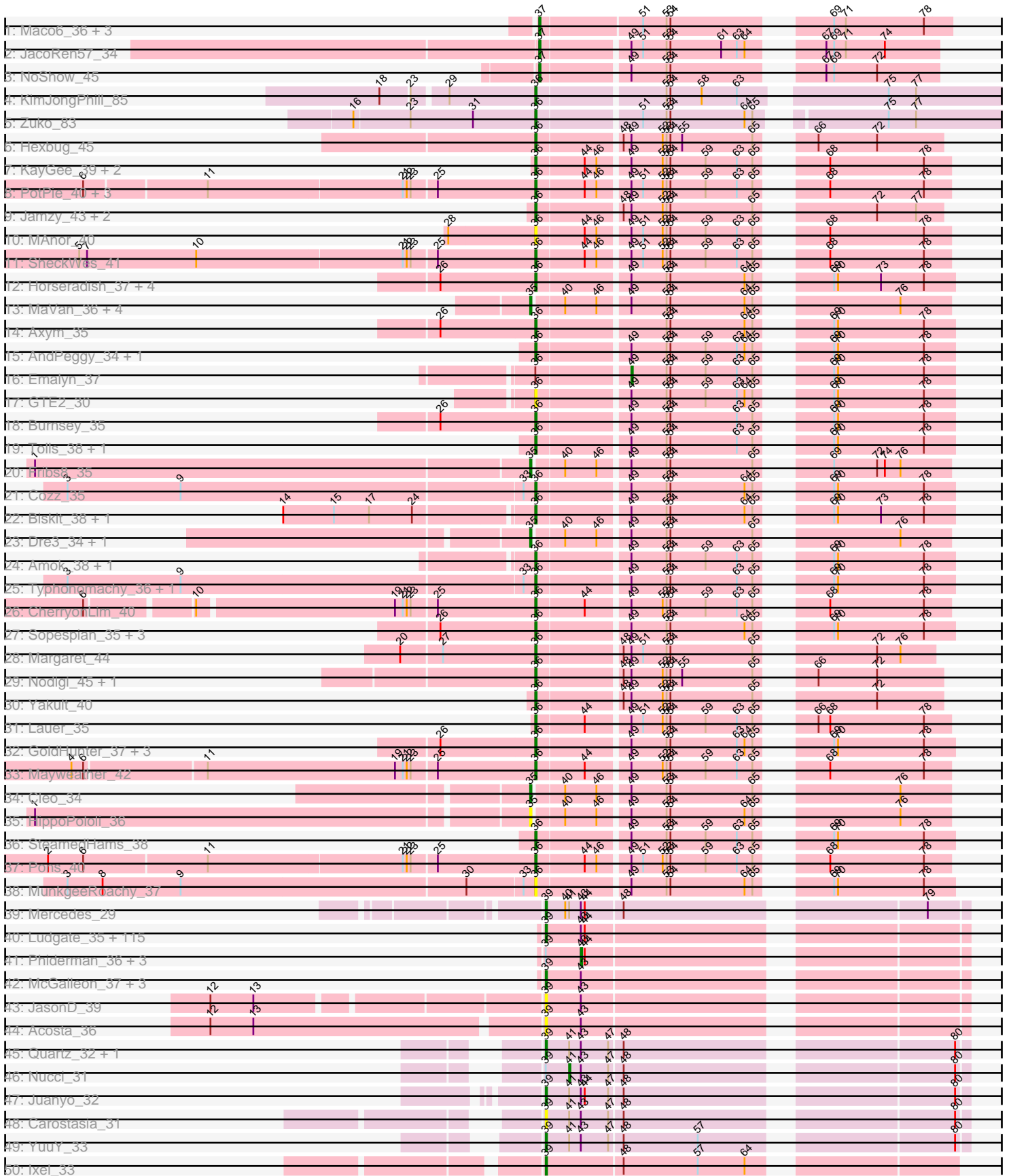


Pham 163312



Pham 163312



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 163312 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163312 has 260 members, 42 are drafts.

Phages represented in each track:

- Track 1 : Maco6_36, FF47_37, 8UZL_38, Muddy_38
- Track 2 : JacoRen57_34
- Track 3 : NoShow_45
- Track 4 : KimJongPhill_85
- Track 5 : Zuko_83
- Track 6 : Hexbug_45
- Track 7 : KayGee_39, Elinal_42, Vine_41
- Track 8 : PotPie_40, BigChungus_38, SummitAcademy_38, Feastonyeet_38
- Track 9 : Jamzy_43, GiKK_43, Button_41
- Track 10 : MAnor_40
- Track 11 : SheckWes_41
- Track 12 : Horseradish_37, Buttrmilkdreams_37, Yummy_37, Troje_37, MScarn_38
- Track 13 : MaVan_36, Azira_36, Nibbles_35, Zareef_38, Survivors_36
- Track 14 : Axym_35
- Track 15 : AndPeggy_34, BillDoor_37
- Track 16 : Emalyn_37
- Track 17 : GTE2_30
- Track 18 : Burnsey_35
- Track 19 : Tolls_38, Yarn_34
- Track 20 : Fribs8_35
- Track 21 : Cozz_35
- Track 22 : Biskit_38, SketchMex_36
- Track 23 : Dre3_34, Gibbous_34
- Track 24 : Amok_38, AikoCarson_38
- Track 25 : Typhonomachy_36, Nina_36
- Track 26 : CherryonLim_40
- Track 27 : Sopespian_35, RedBaron_38, SweatNTears_37, PsychoKiller_35
- Track 28 : Margaret_44
- Track 29 : Nodigi_45, Orla_45
- Track 30 : Yakult_40
- Track 31 : Lauer_35
- Track 32 : GoldHunter_37, Elliott_36, Agatha_35, Quasar_36
- Track 33 : Mayweather_42
- Track 34 : Cleo_34
- Track 35 : HippoPololi_36
- Track 36 : SteamedHams_38
- Track 37 : Pons_40

- Track 38 : MunkgeeRoachy_37
- Track 39 : Mercedes_29
- Track 40 : Ludgate_35, SonOfLevi_34, ManRay_34, Asta_36, Strathdee_35, Dothraki_35, Nattles_34, Thorongil_35, TeddyBear_34, Balsa_34, BigRedClifford_35, Velene_35, Etta_34, Shee_35, Erla_34, Christoph_34, Duocatuli_34, MrWorldwide_35, Raptor_35, Oxtober96_35, Phireproof_35, KannH_34, Espinosa_34, Hamlet_34, Blage_35, Peppino_34, MillyPhilly_35, HankSprout_36, StiryfryIV_35, Jerbirus_35, Kurt1_35, Knox_35, Robinson_35, Bandik_35, Raccoon_34, Chamuel_34, Redfield_34, Alyxandracam_35, Antoinette_35, AranulaLuti_34, Janus167_34, TinSulphur_35, AxiPup_35, Clancy_34, Stanktossa_35, JeriBeth_35, MaeLinda_35, Etna_34, Phriends_35, KingJulien_34, Aubergine_34, Superfresh_35, Pherferi_35, Agente005_35, Byron23_35, Bonino_34, Gargoyle_35, Rog141_35, BonesMcCoy_35, Garey24_34, Rapheph_35, HanSolo_34, SoilGremlin_35, Gubbabump_34, Calix_34, Nagem_35, ShaiHulud_35, BeautPeep30_35, Gershwin_34, Winzigespinne_34, PuppyEggo_35, TatarkaPM_35, Benjalauran_35, Peep_35, Tenda_34, Riyhil_35, Baines_34, Ilzat_34, Martin_36, Inventa_35, Convict_35, BeeBee8_35, AlexAdler_35, Papafritta_34, Kale_34, HungryHenry_35, OldNelly_35, Chako_34, Pocket_34, Dave_35, Sedgewig_34, Stormbreaker8_34, WildNOut_35, SJay_35, Den3_35, Gelo_34, PhredFlintston_35, Thompsone_35, Ioannes_35, GardenB_34, Leafus_34, StingRay_34, Figueroism_35, MonChoix_33, FarmerDoug_34, Teagan_35, Endor_35, Oats_34, ParleG_35, Delphidian_36, JasperRussell_34, Lovelyunicorn_35, Klimt_34, Schnapsidee_34, Zada_35, Renzie_35
- Track 41 : Phiderman_36, Vispistious_35, NickSell_36, Greys_35
- Track 42 : McGalleon_37, Jenos_38, Morigan_34, Schubert_32
- Track 43 : JasonD_39
- Track 44 : Acosta_36
- Track 45 : Quartz_32, Mandalorian_31
- Track 46 : Nucci_31
- Track 47 : Juanyo_32
- Track 48 : Carostasia_31
- Track 49 : YuuY_33
- Track 50 : Ixel_33
- Track 51 : Schimmels22_33
- Track 52 : Tinyman4_33, HerculesXL_33
- Track 53 : WestPM_31
- Track 54 : ColaCorta_33, Andromedas_33
- Track 55 : ChikPic_33, Glamour_32, Zenitsu_33, Shamu_33
- Track 56 : Sansa_32
- Track 57 : Eleri_33
- Track 58 : Finny_33
- Track 59 : MCubed_33
- Track 60 : Saratos_33
- Track 61 : Casey_31, Pikmin_31, Pajaza_31
- Track 62 : Sinatra_32, Lucky3_32, PrincePhergus_32, Koji_32, BouleyBill_33, Luna18_34, WilliamStrong_33, Kauala_32, Golden_32, Chepli_34
- Track 63 : Guetzie_32, SirVictor_32
- Track 64 : Bustleton_32, Pherbot_32
- Track 65 : Zepp_33, QuadZero_32, LilTerminator_33, Fulton_33, Zayuliv_32, Hasitha_32
- Track 66 : Librie_32, CaptainRex_32, Greenlvy_33
- Track 67 : Neferthena_32
- Track 68 : Alakazam_33

- Track 69 : Clock_32
- Track 70 : Nebulous_32
- Track 71 : KatChan_34
- Track 72 : Jemerald_35, Juicer_35
- Track 73 : GaeCeo_35, ChickenKing_34
- Track 74 : Cheeto1_35
- Track 75 : Rasputia_138
- Track 76 : Hendrix_143
- Track 77 : Dewdrop_141, Leaf_141
- Track 78 : Huwbert_83
- Track 79 : Triscuit_82

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

The start number called the most often in the published annotations is 39, it was called in 152 of the 218 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_36, Agente005_35, Alakazam_33, AlexAdler_35, Alyxandracam_35, Andromedas_33, Antoinette_35, AranulaLuti_34, Asta_36, Aubergine_34, AxiPup_35, Baines_34, Balsa_34, Bandik_35, BeautPeep30_35, BeeBee8_35, Benjalauren_35, BigRedClifford_35, Blage_35, BonesMcCoy_35, Bonino_34, BouleyBill_33, Bustleton_32, Byron23_35, Calix_34, CaptainRex_32, Carostasia_31, Chako_34, Chamuel_34, Cheeto1_35, Chepli_34, ChickenKing_34, ChikPic_33, Christoph_34, Clancy_34, ColaCorta_33, Convict_35, Dave_35, Delphidian_36, Den3_35, Dothraki_35, Duocatuli_34, Eleri_33, Endor_35, Erla_34, Espinosa_34, Etna_34, Etta_34, FarmerDoug_34, Figueroism_35, Finny_33, Fulton_33, GaeCeo_35, GardenB_34, Garey24_34, Gargoyle_35, Gelo_34, Gershwin_34, Glamour_32, Golden_32, GreenIvy_33, Gubbabump_34, Guetzie_32, Hamlet_34, HanSolo_34, HankSprout_36, Hasitha_32, HerculesXL_33, HungryHenry_35, Ilzat_34, Inventa_35, Ioannes_35, Ixel_33, Janus167_34, JasonD_39, JasperRussell_34, Jemerald_35, Jenos_38, Jerbirus_35, JeriBeth_35, Juanyo_32, Juicer_35, Kale_34, KannH_34, Kauala_32, KingJulien_34, Klimt_34, Knox_35, Koji_32, Kurt1_35, Leafus_34, Librie_32, LilTerminator_33, Lovelyunicorn_35, Lucky3_32, Ludgate_35, Luna18_34, MCubed_33, MaeLinda_35, ManRay_34, Mandalorian_31, Martin_36, McGalleon_37, Mercedes_29, MillyPhilly_35, MonChoix_33, Morrigan_34, MrWorldwide_35, Nagem_35, Nattles_34, Nebulous_32, Neferthena_32, Oats_34, OldNelly_35, Oxtober96_35, Papafritta_34, ParleG_35, Peep_35, Peppino_34, Pherbot_32, Pherferi_35, Phireproof_35, PhredFlintston_35, Phriends_35, Pocket_34, PrincePhergus_32, PuppyEggo_35, QuadZero_32, Quartz_32, Raccoon_34, Rapheph_35, Raptor_35, Redfield_34, Renzie_35, Riyhil_35, Robinson_35, Rog141_35, SJay_35, Sansa_32, Saratos_33, Schimmels22_33, Schnapsidee_34, Schubert_32, Sedgewig_34, ShaiHulud_35, Shamu_33, Shee_35, Sinatra_32, SirVictor_32, SoilGremlin_35, SonOfLevi_34, Stanktossa_35, StingRay_34, StirfryIV_35, Stormbreaker8_34, Strathdee_35, Superfresh_35, TatarkaPM_35, Teagan_35, TeddyBear_34, Tenda_34, Thompsone_35, Thorongil_35, TinSulphur_35, Tinyman4_33, Velene_35, WildNOut_35, WilliamStrong_33, Winzigespinne_34, YuuY_33, Zada_35, Zayuliv_32, Zenitsu_33, Zepp_33,

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

- Clock_32, Greys_35, KatChan_34, NickSell_36, Nucci_31, Phiderman_36, Vispitious_35, WestPM_31,

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

- 8UZL_38, Agatha_35, AikoCarson_38, Amok_38, AndPeggy_34, Axym_35, Azira_36, BigChungus_38, BillDoor_37, Biskit_38, Burnsey_35, Button_41, Buttrmlkdreams_37, Casey_31, CherryonLim_40, Cleo_34, Cozz_35, Dewdrop_141, Dre3_34, Elinal_42, Elliott_36, Emalyn_37, FF47_37, Feastonyeet_38, Fribs8_35, GTE2_30, GiKK_43, Gibbous_34, GoldHunter_37, Hendrix_143, Hexbug_45, HippoPololi_36, Horseradish_37, Huwburt_83, JacoRen57_34, Jamzy_43, KayGee_39, KimJongPhill_85, Lauer_35, Leaf_141, MAnor_40, MScarn_38, MaVan_36, Maco6_36, Margaret_44, Mayweather_42, Muddy_38, MunkgeeRoachy_37, Nibbles_35, Nina_36, NoShow_45, Nodigi_45, Orla_45, Pajaza_31, Pikmin_31, Pons_40, PotPie_40, PsychoKiller_35, Quasar_36, Rasputia_138, RedBaron_38, SheckWes_41, SketchMex_36, Sopespian_35, SteamedHams_38, SummitAcademy_38, Survivors_36, SweatNTears_37, Tolls_38, Triscuit_82, Troje_37, Typhonomachy_36, Vine_41, Yakult_40, Yarn_34, Yummy_37, Zareef_38, Zuko_83,

Summary by start number:

Start 32:

- Found in 1 of 260 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hendrix_143 (GC),

Start 34:

- Found in 2 of 260 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Huwburt_83 (GG), Triscuit_82 (GG),

Start 35:

- Found in 13 of 260 (5.0%) of genes in pham
- Manual Annotations of this start: 11 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azira_36 (CT), Cleo_34 (CT), Dewdrop_141 (GC), Dre3_34 (CT), Fribs8_35 (CT), Gibbous_34 (CT), HippoPololi_36 (CT), Leaf_141 (GC), MaVan_36 (CT), Nibbles_35 (CT), Rasputia_138 (GC), Survivors_36 (CT), Zareef_38 (CT),

Start 36:

- Found in 53 of 260 (20.4%) of genes in pham
- Manual Annotations of this start: 41 of 218
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Agatha_35 (CT), AikoCarson_38 (CT), Amok_38 (CT), AndPeggy_34 (CT), Axym_35 (CT), BigChungus_38 (CT), BillDoor_37 (CT), Biskit_38 (CT), Burnsey_35 (CT), Button_41 (CT), Buttrmlkdreams_37 (CT), CherryonLim_40 (CT), Cozz_35 (CT), Elinal_42 (CT), Elliott_36 (CT), Feastonyeet_38 (CT), GTE2_30 (CT), GiKK_43 (CT), GoldHunter_37 (CT), Hexbug_45 (CT), Horseradish_37 (CT), Jamzy_43 (CT), KayGee_39 (CT),

KimJongPhill_85 (BR), Lauer_35 (CT), MAnor_40 (CT), MScarn_38 (CT), Margaret_44 (CT), Mayweather_42 (CT), MunkgeeRoachy_37 (CT), Nina_36 (CT), Nodigi_45 (CT), Orla_45 (CT), Pons_40 (CT), PotPie_40 (CT), PsychoKiller_35 (CT), Quasar_36 (CT), RedBaron_38 (CT), SheckWes_41 (CT), SketchMex_36 (CT), Sopespian_35 (CT), SteamedHams_38 (CT), SummitAcademy_38 (CT), SweatNTears_37 (CT), Tolls_38 (CT), Troje_37 (CT), Typhonmarchy_36 (CT), Vine_41 (CT), Yakult_40 (CT), Yarn_34 (CT), Yummy_37 (CT), Zuko_83 (BR),

Start 37:

- Found in 6 of 260 (2.3%) of genes in pham
- Manual Annotations of this start: 4 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL_38 (AB), FF47_37 (AB), JacoRen57_34 (AB), Maco6_36 (AB), Muddy_38 (AB), NoShow_45 (AB),

Start 38:

- Found in 3 of 260 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Casey_31 (EA3), Pajaza_31 (EA3), Pikmin_31 (EA3),

Start 39:

- Found in 182 of 260 (70.0%) of genes in pham
- Manual Annotations of this start: 152 of 218
- Called 95.6% of time when present
- Phage (with cluster) where this start called: Acosta_36 (EA1), Agente005_35 (EA1), Alakazam_33 (EA5), AlexAdler_35 (EA1), Alyxandracam_35 (EA1), Andromedas_33 (EA2), Antoinette_35 (EA1), AranulaLuti_34 (EA1), Asta_36 (EA1), Aubergine_34 (EA1), AxiPup_35 (EA1), Baines_34 (EA1), Balsa_34 (EA1), Bandik_35 (EA1), BeautPeep30_35 (EA1), BeeBee8_35 (EA1), Benjalauen_35 (EA1), BigRedClifford_35 (EA1), Blage_35 (EA1), BonesMcCoy_35 (EA1), Bonino_34 (EA1), BouleyBill_33 (EA4), Bustleton_32 (EA4), Byron23_35 (EA1), Calix_34 (EA1), CaptainRex_32 (EA5), Carostasia_31 (EA10), Chako_34 (EA1), Chamuel_34 (EA1), Cheeto1_35 (EA9), Chepli_34 (EA6), ChickenKing_34 (EA9), ChikPic_33 (EA2), Christoph_34 (EA1), Clancy_34 (EA1), ColaCorta_33 (EA2), Convict_35 (EA1), Dave_35 (EA1), Delphidian_36 (EA1), Den3_35 (EA1), Dothraki_35 (EA1), Duocatuli_34 (EA1), Eleri_33 (EA2), Endor_35 (EA1), Erla_34 (EA1), Espinosa_34 (EA1), Etna_34 (EA1), Etta_34 (EA1), FarmerDoug_34 (EA1), Figueroism_35 (EA1), Finny_33 (EA2), Fulton_33 (EA5), GaeCeo_35 (EA9), GardenB_34 (EA1), Garey24_34 (EA1), Gargoyle_35 (EA1), Gelo_34 (EA1), Gershwin_34 (EA1), Glamour_32 (EA2), Golden_32 (EA4), Greenlvy_33 (EA5), Gubbabump_34 (EA1), Guetzie_32 (EA4), Hamlet_34 (EA1), HanSolo_34 (EA1), HankSprout_36 (EA1), Hasitha_32 (EA5), HerculesXL_33 (EA11), HungryHenry_35 (EA1), Ilzat_34 (EA1), Inventa_35 (EA1), Ioannes_35 (EA1), Ixel_33 (EA11), Janus167_34 (EA1), JasonD_39 (EA1), JasperRussell_34 (EA1), Jemerald_35 (EA6), Jenos_38 (EA1), Jerbirus_35 (EA1), JeriBeth_35 (EA1), Juanyo_32 (EA10), Juicer_35 (EA6), Kale_34 (EA1), KannH_34 (EA1), Kauala_32 (EA4), KingJulien_34 (EA1), Klimt_34 (EA1), Knox_35 (EA1), Koji_32 (EA4), Kurt1_35 (EA1), Leafus_34 (EA1), Librie_32 (EA5), LilTerminator_33 (EA5), Lovelyunicorn_35 (EA1), Lucky3_32 (EA4), Ludgate_35 (EA1), Luna18_34 (EA6), MCubed_33 (EA2), MaeLinda_35 (EA1), ManRay_34 (EA1), Mandalorian_31 (EA10), Martin_36 (EA1), McGalleon_37 (EA1), Mercedes_29 (EA), MillyPhilly_35 (EA1), MonChoix_33 (EA1), Morigan_34 (EA6),

MrWorldwide_35 (EA1), Nagem_35 (EA1), Nattles_34 (EA1), Nebulous_32 (EA5), Neferthema_32 (EA5), Oats_34 (EA1), OldNelly_35 (EA1), Oxtober96_35 (EA1), Papafritta_34 (EA1), ParleG_35 (EA1), Peep_35 (EA1), Peppino_34 (EA1), Pherbot_32 (EA4), Pherferi_35 (EA1), Phireproof_35 (EA1), PhredFlintston_35 (EA1), Phriends_35 (EA1), Pocket_34 (EA1), PrincePhergus_32 (EA4), PuppyEggo_35 (EA1), QuadZero_32 (EA5), Quartz_32 (EA10), Raccoon_34 (EA1), Rappheph_35 (EA1), Raptor_35 (EA1), Redfield_34 (EA1), Renzie_35 (EA1), Riyhil_35 (EA1), Robinson_35 (EA1), Rog141_35 (EA1), SJay_35 (EA1), Sansa_32 (EA2), Saratos_33 (EA2), Schimmels22_33 (EA11), Schnapsidee_34 (EA1), Schubert_32 (EA8), Sedgewig_34 (EA1), ShaiHulud_35 (EA1), Shamu_33 (EA2), Shee_35 (EA1), Sinatra_32 (EA4), SirVictor_32 (EA4), SoilGremlin_35 (EA1), SonOfLevi_34 (EA1), Stanktossa_35 (EA1), StingRay_34 (EA1), StirfryIV_35 (EA1), Stormbreaker8_34 (EA1), Strathdee_35 (EA1), Superfresh_35 (EA1), TatarkaPM_35 (EA1), Teagan_35 (EA1), TeddyBear_34 (EA1), Tenda_34 (EA1), Thompsone_35 (EA1), Thorongil_35 (EA1), TinSulphur_35 (EA1), Tinyman4_33 (EA11), Velene_35 (EA1), WildNOut_35 (EA1), WilliamStrong_33 (EA6), Winzigespinne_34 (EA1), YuuY_33 (EA10), Zada_35 (EA1), Zayuliv_32 (EA5), Zenitsu_33 (EA2), Zepp_33 (EA5),

Start 41:

- Found in 16 of 260 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Nucci_31 (EA10),

Start 43:

- Found in 177 of 260 (68.1%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Clock_32 (EA5), Greys_35 (EA1), KatChan_34 (EA6), NickSell_36 (EA1), Phiderman_36 (EA1), Vispistious_35 (EA1), WestPM_31 (EA11),

Start 49:

- Found in 64 of 260 (24.6%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 1.6% of time when present
- Phage (with cluster) where this start called: Emalyn_37 (CT),

Summary by clusters:

There are 16 clusters represented in this pham: EA9, AB, EA11, EA10, EA6, EA, GG, EA8, GC, BR, EA1, EA3, EA2, EA5, EA4, CT,

Info for manual annotations of cluster AB:

- Start number 37 was manually annotated 4 times for cluster AB.

Info for manual annotations of cluster BR:

- Start number 36 was manually annotated 2 times for cluster BR.

Info for manual annotations of cluster CT:

- Start number 35 was manually annotated 8 times for cluster CT.
- Start number 36 was manually annotated 39 times for cluster CT.

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

Info for manual annotations of cluster EA:

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

Info for manual annotations of cluster EA1:

- Start number 39 was manually annotated 103 times for cluster EA1.
- Start number 43 was manually annotated 1 time for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 39 was manually annotated 4 times for cluster EA10.
- Start number 41 was manually annotated 1 time for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 39 was manually annotated 4 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 39 was manually annotated 11 times for cluster EA2.

Info for manual annotations of cluster EA3:

- Start number 38 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 39 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA5:

- Start number 39 was manually annotated 9 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 39 was manually annotated 6 times for cluster EA6.
- Start number 43 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 39 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 39 was manually annotated 3 times for cluster EA9.

Info for manual annotations of cluster GC:

- Start number 32 was manually annotated 1 time for cluster GC.
- Start number 35 was manually annotated 3 times for cluster GC.

Info for manual annotations of cluster GG:

- Start number 34 was manually annotated 2 times for cluster GG.

Gene Information:

Gene: 8UZL_38 Start: 28660, Stop: 28376, Start Num: 37

Candidate Starts for 8UZL_38:

(Start: 37 @28660 has 4 MA's), (51, 28585), (53, 28567), (54, 28564), (69, 28465), (71, 28456), (78, 28396),

Gene: Acosta_36 Start: 24757, Stop: 24464, Start Num: 39

Candidate Starts for Acosta_36:

(12, 25003), (13, 24970), (Start: 39 @24757 has 152 MA's), (Start: 43 @24730 has 2 MA's),

Gene: Agatha_35 Start: 26614, Stop: 26327, Start Num: 36

Candidate Starts for Agatha_35:

(26, 26686), (Start: 36 @26614 has 41 MA's), (Start: 49 @26548 has 1 MA's), (53, 26521), (54, 26518), (63, 26467), (64, 26461), (65, 26455), (69, 26419), (70, 26416), (78, 26350),

Gene: Agente005_35 Start: 24581, Stop: 24288, Start Num: 39

Candidate Starts for Agente005_35:

(Start: 39 @24581 has 152 MA's), (Start: 43 @24554 has 2 MA's), (44, 24551),

Gene: AikoCarson_38 Start: 27454, Stop: 27167, Start Num: 36

Candidate Starts for AikoCarson_38:

(Start: 36 @27454 has 41 MA's), (Start: 49 @27388 has 1 MA's), (53, 27361), (54, 27358), (59, 27331), (63, 27307), (65, 27295), (69, 27259), (70, 27256), (78, 27190),

Gene: Alakazam_33 Start: 23875, Stop: 23582, Start Num: 39

Candidate Starts for Alakazam_33:

(Start: 39 @23875 has 152 MA's), (Start: 43 @23848 has 2 MA's), (44, 23845), (79, 23611),

Gene: AlexAdler_35 Start: 24357, Stop: 24064, Start Num: 39

Candidate Starts for AlexAdler_35:

(Start: 39 @24357 has 152 MA's), (Start: 43 @24330 has 2 MA's), (44, 24327),

Gene: Alyxandracam_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Alyxandracam_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Amok_38 Start: 27478, Stop: 27191, Start Num: 36

Candidate Starts for Amok_38:

(Start: 36 @27478 has 41 MA's), (Start: 49 @27412 has 1 MA's), (53, 27385), (54, 27382), (59, 27355), (63, 27331), (65, 27319), (69, 27283), (70, 27280), (78, 27214),

Gene: AndPeggy_34 Start: 26881, Stop: 26594, Start Num: 36

Candidate Starts for AndPeggy_34:

(Start: 36 @26881 has 41 MA's), (Start: 49 @26815 has 1 MA's), (53, 26788), (54, 26785), (59, 26758), (63, 26734), (64, 26728), (65, 26722), (69, 26686), (70, 26683), (78, 26617),

Gene: Andromedas_33 Start: 23980, Stop: 23693, Start Num: 39

Candidate Starts for Andromedas_33:

(Start: 39 @23980 has 152 MA's), (Start: 43 @23953 has 2 MA's), (44, 23950), (48, 23923),

Gene: Antoinette_35 Start: 24354, Stop: 24061, Start Num: 39

Candidate Starts for Antoinette_35:

(Start: 39 @24354 has 152 MA's), (Start: 43 @24327 has 2 MA's), (44, 24324),

Gene: AranulaLuti_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for AranulaLuti_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Asta_36 Start: 24064, Stop: 23771, Start Num: 39
Candidate Starts for Asta_36:
(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: Aubergine_34 Start: 24064, Stop: 23771, Start Num: 39
Candidate Starts for Aubergine_34:
(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: AxiPup_35 Start: 24366, Stop: 24073, Start Num: 39
Candidate Starts for AxiPup_35:
(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Axym_35 Start: 26592, Stop: 26305, Start Num: 36
Candidate Starts for Axym_35:
(26, 26664), (Start: 36 @26592 has 41 MA's), (53, 26499), (54, 26496), (64, 26439), (65, 26433), (69, 26397), (70, 26394), (78, 26328),

Gene: Azira_36 Start: 27274, Stop: 26990, Start Num: 35
Candidate Starts for Azira_36:
(Start: 35 @27274 has 11 MA's), (40, 27253), (46, 27229), (Start: 49 @27208 has 1 MA's), (53, 27181), (54, 27178), (64, 27121), (65, 27115), (76, 27028),

Gene: Baines_34 Start: 24051, Stop: 23758, Start Num: 39
Candidate Starts for Baines_34:
(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Balsa_34 Start: 24471, Stop: 24178, Start Num: 39
Candidate Starts for Balsa_34:
(Start: 39 @24471 has 152 MA's), (Start: 43 @24444 has 2 MA's), (44, 24441),

Gene: Bandik_35 Start: 24362, Stop: 24069, Start Num: 39
Candidate Starts for Bandik_35:
(Start: 39 @24362 has 152 MA's), (Start: 43 @24335 has 2 MA's), (44, 24332),

Gene: BeautPeep30_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for BeautPeep30_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: BeeBee8_35 Start: 24638, Stop: 24345, Start Num: 39
Candidate Starts for BeeBee8_35:
(Start: 39 @24638 has 152 MA's), (Start: 43 @24611 has 2 MA's), (44, 24608),

Gene: Benjalauren_35 Start: 24061, Stop: 23768, Start Num: 39
Candidate Starts for Benjalauren_35:
(Start: 39 @24061 has 152 MA's), (Start: 43 @24034 has 2 MA's), (44, 24031),

Gene: BigChungus_38 Start: 28576, Stop: 28292, Start Num: 36
Candidate Starts for BigChungus_38:
(6, 28912), (11, 28822), (21, 28675), (22, 28672), (23, 28669), (25, 28651), (Start: 36 @28576 has 41 MA's), (44, 28540), (46, 28531), (Start: 49 @28510 has 1 MA's), (51, 28501), (52, 28486), (53, 28483), (54, 28480), (59, 28453), (63, 28429), (65, 28417), (68, 28384), (78, 28312),

Gene: BigRedClifford_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for BigRedClifford_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: BillDoor_37 Start: 26558, Stop: 26271, Start Num: 36

Candidate Starts for BillDoor_37:

(Start: 36 @26558 has 41 MA's), (Start: 49 @26492 has 1 MA's), (53, 26465), (54, 26462), (59, 26435), (63, 26411), (64, 26405), (65, 26399), (69, 26363), (70, 26360), (78, 26294),

Gene: Biskit_38 Start: 26909, Stop: 26622, Start Num: 36

Candidate Starts for Biskit_38:

(14, 27092), (15, 27053), (17, 27026), (24, 26993), (Start: 36 @26909 has 41 MA's), (Start: 49 @26843 has 1 MA's), (53, 26816), (54, 26813), (64, 26756), (65, 26750), (69, 26714), (70, 26711), (73, 26678), (78, 26645),

Gene: Blage_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Blage_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: BonesMcCoy_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for BonesMcCoy_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Bonino_34 Start: 24040, Stop: 23747, Start Num: 39

Candidate Starts for Bonino_34:

(Start: 39 @24040 has 152 MA's), (Start: 43 @24013 has 2 MA's), (44, 24010),

Gene: BouleyBill_33 Start: 23931, Stop: 23638, Start Num: 39

Candidate Starts for BouleyBill_33:

(Start: 39 @23931 has 152 MA's), (Start: 43 @23904 has 2 MA's), (48, 23874),

Gene: Burnsey_35 Start: 26605, Stop: 26318, Start Num: 36

Candidate Starts for Burnsey_35:

(26, 26677), (Start: 36 @26605 has 41 MA's), (Start: 49 @26539 has 1 MA's), (53, 26512), (54, 26509), (63, 26458), (65, 26446), (69, 26410), (70, 26407), (78, 26341),

Gene: Bustleton_32 Start: 23931, Stop: 23638, Start Num: 39

Candidate Starts for Bustleton_32:

(Start: 39 @23931 has 152 MA's), (Start: 43 @23904 has 2 MA's), (46, 23892), (48, 23874),

Gene: Button_41 Start: 27875, Stop: 27597, Start Num: 36

Candidate Starts for Button_41:

(Start: 36 @27875 has 41 MA's), (48, 27815), (Start: 49 @27809 has 1 MA's), (52, 27785), (53, 27782), (54, 27779), (65, 27716), (72, 27647), (77, 27617),

Gene: Buttrmlkdreams_37 Start: 26891, Stop: 26604, Start Num: 36

Candidate Starts for Buttrmlkdreams_37:

(26, 26963), (Start: 36 @26891 has 41 MA's), (Start: 49 @26825 has 1 MA's), (53, 26798), (54, 26795), (64, 26738), (65, 26732), (69, 26696), (70, 26693), (73, 26660), (78, 26627),

Gene: Byron23_35 Start: 24371, Stop: 24078, Start Num: 39

Candidate Starts for Byron23_35:

(Start: 39 @24371 has 152 MA's), (Start: 43 @24344 has 2 MA's), (44, 24341),

Gene: Calix_34 Start: 24044, Stop: 23751, Start Num: 39
Candidate Starts for Calix_34:
(Start: 39 @24044 has 152 MA's), (Start: 43 @24017 has 2 MA's), (44, 24014),

Gene: CaptainRex_32 Start: 22209, Stop: 21916, Start Num: 39
Candidate Starts for CaptainRex_32:
(Start: 39 @22209 has 152 MA's), (40, 22194), (Start: 41 @22191 has 1 MA's), (Start: 43 @22182 has 2 MA's), (44, 22179), (48, 22152), (79, 21945),

Gene: Carostasia_31 Start: 23654, Stop: 23361, Start Num: 39
Candidate Starts for Carostasia_31:
(Start: 39 @23654 has 152 MA's), (Start: 41 @23636 has 1 MA's), (Start: 43 @23627 has 2 MA's), (47, 23606), (48, 23597), (80, 23369),

Gene: Casey_31 Start: 23331, Stop: 23032, Start Num: 38
Candidate Starts for Casey_31:
(Start: 38 @23331 has 3 MA's), (48, 23271), (72, 23100),

Gene: Chako_34 Start: 24051, Stop: 23758, Start Num: 39
Candidate Starts for Chako_34:
(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Chamuel_34 Start: 24046, Stop: 23753, Start Num: 39
Candidate Starts for Chamuel_34:
(Start: 39 @24046 has 152 MA's), (Start: 43 @24019 has 2 MA's), (44, 24016),

Gene: Cheeto1_35 Start: 24520, Stop: 24227, Start Num: 39
Candidate Starts for Cheeto1_35:
(Start: 39 @24520 has 152 MA's), (Start: 43 @24493 has 2 MA's), (44, 24490), (47, 24472), (70, 24322),

Gene: Chepli_34 Start: 23435, Stop: 23148, Start Num: 39
Candidate Starts for Chepli_34:
(Start: 39 @23435 has 152 MA's), (Start: 43 @23408 has 2 MA's), (48, 23378),

Gene: CherryonLim_40 Start: 29723, Stop: 29439, Start Num: 36
Candidate Starts for CherryonLim_40:
(6, 30050), (10, 29975), (19, 29828), (21, 29822), (22, 29819), (23, 29816), (25, 29798), (Start: 36 @29723 has 41 MA's), (44, 29687), (Start: 49 @29657 has 1 MA's), (52, 29633), (53, 29630), (54, 29627), (59, 29600), (63, 29576), (65, 29564), (68, 29531), (78, 29459),

Gene: ChickenKing_34 Start: 24433, Stop: 24140, Start Num: 39
Candidate Starts for ChickenKing_34:
(Start: 39 @24433 has 152 MA's), (44, 24403), (47, 24385), (70, 24235),

Gene: ChikPic_33 Start: 23996, Stop: 23709, Start Num: 39
Candidate Starts for ChikPic_33:
(Start: 39 @23996 has 152 MA's), (Start: 43 @23969 has 2 MA's), (44, 23966), (48, 23939),

Gene: Christoph_34 Start: 24062, Stop: 23769, Start Num: 39
Candidate Starts for Christoph_34:
(Start: 39 @24062 has 152 MA's), (Start: 43 @24035 has 2 MA's), (44, 24032),

Gene: Clancy_34 Start: 24096, Stop: 23803, Start Num: 39

Candidate Starts for Clancy_34:

(Start: 39 @24096 has 152 MA's), (Start: 43 @24069 has 2 MA's), (44, 24066),

Gene: Cleo_34 Start: 26822, Stop: 26538, Start Num: 35

Candidate Starts for Cleo_34:

(Start: 35 @26822 has 11 MA's), (40, 26801), (46, 26777), (Start: 49 @26756 has 1 MA's), (53, 26729), (54, 26726), (65, 26663), (76, 26576),

Gene: Clock_32 Start: 25026, Stop: 24760, Start Num: 43

Candidate Starts for Clock_32:

(Start: 39 @25053 has 152 MA's), (Start: 43 @25026 has 2 MA's), (44, 25023), (48, 24996), (79, 24789),

Gene: ColaCorta_33 Start: 23980, Stop: 23693, Start Num: 39

Candidate Starts for ColaCorta_33:

(Start: 39 @23980 has 152 MA's), (Start: 43 @23953 has 2 MA's), (44, 23950), (48, 23923),

Gene: Convict_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Convict_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Cozz_35 Start: 26594, Stop: 26307, Start Num: 36

Candidate Starts for Cozz_35:

(3, 26948), (9, 26861), (33, 26603), (Start: 36 @26594 has 41 MA's), (Start: 49 @26528 has 1 MA's), (53, 26501), (54, 26498), (64, 26441), (65, 26435), (69, 26399), (70, 26396), (78, 26330),

Gene: Dave_35 Start: 24354, Stop: 24061, Start Num: 39

Candidate Starts for Dave_35:

(Start: 39 @24354 has 152 MA's), (Start: 43 @24327 has 2 MA's), (44, 24324),

Gene: Delphidian_36 Start: 24365, Stop: 24072, Start Num: 39

Candidate Starts for Delphidian_36:

(Start: 39 @24365 has 152 MA's), (Start: 43 @24338 has 2 MA's), (44, 24335),

Gene: Den3_35 Start: 24371, Stop: 24078, Start Num: 39

Candidate Starts for Den3_35:

(Start: 39 @24371 has 152 MA's), (Start: 43 @24344 has 2 MA's), (44, 24341),

Gene: Dewdrop_141 Start: 84759, Stop: 85109, Start Num: 35

Candidate Starts for Dewdrop_141:

(Start: 35 @84759 has 11 MA's), (46, 84810), (50, 84840), (52, 84861), (54, 84867), (62, 84909), (74, 85032),

Gene: Dothraki_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Dothraki_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Dre3_34 Start: 26565, Stop: 26281, Start Num: 35

Candidate Starts for Dre3_34:

(Start: 35 @26565 has 11 MA's), (40, 26544), (46, 26520), (Start: 49 @26499 has 1 MA's), (53, 26472), (54, 26469), (65, 26406), (76, 26319),

Gene: Duocatuli_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for Duocatuli_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Eleri_33 Start: 23993, Stop: 23706, Start Num: 39

Candidate Starts for Eleri_33:

(Start: 39 @23993 has 152 MA's), (Start: 43 @23966 has 2 MA's), (44, 23963), (48, 23936),

Gene: Elinal_42 Start: 28954, Stop: 28670, Start Num: 36

Candidate Starts for Elinal_42:

(Start: 36 @28954 has 41 MA's), (44, 28918), (46, 28909), (Start: 49 @28888 has 1 MA's), (52, 28864), (53, 28861), (54, 28858), (59, 28831), (63, 28807), (65, 28795), (68, 28762), (78, 28690),

Gene: Elliott_36 Start: 26613, Stop: 26326, Start Num: 36

Candidate Starts for Elliott_36:

(26, 26685), (Start: 36 @26613 has 41 MA's), (Start: 49 @26547 has 1 MA's), (53, 26520), (54, 26517), (63, 26466), (64, 26460), (65, 26454), (69, 26418), (70, 26415), (78, 26349),

Gene: Emalyn_37 Start: 26583, Stop: 26362, Start Num: 49

Candidate Starts for Emalyn_37:

(Start: 36 @26649 has 41 MA's), (Start: 49 @26583 has 1 MA's), (53, 26556), (54, 26553), (59, 26526), (63, 26502), (65, 26490), (69, 26454), (70, 26451), (78, 26385),

Gene: Endor_35 Start: 24698, Stop: 24405, Start Num: 39

Candidate Starts for Endor_35:

(Start: 39 @24698 has 152 MA's), (Start: 43 @24671 has 2 MA's), (44, 24668),

Gene: Erla_34 Start: 24044, Stop: 23751, Start Num: 39

Candidate Starts for Erla_34:

(Start: 39 @24044 has 152 MA's), (Start: 43 @24017 has 2 MA's), (44, 24014),

Gene: Espinosa_34 Start: 24062, Stop: 23769, Start Num: 39

Candidate Starts for Espinosa_34:

(Start: 39 @24062 has 152 MA's), (Start: 43 @24035 has 2 MA's), (44, 24032),

Gene: Etna_34 Start: 24473, Stop: 24180, Start Num: 39

Candidate Starts for Etna_34:

(Start: 39 @24473 has 152 MA's), (Start: 43 @24446 has 2 MA's), (44, 24443),

Gene: Etta_34 Start: 24048, Stop: 23755, Start Num: 39

Candidate Starts for Etta_34:

(Start: 39 @24048 has 152 MA's), (Start: 43 @24021 has 2 MA's), (44, 24018),

Gene: FF47_37 Start: 28571, Stop: 28287, Start Num: 37

Candidate Starts for FF47_37:

(Start: 37 @28571 has 4 MA's), (51, 28496), (53, 28478), (54, 28475), (69, 28376), (71, 28367), (78, 28307),

Gene: FarmerDoug_34 Start: 24339, Stop: 24046, Start Num: 39

Candidate Starts for FarmerDoug_34:

(Start: 39 @24339 has 152 MA's), (Start: 43 @24312 has 2 MA's), (44, 24309),

Gene: Feastonyeet_38 Start: 28576, Stop: 28292, Start Num: 36

Candidate Starts for Feastonyeet_38:

(6, 28912), (11, 28822), (21, 28675), (22, 28672), (23, 28669), (25, 28651), (Start: 36 @28576 has 41 MA's), (44, 28540), (46, 28531), (Start: 49 @28510 has 1 MA's), (51, 28501), (52, 28486), (53, 28483), (54, 28480), (59, 28453), (63, 28429), (65, 28417), (68, 28384), (78, 28312),

Gene: Figueroism_35 Start: 24353, Stop: 24060, Start Num: 39

Candidate Starts for Figueroism_35:

(Start: 39 @24353 has 152 MA's), (Start: 43 @24326 has 2 MA's), (44, 24323),

Gene: Finny_33 Start: 24033, Stop: 23746, Start Num: 39

Candidate Starts for Finny_33:

(Start: 39 @24033 has 152 MA's), (Start: 43 @24006 has 2 MA's), (44, 24003), (48, 23976),

Gene: Fribs8_35 Start: 26998, Stop: 26714, Start Num: 35

Candidate Starts for Fribs8_35:

(1, 27373), (Start: 35 @26998 has 11 MA's), (40, 26977), (46, 26953), (Start: 49 @26932 has 1 MA's), (53, 26905), (54, 26902), (65, 26839), (69, 26803), (72, 26770), (74, 26764), (76, 26752),

Gene: Fulton_33 Start: 22213, Stop: 21920, Start Num: 39

Candidate Starts for Fulton_33:

(Start: 39 @22213 has 152 MA's), (40, 22198), (Start: 41 @22195 has 1 MA's), (Start: 43 @22186 has 2 MA's), (44, 22183), (48, 22156), (79, 21949),

Gene: GTE2_30 Start: 26884, Stop: 26597, Start Num: 36

Candidate Starts for GTE2_30:

(Start: 36 @26884 has 41 MA's), (Start: 49 @26818 has 1 MA's), (53, 26791), (54, 26788), (59, 26761), (63, 26737), (64, 26731), (65, 26725), (69, 26689), (70, 26686), (78, 26620),

Gene: GaeCeo_35 Start: 24669, Stop: 24376, Start Num: 39

Candidate Starts for GaeCeo_35:

(Start: 39 @24669 has 152 MA's), (44, 24639), (47, 24621), (70, 24471),

Gene: GardenB_34 Start: 24462, Stop: 24169, Start Num: 39

Candidate Starts for GardenB_34:

(Start: 39 @24462 has 152 MA's), (Start: 43 @24435 has 2 MA's), (44, 24432),

Gene: Garey24_34 Start: 24027, Stop: 23734, Start Num: 39

Candidate Starts for Garey24_34:

(Start: 39 @24027 has 152 MA's), (Start: 43 @24000 has 2 MA's), (44, 23997),

Gene: Gargoyle_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Gargoyle_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Gelo_34 Start: 24048, Stop: 23755, Start Num: 39

Candidate Starts for Gelo_34:

(Start: 39 @24048 has 152 MA's), (Start: 43 @24021 has 2 MA's), (44, 24018),

Gene: Gershwin_34 Start: 24064, Stop: 23771, Start Num: 39

Candidate Starts for Gershwin_34:

(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: GiKK_43 Start: 28205, Stop: 27927, Start Num: 36

Candidate Starts for GiKK_43:

(Start: 36 @28205 has 41 MA's), (48, 28145), (Start: 49 @28139 has 1 MA's), (52, 28115), (53, 28112), (54, 28109), (65, 28046), (72, 27977), (77, 27947),

Gene: Gibbous_34 Start: 26565, Stop: 26281, Start Num: 35

Candidate Starts for Gibbous_34:

(Start: 35 @26565 has 11 MA's), (40, 26544), (46, 26520), (Start: 49 @26499 has 1 MA's), (53, 26472), (54, 26469), (65, 26406), (76, 26319),

Gene: Glamour_32 Start: 23981, Stop: 23694, Start Num: 39

Candidate Starts for Glamour_32:

(Start: 39 @23981 has 152 MA's), (Start: 43 @23954 has 2 MA's), (44, 23951), (48, 23924),

Gene: GoldHunter_37 Start: 26614, Stop: 26327, Start Num: 36

Candidate Starts for GoldHunter_37:

(26, 26686), (Start: 36 @26614 has 41 MA's), (Start: 49 @26548 has 1 MA's), (53, 26521), (54, 26518), (63, 26467), (64, 26461), (65, 26455), (69, 26419), (70, 26416), (78, 26350),

Gene: Golden_32 Start: 24032, Stop: 23739, Start Num: 39

Candidate Starts for Golden_32:

(Start: 39 @24032 has 152 MA's), (Start: 43 @24005 has 2 MA's), (48, 23975),

Gene: Greenlvy_33 Start: 22799, Stop: 22506, Start Num: 39

Candidate Starts for Greenlvy_33:

(Start: 39 @22799 has 152 MA's), (40, 22784), (Start: 41 @22781 has 1 MA's), (Start: 43 @22772 has 2 MA's), (44, 22769), (48, 22742), (79, 22535),

Gene: Greys_35 Start: 24337, Stop: 24071, Start Num: 43

Candidate Starts for Greys_35:

(Start: 39 @24364 has 152 MA's), (Start: 43 @24337 has 2 MA's), (44, 24334),

Gene: Gubbabump_34 Start: 24053, Stop: 23760, Start Num: 39

Candidate Starts for Gubbabump_34:

(Start: 39 @24053 has 152 MA's), (Start: 43 @24026 has 2 MA's), (44, 24023),

Gene: Guetzie_32 Start: 24020, Stop: 23727, Start Num: 39

Candidate Starts for Guetzie_32:

(Start: 39 @24020 has 152 MA's), (Start: 43 @23993 has 2 MA's), (48, 23963), (79, 23756),

Gene: Hamlet_34 Start: 24471, Stop: 24178, Start Num: 39

Candidate Starts for Hamlet_34:

(Start: 39 @24471 has 152 MA's), (Start: 43 @24444 has 2 MA's), (44, 24441),

Gene: HanSolo_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for HanSolo_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: HankSprout_36 Start: 23931, Stop: 23638, Start Num: 39

Candidate Starts for HankSprout_36:

(Start: 39 @23931 has 152 MA's), (Start: 43 @23904 has 2 MA's), (44, 23901),

Gene: Hasitha_32 Start: 22225, Stop: 21932, Start Num: 39

Candidate Starts for Hasitha_32:

(Start: 39 @22225 has 152 MA's), (40, 22210), (Start: 41 @22207 has 1 MA's), (Start: 43 @22198 has 2 MA's), (44, 22195), (48, 22168), (79, 21961),

Gene: Hendrix_143 Start: 88738, Stop: 89118, Start Num: 32

Candidate Starts for Hendrix_143:

(Start: 32 @88738 has 1 MA's), (44, 88789), (50, 88828), (52, 88849), (60, 88885),

Gene: HerculesXL_33 Start: 22687, Stop: 22394, Start Num: 39

Candidate Starts for HerculesXL_33:

(Start: 39 @22687 has 152 MA's), (Start: 43 @22660 has 2 MA's), (79, 22423),

Gene: Hexbug_45 Start: 29965, Stop: 29687, Start Num: 36

Candidate Starts for Hexbug_45:

(Start: 36 @29965 has 41 MA's), (48, 29905), (Start: 49 @29899 has 1 MA's), (52, 29875), (53, 29872), (54, 29869), (55, 29860), (65, 29806), (66, 29782), (72, 29737),

Gene: HippoPololi_36 Start: 27019, Stop: 26735, Start Num: 35

Candidate Starts for HippoPololi_36:

(1, 27388), (Start: 35 @27019 has 11 MA's), (40, 26998), (46, 26974), (Start: 49 @26953 has 1 MA's), (53, 26926), (54, 26923), (64, 26866), (65, 26860), (76, 26773),

Gene: Horseradish_37 Start: 26419, Stop: 26132, Start Num: 36

Candidate Starts for Horseradish_37:

(26, 26491), (Start: 36 @26419 has 41 MA's), (Start: 49 @26353 has 1 MA's), (53, 26326), (54, 26323), (64, 26266), (65, 26260), (69, 26224), (70, 26221), (73, 26188), (78, 26155),

Gene: HungryHenry_35 Start: 24062, Stop: 23769, Start Num: 39

Candidate Starts for HungryHenry_35:

(Start: 39 @24062 has 152 MA's), (Start: 43 @24035 has 2 MA's), (44, 24032),

Gene: Huwbert_83 Start: 51659, Stop: 51976, Start Num: 34

Candidate Starts for Huwbert_83:

(Start: 34 @51659 has 2 MA's), (Start: 49 @51728 has 1 MA's), (53, 51755), (54, 51758), (69, 51863), (74, 51902), (77, 51926), (81, 51962),

Gene: Ilzat_34 Start: 24061, Stop: 23768, Start Num: 39

Candidate Starts for Ilzat_34:

(Start: 39 @24061 has 152 MA's), (Start: 43 @24034 has 2 MA's), (44, 24031),

Gene: Inventa_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Inventa_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: loannes_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for loannes_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Ixel_33 Start: 22647, Stop: 22360, Start Num: 39

Candidate Starts for Ixel_33:

(Start: 39 @22647 has 152 MA's), (48, 22590), (57, 22533), (64, 22497),

Gene: JacoRen57_34 Start: 29387, Stop: 29115, Start Num: 37

Candidate Starts for JacoRen57_34:

(Start: 37 @29387 has 4 MA's), (Start: 49 @29324 has 1 MA's), (51, 29315), (53, 29297), (54, 29294), (61, 29255), (63, 29243), (64, 29237), (67, 29201), (69, 29195), (71, 29186), (74, 29156),

Gene: Jamzy_43 Start: 28188, Stop: 27910, Start Num: 36

Candidate Starts for Jamzy_43:

(Start: 36 @28188 has 41 MA's), (48, 28128), (Start: 49 @28122 has 1 MA's), (52, 28098), (53, 28095), (54, 28092), (65, 28029), (72, 27960), (77, 27930),

Gene: Janus167_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for Janus167_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: JasonD_39 Start: 24889, Stop: 24596, Start Num: 39

Candidate Starts for JasonD_39:

(12, 25126), (13, 25093), (Start: 39 @24889 has 152 MA's), (Start: 43 @24862 has 2 MA's),

Gene: JasperRussell_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for JasperRussell_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Jemerald_35 Start: 24708, Stop: 24415, Start Num: 39

Candidate Starts for Jemerald_35:

(Start: 39 @24708 has 152 MA's), (44, 24678), (45, 24672), (47, 24660), (48, 24651), (57, 24594), (80, 24423),

Gene: Jenos_38 Start: 25549, Stop: 25256, Start Num: 39

Candidate Starts for Jenos_38:

(Start: 39 @25549 has 152 MA's), (Start: 43 @25522 has 2 MA's),

Gene: Jerbirus_35 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for Jerbirus_35:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: JeriBeth_35 Start: 23908, Stop: 23615, Start Num: 39

Candidate Starts for JeriBeth_35:

(Start: 39 @23908 has 152 MA's), (Start: 43 @23881 has 2 MA's), (44, 23878),

Gene: Juanyo_32 Start: 23710, Stop: 23417, Start Num: 39

Candidate Starts for Juanyo_32:

(Start: 39 @23710 has 152 MA's), (Start: 41 @23692 has 1 MA's), (Start: 43 @23683 has 2 MA's), (44, 23680), (47, 23662), (48, 23653), (80, 23425),

Gene: Juicer_35 Start: 24708, Stop: 24415, Start Num: 39

Candidate Starts for Juicer_35:

(Start: 39 @24708 has 152 MA's), (44, 24678), (45, 24672), (47, 24660), (48, 24651), (57, 24594), (80, 24423),

Gene: Kale_34 Start: 24066, Stop: 23773, Start Num: 39

Candidate Starts for Kale_34:

(Start: 39 @24066 has 152 MA's), (Start: 43 @24039 has 2 MA's), (44, 24036),

Gene: KannH_34 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for KannH_34:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: KatChan_34 Start: 23414, Stop: 23154, Start Num: 43

Candidate Starts for KatChan_34:

(Start: 39 @23441 has 152 MA's), (Start: 43 @23414 has 2 MA's), (48, 23384),

Gene: Kauala_32 Start: 23924, Stop: 23631, Start Num: 39

Candidate Starts for Kauala_32:

(Start: 39 @23924 has 152 MA's), (Start: 43 @23897 has 2 MA's), (48, 23867),

Gene: KayGee_39 Start: 28954, Stop: 28670, Start Num: 36

Candidate Starts for KayGee_39:

(Start: 36 @28954 has 41 MA's), (44, 28918), (46, 28909), (Start: 49 @28888 has 1 MA's), (52, 28864), (53, 28861), (54, 28858), (59, 28831), (63, 28807), (65, 28795), (68, 28762), (78, 28690),

Gene: KimJongPhill_85 Start: 63717, Stop: 64049, Start Num: 36

Candidate Starts for KimJongPhill_85:

(18, 63606), (23, 63627), (29, 63651), (Start: 36 @63717 has 41 MA's), (53, 63810), (54, 63813), (58, 63837), (63, 63864), (75, 63960), (77, 63981),

Gene: KingJulien_34 Start: 24464, Stop: 24171, Start Num: 39

Candidate Starts for KingJulien_34:

(Start: 39 @24464 has 152 MA's), (Start: 43 @24437 has 2 MA's), (44, 24434),

Gene: Klimt_34 Start: 24046, Stop: 23753, Start Num: 39

Candidate Starts for Klimt_34:

(Start: 39 @24046 has 152 MA's), (Start: 43 @24019 has 2 MA's), (44, 24016),

Gene: Knox_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Knox_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Koji_32 Start: 24059, Stop: 23766, Start Num: 39

Candidate Starts for Koji_32:

(Start: 39 @24059 has 152 MA's), (Start: 43 @24032 has 2 MA's), (48, 24002),

Gene: Kurt1_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Kurt1_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Lauer_35 Start: 29784, Stop: 29500, Start Num: 36

Candidate Starts for Lauer_35:

(Start: 36 @29784 has 41 MA's), (44, 29748), (Start: 49 @29718 has 1 MA's), (51, 29709), (52, 29694), (53, 29691), (54, 29688), (59, 29661), (63, 29637), (65, 29625), (66, 29601), (68, 29592), (78, 29520),

Gene: Leaf_141 Start: 84690, Stop: 85040, Start Num: 35

Candidate Starts for Leaf_141:

(Start: 35 @84690 has 11 MA's), (46, 84741), (50, 84771), (52, 84792), (54, 84798), (62, 84840), (74, 84963),

Gene: Leafus_34 Start: 24606, Stop: 24313, Start Num: 39

Candidate Starts for Leafus_34:

(Start: 39 @24606 has 152 MA's), (Start: 43 @24579 has 2 MA's), (44, 24576),

Gene: Librie_32 Start: 22209, Stop: 21916, Start Num: 39

Candidate Starts for Librie_32:

(Start: 39 @22209 has 152 MA's), (40, 22194), (Start: 41 @22191 has 1 MA's), (Start: 43 @22182 has 2 MA's), (44, 22179), (48, 22152), (79, 21945),

Gene: LilTerminator_33 Start: 22231, Stop: 21938, Start Num: 39

Candidate Starts for LilTerminator_33:

(Start: 39 @22231 has 152 MA's), (40, 22216), (Start: 41 @22213 has 1 MA's), (Start: 43 @22204 has 2 MA's), (44, 22201), (48, 22174), (79, 21967),

Gene: Lovelyunicorn_35 Start: 24367, Stop: 24074, Start Num: 39

Candidate Starts for Lovelyunicorn_35:

(Start: 39 @24367 has 152 MA's), (Start: 43 @24340 has 2 MA's), (44, 24337),

Gene: Lucky3_32 Start: 24032, Stop: 23739, Start Num: 39

Candidate Starts for Lucky3_32:

(Start: 39 @24032 has 152 MA's), (Start: 43 @24005 has 2 MA's), (48, 23975),

Gene: Ludgate_35 Start: 24362, Stop: 24069, Start Num: 39

Candidate Starts for Ludgate_35:

(Start: 39 @24362 has 152 MA's), (Start: 43 @24335 has 2 MA's), (44, 24332),

Gene: Luna18_34 Start: 23441, Stop: 23154, Start Num: 39

Candidate Starts for Luna18_34:

(Start: 39 @23441 has 152 MA's), (Start: 43 @23414 has 2 MA's), (48, 23384),

Gene: MAnor_40 Start: 29358, Stop: 29074, Start Num: 36

Candidate Starts for MAnor_40:

(28, 29424), (Start: 36 @29358 has 41 MA's), (44, 29322), (46, 29313), (Start: 49 @29292 has 1 MA's), (51, 29283), (52, 29268), (53, 29265), (54, 29262), (59, 29235), (63, 29211), (65, 29199), (68, 29166), (78, 29094),

Gene: MCubed_33 Start: 24003, Stop: 23716, Start Num: 39

Candidate Starts for MCubed_33:

(Start: 39 @24003 has 152 MA's), (Start: 43 @23976 has 2 MA's), (44, 23973), (48, 23946),

Gene: MScarn_38 Start: 26559, Stop: 26272, Start Num: 36

Candidate Starts for MScarn_38:

(26, 26631), (Start: 36 @26559 has 41 MA's), (Start: 49 @26493 has 1 MA's), (53, 26466), (54, 26463), (64, 26406), (65, 26400), (69, 26364), (70, 26361), (73, 26328), (78, 26295),

Gene: MaVan_36 Start: 27306, Stop: 27022, Start Num: 35

Candidate Starts for MaVan_36:

(Start: 35 @27306 has 11 MA's), (40, 27285), (46, 27261), (Start: 49 @27240 has 1 MA's), (53, 27213), (54, 27210), (64, 27153), (65, 27147), (76, 27060),

Gene: Maco6_36 Start: 27911, Stop: 27627, Start Num: 37

Candidate Starts for Maco6_36:

(Start: 37 @27911 has 4 MA's), (51, 27836), (53, 27818), (54, 27815), (69, 27716), (71, 27707), (78, 27647),

Gene: MaeLinda_35 Start: 24369, Stop: 24076, Start Num: 39
Candidate Starts for MaeLinda_35:
(Start: 39 @24369 has 152 MA's), (Start: 43 @24342 has 2 MA's), (44, 24339),

Gene: ManRay_34 Start: 24064, Stop: 23771, Start Num: 39
Candidate Starts for ManRay_34:
(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: Mandalorian_31 Start: 23652, Stop: 23359, Start Num: 39
Candidate Starts for Mandalorian_31:
(Start: 39 @23652 has 152 MA's), (Start: 41 @23634 has 1 MA's), (Start: 43 @23625 has 2 MA's),
(47, 23604), (48, 23595), (80, 23367),

Gene: Margaret_44 Start: 28911, Stop: 28639, Start Num: 36
Candidate Starts for Margaret_44:
(20, 29010), (27, 28980), (Start: 36 @28911 has 41 MA's), (48, 28851), (Start: 49 @28845 has 1
MA's), (51, 28836), (53, 28818), (54, 28815), (65, 28752), (72, 28683), (76, 28665),

Gene: Martin_36 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for Martin_36:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Mayweather_42 Start: 29582, Stop: 29298, Start Num: 36
Candidate Starts for Mayweather_42:
(4, 29930), (6, 29921), (11, 29831), (19, 29687), (21, 29681), (22, 29678), (23, 29675), (25, 29657),
(Start: 36 @29582 has 41 MA's), (44, 29546), (Start: 49 @29516 has 1 MA's), (52, 29492), (53,
29489), (54, 29486), (59, 29459), (63, 29435), (65, 29423), (68, 29390), (78, 29318),

Gene: McGalleon_37 Start: 25766, Stop: 25473, Start Num: 39
Candidate Starts for McGalleon_37:
(Start: 39 @25766 has 152 MA's), (Start: 43 @25739 has 2 MA's),

Gene: Mercedes_29 Start: 21222, Stop: 20929, Start Num: 39
Candidate Starts for Mercedes_29:
(Start: 39 @21222 has 152 MA's), (40, 21207), (Start: 41 @21204 has 1 MA's), (Start: 43 @21195 has
2 MA's), (44, 21192), (48, 21165), (79, 20958),

Gene: MillyPhilly_35 Start: 24365, Stop: 24072, Start Num: 39
Candidate Starts for MillyPhilly_35:
(Start: 39 @24365 has 152 MA's), (Start: 43 @24338 has 2 MA's), (44, 24335),

Gene: MonChoix_33 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for MonChoix_33:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Morrigan_34 Start: 23471, Stop: 23184, Start Num: 39
Candidate Starts for Morrigan_34:
(Start: 39 @23471 has 152 MA's), (Start: 43 @23444 has 2 MA's),

Gene: MrWorldwide_35 Start: 24369, Stop: 24076, Start Num: 39
Candidate Starts for MrWorldwide_35:
(Start: 39 @24369 has 152 MA's), (Start: 43 @24342 has 2 MA's), (44, 24339),

Gene: Muddy_38 Start: 29135, Stop: 28851, Start Num: 37
Candidate Starts for Muddy_38:
(Start: 37 @29135 has 4 MA's), (51, 29060), (53, 29042), (54, 29039), (69, 28940), (71, 28931), (78, 28871),

Gene: MunkgeeRoachy_37 Start: 26468, Stop: 26181, Start Num: 36
Candidate Starts for MunkgeeRoachy_37:
(3, 26822), (8, 26795), (9, 26735), (30, 26519), (33, 26477), (Start: 36 @26468 has 41 MA's), (Start: 49 @26402 has 1 MA's), (53, 26375), (54, 26372), (64, 26315), (65, 26309), (69, 26273), (70, 26270), (78, 26204),

Gene: Nagem_35 Start: 24362, Stop: 24069, Start Num: 39
Candidate Starts for Nagem_35:
(Start: 39 @24362 has 152 MA's), (Start: 43 @24335 has 2 MA's), (44, 24332),

Gene: Nattles_34 Start: 24051, Stop: 23758, Start Num: 39
Candidate Starts for Nattles_34:
(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Nebulous_32 Start: 25234, Stop: 24941, Start Num: 39
Candidate Starts for Nebulous_32:
(Start: 39 @25234 has 152 MA's), (Start: 43 @25207 has 2 MA's), (44, 25204), (48, 25177), (79, 24970),

Gene: Neferthema_32 Start: 24324, Stop: 24031, Start Num: 39
Candidate Starts for Neferthema_32:
(Start: 39 @24324 has 152 MA's), (Start: 43 @24297 has 2 MA's), (44, 24294), (48, 24267), (79, 24060),

Gene: Nibbles_35 Start: 26990, Stop: 26706, Start Num: 35
Candidate Starts for Nibbles_35:
(Start: 35 @26990 has 11 MA's), (40, 26969), (46, 26945), (Start: 49 @26924 has 1 MA's), (53, 26897), (54, 26894), (64, 26837), (65, 26831), (76, 26744),

Gene: NickSell_36 Start: 24341, Stop: 24075, Start Num: 43
Candidate Starts for NickSell_36:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Nina_36 Start: 27130, Stop: 26843, Start Num: 36
Candidate Starts for Nina_36:
(3, 27484), (9, 27397), (33, 27139), (Start: 36 @27130 has 41 MA's), (Start: 49 @27064 has 1 MA's), (53, 27037), (54, 27034), (63, 26983), (65, 26971), (69, 26935), (70, 26932), (78, 26866),

Gene: NoShow_45 Start: 31933, Stop: 31661, Start Num: 37
Candidate Starts for NoShow_45:
(Start: 37 @31933 has 4 MA's), (Start: 49 @31870 has 1 MA's), (53, 31843), (54, 31840), (67, 31747), (69, 31741), (72, 31708),

Gene: Nodigi_45 Start: 29954, Stop: 29676, Start Num: 36
Candidate Starts for Nodigi_45:
(Start: 36 @29954 has 41 MA's), (48, 29894), (Start: 49 @29888 has 1 MA's), (52, 29864), (53, 29861), (54, 29858), (55, 29849), (65, 29795), (66, 29771), (72, 29726),

Gene: Nucci_31 Start: 23623, Stop: 23348, Start Num: 41
Candidate Starts for Nucci_31:
(Start: 39 @23641 has 152 MA's), (Start: 41 @23623 has 1 MA's), (Start: 43 @23614 has 2 MA's),
(47, 23593), (48, 23584), (80, 23356),

Gene: Oats_34 Start: 24064, Stop: 23771, Start Num: 39
Candidate Starts for Oats_34:
(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: OldNelly_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for OldNelly_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Orla_45 Start: 29927, Stop: 29649, Start Num: 36
Candidate Starts for Orla_45:
(Start: 36 @29927 has 41 MA's), (48, 29867), (Start: 49 @29861 has 1 MA's), (52, 29837), (53,
29834), (54, 29831), (55, 29822), (65, 29768), (66, 29744), (72, 29699),

Gene: Oxtober96_35 Start: 24367, Stop: 24074, Start Num: 39
Candidate Starts for Oxtober96_35:
(Start: 39 @24367 has 152 MA's), (Start: 43 @24340 has 2 MA's), (44, 24337),

Gene: Pajaza_31 Start: 23331, Stop: 23032, Start Num: 38
Candidate Starts for Pajaza_31:
(Start: 38 @23331 has 3 MA's), (48, 23271), (72, 23100),

Gene: Papafritta_34 Start: 24060, Stop: 23767, Start Num: 39
Candidate Starts for Papafritta_34:
(Start: 39 @24060 has 152 MA's), (Start: 43 @24033 has 2 MA's), (44, 24030),

Gene: ParleG_35 Start: 24369, Stop: 24076, Start Num: 39
Candidate Starts for ParleG_35:
(Start: 39 @24369 has 152 MA's), (Start: 43 @24342 has 2 MA's), (44, 24339),

Gene: Peep_35 Start: 24354, Stop: 24061, Start Num: 39
Candidate Starts for Peep_35:
(Start: 39 @24354 has 152 MA's), (Start: 43 @24327 has 2 MA's), (44, 24324),

Gene: Peppino_34 Start: 24463, Stop: 24170, Start Num: 39
Candidate Starts for Peppino_34:
(Start: 39 @24463 has 152 MA's), (Start: 43 @24436 has 2 MA's), (44, 24433),

Gene: Pherbot_32 Start: 23930, Stop: 23637, Start Num: 39
Candidate Starts for Pherbot_32:
(Start: 39 @23930 has 152 MA's), (Start: 43 @23903 has 2 MA's), (46, 23891), (48, 23873),

Gene: Pherferi_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for Pherferi_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Phiderman_36 Start: 24338, Stop: 24072, Start Num: 43
Candidate Starts for Phiderman_36:
(Start: 39 @24365 has 152 MA's), (Start: 43 @24338 has 2 MA's), (44, 24335),

Gene: Phireproof_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for Phireproof_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: PhredFlintston_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for PhredFlintston_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Phriends_35 Start: 24368, Stop: 24075, Start Num: 39
Candidate Starts for Phriends_35:
(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Pikmin_31 Start: 23331, Stop: 23032, Start Num: 38
Candidate Starts for Pikmin_31:
(Start: 38 @23331 has 3 MA's), (48, 23271), (72, 23100),

Gene: Pocket_34 Start: 24049, Stop: 23756, Start Num: 39
Candidate Starts for Pocket_34:
(Start: 39 @24049 has 152 MA's), (Start: 43 @24022 has 2 MA's), (44, 24019),

Gene: Pons_40 Start: 28933, Stop: 28649, Start Num: 36
Candidate Starts for Pons_40:
(2, 29299), (6, 29272), (11, 29179), (21, 29032), (22, 29029), (23, 29026), (25, 29008), (Start: 36 @28933 has 41 MA's), (44, 28897), (46, 28888), (Start: 49 @28867 has 1 MA's), (51, 28858), (52, 28843), (53, 28840), (54, 28837), (59, 28810), (63, 28786), (65, 28774), (68, 28741), (78, 28669),

Gene: PotPie_40 Start: 29867, Stop: 29583, Start Num: 36
Candidate Starts for PotPie_40:
(6, 30203), (11, 30113), (21, 29966), (22, 29963), (23, 29960), (25, 29942), (Start: 36 @29867 has 41 MA's), (44, 29831), (46, 29822), (Start: 49 @29801 has 1 MA's), (51, 29792), (52, 29777), (53, 29774), (54, 29771), (59, 29744), (63, 29720), (65, 29708), (68, 29675), (78, 29603),

Gene: PrincePhergus_32 Start: 23933, Stop: 23640, Start Num: 39
Candidate Starts for PrincePhergus_32:
(Start: 39 @23933 has 152 MA's), (Start: 43 @23906 has 2 MA's), (48, 23876),

Gene: PsychoKiller_35 Start: 26614, Stop: 26327, Start Num: 36
Candidate Starts for PsychoKiller_35:
(26, 26686), (Start: 36 @26614 has 41 MA's), (Start: 49 @26548 has 1 MA's), (53, 26521), (54, 26518), (64, 26461), (65, 26455), (69, 26419), (70, 26416), (78, 26350),

Gene: PuppyEggo_35 Start: 24366, Stop: 24073, Start Num: 39
Candidate Starts for PuppyEggo_35:
(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: QuadZero_32 Start: 22239, Stop: 21946, Start Num: 39
Candidate Starts for QuadZero_32:
(Start: 39 @22239 has 152 MA's), (40, 22224), (Start: 41 @22221 has 1 MA's), (Start: 43 @22212 has 2 MA's), (44, 22209), (48, 22182), (79, 21975),

Gene: Quartz_32 Start: 23777, Stop: 23484, Start Num: 39
Candidate Starts for Quartz_32:

(Start: 39 @23777 has 152 MA's), (Start: 41 @23759 has 1 MA's), (Start: 43 @23750 has 2 MA's), (47, 23729), (48, 23720), (80, 23492),

Gene: Quasar_36 Start: 27216, Stop: 26929, Start Num: 36

Candidate Starts for Quasar_36:

(26, 27288), (Start: 36 @27216 has 41 MA's), (Start: 49 @27150 has 1 MA's), (53, 27123), (54, 27120), (63, 27069), (64, 27063), (65, 27057), (69, 27021), (70, 27018), (78, 26952),

Gene: Raccoon_34 Start: 24429, Stop: 24136, Start Num: 39

Candidate Starts for Raccoon_34:

(Start: 39 @24429 has 152 MA's), (Start: 43 @24402 has 2 MA's), (44, 24399),

Gene: Rapheph_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Rapheph_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Raptor_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Raptor_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Rasputia_138 Start: 86137, Stop: 86487, Start Num: 35

Candidate Starts for Rasputia_138:

(Start: 35 @86137 has 11 MA's), (42, 86173), (44, 86179), (50, 86218), (52, 86239), (59, 86272), (70, 86374),

Gene: RedBaron_38 Start: 26851, Stop: 26564, Start Num: 36

Candidate Starts for RedBaron_38:

(26, 26923), (Start: 36 @26851 has 41 MA's), (Start: 49 @26785 has 1 MA's), (53, 26758), (54, 26755), (64, 26698), (65, 26692), (69, 26656), (70, 26653), (78, 26587),

Gene: Redfield_34 Start: 24470, Stop: 24177, Start Num: 39

Candidate Starts for Redfield_34:

(Start: 39 @24470 has 152 MA's), (Start: 43 @24443 has 2 MA's), (44, 24440),

Gene: Renzie_35 Start: 24354, Stop: 24061, Start Num: 39

Candidate Starts for Renzie_35:

(Start: 39 @24354 has 152 MA's), (Start: 43 @24327 has 2 MA's), (44, 24324),

Gene: Riyhil_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Riyhil_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Robinson_35 Start: 24360, Stop: 24067, Start Num: 39

Candidate Starts for Robinson_35:

(Start: 39 @24360 has 152 MA's), (Start: 43 @24333 has 2 MA's), (44, 24330),

Gene: Rog141_35 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for Rog141_35:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: SJay_35 Start: 24363, Stop: 24070, Start Num: 39

Candidate Starts for SJay_35:

(Start: 39 @24363 has 152 MA's), (Start: 43 @24336 has 2 MA's), (44, 24333),

Gene: Sansa_32 Start: 24064, Stop: 23777, Start Num: 39

Candidate Starts for Sansa_32:

(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034), (48, 24007),

Gene: Saratos_33 Start: 23978, Stop: 23691, Start Num: 39

Candidate Starts for Saratos_33:

(Start: 39 @23978 has 152 MA's), (Start: 43 @23951 has 2 MA's), (44, 23948), (48, 23921),

Gene: Schimmels22_33 Start: 23061, Stop: 22768, Start Num: 39

Candidate Starts for Schimmels22_33:

(Start: 39 @23061 has 152 MA's), (Start: 43 @23034 has 2 MA's),

Gene: Schnapsidee_34 Start: 24464, Stop: 24171, Start Num: 39

Candidate Starts for Schnapsidee_34:

(Start: 39 @24464 has 152 MA's), (Start: 43 @24437 has 2 MA's), (44, 24434),

Gene: Schubert_32 Start: 23934, Stop: 23641, Start Num: 39

Candidate Starts for Schubert_32:

(Start: 39 @23934 has 152 MA's), (Start: 43 @23907 has 2 MA's),

Gene: Sedgewig_34 Start: 24043, Stop: 23750, Start Num: 39

Candidate Starts for Sedgewig_34:

(Start: 39 @24043 has 152 MA's), (Start: 43 @24016 has 2 MA's), (44, 24013),

Gene: ShaiHulud_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for ShaiHulud_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Shamu_33 Start: 23993, Stop: 23706, Start Num: 39

Candidate Starts for Shamu_33:

(Start: 39 @23993 has 152 MA's), (Start: 43 @23966 has 2 MA's), (44, 23963), (48, 23936),

Gene: SheckWes_41 Start: 28454, Stop: 28170, Start Num: 36

Candidate Starts for SheckWes_41:

(5, 28799), (7, 28793), (10, 28709), (21, 28553), (22, 28550), (23, 28547), (25, 28529), (Start: 36 @28454 has 41 MA's), (44, 28418), (46, 28409), (Start: 49 @28388 has 1 MA's), (51, 28379), (52, 28364), (53, 28361), (54, 28358), (59, 28331), (63, 28307), (65, 28295), (68, 28262), (78, 28190),

Gene: Shee_35 Start: 24365, Stop: 24072, Start Num: 39

Candidate Starts for Shee_35:

(Start: 39 @24365 has 152 MA's), (Start: 43 @24338 has 2 MA's), (44, 24335),

Gene: Sinatra_32 Start: 23929, Stop: 23636, Start Num: 39

Candidate Starts for Sinatra_32:

(Start: 39 @23929 has 152 MA's), (Start: 43 @23902 has 2 MA's), (48, 23872),

Gene: SirVictor_32 Start: 24020, Stop: 23727, Start Num: 39

Candidate Starts for SirVictor_32:

(Start: 39 @24020 has 152 MA's), (Start: 43 @23993 has 2 MA's), (48, 23963), (79, 23756),

Gene: SketchMex_36 Start: 26909, Stop: 26622, Start Num: 36

Candidate Starts for SketchMex_36:

(14, 27092), (15, 27053), (17, 27026), (24, 26993), (Start: 36 @26909 has 41 MA's), (Start: 49 @26843 has 1 MA's), (53, 26816), (54, 26813), (64, 26756), (65, 26750), (69, 26714), (70, 26711), (73, 26678), (78, 26645),

Gene: SoilGremlin_35 Start: 24365, Stop: 24072, Start Num: 39

Candidate Starts for SoilGremlin_35:

(Start: 39 @24365 has 152 MA's), (Start: 43 @24338 has 2 MA's), (44, 24335),

Gene: SonOfLevi_34 Start: 24046, Stop: 23753, Start Num: 39

Candidate Starts for SonOfLevi_34:

(Start: 39 @24046 has 152 MA's), (Start: 43 @24019 has 2 MA's), (44, 24016),

Gene: Sopespian_35 Start: 26615, Stop: 26328, Start Num: 36

Candidate Starts for Sopespian_35:

(26, 26687), (Start: 36 @26615 has 41 MA's), (Start: 49 @26549 has 1 MA's), (53, 26522), (54, 26519), (64, 26462), (65, 26456), (69, 26420), (70, 26417), (78, 26351),

Gene: Stanktossa_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for Stanktossa_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: SteamedHams_38 Start: 27027, Stop: 26740, Start Num: 36

Candidate Starts for SteamedHams_38:

(Start: 36 @27027 has 41 MA's), (Start: 49 @26961 has 1 MA's), (53, 26934), (54, 26931), (59, 26904), (63, 26880), (65, 26868), (69, 26832), (70, 26829), (78, 26763),

Gene: StingRay_34 Start: 24061, Stop: 23768, Start Num: 39

Candidate Starts for StingRay_34:

(Start: 39 @24061 has 152 MA's), (Start: 43 @24034 has 2 MA's), (44, 24031),

Gene: StirfryIV_35 Start: 24051, Stop: 23758, Start Num: 39

Candidate Starts for StirfryIV_35:

(Start: 39 @24051 has 152 MA's), (Start: 43 @24024 has 2 MA's), (44, 24021),

Gene: Stormbreaker8_34 Start: 24464, Stop: 24171, Start Num: 39

Candidate Starts for Stormbreaker8_34:

(Start: 39 @24464 has 152 MA's), (Start: 43 @24437 has 2 MA's), (44, 24434),

Gene: Strathdee_35 Start: 24367, Stop: 24074, Start Num: 39

Candidate Starts for Strathdee_35:

(Start: 39 @24367 has 152 MA's), (Start: 43 @24340 has 2 MA's), (44, 24337),

Gene: SummitAcademy_38 Start: 28496, Stop: 28212, Start Num: 36

Candidate Starts for SummitAcademy_38:

(6, 28832), (11, 28742), (21, 28595), (22, 28592), (23, 28589), (25, 28571), (Start: 36 @28496 has 41 MA's), (44, 28460), (46, 28451), (Start: 49 @28430 has 1 MA's), (51, 28421), (52, 28406), (53, 28403), (54, 28400), (59, 28373), (63, 28349), (65, 28337), (68, 28304), (78, 28232),

Gene: Superfresh_35 Start: 24354, Stop: 24061, Start Num: 39

Candidate Starts for Superfresh_35:

(Start: 39 @24354 has 152 MA's), (Start: 43 @24327 has 2 MA's), (44, 24324),

Gene: Survivors_36 Start: 27199, Stop: 26915, Start Num: 35

Candidate Starts for Survivors_36:

(Start: 35 @27199 has 11 MA's), (40, 27178), (46, 27154), (Start: 49 @27133 has 1 MA's), (53, 27106), (54, 27103), (64, 27046), (65, 27040), (76, 26953),

Gene: SweatNTears_37 Start: 26511, Stop: 26224, Start Num: 36

Candidate Starts for SweatNTears_37:

(26, 26583), (Start: 36 @26511 has 41 MA's), (Start: 49 @26445 has 1 MA's), (53, 26418), (54, 26415), (64, 26358), (65, 26352), (69, 26316), (70, 26313), (78, 26247),

Gene: TatarkaPM_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for TatarkaPM_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Teagan_35 Start: 24362, Stop: 24069, Start Num: 39

Candidate Starts for Teagan_35:

(Start: 39 @24362 has 152 MA's), (Start: 43 @24335 has 2 MA's), (44, 24332),

Gene: TeddyBear_34 Start: 24064, Stop: 23771, Start Num: 39

Candidate Starts for TeddyBear_34:

(Start: 39 @24064 has 152 MA's), (Start: 43 @24037 has 2 MA's), (44, 24034),

Gene: Tenda_34 Start: 24062, Stop: 23769, Start Num: 39

Candidate Starts for Tenda_34:

(Start: 39 @24062 has 152 MA's), (Start: 43 @24035 has 2 MA's), (44, 24032),

Gene: Thompsone_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Thompsone_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: Thorongil_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for Thorongil_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: TinSulphur_35 Start: 24368, Stop: 24075, Start Num: 39

Candidate Starts for TinSulphur_35:

(Start: 39 @24368 has 152 MA's), (Start: 43 @24341 has 2 MA's), (44, 24338),

Gene: Tinyman4_33 Start: 22687, Stop: 22394, Start Num: 39

Candidate Starts for Tinyman4_33:

(Start: 39 @22687 has 152 MA's), (Start: 43 @22660 has 2 MA's), (79, 22423),

Gene: Tolls_38 Start: 27126, Stop: 26839, Start Num: 36

Candidate Starts for Tolls_38:

(Start: 36 @27126 has 41 MA's), (Start: 49 @27060 has 1 MA's), (53, 27033), (54, 27030), (63, 26979), (65, 26967), (69, 26931), (70, 26928), (78, 26862),

Gene: Triscuit_82 Start: 51622, Stop: 51939, Start Num: 34

Candidate Starts for Triscuit_82:

(Start: 34 @51622 has 2 MA's), (Start: 49 @51691 has 1 MA's), (53, 51718), (54, 51721), (56, 51739), (69, 51826), (71, 51835), (74, 51865), (77, 51889), (81, 51925),

Gene: Troje_37 Start: 26916, Stop: 26629, Start Num: 36

Candidate Starts for Troje_37:

(26, 26988), (Start: 36 @26916 has 41 MA's), (Start: 49 @26850 has 1 MA's), (53, 26823), (54, 26820), (64, 26763), (65, 26757), (69, 26721), (70, 26718), (73, 26685), (78, 26652),

Gene: Typhonomachy_36 Start: 26625, Stop: 26338, Start Num: 36

Candidate Starts for Typhonomachy_36:

(3, 26979), (9, 26892), (33, 26634), (Start: 36 @26625 has 41 MA's), (Start: 49 @26559 has 1 MA's), (53, 26532), (54, 26529), (63, 26478), (65, 26466), (69, 26430), (70, 26427), (78, 26361),

Gene: Velene_35 Start: 24367, Stop: 24074, Start Num: 39

Candidate Starts for Velene_35:

(Start: 39 @24367 has 152 MA's), (Start: 43 @24340 has 2 MA's), (44, 24337),

Gene: Vine_41 Start: 29228, Stop: 28944, Start Num: 36

Candidate Starts for Vine_41:

(Start: 36 @29228 has 41 MA's), (44, 29192), (46, 29183), (Start: 49 @29162 has 1 MA's), (52, 29138), (53, 29135), (54, 29132), (59, 29105), (63, 29081), (65, 29069), (68, 29036), (78, 28964),

Gene: Vispistious_35 Start: 24339, Stop: 24073, Start Num: 43

Candidate Starts for Vispistious_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: WestPM_31 Start: 22517, Stop: 22251, Start Num: 43

Candidate Starts for WestPM_31:

(Start: 39 @22544 has 152 MA's), (Start: 43 @22517 has 2 MA's),

Gene: WildNOut_35 Start: 24366, Stop: 24073, Start Num: 39

Candidate Starts for WildNOut_35:

(Start: 39 @24366 has 152 MA's), (Start: 43 @24339 has 2 MA's), (44, 24336),

Gene: WilliamStrong_33 Start: 23765, Stop: 23478, Start Num: 39

Candidate Starts for WilliamStrong_33:

(Start: 39 @23765 has 152 MA's), (Start: 43 @23738 has 2 MA's), (48, 23708),

Gene: Winzigespinne_34 Start: 24050, Stop: 23757, Start Num: 39

Candidate Starts for Winzigespinne_34:

(Start: 39 @24050 has 152 MA's), (Start: 43 @24023 has 2 MA's), (44, 24020),

Gene: Yakult_40 Start: 28020, Stop: 27742, Start Num: 36

Candidate Starts for Yakult_40:

(Start: 36 @28020 has 41 MA's), (48, 27960), (Start: 49 @27954 has 1 MA's), (52, 27930), (53, 27927), (54, 27924), (65, 27861), (72, 27792),

Gene: Yarn_34 Start: 26886, Stop: 26599, Start Num: 36

Candidate Starts for Yarn_34:

(Start: 36 @26886 has 41 MA's), (Start: 49 @26820 has 1 MA's), (53, 26793), (54, 26790), (63, 26739), (65, 26727), (69, 26691), (70, 26688), (78, 26622),

Gene: Yummy_37 Start: 26533, Stop: 26246, Start Num: 36

Candidate Starts for Yummy_37:

(26, 26605), (Start: 36 @26533 has 41 MA's), (Start: 49 @26467 has 1 MA's), (53, 26440), (54, 26437), (64, 26380), (65, 26374), (69, 26338), (70, 26335), (73, 26302), (78, 26269),

Gene: YuuY_33 Start: 24385, Stop: 24092, Start Num: 39

Candidate Starts for YuuY_33:

(Start: 39 @24385 has 152 MA's), (Start: 41 @24367 has 1 MA's), (Start: 43 @24358 has 2 MA's), (47, 24337), (48, 24328), (57, 24271), (80, 24100),

Gene: Zada_35 Start: 24347, Stop: 24054, Start Num: 39

Candidate Starts for Zada_35:

(Start: 39 @24347 has 152 MA's), (Start: 43 @24320 has 2 MA's), (44, 24317),

Gene: Zareef_38 Start: 27293, Stop: 27009, Start Num: 35

Candidate Starts for Zareef_38:

(Start: 35 @27293 has 11 MA's), (40, 27272), (46, 27248), (Start: 49 @27227 has 1 MA's), (53, 27200), (54, 27197), (64, 27140), (65, 27134), (76, 27047),

Gene: Zayuliv_32 Start: 22821, Stop: 22528, Start Num: 39

Candidate Starts for Zayuliv_32:

(Start: 39 @22821 has 152 MA's), (40, 22806), (Start: 41 @22803 has 1 MA's), (Start: 43 @22794 has 2 MA's), (44, 22791), (48, 22764), (79, 22557),

Gene: Zenitsu_33 Start: 24008, Stop: 23721, Start Num: 39

Candidate Starts for Zenitsu_33:

(Start: 39 @24008 has 152 MA's), (Start: 43 @23981 has 2 MA's), (44, 23978), (48, 23951),

Gene: Zepp_33 Start: 22289, Stop: 21996, Start Num: 39

Candidate Starts for Zepp_33:

(Start: 39 @22289 has 152 MA's), (40, 22274), (Start: 41 @22271 has 1 MA's), (Start: 43 @22262 has 2 MA's), (44, 22259), (48, 22232), (79, 22025),

Gene: Zuko_83 Start: 63560, Stop: 63886, Start Num: 36

Candidate Starts for Zuko_83:

(16, 63422), (23, 63464), (31, 63512), (Start: 36 @63560 has 41 MA's), (51, 63635), (53, 63653), (54, 63656), (64, 63713), (65, 63719), (75, 63797), (77, 63818),