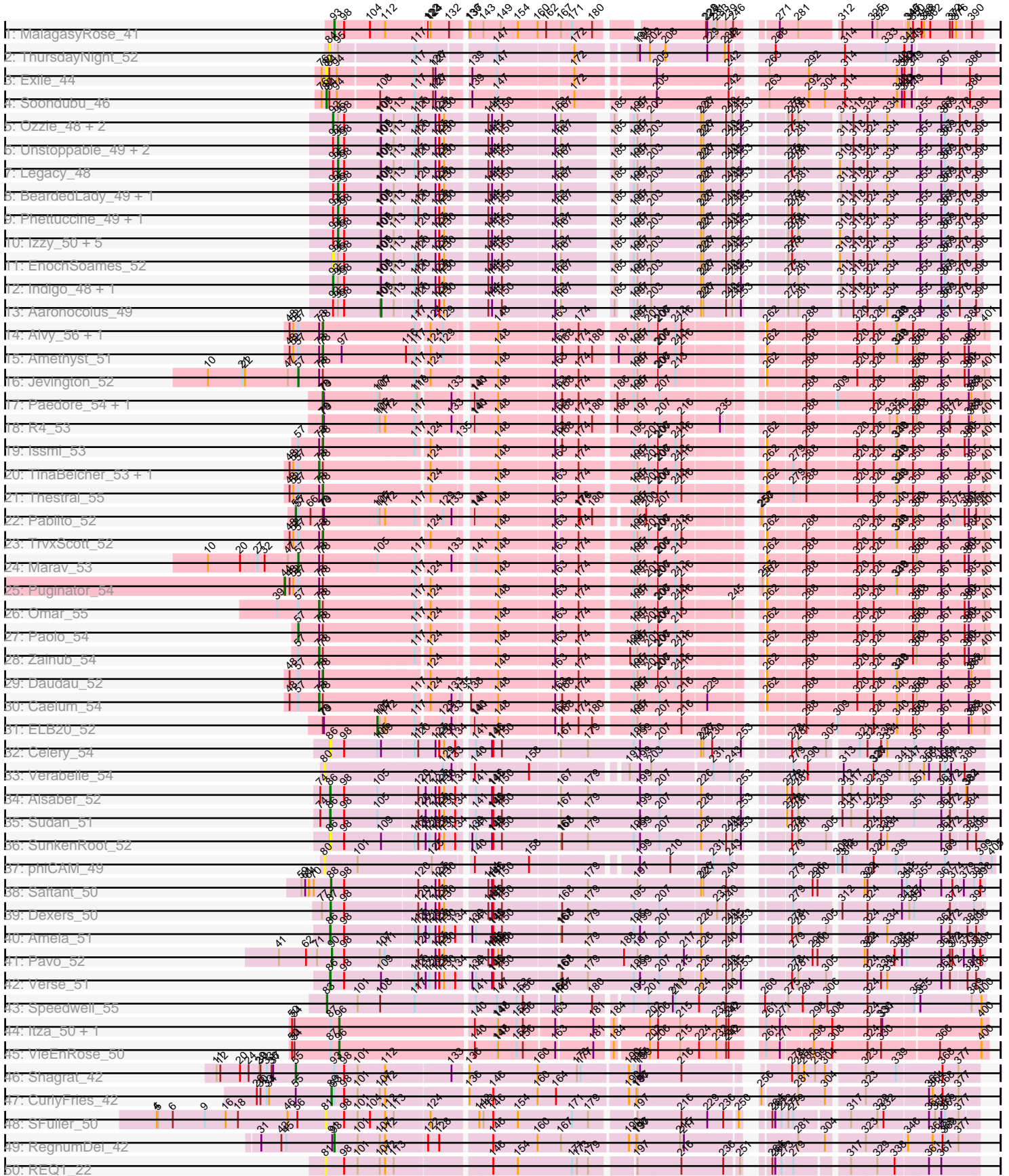
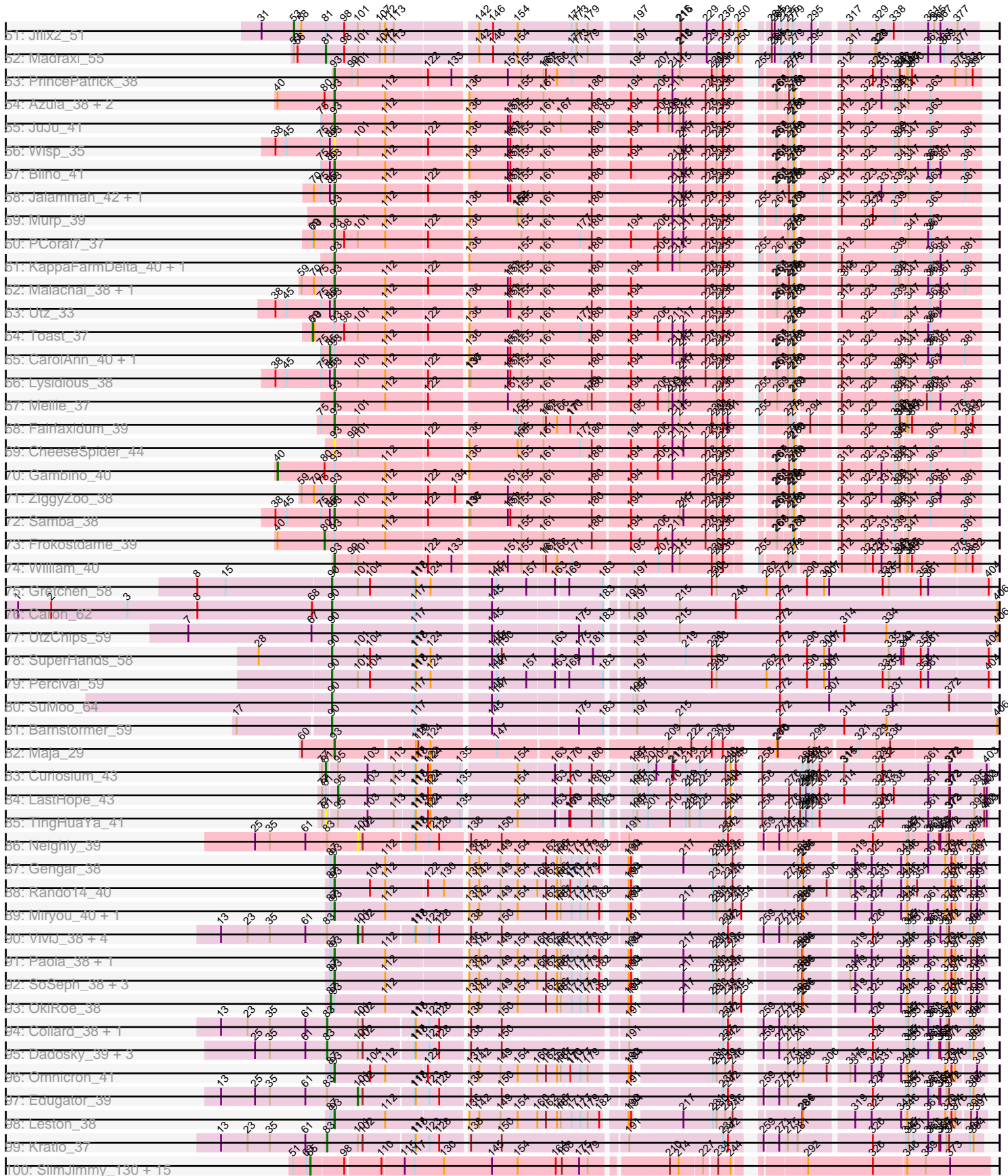


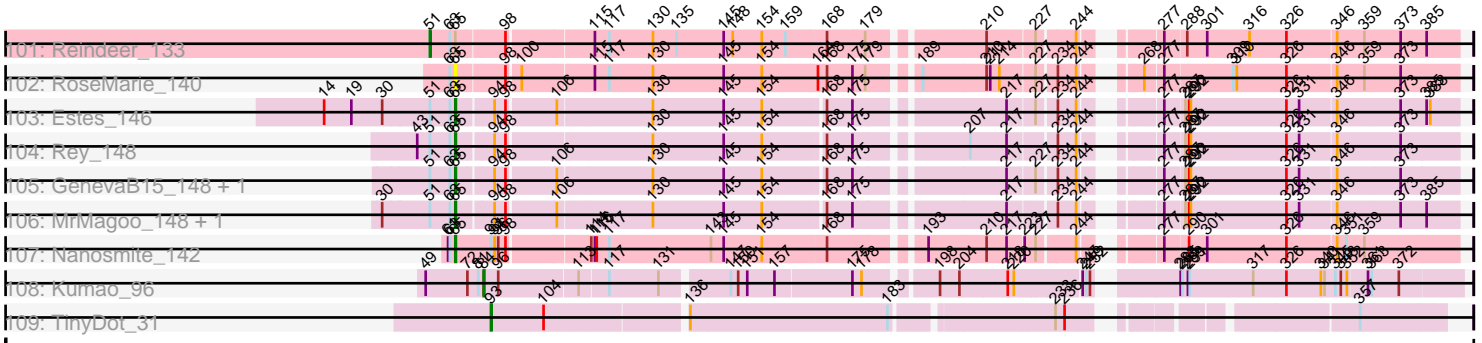
Pham 304757



Pham 304757



Pham 304757



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 304757 Report

This analysis was run 06/08/26 on database version 649.

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

Pham number 304757 has 161 members, 18 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_41
- Track 2 : ThursdayNight_52
- Track 3 : Exile_44
- Track 4 : Soondubu_46
- Track 5 : Ozzie_48, Hydra_50, Bovely_49
- Track 6 : Unstoppable_49, Esperer_49, Nerdos_48
- Track 7 : Legacy_48
- Track 8 : BeardedLady_49, Caliburn_48
- Track 9 : Phettuccine_49, SunsetPointe_48
- Track 10 : Izzy_50, BryanRecycles_50, Eddasa_50, Oliynyk_50, Rusticus_50, Jash_50
- Track 11 : EnochSoames_52
- Track 12 : Indigo_48, Leviticus_49
- Track 13 : Aaronocolus_49
- Track 14 : Alvy_56, BartholomewSD_56
- Track 15 : Amethyst_51
- Track 16 : Jevington_52
- Track 17 : Paedore_54, Loofah_55
- Track 18 : R4_53
- Track 19 : Issmi_53
- Track 20 : TinaBelcher_53, Bowden_53
- Track 21 : Thestral_55
- Track 22 : Pablito_52
- Track 23 : TrvxScott_52
- Track 24 : Marav_53
- Track 25 : Puginator_54
- Track 26 : Omar_55
- Track 27 : Paolo_54
- Track 28 : Zainub_54
- Track 29 : Daudau_52
- Track 30 : Caelum_54
- Track 31 : ELB20_52
- Track 32 : Celery_54

- Track 33 : Verabelle_54
- Track 34 : Alsaber_52
- Track 35 : Sudan_51
- Track 36 : SunkenRoot_52
- Track 37 : phiCAM_49
- Track 38 : Saftant_50
- Track 39 : Dexers_50
- Track 40 : Amela_51
- Track 41 : Pavo_52
- Track 42 : Verse_51
- Track 43 : Speedwell_55
- Track 44 : Itza_50, Urza_50
- Track 45 : VieEnRose_50
- Track 46 : Shagrat_42
- Track 47 : CurlyFries_42
- Track 48 : SFuller_50
- Track 49 : RegnumDei_42
- Track 50 : REQ1_22
- Track 51 : Jflix2_51
- Track 52 : Madraxi_55
- Track 53 : PrincePatrick_38
- Track 54 : Azula_38, MissRona_38, Blueberry_37
- Track 55 : JuJu_41
- Track 56 : Wisp_35
- Track 57 : Blino_41
- Track 58 : Jalammah_42, Fenry_37
- Track 59 : Murp_39
- Track 60 : PCoral7_37
- Track 61 : KappaFarmDelta_40, Wocket_39
- Track 62 : Malachai_38, Begonia_38
- Track 63 : Utz_33
- Track 64 : Toast_37
- Track 65 : CarolAnn_40, Soilmate_42
- Track 66 : Lysidious_38
- Track 67 : Mellie_37
- Track 68 : Fairfaxidum_39
- Track 69 : CheeseSpider_44
- Track 70 : Gambino_40
- Track 71 : ZiggyZoo_38
- Track 72 : Samba_38
- Track 73 : Frokostdame_39
- Track 74 : William_40
- Track 75 : Gretchen_58
- Track 76 : Caron_62
- Track 77 : UtzChips_59
- Track 78 : SuperHands_58
- Track 79 : Percival_59
- Track 80 : SuMoo_64
- Track 81 : Barnstormer_59
- Track 82 : Maja_29
- Track 83 : Curiosium_43
- Track 84 : LastHope_43
- Track 85 : TingHuaYa_41

- Track 86 : Neighly_39
- Track 87 : Gengar_38
- Track 88 : Rando14_40
- Track 89 : Miryou_40, Feyre_38
- Track 90 : ViviJ_38, LilDirt_38, InvictusManeo_38, BananenDer11_39, DoubleChamp_38
- Track 91 : Paola_38, Guillsminger_39
- Track 92 : SoSeph_38, Heftyboy_38, Thyatira_40, Waterfoul_39
- Track 93 : OkiRoe_38
- Track 94 : Collard_38, Agent47_39
- Track 95 : Dadosky_39, Psycho_39, Larva_39, AlleyCat_39
- Track 96 : Omnicron_41
- Track 97 : Edugator_39
- Track 98 : Leston_38
- Track 99 : Kratio_37
- Track 100 : SlimJimmy_130, Auspice_131, Bongo_130, Glaske16_133, LilhomieP_131, Bricole_133, PegLeg_134, Diminimus_131, Izel_131, KleverKiS_134, FreakyGoo_131, Skinny_137, TyDawg_126, IPhane7_129, Dulcita_131, TpudiCK_132
- Track 101 : Reindeer_133
- Track 102 : RoseMarie_140
- Track 103 : Estes_146
- Track 104 : Rey_148
- Track 105 : GenevaB15_148, Aziz_145
- Track 106 : MrMagoo_148, GardenSalsa_146
- Track 107 : Nanosmite_142
- Track 108 : Kumao_96
- Track 109 : TinyDot_31

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

The start number called the most often in the published annotations is 93, it was called in 37 of the 143 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Azula_38, Begonia_38, Blino_41, Blueberry_37, CheeseSpider_44, Fairfaxidum_39, Fenry_37, Feyre_38, Gengar_38, Guillsminger_39, Heftyboy_38, Jalammah_42, JuJu_41, KappaFarmDelta_40, Leston_38, Lysidious_38, Maja_29, Malachai_38, MalagasyRose_41, Mellie_37, Miryou_40, MissRona_38, Murp_39, Omnicron_41, PCoral7_37, Paola_38, PrincePatrick_38, Rando14_40, RegnumDei_42, Samba_38, SoSeph_38, Thyatira_40, TinyDot_31, Utz_33, Waterfoul_39, William_40, Wisp_35, Wocket_39, ZiggyZoo_38,

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

- CarolAnn_40, CurlyFries_42, Frokostdame_39, Gambino_40, Nanosmite_142, OkiRoe_38, Shagrat_42, Soilmate_42, Toast_37,

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

- Aaronocolus_49, Agent47_39, AlleyCat_39, Alsaber_52, Alvy_56, Amela_51, Amethyst_51, Auspice_131, Aziz_145, BananenDer11_39, Barnstormer_59,

BartholomewSD_56, BeardedLady_49, Bongo_130, Bovely_49, Bowden_53, Bricole_133, BryanRecycles_50, Caelum_54, Caliburn_48, Caron_62, Celery_54, Collard_38, Curiosium_43, Dadosky_39, Daudau_52, Dexers_50, Diminimus_131, DoubleChamp_38, Dulcita_131, ELB20_52, Eddasa_50, Edugator_39, EnochSoames_52, Esperer_49, Estes_146, Exile_44, FreakyGoo_131, GardenSalsa_146, GenevaB15_148, Glaske16_133, Gretchen_58, Hydra_50, IPHane7_129, Indigo_48, InvictusManeo_38, Issmi_53, Itza_50, Izel_131, Izzy_50, Jash_50, Jevington_52, Jflix2_51, KleverKiS_134, Kratio_37, Kumao_96, Larva_39, LastHope_43, Legacy_48, Leviticus_49, LiDirt_38, LilhomieP_131, Loofah_55, Madraxi_55, Marav_53, MrMagoo_148, Neighly_39, Nerdos_48, Oliynyk_50, Omar_55, Ozzie_48, Pablito_52, Paedore_54, Paolo_54, Pavo_52, PegLeg_134, Percival_59, Phettuccine_49, Psycho_39, Puginator_54, R4_53, REQ1_22, Reindeer_133, Rey_148, RoseMarie_140, Rusticus_50, SFuller_50, Saftant_50, Skinny_137, SlimJimmy_130, Soondubu_46, Speedwell_55, SuMoo_64, Sudan_51, SunkenRoot_52, SunsetPointe_48, SuperHands_58, Thestral_55, ThursdayNight_52, TinaBelcher_53, TingHuaYa_41, TpudiCK_132, TrvxScott_52, TyDawg_126, Unstoppable_49, Urza_50, UtzChips_59, Verabelle_54, Verse_51, VieEnRose_50, ViviJ_38, Zainub_54, phiCAM_49,

Summary by start number:

Start 40:

- Found in 5 of 161 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Gambino_40 (CV),

Start 44:

- Found in 1 of 161 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puginator_54 (BD2),

Start 51:

- Found in 23 of 161 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Reindeer_133 (M1),

Start 53:

- Found in 2 of 161 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jflix2_51 (CF),

Start 55:

- Found in 3 of 161 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Pablito_52 (BD2), Shagrat_42 (CF),

Start 57:

- Found in 17 of 161 (10.6%) of genes in pham

- Manual Annotations of this start: 3 of 143
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Jevington_52 (BD2), Marav_53 (BD2), Paolo_54 (BD2),

Start 65:

- Found in 25 of 161 (15.5%) of genes in pham
- Manual Annotations of this start: 21 of 143
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Auspice_131 (M1), Aziz_145 (M2), Bongo_130 (M1), Bricole_133 (M1), Diminimus_131 (M1), Dulcita_131 (M1), Estes_146 (M2), FreakyGoo_131 (M1), GardenSalsa_146 (M2), GenevaB15_148 (M2), Glaske16_133 (M1), IPHane7_129 (M1), Izel_131 (M1), KleverKiS_134 (M1), LilhomieP_131 (M1), MrMagoo_148 (M2), Nanosmite_142 (M3), PegLeg_134 (M1), Rey_148 (M2), RoseMarie_140 (M1), Skinny_137 (M1), SlimJimmy_130 (M1), TpuDiCK_132 (M1), TyDawg_126 (M1),

Start 69:

- Found in 2 of 161 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Toast_37 (CV),

Start 73:

- Found in 16 of 161 (9.9%) of genes in pham
- Manual Annotations of this start: 5 of 143
- Called 31.2% of time when present
- Phage (with cluster) where this start called: Bowden_53 (BD2), Caelum_54 (BD2), Omar_55 (BD2), TinaBelcher_53 (BD2), Zainub_54 (BD2),

Start 78:

- Found in 21 of 161 (13.0%) of genes in pham
- Manual Annotations of this start: 10 of 143
- Called 47.6% of time when present
- Phage (with cluster) where this start called: Alvy_56 (BD2), Amethyst_51 (BD2), BartholomewSD_56 (BD2), Daudau_52 (BD2), Issmi_53 (BD2), Loofah_55 (BD2), Paedore_54 (BD2), R4_53 (BD2), Thestral_55 (BD2), TrvxScott_52 (BD2),

Start 80:

- Found in 7 of 161 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Frokostdame_39 (CV), Verabelle_54 (BD3), phiCAM_49 (BD3),

Start 81:

- Found in 8 of 161 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Curiosium_43 (K1), Madraxi_55 (CF), REQ1_22 (CF), SFuller_50 (CF), TingHuaYa_41 (K1),

Start 82:

- Found in 2 of 161 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Exile_44 (AZ6), Soondubu_46 (AZ6),

Start 83:

- Found in 15 of 161 (9.3%) of genes in pham
- Manual Annotations of this start: 8 of 143
- Called 53.3% of time when present
- Phage (with cluster) where this start called: Agent47_39 (K5), AlleyCat_39 (K5), Collard_38 (K5), Dadosky_39 (K5), Kratio_37 (K5), Larva_39 (K5), Psycho_39 (K5), Speedwell_55 (BD3),

Start 84:

- Found in 4 of 161 (2.5%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kumao_96 (singleton), ThursdayNight_52 (AZ),

Start 85:

- Found in 9 of 161 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 22.2% of time when present
- Phage (with cluster) where this start called: CarolAnn_40 (CV), Soilmate_42 (CV),

Start 86:

- Found in 6 of 161 (3.7%) of genes in pham
- Manual Annotations of this start: 4 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsaber_52 (BD3), Amela_51 (BD3), Celery_54 (BD3), Sudan_51 (BD3), SunkenRoot_52 (BD3), Verse_51 (BD3),

Start 87:

- Found in 17 of 161 (10.6%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Dexers_50 (BD3), OkiRoe_38 (K5),

Start 88:

- Found in 1 of 161 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Saftant_50 (BD3),

Start 89:

- Found in 1 of 161 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CurlyFries_42 (CF),

Start 90:

- Found in 8 of 161 (5.0%) of genes in pham

- Manual Annotations of this start: 8 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_59 (EH), Caron_62 (EH), Gretchen_58 (EH), Pavo_52 (BD3), Percival_59 (EH), SuMoo_64 (EH), SuperHands_58 (EH), UtzChips_59 (EH),

Start 92:

- Found in 21 of 161 (13.0%) of genes in pham
- Manual Annotations of this start: 5 of 143
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Bovely_49 (BD1), EnochSoames_52 (BD1), Hydra_50 (BD1), Indigo_48 (BD1), Leviticus_49 (BD1), Ozzie_48 (BD1),

Start 93:

- Found in 48 of 161 (29.8%) of genes in pham
- Manual Annotations of this start: 37 of 143
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Azula_38 (CV), Begonia_38 (CV), Blino_41 (CV), Blueberry_37 (CV), CheeseSpider_44 (CV), Fairfaxidum_39 (CV), Ferry_37 (CV), Feyre_38 (K5), Gengar_38 (K5), Guillsminger_39 (K5), Heftyboy_38 (K5), Jalammah_42 (CV), JuJu_41 (CV), KappaFarmDelta_40 (CV), Leston_38 (K5), Lysidious_38 (CV), Maja_29 (FO), Malachai_38 (CV), MalagasyRose_41 (AG), Mellie_37 (CV), Miryou_40 (K5), MissRona_38 (CV), Murp_39 (CV), Omnicron_41 (K5), PCoral7_37 (CV), Paola_38 (K5), PrincePatrick_38 (CV), Rando14_40 (K5), RegnumDei_42 (CF), Samba_38 (CV), SoSeph_38 (K5), Thyatira_40 (K5), TinyDot_31 (singleton), Utz_33 (CV), Waterfoul_39 (K5), William_40 (CV), Wisp_35 (CV), Wocket_39 (CV), ZiggyZoo_38 (CV),

Start 95:

- Found in 25 of 161 (15.5%) of genes in pham
- Manual Annotations of this start: 15 of 143
- Called 60.0% of time when present
- Phage (with cluster) where this start called: BeardedLady_49 (BD1), BryanRecycles_50 (BD1), Caliburn_48 (BD1), Eddasa_50 (BD1), Esperer_49 (BD1), Izzy_50 (BD1), Jash_50 (BD1), LastHope_43 (K1), Legacy_48 (BD1), Nerdos_48 (BD1), Oliynk_50 (BD1), Phettuccine_49 (BD1), Rusticus_50 (BD1), SunsetPointe_48 (BD1), Unstoppable_49 (BD1),

Start 96:

- Found in 5 of 161 (3.1%) of genes in pham
- Manual Annotations of this start: 3 of 143
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Itza_50 (BD6), Urza_50 (BD6), VieEnRose_50 (BD6),

Start 101:

- Found in 35 of 161 (21.7%) of genes in pham
- Manual Annotations of this start: 5 of 143
- Called 20.0% of time when present
- Phage (with cluster) where this start called: BananenDer11_39 (K5), DoubleChamp_38 (K5), Edugator_39 (K5), InvictusManeo_38 (K5), LilDirt_38 (K5), Neighly_39 (K3), ViviJ_38 (K5),

Start 105:

- Found in 9 of 161 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 11.1% of time when present
- Phage (with cluster) where this start called: ELB20_52 (BD2),

Start 109:

- Found in 24 of 161 (14.9%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Aaronocolus_49 (BD1),

Summary by clusters:

There are 18 clusters represented in this pham: singleton, K5, AG, FO, M2, CF, M3, K3, K1, BD6, BD1, BD3, BD2, M1, AZ, CV, AZ6, EH,

Info for manual annotations of cluster AG:

- Start number 93 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AZ6:

- Start number 82 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BD1:

- Start number 92 was manually annotated 5 times for cluster BD1.
- Start number 95 was manually annotated 14 times for cluster BD1.
- Start number 109 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 44 was manually annotated 1 time for cluster BD2.
- Start number 55 was manually annotated 1 time for cluster BD2.
- Start number 57 was manually annotated 3 times for cluster BD2.
- Start number 73 was manually annotated 5 times for cluster BD2.
- Start number 78 was manually annotated 10 times for cluster BD2.
- Start number 105 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 83 was manually annotated 1 time for cluster BD3.
- Start number 86 was manually annotated 4 times for cluster BD3.
- Start number 87 was manually annotated 1 time for cluster BD3.
- Start number 88 was manually annotated 1 time for cluster BD3.
- Start number 90 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD6:

- Start number 96 was manually annotated 3 times for cluster BD6.

Info for manual annotations of cluster CF:

- Start number 53 was manually annotated 1 time for cluster CF.
- Start number 55 was manually annotated 1 time for cluster CF.
- Start number 81 was manually annotated 1 time for cluster CF.
- Start number 89 was manually annotated 1 time for cluster CF.
- Start number 93 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CV:

- Start number 40 was manually annotated 1 time for cluster CV.
- Start number 69 was manually annotated 1 time for cluster CV.
- Start number 80 was manually annotated 1 time for cluster CV.
- Start number 85 was manually annotated 1 time for cluster CV.
- Start number 93 was manually annotated 21 times for cluster CV.

Info for manual annotations of cluster EH:

- Start number 90 was manually annotated 7 times for cluster EH.

Info for manual annotations of cluster FO:

- Start number 93 was manually annotated 1 time for cluster FO.

Info for manual annotations of cluster K1:

- Start number 81 was manually annotated 1 time for cluster K1.
- Start number 95 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K5:

- Start number 83 was manually annotated 7 times for cluster K5.
- Start number 87 was manually annotated 1 time for cluster K5.
- Start number 93 was manually annotated 12 times for cluster K5.
- Start number 101 was manually annotated 5 times for cluster K5.

Info for manual annotations of cluster M1:

- Start number 51 was manually annotated 1 time for cluster M1.
- Start number 65 was manually annotated 14 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 65 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 65 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Aaronocolus_49 Start: 34181, Stop: 35398, Start Num: 109

Candidate Starts for Aaronocolus_49:

(Start: 92 @34064 has 5 MA's), (Start: 95 @34076 has 15 MA's), (98, 34091), (107, 34178), (Start: 109 @34181 has 1 MA's), (113, 34205), (117, 34247), (120, 34256), (127, 34298), (128, 34307), (130, 34319), (144, 34409), (145, 34418), (150, 34442), (163, 34562), (167, 34568), (185, 34658), (195, 34673), (197, 34682), (203, 34715), (226, 34826), (227, 34832), (240, 34880), (245, 34895), (253, 34910), (275, 34970), (281, 34994), (311, 35075), (318, 35105), (324, 35135), (334, 35183), (355, 35261), (367, 35309), (369, 35318), (378, 35345), (396, 35384),

Gene: Agent47_39 Start: 31420, Stop: 32865, Start Num: 83

Candidate Starts for Agent47_39:

(13, 31168), (23, 31231), (35, 31285), (61, 31372), (Start: 83 @31420 has 8 MA's), (Start: 101 @31495 has 5 MA's), (102, 31507), (117, 31618), (118, 31621), (123, 31654), (128, 31678), (138, 31741), (150, 31816), (191, 32092), (237, 32314), (242, 32326), (259, 32374), (271, 32404), (275, 32425), (281,

32449), (326, 32602), (345, 32683), (347, 32689), (351, 32701), (361, 32737), (363, 32743), (367, 32764), (371, 32779), (372, 32785), (387, 32833), (394, 32842),

Gene: AlleyCat_39 Start: 31272, Stop: 32717, Start Num: 83

Candidate Starts for AlleyCat_39:

(25, 31101), (35, 31137), (61, 31224), (Start: 83 @31272 has 8 MA's), (Start: 101 @31347 has 5 MA's), (102, 31359), (117, 31470), (118, 31473), (123, 31506), (128, 31530), (138, 31593), (150, 31668), (191, 31944), (237, 32166), (242, 32178), (259, 32226), (271, 32256), (275, 32277), (281, 32301), (326, 32454), (345, 32535), (347, 32541), (351, 32553), (361, 32589), (363, 32595), (366, 32613), (367, 32616), (371, 32631), (372, 32637), (387, 32685), (394, 32694),

Gene: Alsaber_52 Start: 36706, Stop: 38124, Start Num: 86

Candidate Starts for Alsaber_52:

(74, 36682), (Start: 86 @36706 has 4 MA's), (98, 36736), (Start: 105 @36817 has 1 MA's), (120, 36901), (121, 36919), (127, 36943), (128, 36952), (130, 36964), (134, 36991), (141, 37024), (145, 37063), (146, 37066), (150, 37087), (167, 37213), (179, 37276), (199, 37402), (207, 37447), (226, 37540), (253, 37624), (274, 37681), (278, 37693), (281, 37708), (312, 37792), (317, 37813), (324, 37849), (330, 37882), (351, 37960), (367, 38023), (372, 38041), (382, 38074), (384, 38077),

Gene: Alvy_56 Start: 38642, Stop: 40063, Start Num: 78

Candidate Starts for Alvy_56:

(48, 38561), (52, 38570), (Start: 57 @38582 has 3 MA's), (Start: 73 @38633 has 5 MA's), (Start: 78 @38642 has 10 MA's), (117, 38852), (124, 38879), (129, 38909), (148, 39017), (163, 39146), (174, 39194), (195, 39305), (197, 39314), (201, 39341), (206, 39362), (207, 39365), (213, 39404), (216, 39419), (262, 39563), (288, 39647), (320, 39764), (326, 39800), (339, 39854), (340, 39857), (350, 39890), (367, 39956), (385, 40013), (401, 40052),

Gene: Amela_51 Start: 37563, Stop: 38975, Start Num: 86

Candidate Starts for Amela_51:

(Start: 86 @37563 has 4 MA's), (98, 37593), (117, 37749), (120, 37758), (121, 37776), (123, 37785), (127, 37800), (128, 37809), (130, 37821), (134, 37848), (139, 37872), (141, 37881), (145, 37920), (146, 37923), (150, 37944), (167, 38070), (168, 38073), (179, 38133), (195, 38244), (199, 38259), (207, 38304), (226, 38397), (240, 38451), (245, 38466), (253, 38481), (278, 38550), (281, 38565), (305, 38628), (324, 38706), (334, 38754), (367, 38880), (372, 38898), (384, 38934), (396, 38955),

Gene: Amethyst_51 Start: 36872, Stop: 38293, Start Num: 78

Candidate Starts for Amethyst_51:

(48, 36791), (52, 36800), (Start: 57 @36812 has 3 MA's), (Start: 73 @36863 has 5 MA's), (Start: 78 @36872 has 10 MA's), (97, 36917), (116, 37061), (117, 37082), (124, 37109), (129, 37139), (148, 37247), (163, 37376), (168, 37385), (174, 37424), (180, 37454), (187, 37502), (195, 37535), (197, 37544), (206, 37592), (207, 37595), (213, 37634), (216, 37649), (262, 37793), (288, 37877), (320, 37994), (326, 38030), (339, 38084), (340, 38087), (350, 38120), (353, 38129), (367, 38186), (380, 38234), (385, 38243),

Gene: Auspice_131 Start: 69640, Stop: 68180, Start Num: 65

Candidate Starts for Auspice_131:

(Start: 51 @69682 has 1 MA's), (63, 69649), (Start: 65 @69640 has 21 MA's), (98, 69568), (110, 69487), (115, 69445), (117, 69421), (130, 69349), (145, 69232), (154, 69169), (164, 69085), (168, 69073), (175, 69031), (179, 69013), (210, 68851), (214, 68830), (227, 68779), (234, 68752), (244, 68725), (292, 68605), (326, 68455), (346, 68377), (359, 68332), (373, 68275),

Gene: Aziz_145 Start: 70550, Stop: 69096, Start Num: 65

Candidate Starts for Aziz_145:

(Start: 51 @70592 has 1 MA's), (63, 70559), (Start: 65 @70550 has 21 MA's), (94, 70496), (98, 70478), (106, 70403), (130, 70259), (145, 70142), (154, 70079), (168, 69989), (175, 69947), (217, 69734), (227, 69695), (234, 69668), (244, 69641), (277, 69560), (287, 69530), (290, 69524), (292, 69521), (326, 69371), (331, 69350), (346, 69293), (373, 69191),

Gene: Azula_38 Start: 30375, Stop: 31766, Start Num: 93

Candidate Starts for Azula_38:

(Start: 40 @30240 has 1 MA's), (Start: 80 @30354 has 1 MA's), (Start: 93 @30375 has 37 MA's), (112, 30495), (136, 30672), (155, 30798), (161, 30852), (180, 30969), (194, 31047), (206, 31110), (211, 31146), (228, 31224), (233, 31251), (236, 31266), (267, 31332), (269, 31335), (276, 31359), (279, 31368), (280, 31371), (312, 31449), (323, 31506), (331, 31542), (339, 31575), (341, 31584), (347, 31602), (363, 31653),

Gene: BananenDer11_39 Start: 31456, Stop: 32826, Start Num: 101

Candidate Starts for BananenDer11_39:

(13, 31129), (23, 31192), (35, 31246), (61, 31333), (Start: 83 @31381 has 8 MA's), (Start: 101 @31456 has 5 MA's), (102, 31468), (117, 31579), (118, 31582), (123, 31615), (128, 31639), (138, 31702), (150, 31777), (191, 32053), (237, 32275), (242, 32287), (259, 32335), (271, 32365), (275, 32386), (281, 32410), (326, 32563), (345, 32644), (347, 32650), (351, 32662), (361, 32698), (363, 32704), (367, 32725), (371, 32740), (372, 32746), (387, 32794), (394, 32803),

Gene: Barnstormer_59 Start: 38306, Stop: 39811, Start Num: 90

Candidate Starts for Barnstormer_59:

(17, 38096), (Start: 90 @38306 has 8 MA's), (117, 38498), (145, 38669), (175, 38861), (183, 38915), (197, 38963), (215, 39065), (272, 39302), (314, 39452), (334, 39551), (406, 39806),

Gene: BartholomewSD_56 Start: 37761, Stop: 39182, Start Num: 78

Candidate Starts for BartholomewSD_56:

(48, 37680), (52, 37689), (Start: 57 @37701 has 3 MA's), (Start: 73 @37752 has 5 MA's), (Start: 78 @37761 has 10 MA's), (117, 37971), (124, 37998), (129, 38028), (148, 38136), (163, 38265), (174, 38313), (195, 38424), (197, 38433), (201, 38460), (206, 38481), (207, 38484), (213, 38523), (216, 38538), (262, 38682), (288, 38766), (320, 38883), (326, 38919), (339, 38973), (340, 38976), (350, 39009), (367, 39075), (385, 39132), (401, 39171),

Gene: BeardedLady_49 Start: 34453, Stop: 35775, Start Num: 95

Candidate Starts for BeardedLady_49:

(Start: 92 @34441 has 5 MA's), (Start: 95 @34453 has 15 MA's), (98, 34468), (107, 34555), (Start: 109 @34558 has 1 MA's), (113, 34582), (120, 34633), (127, 34675), (128, 34684), (130, 34696), (144, 34786), (145, 34795), (150, 34819), (163, 34939), (167, 34945), (185, 35035), (195, 35050), (197, 35059), (203, 35092), (226, 35203), (227, 35209), (240, 35257), (245, 35272), (253, 35287), (275, 35347), (281, 35371), (311, 35452), (318, 35482), (324, 35512), (334, 35560), (355, 35638), (367, 35686), (369, 35695), (378, 35722), (396, 35761),

Gene: Begonia_38 Start: 31872, Stop: 33263, Start Num: 93

Candidate Starts for Begonia_38:

(59, 31794), (70, 31824), (75, 31842), (Start: 93 @31872 has 37 MA's), (112, 31992), (122, 32085), (151, 32262), (152, 32268), (155, 32295), (161, 32349), (180, 32466), (194, 32544), (228, 32721), (233, 32748), (236, 32763), (267, 32829), (269, 32832), (275, 32853), (276, 32856), (279, 32865), (280, 32868), (312, 32946), (315, 32955), (323, 33003), (339, 33072), (341, 33081), (347, 33099), (361, 33144), (363, 33150), (367, 33171), (381, 33225),

Gene: Blino_41 Start: 33377, Stop: 34768, Start Num: 93

Candidate Starts for Blino_41:

(75, 33347), (Start: 85 @33368 has 1 MA's), (Start: 93 @33377 has 37 MA's), (112, 33497), (136, 33674), (151, 33767), (152, 33773), (155, 33800), (161, 33854), (180, 33971), (194, 34049), (211, 34148), (215, 34166), (217, 34175), (228, 34226), (233, 34253), (236, 34268), (267, 34334), (269, 34337), (275, 34358), (279, 34370), (280, 34373), (312, 34451), (323, 34508), (341, 34586), (347, 34604), (361, 34649), (363, 34655), (367, 34676), (381, 34730),

Gene: Blueberry_37 Start: 30375, Stop: 31766, Start Num: 93

Candidate Starts for Blueberry_37:

(Start: 40 @30240 has 1 MA's), (Start: 80 @30354 has 1 MA's), (Start: 93 @30375 has 37 MA's), (112, 30495), (136, 30672), (155, 30798), (161, 30852), (180, 30969), (194, 31047), (206, 31110), (211, 31146), (228, 31224), (233, 31251), (236, 31266), (267, 31332), (269, 31335), (276, 31359), (279, 31368), (280, 31371), (312, 31449), (323, 31506), (331, 31542), (339, 31575), (341, 31584), (347, 31602), (363, 31653),

Gene: Bongo_130 Start: 69256, Stop: 67796, Start Num: 65

Candidate Starts for Bongo_130:

(Start: 51 @69298 has 1 MA's), (63, 69265), (Start: 65 @69256 has 21 MA's), (98, 69184), (110, 69103), (115, 69061), (117, 69037), (130, 68965), (145, 68848), (154, 68785), (164, 68701), (168, 68689), (175, 68647), (179, 68629), (210, 68467), (214, 68446), (227, 68395), (234, 68368), (244, 68341), (292, 68221), (326, 68071), (346, 67993), (359, 67948), (373, 67891),

Gene: Bovely_49 Start: 34070, Stop: 35404, Start Num: 92

Candidate Starts for Bovely_49:

(Start: 92 @34070 has 5 MA's), (Start: 95 @34082 has 15 MA's), (98, 34097), (107, 34184), (Start: 109 @34187 has 1 MA's), (113, 34211), (117, 34253), (120, 34262), (127, 34304), (128, 34313), (130, 34325), (144, 34415), (145, 34424), (150, 34448), (163, 34568), (167, 34574), (185, 34664), (195, 34679), (197, 34688), (203, 34721), (226, 34832), (227, 34838), (240, 34886), (245, 34901), (253, 34916), (275, 34976), (278, 34985), (281, 35000), (311, 35081), (318, 35111), (324, 35141), (334, 35189), (355, 35267), (367, 35315), (369, 35324), (378, 35351), (396, 35390),

Gene: Bowden_53 Start: 38547, Stop: 39977, Start Num: 73

Candidate Starts for Bowden_53:

(48, 38475), (52, 38484), (Start: 57 @38496 has 3 MA's), (Start: 73 @38547 has 5 MA's), (Start: 78 @38556 has 10 MA's), (124, 38793), (148, 38931), (163, 39060), (174, 39108), (195, 39219), (197, 39228), (201, 39255), (206, 39276), (207, 39279), (213, 39318), (216, 39333), (262, 39477), (279, 39534), (288, 39561), (320, 39678), (326, 39714), (339, 39768), (340, 39771), (350, 39804), (367, 39870), (385, 39927), (401, 39966),

Gene: Bricole_133 Start: 69404, Stop: 67944, Start Num: 65

Candidate Starts for Bricole_133:

(Start: 51 @69446 has 1 MA's), (63, 69413), (Start: 65 @69404 has 21 MA's), (98, 69332), (110, 69251), (115, 69209), (117, 69185), (130, 69113), (145, 68996), (154, 68933), (164, 68849), (168, 68837), (175, 68795), (179, 68777), (210, 68615), (214, 68594), (227, 68543), (234, 68516), (244, 68489), (292, 68369), (326, 68219), (346, 68141), (359, 68096), (373, 68039),

Gene: BryanRecycles_50 Start: 34372, Stop: 35694, Start Num: 95

Candidate Starts for BryanRecycles_50:

(Start: 92 @34360 has 5 MA's), (Start: 95 @34372 has 15 MA's), (98, 34387), (107, 34474), (Start: 109 @34477 has 1 MA's), (113, 34501), (120, 34552), (127, 34594), (128, 34603), (130, 34615), (144, 34705), (145, 34714), (150, 34738), (163, 34858), (167, 34864), (185, 34954), (195, 34969), (197, 34978), (203, 35011), (226, 35122), (227, 35128), (240, 35176), (245, 35191), (253, 35206), (275, 35266), (278, 35275), (281, 35290), (310, 35368), (318, 35401), (324, 35431), (334, 35479), (355, 35557), (367, 35605), (369, 35614), (378, 35641), (396, 35680),

Gene: Caelum_54 Start: 37075, Stop: 38505, Start Num: 73

Candidate Starts for Caelum_54:

(48, 37003), (Start: 57 @37024 has 3 MA's), (Start: 73 @37075 has 5 MA's), (Start: 78 @37084 has 10 MA's), (117, 37294), (124, 37321), (133, 37372), (135, 37387), (138, 37393), (148, 37459), (163, 37588), (168, 37597), (174, 37636), (195, 37747), (197, 37756), (207, 37807), (216, 37861), (229, 37915), (262, 38005), (288, 38089), (320, 38206), (326, 38242), (340, 38299), (350, 38332), (353, 38341), (367, 38398), (385, 38455),

Gene: Caliburn_48 Start: 34183, Stop: 35505, Start Num: 95

Candidate Starts for Caliburn_48:

(Start: 92 @34171 has 5 MA's), (Start: 95 @34183 has 15 MA's), (98, 34198), (107, 34285), (Start: 109 @34288 has 1 MA's), (113, 34312), (120, 34363), (127, 34405), (128, 34414), (130, 34426), (144, 34516), (145, 34525), (150, 34549), (163, 34669), (167, 34675), (185, 34765), (195, 34780), (197, 34789), (203, 34822), (226, 34933), (227, 34939), (240, 34987), (245, 35002), (253, 35017), (275, 35077), (281, 35101), (311, 35182), (318, 35212), (324, 35242), (334, 35290), (355, 35368), (367, 35416), (369, 35425), (378, 35452), (396, 35491),

Gene: CarolAnn_40 Start: 33367, Stop: 34767, Start Num: 85

Candidate Starts for CarolAnn_40:

(75, 33346), (Start: 85 @33367 has 1 MA's), (Start: 93 @33376 has 37 MA's), (112, 33496), (136, 33673), (151, 33766), (152, 33772), (155, 33799), (161, 33853), (180, 33970), (194, 34048), (211, 34147), (215, 34165), (217, 34174), (228, 34225), (233, 34252), (236, 34267), (267, 34333), (269, 34336), (275, 34357), (279, 34369), (280, 34372), (312, 34450), (323, 34507), (341, 34585), (347, 34603), (361, 34648), (363, 34654), (367, 34675), (381, 34729),

Gene: Caron_62 Start: 38824, Stop: 40329, Start Num: 90

Candidate Starts for Caron_62:

(1, 38068), (2, 38149), (3, 38335), (8, 38500), (68, 38776), (Start: 90 @38824 has 8 MA's), (117, 39016), (145, 39187), (183, 39433), (191, 39466), (197, 39481), (215, 39583), (248, 39715), (272, 39820), (406, 40324),

Gene: Celery_54 Start: 36669, Stop: 38081, Start Num: 86

Candidate Starts for Celery_54:

(Start: 86 @36669 has 4 MA's), (98, 36699), (Start: 105 @36780 has 1 MA's), (Start: 109 @36789 has 1 MA's), (117, 36855), (120, 36864), (127, 36906), (128, 36915), (130, 36927), (134, 36954), (141, 36987), (145, 37026), (146, 37029), (150, 37050), (167, 37176), (179, 37239), (195, 37350), (199, 37365), (207, 37410), (226, 37503), (227, 37509), (230, 37530), (253, 37587), (278, 37656), (281, 37671), (305, 37734), (321, 37797), (324, 37812), (330, 37845), (334, 37860), (351, 37923), (367, 37986),

Gene: CheeseSpider_44 Start: 30163, Stop: 31554, Start Num: 93

Candidate Starts for CheeseSpider_44:

(Start: 93 @30163 has 37 MA's), (99, 30205), (Start: 101 @30220 has 5 MA's), (122, 30376), (136, 30460), (154, 30577), (155, 30586), (161, 30640), (177, 30730), (180, 30757), (194, 30835), (206, 30898), (211, 30934), (217, 30961), (228, 31012), (233, 31039), (236, 31054), (275, 31144), (279, 31156), (280, 31159), (323, 31294), (339, 31363), (341, 31372), (363, 31441), (381, 31516),

Gene: Collard_38 Start: 31381, Stop: 32826, Start Num: 83

Candidate Starts for Collard_38:

(13, 31129), (23, 31192), (35, 31246), (61, 31333), (Start: 83 @31381 has 8 MA's), (Start: 101 @31456 has 5 MA's), (102, 31468), (117, 31579), (118, 31582), (123, 31615), (128, 31639), (138, 31702), (150, 31777), (191, 32053), (237, 32275), (242, 32287), (259, 32335), (271, 32365), (275, 32386), (281,

32410), (326, 32563), (345, 32644), (347, 32650), (351, 32662), (361, 32698), (363, 32704), (367, 32725), (371, 32740), (372, 32746), (387, 32794), (394, 32803),

Gene: Curiosium_43 Start: 31007, Stop: 32419, Start Num: 81

Candidate Starts for Curiosium_43:

(77, 30998), (Start: 81 @31007 has 2 MA's), (Start: 95 @31028 has 15 MA's), (103, 31100), (113, 31157), (117, 31199), (118, 31202), (122, 31232), (124, 31238), (135, 31310), (154, 31433), (163, 31511), (170, 31541), (180, 31589), (195, 31658), (197, 31667), (201, 31694), (205, 31709), (211, 31748), (212, 31751), (219, 31778), (225, 31805), (240, 31859), (244, 31871), (248, 31877), (258, 31901), (285, 31994), (291, 32006), (293, 32009), (297, 32018), (302, 32036), (314, 32093), (315, 32096), (329, 32168), (332, 32183), (361, 32285), (372, 32330), (373, 32333), (403, 32414),

Gene: CurlyFries_42 Start: 31973, Stop: 33400, Start Num: 89

Candidate Starts for CurlyFries_42:

(26, 31793), (30, 31802), (33, 31817), (34, 31823), (Start: 55 @31886 has 2 MA's), (Start: 89 @31973 has 1 MA's), (Start: 93 @31979 has 37 MA's), (98, 32003), (Start: 101 @32036 has 5 MA's), (107, 32090), (112, 32099), (136, 32279), (146, 32336), (160, 32444), (164, 32489), (190, 32651), (196, 32669), (197, 32672), (256, 32918), (281, 32999), (304, 33059), (323, 33140), (361, 33281), (364, 33290), (368, 33314), (377, 33350),

Gene: Dadosky_39 Start: 31274, Stop: 32719, Start Num: 83

Candidate Starts for Dadosky_39:

(25, 31103), (35, 31139), (61, 31226), (Start: 83 @31274 has 8 MA's), (Start: 101 @31349 has 5 MA's), (102, 31361), (117, 31472), (118, 31475), (123, 31508), (128, 31532), (138, 31595), (150, 31670), (191, 31946), (237, 32168), (242, 32180), (259, 32228), (271, 32258), (275, 32279), (281, 32303), (326, 32456), (345, 32537), (347, 32543), (351, 32555), (361, 32591), (363, 32597), (366, 32615), (367, 32618), (371, 32633), (372, 32639), (387, 32687), (394, 32696),

Gene: Daudau_52 Start: 37034, Stop: 38455, Start Num: 78

Candidate Starts for Daudau_52:

(48, 36953), (Start: 57 @36974 has 3 MA's), (Start: 73 @37025 has 5 MA's), (Start: 78 @37034 has 10 MA's), (124, 37271), (148, 37409), (163, 37538), (174, 37586), (195, 37697), (197, 37706), (201, 37733), (206, 37754), (207, 37757), (213, 37796), (216, 37811), (262, 37955), (288, 38039), (320, 38156), (326, 38192), (339, 38246), (340, 38249), (367, 38348), (385, 38405), (388, 38411),

Gene: Dexers_50 Start: 36616, Stop: 38022, Start Num: 87

Candidate Starts for Dexers_50:

(77, 36595), (Start: 87 @36616 has 2 MA's), (98, 36646), (120, 36811), (121, 36829), (127, 36853), (128, 36862), (130, 36874), (144, 36964), (145, 36973), (146, 36976), (150, 36997), (168, 37126), (179, 37186), (195, 37297), (207, 37357), (233, 37489), (240, 37504), (279, 37606), (312, 37702), (324, 37759), (343, 37843), (347, 37858), (351, 37870), (372, 37951), (393, 38002),

Gene: Diminimus_131 Start: 69072, Stop: 67612, Start Num: 65

Candidate Starts for Diminimus_131:

(Start: 51 @69114 has 1 MA's), (63, 69081), (Start: 65 @69072 has 21 MA's), (98, 69000), (110, 68919), (115, 68877), (117, 68853), (130, 68781), (145, 68664), (154, 68601), (164, 68517), (168, 68505), (175, 68463), (179, 68445), (210, 68283), (214, 68262), (227, 68211), (234, 68184), (244, 68157), (292, 68037), (326, 67887), (346, 67809), (359, 67764), (373, 67707),

Gene: DoubleChamp_38 Start: 31456, Stop: 32826, Start Num: 101

Candidate Starts for DoubleChamp_38:

(13, 31129), (23, 31192), (35, 31246), (61, 31333), (Start: 83 @31381 has 8 MA's), (Start: 101 @31456 has 5 MA's), (102, 31468), (117, 31579), (118, 31582), (123, 31615), (128, 31639), (138, 31702), (150,

31777), (191, 32053), (237, 32275), (242, 32287), (259, 32335), (271, 32365), (275, 32386), (281, 32410), (326, 32563), (345, 32644), (347, 32650), (351, 32662), (361, 32698), (363, 32704), (367, 32725), (371, 32740), (372, 32746), (387, 32794), (394, 32803),

Gene: Dulcita_131 Start: 69073, Stop: 67613, Start Num: 65

Candidate Starts for Dulcita_131:

(Start: 51 @69115 has 1 MA's), (63, 69082), (Start: 65 @69073 has 21 MA's), (98, 69001), (110, 68920), (115, 68878), (117, 68854), (130, 68782), (145, 68665), (154, 68602), (164, 68518), (168, 68506), (175, 68464), (179, 68446), (210, 68284), (214, 68263), (227, 68212), (234, 68185), (244, 68158), (292, 68038), (326, 67888), (346, 67810), (359, 67765), (373, 67708),

Gene: ELB20_52 Start: 37707, Stop: 38996, Start Num: 105

Candidate Starts for ELB20_52:

(Start: 78 @37578 has 10 MA's), (79, 37581), (Start: 105 @37707 has 1 MA's), (107, 37713), (112, 37722), (117, 37785), (129, 37842), (133, 37863), (140, 37893), (141, 37896), (148, 37950), (163, 38079), (168, 38088), (174, 38127), (180, 38157), (195, 38238), (197, 38247), (207, 38298), (216, 38352), (288, 38580), (309, 38649), (326, 38733), (340, 38790), (350, 38823), (353, 38832), (367, 38889), (385, 38946), (388, 38952), (401, 38985),

Gene: Eddasa_50 Start: 34372, Stop: 35694, Start Num: 95

Candidate Starts for Eddasa_50:

(Start: 92 @34360 has 5 MA's), (Start: 95 @34372 has 15 MA's), (98, 34387), (107, 34474), (Start: 109 @34477 has 1 MA's), (113, 34501), (120, 34552), (127, 34594), (128, 34603), (130, 34615), (144, 34705), (145, 34714), (150, 34738), (163, 34858), (167, 34864), (185, 34954), (195, 34969), (197, 34978), (203, 35011), (226, 35122), (227, 35128), (240, 35176), (245, 35191), (253, 35206), (275, 35266), (278, 35275), (281, 35290), (310, 35368), (318, 35401), (324, 35431), (334, 35479), (355, 35557), (367, 35605), (369, 35614), (378, 35641), (396, 35680),

Gene: Edugator_39 Start: 31774, Stop: 33144, Start Num: 101

Candidate Starts for Edugator_39:

(13, 31447), (25, 31528), (35, 31564), (61, 31651), (Start: 83 @31699 has 8 MA's), (Start: 101 @31774 has 5 MA's), (102, 31786), (117, 31897), (118, 31900), (123, 31933), (128, 31957), (138, 32020), (150, 32095), (191, 32371), (237, 32593), (242, 32605), (259, 32653), (271, 32683), (275, 32704), (326, 32881), (345, 32962), (347, 32968), (351, 32980), (361, 33016), (363, 33022), (366, 33040), (367, 33043), (371, 33058), (372, 33064), (387, 33112), (394, 33121),

Gene: EnochSoames_52 Start: 34356, Stop: 35690, Start Num: 92

Candidate Starts for EnochSoames_52:

(Start: 92 @34356 has 5 MA's), (Start: 95 @34368 has 15 MA's), (98, 34383), (107, 34470), (Start: 109 @34473 has 1 MA's), (113, 34497), (117, 34539), (120, 34548), (127, 34590), (128, 34599), (130, 34611), (144, 34701), (145, 34710), (150, 34734), (163, 34854), (167, 34860), (185, 34950), (195, 34965), (197, 34974), (203, 35007), (226, 35118), (227, 35124), (240, 35172), (245, 35187), (253, 35202), (275, 35262), (278, 35271), (310, 35364), (318, 35397), (324, 35427), (334, 35475), (355, 35553), (367, 35601), (369, 35610), (378, 35637), (396, 35676),

Gene: Esperer_49 Start: 33895, Stop: 35217, Start Num: 95

Candidate Starts for Esperer_49:

(Start: 92 @33883 has 5 MA's), (Start: 95 @33895 has 15 MA's), (98, 33910), (107, 33997), (Start: 109 @34000 has 1 MA's), (113, 34024), (117, 34066), (120, 34075), (127, 34117), (128, 34126), (130, 34138), (144, 34228), (145, 34237), (150, 34261), (163, 34381), (167, 34387), (185, 34477), (195, 34492), (197, 34501), (203, 34534), (226, 34645), (227, 34651), (240, 34699), (245, 34714), (253, 34729), (275, 34789), (281, 34813), (311, 34894), (318, 34924), (324, 34954), (334, 35002), (355, 35080), (367, 35128), (369, 35137), (378, 35164), (396, 35203),

Gene: Estes_146 Start: 70719, Stop: 69265, Start Num: 65

Candidate Starts for Estes_146:

(14, 70932), (19, 70887), (30, 70836), (Start: 51 @70761 has 1 MA's), (63, 70728), (Start: 65 @70719 has 21 MA's), (94, 70665), (98, 70647), (106, 70572), (130, 70428), (145, 70311), (154, 70248), (168, 70158), (175, 70116), (217, 69903), (227, 69864), (234, 69837), (244, 69810), (277, 69729), (287, 69699), (290, 69693), (292, 69690), (326, 69540), (331, 69519), (346, 69462), (373, 69360), (385, 69318), (388, 69312),

Gene: Exile_44 Start: 37249, Stop: 38688, Start Num: 82

Candidate Starts for Exile_44:

(76, 37237), (Start: 82 @37249 has 1 MA's), (Start: 84 @37255 has 1 MA's), (94, 37273), (117, 37441), (126, 37486), (127, 37492), (139, 37552), (147, 37612), (172, 37780), (205, 37939), (242, 38107), (263, 38161), (292, 38254), (314, 38341), (340, 38464), (343, 38476), (344, 38482), (349, 38500), (367, 38560), (386, 38620),

Gene: Fairfaxidum_39 Start: 30789, Stop: 32177, Start Num: 93

Candidate Starts for Fairfaxidum_39:

(75, 30759), (Start: 93 @30789 has 37 MA's), (Start: 101 @30846 has 5 MA's), (153, 31200), (155, 31212), (161, 31266), (162, 31272), (166, 31299), (170, 31332), (171, 31335), (195, 31467), (211, 31560), (215, 31578), (230, 31653), (233, 31665), (236, 31680), (241, 31689), (255, 31716), (275, 31770), (279, 31782), (294, 31812), (312, 31863), (323, 31920), (339, 31989), (341, 31998), (342, 32001), (346, 32013), (347, 32016), (350, 32025), (376, 32121), (383, 32142), (392, 32157),

Gene: Fenry_37 Start: 30762, Stop: 32153, Start Num: 93

Candidate Starts for Fenry_37:

(70, 30714), (75, 30732), (Start: 85 @30753 has 1 MA's), (Start: 93 @30762 has 37 MA's), (112, 30882), (122, 30975), (151, 31152), (152, 31158), (155, 31185), (161, 31239), (180, 31356), (211, 31533), (215, 31551), (217, 31560), (228, 31611), (233, 31638), (236, 31653), (267, 31719), (269, 31722), (275, 31743), (276, 31746), (279, 31755), (280, 31758), (303, 31809), (312, 31836), (323, 31893), (331, 31929), (339, 31962), (347, 31989), (363, 32040), (381, 32115),

Gene: Feyre_38 Start: 31236, Stop: 32642, Start Num: 93

Candidate Starts for Feyre_38:

(Start: 87 @31227 has 2 MA's), (Start: 93 @31236 has 37 MA's), (112, 31356), (136, 31533), (142, 31557), (149, 31608), (154, 31650), (162, 31719), (166, 31746), (167, 31755), (171, 31782), (177, 31803), (179, 31821), (182, 31848), (190, 31893), (194, 31899), (217, 32004), (231, 32070), (233, 32079), (239, 32100), (246, 32118), (254, 32139), (281, 32226), (284, 32235), (286, 32238), (319, 32346), (325, 32382), (343, 32454), (346, 32463), (361, 32514), (370, 32553), (374, 32565), (376, 32574), (390, 32604), (397, 32619),

Gene: FreakyGoo_131 Start: 69557, Stop: 68097, Start Num: 65

Candidate Starts for FreakyGoo_131:

(Start: 51 @69599 has 1 MA's), (63, 69566), (Start: 65 @69557 has 21 MA's), (98, 69485), (110, 69404), (115, 69362), (117, 69338), (130, 69266), (145, 69149), (154, 69086), (164, 69002), (168, 68990), (175, 68948), (179, 68930), (210, 68768), (214, 68747), (227, 68696), (234, 68669), (244, 68642), (292, 68522), (326, 68372), (346, 68294), (359, 68249), (373, 68192),

Gene: Frokostdame_39 Start: 30677, Stop: 32089, Start Num: 80

Candidate Starts for Frokostdame_39:

(Start: 40 @30563 has 1 MA's), (Start: 80 @30677 has 1 MA's), (Start: 93 @30698 has 37 MA's), (112, 30818), (155, 31121), (161, 31175), (180, 31292), (194, 31370), (206, 31433), (211, 31469), (228, 31547), (233, 31574), (236, 31589), (267, 31655), (269, 31658), (279, 31691), (280, 31694), (312,

31772), (323, 31829), (331, 31865), (339, 31898), (347, 31925), (381, 32051),

Gene: Gambino_40 Start: 30240, Stop: 31766, Start Num: 40

Candidate Starts for Gambino_40:

(Start: 40 @30240 has 1 MA's), (Start: 80 @30354 has 1 MA's), (Start: 93 @30375 has 37 MA's), (112, 30495), (136, 30672), (155, 30798), (161, 30852), (180, 30969), (194, 31047), (206, 31110), (211, 31146), (228, 31224), (233, 31251), (236, 31266), (267, 31332), (269, 31335), (276, 31359), (279, 31368), (280, 31371), (312, 31449), (323, 31506), (331, 31542), (339, 31575), (341, 31584), (347, 31602), (363, 31653),

Gene: GardenSalsa_146 Start: 70892, Stop: 69438, Start Num: 65

Candidate Starts for GardenSalsa_146:

(30, 71009), (Start: 51 @70934 has 1 MA's), (63, 70901), (Start: 65 @70892 has 21 MA's), (94, 70838), (98, 70820), (106, 70745), (130, 70601), (145, 70484), (154, 70421), (168, 70331), (175, 70289), (217, 70076), (234, 70010), (244, 69983), (277, 69902), (287, 69872), (290, 69866), (292, 69863), (326, 69713), (331, 69692), (346, 69635), (373, 69533), (385, 69491),

Gene: GenevaB15_148 Start: 70550, Stop: 69096, Start Num: 65

Candidate Starts for GenevaB15_148:

(Start: 51 @70592 has 1 MA's), (63, 70559), (Start: 65 @70550 has 21 MA's), (94, 70496), (98, 70478), (106, 70403), (130, 70259), (145, 70142), (154, 70079), (168, 69989), (175, 69947), (217, 69734), (227, 69695), (234, 69668), (244, 69641), (277, 69560), (287, 69530), (290, 69524), (292, 69521), (326, 69371), (331, 69350), (346, 69293), (373, 69191),

Gene: Gengar_38 Start: 31346, Stop: 32752, Start Num: 93

Candidate Starts for Gengar_38:

(Start: 87 @31337 has 2 MA's), (Start: 93 @31346 has 37 MA's), (112, 31466), (136, 31643), (142, 31667), (149, 31718), (154, 31760), (162, 31829), (166, 31856), (167, 31865), (171, 31892), (177, 31913), (179, 31931), (182, 31958), (190, 32003), (194, 32009), (217, 32114), (231, 32180), (233, 32189), (239, 32210), (246, 32228), (281, 32336), (284, 32345), (286, 32348), (319, 32456), (325, 32492), (343, 32564), (346, 32573), (361, 32624), (370, 32663), (374, 32675), (376, 32684), (390, 32714), (397, 32729),

Gene: Glaske16_133 Start: 70191, Stop: 68731, Start Num: 65

Candidate Starts for Glaske16_133:

(Start: 51 @70233 has 1 MA's), (63, 70200), (Start: 65 @70191 has 21 MA's), (98, 70119), (110, 70038), (115, 69996), (117, 69972), (130, 69900), (145, 69783), (154, 69720), (164, 69636), (168, 69624), (175, 69582), (179, 69564), (210, 69402), (214, 69381), (227, 69330), (234, 69303), (244, 69276), (292, 69156), (326, 69006), (346, 68928), (359, 68883), (373, 68826),

Gene: Gretchen_58 Start: 38919, Stop: 40406, Start Num: 90

Candidate Starts for Gretchen_58:

(8, 38601), (15, 38670), (Start: 90 @38919 has 8 MA's), (Start: 101 @38982 has 5 MA's), (104, 39012), (117, 39111), (118, 39114), (124, 39150), (145, 39282), (147, 39294), (157, 39366), (163, 39423), (169, 39450), (183, 39528), (197, 39576), (230, 39753), (233, 39765), (262, 39885), (272, 39918), (290, 39978), (304, 40020), (307, 40032), (332, 40158), (335, 40173), (356, 40251), (361, 40269), (404, 40401),

Gene: Guillsminger_39 Start: 31317, Stop: 32723, Start Num: 93

Candidate Starts for Guillsminger_39:

(Start: 87 @31308 has 2 MA's), (Start: 93 @31317 has 37 MA's), (112, 31437), (136, 31614), (142, 31638), (149, 31689), (154, 31731), (160, 31779), (162, 31800), (166, 31827), (167, 31836), (171, 31863), (177, 31884), (179, 31902), (182, 31929), (190, 31974), (194, 31980), (217, 32085), (231,

32151), (233, 32160), (239, 32181), (246, 32199), (281, 32307), (284, 32316), (286, 32319), (319, 32427), (325, 32463), (343, 32535), (346, 32544), (361, 32595), (370, 32634), (374, 32646), (376, 32655), (390, 32685), (397, 32700),

Gene: Heftyboy_38 Start: 31463, Stop: 32869, Start Num: 93

Candidate Starts for Heftyboy_38:

(Start: 87 @31454 has 2 MA's), (Start: 93 @31463 has 37 MA's), (112, 31583), (136, 31760), (142, 31784), (149, 31835), (154, 31877), (160, 31925), (162, 31946), (166, 31973), (167, 31982), (171, 32009), (177, 32030), (179, 32048), (182, 32075), (190, 32120), (194, 32126), (217, 32231), (231, 32297), (233, 32306), (239, 32327), (246, 32345), (281, 32453), (284, 32462), (286, 32465), (317, 32561), (319, 32573), (325, 32609), (343, 32681), (346, 32690), (361, 32741), (370, 32780), (374, 32792), (376, 32801), (390, 32831), (397, 32846),

Gene: Hydra_50 Start: 34719, Stop: 36053, Start Num: 92

Candidate Starts for Hydra_50:

(Start: 92 @34719 has 5 MA's), (Start: 95 @34731 has 15 MA's), (98, 34746), (107, 34833), (Start: 109 @34836 has 1 MA's), (113, 34860), (117, 34902), (120, 34911), (127, 34953), (128, 34962), (130, 34974), (144, 35064), (145, 35073), (150, 35097), (163, 35217), (167, 35223), (185, 35313), (195, 35328), (197, 35337), (203, 35370), (226, 35481), (227, 35487), (240, 35535), (245, 35550), (253, 35565), (275, 35625), (278, 35634), (281, 35649), (311, 35730), (318, 35760), (324, 35790), (334, 35838), (355, 35916), (367, 35964), (369, 35973), (378, 36000), (396, 36039),

Gene: IPHane7_129 Start: 69256, Stop: 67796, Start Num: 65

Candidate Starts for IPHane7_129:

(Start: 51 @69298 has 1 MA's), (63, 69265), (Start: 65 @69256 has 21 MA's), (98, 69184), (110, 69103), (115, 69061), (117, 69037), (130, 68965), (145, 68848), (154, 68785), (164, 68701), (168, 68689), (175, 68647), (179, 68629), (210, 68467), (214, 68446), (227, 68395), (234, 68368), (244, 68341), (292, 68221), (326, 68071), (346, 67993), (359, 67948), (373, 67891),

Gene: Indigo_48 Start: 34063, Stop: 35397, Start Num: 92

Candidate Starts for Indigo_48:

(Start: 92 @34063 has 5 MA's), (Start: 95 @34075 has 15 MA's), (98, 34090), (107, 34177), (Start: 109 @34180 has 1 MA's), (113, 34204), (117, 34246), (120, 34255), (127, 34297), (128, 34306), (130, 34318), (144, 34408), (145, 34417), (150, 34441), (163, 34561), (167, 34567), (185, 34657), (195, 34672), (197, 34681), (203, 34714), (226, 34825), (227, 34831), (240, 34879), (245, 34894), (253, 34909), (275, 34969), (281, 34993), (311, 35074), (318, 35104), (324, 35134), (334, 35182), (355, 35260), (367, 35308), (369, 35317), (378, 35344), (396, 35383),

Gene: InvictusManeo_38 Start: 31499, Stop: 32869, Start Num: 101

Candidate Starts for InvictusManeo_38:

(13, 31172), (23, 31235), (35, 31289), (61, 31376), (Start: 83 @31424 has 8 MA's), (Start: 101 @31499 has 5 MA's), (102, 31511), (117, 31622), (118, 31625), (123, 31658), (128, 31682), (138, 31745), (150, 31820), (191, 32096), (237, 32318), (242, 32330), (259, 32378), (271, 32408), (275, 32429), (281, 32453), (326, 32606), (345, 32687), (347, 32693), (351, 32705), (361, 32741), (363, 32747), (367, 32768), (371, 32783), (372, 32789), (387, 32837), (394, 32846),

Gene: Issmi_53 Start: 37574, Stop: 38995, Start Num: 78

Candidate Starts for Issmi_53:

(Start: 57 @37514 has 3 MA's), (Start: 73 @37565 has 5 MA's), (Start: 78 @37574 has 10 MA's), (117, 37784), (124, 37811), (135, 37877), (148, 37949), (163, 38078), (168, 38087), (174, 38126), (195, 38237), (201, 38273), (206, 38294), (207, 38297), (213, 38336), (216, 38351), (262, 38495), (288, 38579), (320, 38696), (326, 38732), (339, 38786), (340, 38789), (350, 38822), (367, 38888), (380, 38936), (385, 38945), (401, 38984),

Gene: Itza_50 Start: 33245, Stop: 34663, Start Num: 96

Candidate Starts for Itza_50:

(50, 33131), (54, 33137), (Start: 87 @33224 has 2 MA's), (Start: 96 @33245 has 3 MA's), (140, 33557), (147, 33611), (148, 33614), (153, 33659), (156, 33674), (163, 33740), (181, 33824), (184, 33857), (202, 33929), (206, 33947), (215, 34001), (232, 34082), (240, 34106), (242, 34112), (261, 34163), (271, 34196), (298, 34265), (308, 34310), (324, 34391), (330, 34424), (331, 34427), (400, 34646),

Gene: Izel_131 Start: 69072, Stop: 67612, Start Num: 65

Candidate Starts for Izel_131:

(Start: 51 @69114 has 1 MA's), (63, 69081), (Start: 65 @69072 has 21 MA's), (98, 69000), (110, 68919), (115, 68877), (117, 68853), (130, 68781), (145, 68664), (154, 68601), (164, 68517), (168, 68505), (175, 68463), (179, 68445), (210, 68283), (214, 68262), (227, 68211), (234, 68184), (244, 68157), (292, 68037), (326, 67887), (346, 67809), (359, 67764), (373, 67707),

Gene: Izzy_50 Start: 34419, Stop: 35741, Start Num: 95

Candidate Starts for Izzy_50:

(Start: 92 @34407 has 5 MA's), (Start: 95 @34419 has 15 MA's), (98, 34434), (107, 34521), (Start: 109 @34524 has 1 MA's), (113, 34548), (120, 34599), (127, 34641), (128, 34650), (130, 34662), (144, 34752), (145, 34761), (150, 34785), (163, 34905), (167, 34911), (185, 35001), (195, 35016), (197, 35025), (203, 35058), (226, 35169), (227, 35175), (240, 35223), (245, 35238), (253, 35253), (275, 35313), (278, 35322), (281, 35337), (310, 35415), (318, 35448), (324, 35478), (334, 35526), (355, 35604), (367, 35652), (369, 35661), (378, 35688), (396, 35727),

Gene: Jalammah_42 Start: 32075, Stop: 33466, Start Num: 93

Candidate Starts for Jalammah_42:

(70, 32027), (75, 32045), (Start: 85 @32066 has 1 MA's), (Start: 93 @32075 has 37 MA's), (112, 32195), (122, 32288), (151, 32465), (152, 32471), (155, 32498), (161, 32552), (180, 32669), (211, 32846), (215, 32864), (217, 32873), (228, 32924), (233, 32951), (236, 32966), (267, 33032), (269, 33035), (275, 33056), (276, 33059), (279, 33068), (280, 33071), (303, 33122), (312, 33149), (323, 33206), (331, 33242), (339, 33275), (347, 33302), (363, 33353), (381, 33428),

Gene: Jash_50 Start: 34372, Stop: 35694, Start Num: 95

Candidate Starts for Jash_50:

(Start: 92 @34360 has 5 MA's), (Start: 95 @34372 has 15 MA's), (98, 34387), (107, 34474), (Start: 109 @34477 has 1 MA's), (113, 34501), (120, 34552), (127, 34594), (128, 34603), (130, 34615), (144, 34705), (145, 34714), (150, 34738), (163, 34858), (167, 34864), (185, 34954), (195, 34969), (197, 34978), (203, 35011), (226, 35122), (227, 35128), (240, 35176), (245, 35191), (253, 35206), (275, 35266), (278, 35275), (281, 35290), (310, 35368), (318, 35401), (324, 35431), (334, 35479), (355, 35557), (367, 35605), (369, 35614), (378, 35641), (396, 35680),

Gene: Jevington_52 Start: 36147, Stop: 37628, Start Num: 57

Candidate Starts for Jevington_52:

(10, 35931), (21, 36015), (22, 36021), (47, 36123), (Start: 57 @36147 has 3 MA's), (Start: 73 @36198 has 5 MA's), (Start: 78 @36207 has 10 MA's), (117, 36417), (124, 36444), (148, 36582), (163, 36711), (174, 36759), (195, 36870), (197, 36879), (206, 36927), (207, 36930), (213, 36969), (262, 37128), (288, 37212), (320, 37329), (326, 37365), (350, 37455), (353, 37464), (367, 37521), (380, 37569), (385, 37578), (401, 37617),

Gene: Jflix2_51 Start: 35443, Stop: 36906, Start Num: 53

Candidate Starts for Jflix2_51:

(31, 35365), (Start: 53 @35443 has 1 MA's), (58, 35461), (Start: 81 @35521 has 2 MA's), (98, 35566), (Start: 101 @35596 has 5 MA's), (107, 35650), (112, 35659), (113, 35677), (142, 35860), (146, 35893),

(154, 35953), (171, 36085), (173, 36097), (179, 36124), (197, 36208), (215, 36310), (216, 36313), (229, 36373), (236, 36412), (250, 36439), (264, 36469), (265, 36475), (273, 36490), (275, 36502), (279, 36514), (295, 36556), (317, 36619), (329, 36679), (338, 36721), (361, 36796), (365, 36808), (367, 36823), (377, 36862),

Gene: JuJu_41 Start: 31203, Stop: 32594, Start Num: 93

Candidate Starts for JuJu_41:

(75, 31173), (Start: 93 @31203 has 37 MA's), (112, 31323), (136, 31500), (151, 31593), (152, 31599), (155, 31626), (161, 31680), (167, 31722), (180, 31797), (183, 31824), (194, 31875), (206, 31938), (209, 31965), (211, 31974), (215, 31992), (217, 32001), (228, 32052), (233, 32079), (236, 32094), (275, 32184), (279, 32196), (280, 32199), (312, 32277), (323, 32334), (341, 32412), (363, 32481),

Gene: KappaFarmDelta_40 Start: 29698, Stop: 31089, Start Num: 93

Candidate Starts for KappaFarmDelta_40:

(Start: 93 @29698 has 37 MA's), (136, 29995), (155, 30121), (161, 30175), (180, 30292), (206, 30433), (211, 30469), (215, 30487), (228, 30547), (233, 30574), (236, 30589), (255, 30625), (267, 30655), (279, 30691), (280, 30694), (312, 30772), (339, 30898), (363, 30976), (367, 30997), (381, 31051),

Gene: KleverKiS_134 Start: 70309, Stop: 68849, Start Num: 65

Candidate Starts for KleverKiS_134:

(Start: 51 @70351 has 1 MA's), (63, 70318), (Start: 65 @70309 has 21 MA's), (98, 70237), (110, 70156), (115, 70114), (117, 70090), (130, 70018), (145, 69901), (154, 69838), (164, 69754), (168, 69742), (175, 69700), (179, 69682), (210, 69520), (214, 69499), (227, 69448), (234, 69421), (244, 69394), (292, 69274), (326, 69124), (346, 69046), (359, 69001), (373, 68944),

Gene: Kratio_37 Start: 30972, Stop: 32417, Start Num: 83

Candidate Starts for Kratio_37:

(13, 30720), (23, 30783), (35, 30837), (61, 30924), (Start: 83 @30972 has 8 MA's), (Start: 101 @31047 has 5 MA's), (102, 31059), (117, 31170), (118, 31173), (123, 31206), (128, 31230), (138, 31293), (150, 31368), (191, 31644), (237, 31866), (242, 31878), (259, 31926), (271, 31956), (275, 31977), (281, 32001), (326, 32154), (345, 32235), (347, 32241), (351, 32253), (361, 32289), (363, 32295), (366, 32313), (367, 32316), (371, 32331), (372, 32337), (387, 32385), (394, 32394),

Gene: Kumao_96 Start: 59042, Stop: 60475, Start Num: 84

Candidate Starts for Kumao_96:

(49, 58946), (72, 59015), (Start: 81 @59033 has 2 MA's), (Start: 84 @59042 has 1 MA's), (Start: 96 @59066 has 3 MA's), (113, 59189), (117, 59231), (131, 59312), (147, 59414), (150, 59426), (151, 59441), (157, 59486), (175, 59609), (178, 59621), (198, 59714), (204, 59744), (218, 59816), (220, 59825), (247, 59915), (249, 59921), (252, 59927), (283, 60035), (285, 60038), (289, 60047), (291, 60050), (317, 60155), (326, 60206), (340, 60263), (341, 60269), (345, 60287), (348, 60296), (352, 60305), (361, 60335), (363, 60341), (372, 60380),

Gene: Larva_39 Start: 31141, Stop: 32586, Start Num: 83

Candidate Starts for Larva_39:

(25, 30970), (35, 31006), (61, 31093), (Start: 83 @31141 has 8 MA's), (Start: 101 @31216 has 5 MA's), (102, 31228), (117, 31339), (118, 31342), (123, 31375), (128, 31399), (138, 31462), (150, 31537), (191, 31813), (237, 32035), (242, 32047), (259, 32095), (271, 32125), (275, 32146), (281, 32170), (326, 32323), (345, 32404), (347, 32410), (351, 32422), (361, 32458), (363, 32464), (366, 32482), (367, 32485), (371, 32500), (372, 32506), (387, 32554), (394, 32563),

Gene: LastHope_43 Start: 31352, Stop: 32743, Start Num: 95

Candidate Starts for LastHope_43:

(77, 31322), (Start: 81 @31331 has 2 MA's), (Start: 95 @31352 has 15 MA's), (103, 31424), (113, 31481), (117, 31523), (118, 31526), (122, 31556), (124, 31562), (135, 31634), (154, 31757), (163, 31835), (170, 31865), (180, 31913), (183, 31940), (195, 31982), (197, 31991), (201, 32018), (210, 32066), (219, 32102), (221, 32111), (225, 32129), (240, 32183), (244, 32195), (258, 32225), (276, 32285), (282, 32312), (285, 32318), (289, 32327), (291, 32330), (297, 32342), (302, 32360), (314, 32417), (329, 32492), (332, 32507), (338, 32534), (361, 32609), (372, 32654), (373, 32657), (395, 32708), (402, 32732), (403, 32738),

Gene: Legacy_48 Start: 34174, Stop: 35496, Start Num: 95

Candidate Starts for Legacy_48:

(Start: 92 @34162 has 5 MA's), (Start: 95 @34174 has 15 MA's), (98, 34189), (107, 34276), (Start: 109 @34279 has 1 MA's), (113, 34303), (117, 34345), (120, 34354), (127, 34396), (128, 34405), (130, 34417), (144, 34507), (145, 34516), (150, 34540), (163, 34660), (167, 34666), (185, 34756), (195, 34771), (197, 34780), (203, 34813), (226, 34924), (227, 34930), (240, 34978), (245, 34993), (253, 35008), (275, 35068), (278, 35077), (281, 35092), (310, 35170), (318, 35203), (324, 35233), (334, 35281), (355, 35359), (367, 35407), (369, 35416), (378, 35443), (396, 35482),

Gene: Leston_38 Start: 31447, Stop: 32853, Start Num: 93

Candidate Starts for Leston_38:

(Start: 87 @31438 has 2 MA's), (Start: 93 @31447 has 37 MA's), (112, 31567), (136, 31744), (142, 31768), (149, 31819), (154, 31861), (160, 31909), (162, 31930), (166, 31957), (167, 31966), (171, 31993), (177, 32014), (179, 32032), (182, 32059), (190, 32104), (194, 32110), (217, 32215), (231, 32281), (233, 32290), (239, 32311), (246, 32329), (284, 32446), (286, 32449), (319, 32557), (325, 32593), (343, 32665), (346, 32674), (361, 32725), (370, 32764), (374, 32776), (376, 32785), (390, 32815), (397, 32830),

Gene: Leviticus_49 Start: 34067, Stop: 35401, Start Num: 92

Candidate Starts for Leviticus_49:

(Start: 92 @34067 has 5 MA's), (Start: 95 @34079 has 15 MA's), (98, 34094), (107, 34181), (Start: 109 @34184 has 1 MA's), (113, 34208), (117, 34250), (120, 34259), (127, 34301), (128, 34310), (130, 34322), (144, 34412), (145, 34421), (150, 34445), (163, 34565), (167, 34571), (185, 34661), (195, 34676), (197, 34685), (203, 34718), (226, 34829), (227, 34835), (240, 34883), (245, 34898), (253, 34913), (275, 34973), (281, 34997), (311, 35078), (318, 35108), (324, 35138), (334, 35186), (355, 35264), (367, 35312), (369, 35321), (378, 35348), (396, 35387),

Gene: LilDirt_38 Start: 31257, Stop: 32627, Start Num: 101

Candidate Starts for LilDirt_38:

(13, 30930), (23, 30993), (35, 31047), (61, 31134), (Start: 83 @31182 has 8 MA's), (Start: 101 @31257 has 5 MA's), (102, 31269), (117, 31380), (118, 31383), (123, 31416), (128, 31440), (138, 31503), (150, 31578), (191, 31854), (237, 32076), (242, 32088), (259, 32136), (271, 32166), (275, 32187), (281, 32211), (326, 32364), (345, 32445), (347, 32451), (351, 32463), (361, 32499), (363, 32505), (367, 32526), (371, 32541), (372, 32547), (387, 32595), (394, 32604),

Gene: LilhomieP_131 Start: 70102, Stop: 68642, Start Num: 65

Candidate Starts for LilhomieP_131:

(Start: 51 @70144 has 1 MA's), (63, 70111), (Start: 65 @70102 has 21 MA's), (98, 70030), (110, 69949), (115, 69907), (117, 69883), (130, 69811), (145, 69694), (154, 69631), (164, 69547), (168, 69535), (175, 69493), (179, 69475), (210, 69313), (214, 69292), (227, 69241), (234, 69214), (244, 69187), (292, 69067), (326, 68917), (346, 68839), (359, 68794), (373, 68737),

Gene: Loofah_55 Start: 37744, Stop: 39162, Start Num: 78

Candidate Starts for Loofah_55:

(Start: 78 @37744 has 10 MA's), (79, 37747), (Start: 105 @37873 has 1 MA's), (107, 37879), (117, 37951), (119, 37957), (133, 38029), (140, 38059), (141, 38062), (148, 38116), (163, 38245), (168, 38254), (174, 38293), (186, 38368), (195, 38404), (197, 38413), (207, 38464), (288, 38746), (309, 38815), (326, 38899), (350, 38989), (353, 38998), (367, 39055), (385, 39112), (388, 39118), (401, 39151),

Gene: Lysidious_38 Start: 30792, Stop: 32183, Start Num: 93

Candidate Starts for Lysidious_38:

(38, 30651), (45, 30678), (75, 30762), (Start: 85 @30783 has 1 MA's), (Start: 93 @30792 has 37 MA's), (Start: 101 @30849 has 5 MA's), (112, 30912), (122, 31005), (136, 31089), (137, 31092), (151, 31182), (152, 31188), (155, 31215), (161, 31269), (180, 31386), (194, 31464), (215, 31581), (217, 31590), (228, 31641), (233, 31668), (236, 31683), (267, 31749), (269, 31752), (275, 31773), (279, 31785), (280, 31788), (312, 31866), (323, 31923), (339, 31992), (341, 32001), (347, 32019), (363, 32070),

Gene: Madraxi_55 Start: 38153, Stop: 39541, Start Num: 81

Candidate Starts for Madraxi_55:

(Start: 53 @38075 has 1 MA's), (56, 38084), (Start: 81 @38153 has 2 MA's), (98, 38198), (Start: 101 @38228 has 5 MA's), (107, 38282), (112, 38291), (113, 38309), (142, 38492), (146, 38525), (154, 38585), (171, 38717), (173, 38729), (179, 38756), (197, 38840), (215, 38942), (216, 38945), (229, 39005), (236, 39044), (250, 39071), (264, 39101), (265, 39107), (273, 39122), (279, 39146), (295, 39188), (317, 39251), (328, 39311), (329, 39314), (361, 39431), (367, 39458), (369, 39467), (377, 39497),

Gene: Maja_29 Start: 25557, Stop: 24160, Start Num: 93

Candidate Starts for Maja_29:

(60, 25635), (Start: 93 @25557 has 37 MA's), (118, 25380), (120, 25374), (124, 25344), (147, 25200), (209, 24819), (222, 24765), (230, 24723), (236, 24696), (268, 24609), (270, 24606), (299, 24519), (321, 24423), (329, 24384), (336, 24351),

Gene: Malachai_38 Start: 31872, Stop: 33263, Start Num: 93

Candidate Starts for Malachai_38:

(59, 31794), (70, 31824), (75, 31842), (Start: 93 @31872 has 37 MA's), (112, 31992), (122, 32085), (151, 32262), (152, 32268), (155, 32295), (161, 32349), (180, 32466), (194, 32544), (228, 32721), (233, 32748), (236, 32763), (267, 32829), (269, 32832), (275, 32853), (276, 32856), (279, 32865), (280, 32868), (312, 32946), (315, 32955), (323, 33003), (339, 33072), (341, 33081), (347, 33099), (361, 33144), (363, 33150), (367, 33171), (381, 33225),

Gene: MalagasyRose_41 Start: 30932, Stop: 32326, Start Num: 93

Candidate Starts for MalagasyRose_41:

(Start: 93 @30932 has 37 MA's), (98, 30956), (104, 31019), (112, 31052), (122, 31145), (123, 31148), (124, 31151), (132, 31196), (136, 31229), (137, 31232), (143, 31262), (149, 31304), (154, 31346), (160, 31394), (162, 31415), (167, 31451), (171, 31478), (180, 31526), (228, 31748), (229, 31751), (231, 31766), (233, 31775), (239, 31796), (246, 31814), (271, 31877), (281, 31922), (312, 32006), (325, 32075), (329, 32087), (346, 32156), (347, 32159), (350, 32168), (356, 32189), (358, 32195), (362, 32210), (372, 32255), (374, 32261), (376, 32270), (390, 32300),

Gene: Marav_53 Start: 36467, Stop: 37948, Start Num: 57

Candidate Starts for Marav_53:

(10, 36248), (20, 36326), (27, 36368), (32, 36386), (47, 36443), (Start: 57 @36467 has 3 MA's), (Start: 73 @36518 has 5 MA's), (Start: 78 @36527 has 10 MA's), (Start: 105 @36659 has 1 MA's), (117, 36737), (133, 36815), (141, 36848), (148, 36902), (163, 37031), (174, 37079), (195, 37190), (197, 37199), (206, 37247), (207, 37250), (213, 37289), (262, 37448), (288, 37532), (320, 37649), (326, 37685), (350, 37775), (353, 37784), (367, 37841), (380, 37889), (385, 37898), (401, 37937),

Gene: Mellie_37 Start: 29588, Stop: 30979, Start Num: 93

Candidate Starts for Mellie_37:

(Start: 93 @29588 has 37 MA's), (112, 29708), (122, 29801), (151, 29978), (155, 30011), (161, 30065), (179, 30173), (180, 30182), (194, 30260), (206, 30323), (209, 30350), (211, 30359), (215, 30377), (217, 30386), (233, 30464), (236, 30479), (255, 30515), (269, 30548), (279, 30581), (280, 30584), (312, 30662), (323, 30719), (339, 30788), (341, 30797), (347, 30815), (360, 30857), (363, 30866), (367, 30887), (381, 30941),

Gene: Miryou_40 Start: 33649, Stop: 35055, Start Num: 93

Candidate Starts for Miryou_40:

(Start: 87 @33640 has 2 MA's), (Start: 93 @33649 has 37 MA's), (112, 33769), (136, 33946), (142, 33970), (149, 34021), (154, 34063), (162, 34132), (166, 34159), (167, 34168), (171, 34195), (177, 34216), (179, 34234), (182, 34261), (190, 34306), (194, 34312), (217, 34417), (231, 34483), (233, 34492), (239, 34513), (246, 34531), (254, 34552), (281, 34639), (284, 34648), (286, 34651), (319, 34759), (325, 34795), (343, 34867), (346, 34876), (361, 34927), (370, 34966), (374, 34978), (376, 34987), (390, 35017), (397, 35032),

Gene: MissRona_38 Start: 30376, Stop: 31767, Start Num: 93

Candidate Starts for MissRona_38:

(Start: 40 @30241 has 1 MA's), (Start: 80 @30355 has 1 MA's), (Start: 93 @30376 has 37 MA's), (112, 30496), (136, 30673), (155, 30799), (161, 30853), (180, 30970), (194, 31048), (206, 31111), (211, 31147), (228, 31225), (233, 31252), (236, 31267), (267, 31333), (269, 31336), (276, 31360), (279, 31369), (280, 31372), (312, 31450), (323, 31507), (331, 31543), (339, 31576), (341, 31585), (347, 31603), (363, 31654),

Gene: MrMagoo_148 Start: 70893, Stop: 69439, Start Num: 65

Candidate Starts for MrMagoo_148:

(30, 71010), (Start: 51 @70935 has 1 MA's), (63, 70902), (Start: 65 @70893 has 21 MA's), (94, 70839), (98, 70821), (106, 70746), (130, 70602), (145, 70485), (154, 70422), (168, 70332), (175, 70290), (217, 70077), (234, 70011), (244, 69984), (277, 69903), (287, 69873), (290, 69867), (292, 69864), (326, 69714), (331, 69693), (346, 69636), (373, 69534), (385, 69492),

Gene: Murp_39 Start: 32170, Stop: 33561, Start Num: 93

Candidate Starts for Murp_39:

(Start: 93 @32170 has 37 MA's), (112, 32290), (136, 32467), (153, 32581), (154, 32584), (155, 32593), (161, 32647), (180, 32764), (211, 32941), (215, 32959), (217, 32968), (228, 33019), (236, 33061), (255, 33097), (267, 33127), (279, 33163), (280, 33166), (312, 33244), (323, 33301), (326, 33316), (339, 33370), (363, 33448),

Gene: Nanosmite_142 Start: 71091, Stop: 69622, Start Num: 65

Candidate Starts for Nanosmite_142:

(61, 71103), (63, 71100), (Start: 65 @71091 has 21 MA's), (Start: 93 @71034 has 37 MA's), (94, 71028), (Start: 96 @71022 has 3 MA's), (98, 71010), (114, 70893), (115, 70887), (116, 70884), (117, 70863), (143, 70695), (145, 70674), (154, 70611), (168, 70515), (193, 70383), (210, 70293), (217, 70260), (223, 70236), (227, 70221), (244, 70167), (277, 70086), (290, 70050), (301, 70020), (326, 69897), (346, 69819), (351, 69804), (359, 69774),

Gene: Neighly_39 Start: 31215, Stop: 32585, Start Num: 101

Candidate Starts for Neighly_39:

(25, 30969), (35, 31005), (61, 31092), (Start: 83 @31140 has 8 MA's), (Start: 101 @31215 has 5 MA's), (102, 31227), (117, 31338), (118, 31341), (123, 31374), (128, 31398), (138, 31461), (150, 31536), (191, 31812), (237, 32034), (242, 32046), (259, 32094), (271, 32124), (275, 32145), (281, 32169),

(326, 32322), (345, 32403), (347, 32409), (351, 32421), (361, 32457), (363, 32463), (366, 32481), (367, 32484), (371, 32499), (372, 32505), (387, 32553), (394, 32562),

Gene: Nerdos_48 Start: 34074, Stop: 35396, Start Num: 95

Candidate Starts for Nerdos_48:

(Start: 92 @34062 has 5 MA's), (Start: 95 @34074 has 15 MA's), (98, 34089), (107, 34176), (Start: 109 @34179 has 1 MA's), (113, 34203), (117, 34245), (120, 34254), (127, 34296), (128, 34305), (130, 34317), (144, 34407), (145, 34416), (150, 34440), (163, 34560), (167, 34566), (185, 34656), (195, 34671), (197, 34680), (203, 34713), (226, 34824), (227, 34830), (240, 34878), (245, 34893), (253, 34908), (275, 34968), (281, 34992), (311, 35073), (318, 35103), (324, 35133), (334, 35181), (355, 35259), (367, 35307), (369, 35316), (378, 35343), (396, 35382),

Gene: OkiRoe_38 Start: 31310, Stop: 32725, Start Num: 87

Candidate Starts for OkiRoe_38:

(Start: 87 @31310 has 2 MA's), (Start: 93 @31319 has 37 MA's), (112, 31439), (136, 31616), (142, 31640), (149, 31691), (154, 31733), (162, 31802), (166, 31829), (167, 31838), (171, 31865), (177, 31886), (179, 31904), (182, 31931), (190, 31976), (194, 31982), (217, 32087), (231, 32153), (233, 32162), (239, 32183), (246, 32201), (254, 32222), (281, 32309), (284, 32318), (286, 32321), (319, 32429), (325, 32465), (343, 32537), (346, 32546), (361, 32597), (370, 32636), (374, 32648), (376, 32657), (390, 32687), (397, 32702),

Gene: Oliynyk_50 Start: 34372, Stop: 35694, Start Num: 95

Candidate Starts for Oliynyk_50:

(Start: 92 @34360 has 5 MA's), (Start: 95 @34372 has 15 MA's), (98, 34387), (107, 34474), (Start: 109 @34477 has 1 MA's), (113, 34501), (120, 34552), (127, 34594), (128, 34603), (130, 34615), (144, 34705), (145, 34714), (150, 34738), (163, 34858), (167, 34864), (185, 34954), (195, 34969), (197, 34978), (203, 35011), (226, 35122), (227, 35128), (240, 35176), (245, 35191), (253, 35206), (275, 35266), (278, 35275), (281, 35290), (310, 35368), (318, 35401), (324, 35431), (334, 35479), (355, 35557), (367, 35605), (369, 35614), (378, 35641), (396, 35680),

Gene: Omar_55 Start: 36249, Stop: 37679, Start Num: 73

Candidate Starts for Omar_55:

(39, 36147), (Start: 57 @36198 has 3 MA's), (Start: 73 @36249 has 5 MA's), (Start: 78 @36258 has 10 MA's), (117, 36468), (124, 36495), (148, 36633), (163, 36762), (174, 36810), (195, 36921), (197, 36930), (206, 36978), (207, 36981), (213, 37020), (216, 37035), (245, 37149), (262, 37179), (288, 37263), (320, 37380), (326, 37416), (350, 37506), (353, 37515), (367, 37572), (380, 37620), (385, 37629), (401, 37668),

Gene: Omnicron_41 Start: 30937, Stop: 32343, Start Num: 93

Candidate Starts for Omnicron_41:

(Start: 87 @30928 has 2 MA's), (Start: 93 @30937 has 37 MA's), (104, 31024), (112, 31057), (122, 31150), (137, 31237), (142, 31258), (149, 31309), (154, 31351), (160, 31399), (162, 31420), (166, 31447), (167, 31456), (170, 31480), (171, 31483), (177, 31504), (179, 31522), (190, 31594), (194, 31600), (231, 31771), (233, 31780), (239, 31801), (246, 31819), (275, 31903), (281, 31927), (286, 31939), (306, 31996), (317, 32035), (319, 32047), (325, 32083), (331, 32107), (343, 32155), (346, 32164), (370, 32254), (374, 32266), (376, 32275), (397, 32320),

Gene: Ozzie_48 Start: 34171, Stop: 35505, Start Num: 92

Candidate Starts for Ozzie_48:

(Start: 92 @34171 has 5 MA's), (Start: 95 @34183 has 15 MA's), (98, 34198), (107, 34285), (Start: 109 @34288 has 1 MA's), (113, 34312), (117, 34354), (120, 34363), (127, 34405), (128, 34414), (130, 34426), (144, 34516), (145, 34525), (150, 34549), (163, 34669), (167, 34675), (185, 34765), (195, 34780), (197, 34789), (203, 34822), (226, 34933), (227, 34939), (240, 34987), (245, 35002), (253,

35017), (275, 35077), (278, 35086), (281, 35101), (311, 35182), (318, 35212), (324, 35242), (334, 35290), (355, 35368), (367, 35416), (369, 35425), (378, 35452), (396, 35491),

Gene: PCoral7_37 Start: 30351, Stop: 31742, Start Num: 93

Candidate Starts for PCoral7_37:

(Start: 69 @30300 has 1 MA's), (70, 30303), (Start: 93 @30351 has 37 MA's), (98, 30375), (Start: 101 @30408 has 5 MA's), (112, 30471), (122, 30564), (136, 30648), (155, 30774), (161, 30828), (177, 30918), (180, 30945), (194, 31023), (206, 31086), (211, 31122), (217, 31149), (228, 31200), (233, 31227), (236, 31242), (275, 31332), (279, 31344), (280, 31347), (323, 31482), (347, 31578), (361, 31623), (363, 31629),

Gene: Pablito_52 Start: 36745, Stop: 38214, Start Num: 55

Candidate Starts for Pablito_52:

(Start: 55 @36745 has 2 MA's), (Start: 57 @36751 has 3 MA's), (66, 36781), (Start: 78 @36811 has 10 MA's), (79, 36814), (Start: 105 @36940 has 1 MA's), (107, 36946), (112, 36955), (117, 37018), (129, 37075), (133, 37096), (140, 37126), (141, 37129), (148, 37183), (163, 37312), (174, 37360), (176, 37363), (180, 37390), (195, 37462), (197, 37471), (200, 37492), (207, 37522), (256, 37708), (257, 37711), (326, 37951), (340, 38008), (350, 38041), (353, 38050), (367, 38107), (375, 38131), (380, 38155), (385, 38164), (396, 38182), (401, 38203),

Gene: Paedore_54 Start: 37729, Stop: 39147, Start Num: 78

Candidate Starts for Paedore_54:

(Start: 78 @37729 has 10 MA's), (79, 37732), (Start: 105 @37858 has 1 MA's), (107, 37864), (117, 37936), (119, 37942), (133, 38014), (140, 38044), (141, 38047), (148, 38101), (163, 38230), (168, 38239), (174, 38278), (186, 38353), (195, 38389), (197, 38398), (207, 38449), (288, 38731), (309, 38800), (326, 38884), (350, 38974), (353, 38983), (367, 39040), (385, 39097), (388, 39103), (401, 39136),

Gene: Paola_38 Start: 31317, Stop: 32723, Start Num: 93

Candidate Starts for Paola_38:

(Start: 87 @31308 has 2 MA's), (Start: 93 @31317 has 37 MA's), (112, 31437), (136, 31614), (142, 31638), (149, 31689), (154, 31731), (160, 31779), (162, 31800), (166, 31827), (167, 31836), (171, 31863), (177, 31884), (179, 31902), (182, 31929), (190, 31974), (194, 31980), (217, 32085), (231, 32151), (233, 32160), (239, 32181), (246, 32199), (281, 32307), (284, 32316), (286, 32319), (319, 32427), (325, 32463), (343, 32535), (346, 32544), (361, 32595), (370, 32634), (374, 32646), (376, 32655), (390, 32685), (397, 32700),

Gene: Paolo_54 Start: 37643, Stop: 39124, Start Num: 57

Candidate Starts for Paolo_54:

(Start: 57 @37643 has 3 MA's), (Start: 73 @37694 has 5 MA's), (Start: 78 @37703 has 10 MA's), (117, 37913), (124, 37940), (148, 38078), (163, 38207), (174, 38255), (195, 38366), (197, 38375), (201, 38402), (206, 38423), (207, 38426), (213, 38465), (262, 38624), (288, 38708), (320, 38825), (326, 38861), (350, 38951), (353, 38960), (367, 39017), (380, 39065), (385, 39074), (401, 39113),

Gene: Pavo_52 Start: 36851, Stop: 38260, Start Num: 90

Candidate Starts for Pavo_52:

(41, 36722), (62, 36788), (71, 36815), (Start: 90 @36851 has 8 MA's), (98, 36881), (107, 36968), (111, 36977), (120, 37046), (127, 37088), (128, 37097), (130, 37109), (144, 37199), (145, 37208), (146, 37211), (148, 37223), (150, 37232), (179, 37421), (188, 37508), (197, 37541), (207, 37592), (217, 37652), (226, 37685), (240, 37739), (279, 37841), (296, 37883), (300, 37895), (322, 37991), (324, 37994), (338, 38060), (343, 38078), (345, 38087), (367, 38168), (372, 38186), (374, 38192), (379, 38213), (391, 38234), (398, 38252),

Gene: PegLeg_134 Start: 69986, Stop: 68526, Start Num: 65

Candidate Starts for PegLeg_134:

(Start: 51 @70028 has 1 MA's), (63, 69995), (Start: 65 @69986 has 21 MA's), (98, 69914), (110, 69833), (115, 69791), (117, 69767), (130, 69695), (145, 69578), (154, 69515), (164, 69431), (168, 69419), (175, 69377), (179, 69359), (210, 69197), (214, 69176), (227, 69125), (234, 69098), (244, 69071), (292, 68951), (326, 68801), (346, 68723), (359, 68678), (373, 68621),

Gene: Percival_59 Start: 38819, Stop: 40306, Start Num: 90

Candidate Starts for Percival_59:

(Start: 90 @38819 has 8 MA's), (Start: 101 @38882 has 5 MA's), (104, 38912), (117, 39011), (118, 39014), (124, 39050), (145, 39182), (147, 39194), (157, 39266), (163, 39323), (169, 39350), (183, 39428), (197, 39476), (230, 39653), (233, 39665), (262, 39785), (272, 39818), (290, 39878), (304, 39920), (307, 39932), (332, 40058), (335, 40073), (356, 40151), (361, 40169), (404, 40301),

Gene: Phettuccine_49 Start: 34075, Stop: 35397, Start Num: 95

Candidate Starts for Phettuccine_49:

(Start: 92 @34063 has 5 MA's), (Start: 95 @34075 has 15 MA's), (98, 34090), (107, 34177), (Start: 109 @34180 has 1 MA's), (113, 34204), (117, 34246), (120, 34255), (127, 34297), (128, 34306), (130, 34318), (144, 34408), (145, 34417), (150, 34441), (163, 34561), (167, 34567), (185, 34657), (195, 34672), (197, 34681), (203, 34714), (226, 34825), (227, 34831), (240, 34879), (245, 34894), (253, 34909), (275, 34969), (278, 34978), (281, 34993), (311, 35074), (318, 35104), (324, 35134), (334, 35182), (355, 35260), (367, 35308), (369, 35317), (378, 35344), (396, 35383),

Gene: PrincePatrick_38 Start: 29413, Stop: 30801, Start Num: 93

Candidate Starts for PrincePatrick_38:

(Start: 93 @29413 has 37 MA's), (99, 29455), (Start: 101 @29470 has 5 MA's), (122, 29626), (133, 29683), (151, 29803), (155, 29836), (161, 29890), (162, 29896), (166, 29923), (171, 29959), (195, 30091), (207, 30151), (211, 30184), (215, 30202), (230, 30277), (233, 30289), (236, 30304), (255, 30340), (275, 30394), (279, 30406), (312, 30487), (326, 30559), (331, 30580), (339, 30613), (341, 30622), (342, 30625), (346, 30637), (347, 30640), (350, 30649), (376, 30745), (383, 30766), (392, 30781),

Gene: Psycho_39 Start: 31271, Stop: 32716, Start Num: 83

Candidate Starts for Psycho_39:

(25, 31100), (35, 31136), (61, 31223), (Start: 83 @31271 has 8 MA's), (Start: 101 @31346 has 5 MA's), (102, 31358), (117, 31469), (118, 31472), (123, 31505), (128, 31529), (138, 31592), (150, 31667), (191, 31943), (237, 32165), (242, 32177), (259, 32225), (271, 32255), (275, 32276), (281, 32300), (326, 32453), (345, 32534), (347, 32540), (351, 32552), (361, 32588), (363, 32594), (366, 32612), (367, 32615), (371, 32630), (372, 32636), (387, 32684), (394, 32693),

Gene: Puginator_54 Start: 37656, Stop: 39170, Start Num: 44

Candidate Starts for Puginator_54:

(Start: 44 @37656 has 1 MA's), (48, 37668), (52, 37677), (Start: 57 @37689 has 3 MA's), (Start: 73 @37740 has 5 MA's), (Start: 78 @37749 has 10 MA's), (117, 37959), (124, 37986), (148, 38124), (163, 38253), (174, 38301), (195, 38412), (197, 38421), (201, 38448), (206, 38469), (207, 38472), (213, 38511), (216, 38526), (257, 38667), (262, 38670), (288, 38754), (320, 38871), (326, 38907), (339, 38961), (340, 38964), (350, 38997), (367, 39063), (385, 39120), (401, 39159),

Gene: R4_53 Start: 37594, Stop: 39006, Start Num: 78

Candidate Starts for R4_53:

(Start: 78 @37594 has 10 MA's), (79, 37597), (Start: 105 @37723 has 1 MA's), (107, 37729), (112, 37738), (117, 37801), (133, 37879), (140, 37909), (141, 37912), (148, 37966), (163, 38095), (168, 38104), (174, 38143), (180, 38173), (186, 38218), (197, 38263), (207, 38314), (216, 38368), (235,

38452), (288, 38590), (326, 38743), (335, 38782), (340, 38800), (350, 38833), (353, 38842), (367, 38899), (372, 38914), (385, 38956), (388, 38962), (401, 38995),

Gene: REQ1_22 Start: 7618, Stop: 9012, Start Num: 81

Candidate Starts for REQ1_22:

(Start: 81 @7618 has 2 MA's), (98, 7663), (Start: 101 @7693 has 5 MA's), (107, 7747), (112, 7756), (113, 7774), (146, 7990), (154, 8050), (171, 8182), (173, 8194), (179, 8221), (197, 8305), (216, 8410), (236, 8509), (251, 8539), (264, 8566), (265, 8572), (273, 8587), (279, 8611), (317, 8719), (329, 8779), (338, 8821), (361, 8896), (367, 8923),

Gene: Rando14_40 Start: 30508, Stop: 31914, Start Num: 93

Candidate Starts for Rando14_40:

(Start: 87 @30499 has 2 MA's), (Start: 93 @30508 has 37 MA's), (104, 30595), (112, 30628), (122, 30721), (130, 30760), (136, 30805), (142, 30829), (149, 30880), (154, 30922), (160, 30970), (162, 30991), (166, 31018), (167, 31027), (170, 31051), (171, 31054), (177, 31075), (179, 31093), (190, 31165), (194, 31171), (231, 31342), (239, 31372), (246, 31390), (275, 31474), (281, 31498), (286, 31510), (306, 31567), (317, 31606), (319, 31618), (325, 31654), (331, 31678), (343, 31726), (346, 31735), (354, 31759), (370, 31825), (374, 31837), (376, 31846), (390, 31876), (397, 31891),

Gene: RegnumDei_42 Start: 32482, Stop: 33900, Start Num: 93

Candidate Starts for RegnumDei_42:

(31, 32308), (42, 32356), (45, 32368), (91, 32479), (Start: 93 @32482 has 37 MA's), (Start: 101 @32539 has 5 MA's), (107, 32593), (112, 32602), (122, 32698), (128, 32725), (146, 32839), (160, 32947), (167, 33001), (190, 33151), (196, 33169), (197, 33172), (215, 33274), (217, 33283), (281, 33499), (304, 33559), (323, 33640), (346, 33733), (364, 33790), (368, 33814), (369, 33820), (377, 33850),

Gene: Reindeer_133 Start: 71279, Stop: 69777, Start Num: 51

Candidate Starts for Reindeer_133:

(Start: 51 @71279 has 1 MA's), (63, 71246), (Start: 65 @71237 has 21 MA's), (98, 71165), (115, 71042), (117, 71018), (130, 70946), (135, 70907), (145, 70829), (148, 70814), (154, 70766), (159, 70727), (168, 70670), (179, 70610), (210, 70448), (227, 70376), (244, 70322), (277, 70241), (288, 70208), (301, 70175), (316, 70109), (326, 70052), (346, 69974), (359, 69929), (373, 69872), (385, 69830),

Gene: Rey_148 Start: 70427, Stop: 68973, Start Num: 65

Candidate Starts for Rey_148:

(43, 70490), (Start: 51 @70469 has 1 MA's), (63, 70436), (Start: 65 @70427 has 21 MA's), (94, 70373), (98, 70355), (130, 70136), (145, 70019), (154, 69956), (168, 69866), (175, 69824), (207, 69671), (217, 69611), (234, 69545), (244, 69518), (277, 69437), (287, 69407), (290, 69401), (292, 69398), (326, 69248), (331, 69227), (346, 69170), (373, 69068),

Gene: RoseMarie_140 Start: 73018, Stop: 71558, Start Num: 65

Candidate Starts for RoseMarie_140:

(63, 73027), (Start: 65 @73018 has 21 MA's), (98, 72946), (100, 72928), (115, 72823), (117, 72799), (130, 72727), (145, 72610), (154, 72547), (164, 72463), (168, 72451), (175, 72409), (179, 72391), (189, 72328), (210, 72229), (211, 72223), (214, 72208), (227, 72157), (234, 72130), (244, 72103), (268, 72046), (277, 72022), (309, 71917), (310, 71911), (326, 71833), (346, 71755), (359, 71710), (373, 71653),

Gene: Rusticus_50 Start: 34372, Stop: 35694, Start Num: 95

Candidate Starts for Rusticus_50:

(Start: 92 @34360 has 5 MA's), (Start: 95 @34372 has 15 MA's), (98, 34387), (107, 34474), (Start: 109 @34477 has 1 MA's), (113, 34501), (120, 34552), (127, 34594), (128, 34603), (130, 34615), (144, 34705), (145, 34714), (150, 34738), (163, 34858), (167, 34864), (185, 34954), (195, 34969), (197, 34978), (203, 35011), (226, 35122), (227, 35128), (240, 35176), (245, 35191), (253, 35206), (275, 35266), (278, 35275), (281, 35290), (310, 35368), (318, 35401), (324, 35431), (334, 35479), (355, 35557), (367, 35605), (369, 35614), (378, 35641), (396, 35680),

Gene: SFuller_50 Start: 35352, Stop: 36737, Start Num: 81

Candidate Starts for SFuller_50:

(4, 34941), (5, 34944), (6, 34980), (9, 35058), (16, 35109), (18, 35139), (46, 35259), (56, 35283), (Start: 81 @35352 has 2 MA's), (98, 35397), (Start: 101 @35427 has 5 MA's), (104, 35457), (112, 35490), (113, 35508), (124, 35589), (142, 35691), (143, 35700), (146, 35724), (154, 35784), (171, 35916), (179, 35955), (197, 36039), (216, 36144), (229, 36204), (236, 36243), (250, 36270), (264, 36300), (265, 36306), (273, 36321), (275, 36333), (279, 36345), (317, 36450), (329, 36510), (332, 36525), (361, 36627), (365, 36639), (367, 36654), (369, 36663), (377, 36693),

Gene: Saftant_50 Start: 36790, Stop: 38202, Start Num: 88

Candidate Starts for Saftant_50:

(59, 36718), (61, 36727), (64, 36736), (70, 36748), (Start: 88 @36790 has 1 MA's), (98, 36820), (120, 36985), (127, 37027), (128, 37036), (130, 37048), (144, 37138), (145, 37147), (146, 37150), (150, 37171), (179, 37360), (197, 37480), (226, 37624), (227, 37630), (240, 37678), (279, 37780), (296, 37822), (300, 37834), (322, 37930), (324, 37933), (343, 38017), (345, 38026), (355, 38059), (367, 38107), (374, 38131), (379, 38152), (393, 38176), (398, 38191),

Gene: Samba_38 Start: 31981, Stop: 33372, Start Num: 93

Candidate Starts for Samba_38:

(38, 31840), (45, 31867), (75, 31951), (Start: 85 @31972 has 1 MA's), (Start: 93 @31981 has 37 MA's), (Start: 101 @32038 has 5 MA's), (112, 32101), (122, 32194), (136, 32278), (137, 32281), (151, 32371), (152, 32377), (155, 32404), (161, 32458), (180, 32575), (194, 32653), (215, 32770), (217, 32779), (228, 32830), (233, 32857), (236, 32872), (267, 32938), (269, 32941), (275, 32962), (279, 32974), (280, 32977), (312, 33055), (323, 33112), (339, 33181), (341, 33190), (347, 33208), (363, 33259), (381, 33334),

Gene: Shagrat_42 Start: 32662, Stop: 34170, Start Num: 55

Candidate Starts for Shagrat_42:

(11, 32476), (12, 32485), (20, 32533), (24, 32554), (29, 32575), (30, 32578), (33, 32593), (36, 32605), (37, 32608), (Start: 55 @32662 has 2 MA's), (Start: 93 @32755 has 37 MA's), (98, 32779), (Start: 101 @32812 has 5 MA's), (112, 32875), (133, 33028), (136, 33055), (160, 33220), (173, 33316), (177, 33325), (190, 33427), (195, 33439), (197, 33448), (199, 33454), (216, 33553), (278, 33754), (281, 33769), (286, 33781), (299, 33805), (304, 33829), (323, 33910), (339, 33979), (368, 34084), (377, 34120),

Gene: Skinny_137 Start: 71103, Stop: 69643, Start Num: 65

Candidate Starts for Skinny_137:

(Start: 51 @71145 has 1 MA's), (63, 71112), (Start: 65 @71103 has 21 MA's), (98, 71031), (110, 70950), (115, 70908), (117, 70884), (130, 70812), (145, 70695), (154, 70632), (164, 70548), (168, 70536), (175, 70494), (179, 70476), (210, 70314), (214, 70293), (227, 70242), (234, 70215), (244, 70188), (292, 70068), (326, 69918), (346, 69840), (359, 69795), (373, 69738),

Gene: SlimJimmy_130 Start: 69812, Stop: 68352, Start Num: 65

Candidate Starts for SlimJimmy_130:

(Start: 51 @69854 has 1 MA's), (63, 69821), (Start: 65 @69812 has 21 MA's), (98, 69740), (110, 69659), (115, 69617), (117, 69593), (130, 69521), (145, 69404), (154, 69341), (164, 69257), (168,

69245), (175, 69203), (179, 69185), (210, 69023), (214, 69002), (227, 68951), (234, 68924), (244, 68897), (292, 68777), (326, 68627), (346, 68549), (359, 68504), (373, 68447),

Gene: SoSeph_38 Start: 31463, Stop: 32869, Start Num: 93

Candidate Starts for SoSeph_38:

(Start: 87 @31454 has 2 MA's), (Start: 93 @31463 has 37 MA's), (112, 31583), (136, 31760), (142, 31784), (149, 31835), (154, 31877), (160, 31925), (162, 31946), (166, 31973), (167, 31982), (171, 32009), (177, 32030), (179, 32048), (182, 32075), (190, 32120), (194, 32126), (217, 32231), (231, 32297), (233, 32306), (239, 32327), (246, 32345), (281, 32453), (284, 32462), (286, 32465), (317, 32561), (319, 32573), (325, 32609), (343, 32681), (346, 32690), (361, 32741), (370, 32780), (374, 32792), (376, 32801), (390, 32831), (397, 32846),

Gene: Soilmate_42 Start: 33367, Stop: 34767, Start Num: 85

Candidate Starts for Soilmate_42:

(75, 33346), (Start: 85 @33367 has 1 MA's), (Start: 93 @33376 has 37 MA's), (112, 33496), (136, 33673), (151, 33766), (152, 33772), (155, 33799), (161, 33853), (180, 33970), (194, 34048), (211, 34147), (215, 34165), (217, 34174), (228, 34225), (233, 34252), (236, 34267), (267, 34333), (269, 34336), (275, 34357), (279, 34369), (280, 34372), (312, 34450), (323, 34507), (341, 34585), (347, 34603), (361, 34648), (363, 34654), (367, 34675), (381, 34729),

Gene: Soondubu_46 Start: 37732, Stop: 39171, Start Num: 82

Candidate Starts for Soondubu_46:

(76, 37720), (Start: 82 @37732 has 1 MA's), (Start: 84 @37738 has 1 MA's), (94, 37756), (108, 37852), (117, 37924), (126, 37969), (127, 37975), (139, 38035), (147, 38095), (172, 38263), (205, 38422), (242, 38590), (263, 38644), (292, 38737), (304, 38776), (314, 38824), (340, 38947), (343, 38959), (344, 38965), (349, 38983), (386, 39103),

Gene: Speedwell_55 Start: 37976, Stop: 39418, Start Num: 83

Candidate Starts for Speedwell_55:

(Start: 83 @37976 has 8 MA's), (Start: 101 @38051 has 5 MA's), (108, 38105), (117, 38186), (141, 38321), (147, 38372), (153, 38420), (156, 38435), (163, 38501), (165, 38504), (167, 38507), (180, 38582), (195, 38651), (201, 38687), (211, 38744), (213, 38750), (224, 38801), (240, 38867), (260, 38921), (275, 38972), (284, 39002), (306, 39062), (324, 39152), (351, 39260), (355, 39266), (389, 39383), (400, 39407),

Gene: SuMoo_64 Start: 40543, Stop: 42009, Start Num: 90

Candidate Starts for SuMoo_64:

(Start: 90 @40543 has 8 MA's), (117, 40735), (145, 40906), (147, 40918), (195, 41191), (197, 41200), (272, 41539), (307, 41653), (337, 41803), (372, 41917),

Gene: Sudan_51 Start: 36704, Stop: 38122, Start Num: 86

Candidate Starts for Sudan_51:

(74, 36680), (Start: 86 @36704 has 4 MA's), (98, 36734), (Start: 105 @36815 has 1 MA's), (120, 36899), (121, 36917), (127, 36941), (128, 36950), (130, 36962), (134, 36989), (141, 37022), (145, 37061), (146, 37064), (150, 37085), (167, 37211), (179, 37274), (199, 37400), (207, 37445), (226, 37538), (253, 37622), (274, 37679), (278, 37691), (281, 37706), (312, 37790), (317, 37811), (324, 37847), (330, 37880), (351, 37958), (367, 38021), (372, 38039), (384, 38075),

Gene: SunkenRoot_52 Start: 37385, Stop: 38797, Start Num: 86

Candidate Starts for SunkenRoot_52:

(Start: 86 @37385 has 4 MA's), (98, 37415), (Start: 109 @37505 has 1 MA's), (117, 37571), (120, 37580), (121, 37598), (123, 37607), (127, 37622), (128, 37631), (130, 37643), (134, 37670), (139, 37694), (141, 37703), (145, 37742), (146, 37745), (150, 37766), (167, 37892), (168, 37895), (179,

37955), (195, 38066), (199, 38081), (207, 38126), (226, 38219), (240, 38273), (245, 38288), (253, 38303), (278, 38372), (281, 38387), (305, 38450), (324, 38528), (330, 38561), (334, 38576), (367, 38702), (372, 38720), (384, 38756), (396, 38777),

Gene: SunsetPointe_48 Start: 34190, Stop: 35512, Start Num: 95

Candidate Starts for SunsetPointe_48:

(Start: 92 @34178 has 5 MA's), (Start: 95 @34190 has 15 MA's), (98, 34205), (107, 34292), (Start: 109 @34295 has 1 MA's), (113, 34319), (117, 34361), (120, 34370), (127, 34412), (128, 34421), (130, 34433), (144, 34523), (145, 34532), (150, 34556), (163, 34676), (167, 34682), (185, 34772), (195, 34787), (197, 34796), (203, 34829), (226, 34940), (227, 34946), (240, 34994), (245, 35009), (253, 35024), (275, 35084), (278, 35093), (281, 35108), (311, 35189), (318, 35219), (324, 35249), (334, 35297), (355, 35375), (367, 35423), (369, 35432), (378, 35459), (396, 35498),

Gene: SuperHands_58 Start: 39474, Stop: 40961, Start Num: 90

Candidate Starts for SuperHands_58:

(28, 39306), (Start: 90 @39474 has 8 MA's), (Start: 101 @39537 has 5 MA's), (104, 39567), (117, 39666), (118, 39669), (124, 39705), (145, 39837), (147, 39849), (150, 39861), (163, 39978), (175, 40029), (181, 40059), (197, 40131), (219, 40248), (230, 40308), (233, 40320), (272, 40473), (290, 40533), (304, 40575), (307, 40587), (335, 40728), (343, 40758), (344, 40764), (356, 40806), (361, 40824), (404, 40956),

Gene: Thestral_55 Start: 38547, Stop: 39968, Start Num: 78

Candidate Starts for Thestral_55:

(48, 38466), (52, 38475), (Start: 57 @38487 has 3 MA's), (Start: 73 @38538 has 5 MA's), (Start: 78 @38547 has 10 MA's), (124, 38784), (148, 38922), (163, 39051), (174, 39099), (195, 39210), (197, 39219), (201, 39246), (206, 39267), (207, 39270), (213, 39309), (216, 39324), (262, 39468), (279, 39525), (288, 39552), (320, 39669), (326, 39705), (339, 39759), (340, 39762), (350, 39795), (367, 39861), (385, 39918), (401, 39957),

Gene: ThursdayNight_52 Start: 36511, Stop: 37926, Start Num: 84

Candidate Starts for ThursdayNight_52:

(Start: 84 @36511 has 1 MA's), (Start: 95 @36526 has 15 MA's), (117, 36691), (147, 36862), (172, 37030), (197, 37144), (199, 37150), (202, 37174), (208, 37210), (229, 37309), (238, 37348), (242, 37357), (266, 37426), (314, 37591), (333, 37687), (344, 37732), (349, 37750),

Gene: Thyatira_40 Start: 33664, Stop: 35070, Start Num: 93

Candidate Starts for Thyatira_40:

(Start: 87 @33655 has 2 MA's), (Start: 93 @33664 has 37 MA's), (112, 33784), (136, 33961), (142, 33985), (149, 34036), (154, 34078), (160, 34126), (162, 34147), (166, 34174), (167, 34183), (171, 34210), (177, 34231), (179, 34249), (182, 34276), (190, 34321), (194, 34327), (217, 34432), (231, 34498), (233, 34507), (239, 34528), (246, 34546), (281, 34654), (284, 34663), (286, 34666), (317, 34762), (319, 34774), (325, 34810), (343, 34882), (346, 34891), (361, 34942), (370, 34981), (374, 34993), (376, 35002), (390, 35032), (397, 35047),

Gene: TinaBelcher_53 Start: 38486, Stop: 39916, Start Num: 73

Candidate Starts for TinaBelcher_53:

(48, 38414), (52, 38423), (Start: 57 @38435 has 3 MA's), (Start: 73 @38486 has 5 MA's), (Start: 78 @38495 has 10 MA's), (124, 38732), (148, 38870), (163, 38999), (174, 39047), (195, 39158), (197, 39167), (201, 39194), (206, 39215), (207, 39218), (213, 39257), (216, 39272), (262, 39416), (279, 39473), (288, 39500), (320, 39617), (326, 39653), (339, 39707), (340, 39710), (350, 39743), (367, 39809), (385, 39866), (401, 39905),

Gene: TingHuaYa_41 Start: 31113, Stop: 32525, Start Num: 81

Candidate Starts for TingHuaYa_41:

(77, 31104), (Start: 81 @31113 has 2 MA's), (Start: 95 @31134 has 15 MA's), (103, 31206), (113, 31263), (117, 31305), (118, 31308), (122, 31338), (124, 31344), (135, 31416), (154, 31539), (163, 31617), (169, 31644), (170, 31647), (180, 31695), (183, 31722), (195, 31764), (197, 31773), (201, 31800), (210, 31848), (219, 31884), (221, 31893), (225, 31911), (240, 31965), (244, 31977), (258, 32007), (276, 32067), (282, 32094), (285, 32100), (289, 32109), (291, 32112), (297, 32124), (302, 32142), (329, 32274), (332, 32289), (361, 32391), (372, 32436), (373, 32439), (395, 32490), (402, 32514), (403, 32520),

Gene: TinyDot_31 Start: 24778, Stop: 26145, Start Num: 93

Candidate Starts for TinyDot_31:

(Start: 93 @24778 has 37 MA's), (104, 24865), (136, 25075), (183, 25399), (233, 25633), (236, 25648), (357, 26017),

Gene: Toast_37 Start: 30300, Stop: 31742, Start Num: 69

Candidate Starts for Toast_37:

(Start: 69 @30300 has 1 MA's), (70, 30303), (Start: 93 @30351 has 37 MA's), (98, 30375), (Start: 101 @30408 has 5 MA's), (112, 30471), (122, 30564), (136, 30648), (155, 30774), (161, 30828), (177, 30918), (180, 30945), (194, 31023), (206, 31086), (211, 31122), (217, 31149), (228, 31200), (233, 31227), (236, 31242), (275, 31332), (279, 31344), (280, 31347), (323, 31482), (347, 31578), (361, 31623), (363, 31629),

Gene: TpudiCK_132 Start: 69077, Stop: 67617, Start Num: 65

Candidate Starts for TpudiCK_132:

(Start: 51 @69119 has 1 MA's), (63, 69086), (Start: 65 @69077 has 21 MA's), (98, 69005), (110, 68924), (115, 68882), (117, 68858), (130, 68786), (145, 68669), (154, 68606), (164, 68522), (168, 68510), (175, 68468), (179, 68450), (210, 68288), (214, 68267), (227, 68216), (234, 68189), (244, 68162), (292, 68042), (326, 67892), (346, 67814), (359, 67769), (373, 67712),

Gene: TrvxScott_52 Start: 38541, Stop: 39962, Start Num: 78

Candidate Starts for TrvxScott_52:

(48, 38460), (52, 38469), (Start: 57 @38481 has 3 MA's), (Start: 73 @38532 has 5 MA's), (Start: 78 @38541 has 10 MA's), (124, 38778), (148, 38916), (163, 39045), (174, 39093), (195, 39204), (197, 39213), (201, 39240), (206, 39261), (207, 39264), (213, 39303), (216, 39318), (262, 39462), (288, 39546), (320, 39663), (326, 39699), (339, 39753), (340, 39756), (350, 39789), (367, 39855), (385, 39912), (401, 39951),

Gene: TyDawg_126 Start: 69259, Stop: 67799, Start Num: 65

Candidate Starts for TyDawg_126:

(Start: 51 @69301 has 1 MA's), (63, 69268), (Start: 65 @69259 has 21 MA's), (98, 69187), (110, 69106), (115, 69064), (117, 69040), (130, 68968), (145, 68851), (154, 68788), (164, 68704), (168, 68692), (175, 68650), (179, 68632), (210, 68470), (214, 68449), (227, 68398), (234, 68371), (244, 68344), (292, 68224), (326, 68074), (346, 67996), (359, 67951), (373, 67894),

Gene: Unstoppable_49 Start: 34070, Stop: 35392, Start Num: 95

Candidate Starts for Unstoppable_49:

(Start: 92 @34058 has 5 MA's), (Start: 95 @34070 has 15 MA's), (98, 34085), (107, 34172), (Start: 109 @34175 has 1 MA's), (113, 34199), (117, 34241), (120, 34250), (127, 34292), (128, 34301), (130, 34313), (144, 34403), (145, 34412), (150, 34436), (163, 34556), (167, 34562), (185, 34652), (195, 34667), (197, 34676), (203, 34709), (226, 34820), (227, 34826), (240, 34874), (245, 34889), (253, 34904), (275, 34964), (281, 34988), (311, 35069), (318, 35099), (324, 35129), (334, 35177), (355, 35255), (367, 35303), (369, 35312), (378, 35339), (396, 35378),

Gene: Urza_50 Start: 33266, Stop: 34684, Start Num: 96

Candidate Starts for Urza_50:

(50, 33152), (54, 33158), (Start: 87 @33245 has 2 MA's), (Start: 96 @33266 has 3 MA's), (140, 33578), (147, 33632), (148, 33635), (153, 33680), (156, 33695), (163, 33761), (181, 33845), (184, 33878), (202, 33950), (206, 33968), (215, 34022), (232, 34103), (240, 34127), (242, 34133), (261, 34184), (271, 34217), (298, 34286), (308, 34331), (324, 34412), (330, 34445), (331, 34448), (400, 34667),

Gene: Utz_33 Start: 30671, Stop: 32062, Start Num: 93

Candidate Starts for Utz_33:

(38, 30530), (45, 30557), (75, 30641), (Start: 85 @30662 has 1 MA's), (Start: 93 @30671 has 37 MA's), (112, 30791), (136, 30968), (151, 31061), (152, 31067), (155, 31094), (161, 31148), (180, 31265), (194, 31343), (228, 31520), (233, 31547), (236, 31562), (267, 31628), (269, 31631), (275, 31652), (279, 31664), (280, 31667), (312, 31745), (323, 31802), (339, 31871), (347, 31898), (363, 31949), (367, 31970),

Gene: UtzChips_59 Start: 38303, Stop: 39808, Start Num: 90

Candidate Starts for UtzChips_59:

(7, 37964), (67, 38255), (Start: 90 @38303 has 8 MA's), (117, 38495), (145, 38666), (175, 38858), (183, 38912), (197, 38960), (215, 39062), (272, 39299), (314, 39449), (334, 39548), (406, 39803),

Gene: Verabelle_54 Start: 36387, Stop: 37772, Start Num: 80

Candidate Starts for Verabelle_54:

(Start: 80 @36387 has 1 MA's), (129, 36657), (133, 36678), (140, 36708), (158, 36840), (191, 37026), (199, 37047), (203, 37074), (231, 37206), (243, 37245), (279, 37341), (290, 37371), (313, 37452), (326, 37521), (327, 37524), (341, 37584), (347, 37602), (358, 37638), (361, 37650), (366, 37674), (369, 37686), (373, 37698), (380, 37728),

Gene: Verse_51 Start: 37557, Stop: 38969, Start Num: 86

Candidate Starts for Verse_51:

(Start: 86 @37557 has 4 MA's), (98, 37587), (Start: 109 @37677 has 1 MA's), (117, 37743), (120, 37752), (121, 37770), (123, 37779), (127, 37794), (128, 37803), (130, 37815), (134, 37842), (139, 37866), (141, 37875), (145, 37914), (146, 37917), (150, 37938), (167, 38064), (168, 38067), (179, 38127), (195, 38238), (199, 38253), (207, 38298), (215, 38349), (226, 38391), (240, 38445), (245, 38460), (253, 38475), (278, 38544), (281, 38559), (305, 38622), (324, 38700), (330, 38733), (334, 38748), (367, 38874), (372, 38892), (384, 38928), (396, 38949),

Gene: VieEnRose_50 Start: 33329, Stop: 34747, Start Num: 96

Candidate Starts for VieEnRose_50:

(50, 33215), (54, 33221), (Start: 87 @33308 has 2 MA's), (Start: 96 @33329 has 3 MA's), (140, 33641), (147, 33695), (148, 33698), (153, 33743), (156, 33758), (163, 33824), (181, 33908), (184, 33941), (202, 34013), (206, 34031), (215, 34085), (224, 34124), (232, 34166), (240, 34190), (242, 34196), (261, 34247), (271, 34280), (298, 34349), (308, 34394), (324, 34475), (330, 34508), (366, 34634), (400, 34730),

Gene: ViviJ_38 Start: 31256, Stop: 32626, Start Num: 101

Candidate Starts for ViviJ_38:

(13, 30929), (23, 30992), (35, 31046), (61, 31133), (Start: 83 @31181 has 8 MA's), (Start: 101 @31256 has 5 MA's), (102, 31268), (117, 31379), (118, 31382), (123, 31415), (128, 31439), (138, 31502), (150, 31577), (191, 31853), (237, 32075), (242, 32087), (259, 32135), (271, 32165), (275, 32186), (281, 32210), (326, 32363), (345, 32444), (347, 32450), (351, 32462), (361, 32498), (363, 32504), (367, 32525), (371, 32540), (372, 32546), (387, 32594), (394, 32603),

Gene: Waterfoul_39 Start: 31558, Stop: 32964, Start Num: 93

Candidate Starts for Waterfoul_39:

(Start: 87 @31549 has 2 MA's), (Start: 93 @31558 has 37 MA's), (112, 31678), (136, 31855), (142, 31879), (149, 31930), (154, 31972), (160, 32020), (162, 32041), (166, 32068), (167, 32077), (171, 32104), (177, 32125), (179, 32143), (182, 32170), (190, 32215), (194, 32221), (217, 32326), (231, 32392), (233, 32401), (239, 32422), (246, 32440), (281, 32548), (284, 32557), (286, 32560), (317, 32656), (319, 32668), (325, 32704), (343, 32776), (346, 32785), (361, 32836), (370, 32875), (374, 32887), (376, 32896), (390, 32926), (397, 32941),

Gene: William_40 Start: 31099, Stop: 32487, Start Num: 93

Candidate Starts for William_40:

(Start: 93 @31099 has 37 MA's), (99, 31141), (Start: 101 @31156 has 5 MA's), (122, 31312), (133, 31369), (151, 31489), (155, 31522), (161, 31576), (162, 31582), (166, 31609), (171, 31645), (195, 31777), (207, 31837), (211, 31870), (215, 31888), (230, 31963), (233, 31975), (236, 31990), (255, 32026), (275, 32080), (279, 32092), (312, 32173), (323, 32230), (326, 32245), (331, 32266), (339, 32299), (341, 32308), (342, 32311), (346, 32323), (347, 32326), (350, 32335), (376, 32431), (383, 32452), (392, 32467),

Gene: Wisp_35 Start: 29114, Stop: 30505, Start Num: 93

Candidate Starts for Wisp_35:

(38, 28973), (45, 29000), (75, 29084), (Start: 85 @29105 has 1 MA's), (Start: 93 @29114 has 37 MA's), (Start: 101 @29171 has 5 MA's), (112, 29234), (122, 29327), (136, 29411), (151, 29504), (152, 29510), (155, 29537), (161, 29591), (180, 29708), (194, 29786), (215, 29903), (217, 29912), (228, 29963), (233, 29990), (236, 30005), (267, 30071), (269, 30074), (275, 30095), (279, 30107), (280, 30110), (312, 30188), (323, 30245), (339, 30314), (341, 30323), (347, 30341), (363, 30392), (381, 30467),

Gene: Wocket_39 Start: 29863, Stop: 31254, Start Num: 93

Candidate Starts for Wocket_39:

(Start: 93 @29863 has 37 MA's), (136, 30160), (155, 30286), (161, 30340), (180, 30457), (206, 30598), (211, 30634), (215, 30652), (228, 30712), (233, 30739), (236, 30754), (255, 30790), (267, 30820), (279, 30856), (280, 30859), (312, 30937), (339, 31063), (363, 31141), (367, 31162), (381, 31216),

Gene: Zainub_54 Start: 37669, Stop: 39099, Start Num: 73

Candidate Starts for Zainub_54:

(Start: 57 @37618 has 3 MA's), (Start: 73 @37669 has 5 MA's), (Start: 78 @37678 has 10 MA's), (117, 37888), (124, 37915), (148, 38053), (163, 38182), (174, 38230), (192, 38332), (195, 38341), (197, 38350), (201, 38377), (206, 38398), (207, 38401), (213, 38440), (216, 38455), (262, 38599), (288, 38683), (320, 38800), (326, 38836), (350, 38926), (353, 38935), (367, 38992), (380, 39040), (385, 39049), (401, 39088),

Gene: ZiggyZoo_38 Start: 30330, Stop: 31721, Start Num: 93

Candidate Starts for ZiggyZoo_38:

(59, 30252), (70, 30282), (75, 30300), (Start: 93 @30330 has 37 MA's), (112, 30450), (122, 30543), (134, 30609), (151, 30720), (155, 30753), (161, 30807), (180, 30924), (194, 31002), (228, 31179), (233, 31206), (236, 31221), (267, 31287), (269, 31290), (275, 31311), (276, 31314), (279, 31323), (280, 31326), (312, 31404), (323, 31461), (331, 31497), (339, 31530), (341, 31539), (347, 31557), (363, 31608), (367, 31629), (381, 31683),

Gene: phiCAM_49 Start: 38659, Stop: 40071, Start Num: 80

Candidate Starts for phiCAM_49:

(Start: 80 @38659 has 1 MA's), (Start: 101 @38737 has 5 MA's), (125, 38902), (140, 38980), (158, 39112), (199, 39319), (210, 39391), (231, 39478), (243, 39517), (279, 39613), (309, 39709), (312, 39721), (315, 39730), (326, 39793), (339, 39847), (369, 39958), (399, 40036), (405, 40063),