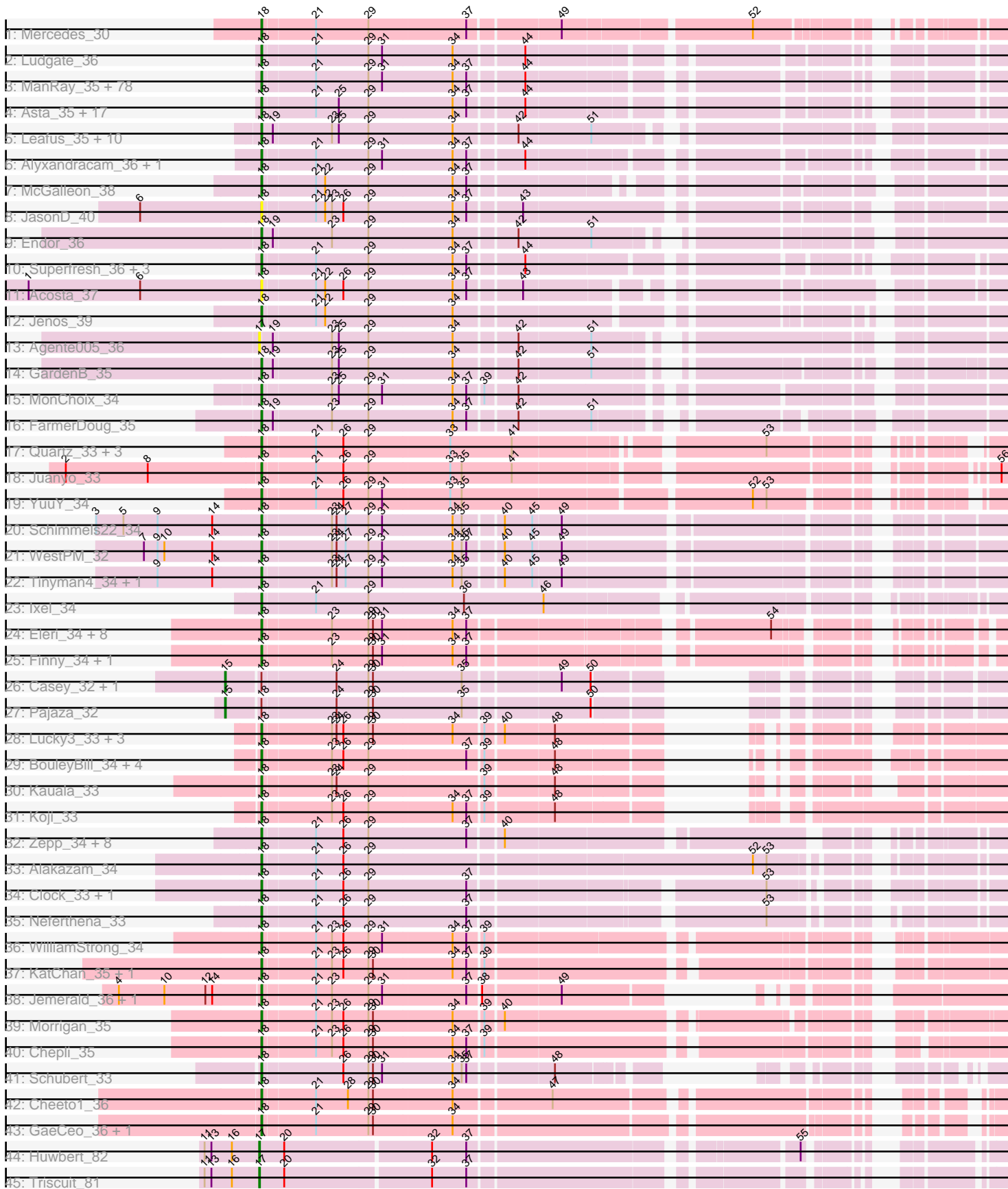


Pham 171228



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 171228 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171228 has 187 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_30
- Track 2 : Ludgate_36
- Track 3 : ManRay_35, Thorongil_36, Strathdee_36, BonesMcCoy_36, Phiderman_36, Christoph_35, Duocatuli_35, Inventa_36, MrWorldwide_36, Phireproof_36, Oxtober96_36, Espinosa_35, AlexAdler_36, Blage_36, MillyPhilly_36, StirfryIV_36, HankSprout_36, Jerbirus_36, Kurt1_36, Robinson_36, Ilzat_35, Antoinette_36, TatarkaPM_36, AranulaLuti_35, Janus167_35, TinSulphur_36, Clancy_35, JeriBeth_36, Phriends_36, MaeLinda_36, BigRedClifford_36, AxiPup_36, ParleG_36, Teagan_36, Aubergine_35, Pherferi_36, Gargoyle_36, Byron23_36, Rog141_35, Velene_36, Garey24_35, Delphidian_37, Rapheph_36, HanSolo_35, Gubbabump_35, ShaiHulud_36, JasperRussell_35, Winzigespinne_35, Stanktossa_36, PuppyEggo_36, Vispistious_36, Tenda_35, Shee_36, Martin_37, Convict_36, Bandik_36, HungryHenry_35, Chako_35, OldNelly_36, Sedgewig_35, WildNOut_36, NickSell_37, Den3_36, Greys_36, Figueroism_36, Thompsone_36, PhredFlintston_36, Ioannes_36, StingRay_35, Benjal Lauren_36, Knox_36, Oats_35, Dothraki_36, Papafritta_35, BeautPeep30_36, Lovelyunicorn_36, KannH_35, Zada_36, SoilGremlin_36
- Track 4 : Asta_35, SonOfLevi_35, Nattles_35, TeddyBear_35, Etta_35, Erla_35, Raptor_36, Chamuel_35, Calix_35, Nagem_36, Gershwin_35, Baines_35, Kale_35, Pocket_35, Bonino_35, SJay_36, Gelo_35, Klimt_35
- Track 5 : Leafus_35, Peppino_35, Raccoon_35, Etna_35, KingJulien_35, Redfield_35, BeeBee8_36, Balsa_35, Stormbreaker8_35, Hamlet_35, Schnapsidee_35
- Track 6 : Alyxandracam_36, Riyhil_36
- Track 7 : McGalleon_38
- Track 8 : JasonD_40
- Track 9 : Endor_36
- Track 10 : Superfresh_36, Peep_36, Dave_36, Renzie_36
- Track 11 : Acosta_37
- Track 12 : Jenos_39
- Track 13 : Agente005_36
- Track 14 : GardenB_35
- Track 15 : MonChoix_34
- Track 16 : FarmerDoug_35
- Track 17 : Quartz_33, Mandalorian_32, Nucci_32, Carostasia_32
- Track 18 : Juanyo_33
- Track 19 : YuuY_34

- Track 20 : Schimmels22_34
- Track 21 : WestPM_32
- Track 22 : Tinyman4_34, HerculesXL_34
- Track 23 : Ixel_34
- Track 24 : Eleri_34, Shamu_34, ColaCorta_34, ChikPic_34, Sansa_33, Andromedas_34, Glamour_33, Saratos_34, Zenitsu_34
- Track 25 : Finny_34, MCubed_34
- Track 26 : Casey_32, Pikmin_32
- Track 27 : Pajaza_32
- Track 28 : Lucky3_33, SirVictor_33, Golden_33, Guetzie_33
- Track 29 : BouleyBill_34, Sinatra_33, Bustleton_33, PrincePhergus_33, Pherbot_33
- Track 30 : Kauala_33
- Track 31 : Koji_33
- Track 32 : Zepp_34, Librie_33, Zayuliv_33, LilTerminator_34, CaptainRex_33, Fulton_34, GreenIvy_33, QuadZero_33, Hasitha_33
- Track 33 : Alakazam_34
- Track 34 : Clock_33, Nebulous_33
- Track 35 : Neferthena_33
- Track 36 : WilliamStrong_34
- Track 37 : KatChan_35, Luna18_35
- Track 38 : Jemerald_36, Juicer_36
- Track 39 : Morrigan_35
- Track 40 : Chepli_35
- Track 41 : Schubert_33
- Track 42 : Cheeto1_36
- Track 43 : GaeCeo_36, ChickenKing_35
- Track 44 : Huwbert_82
- Track 45 : Triscuit_81

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

The start number called the most often in the published annotations is 18, it was called in 164 of the 169 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_37, Alakazam_34, AlexAdler_36, Alyxandracam_36, Andromedas_34, Antoinette_36, AranulaLuti_35, Asta_35, Aubergine_35, AxiPup_36, Baines_35, Balsa_35, Bandik_36, BeautPeep30_36, BeeBee8_36, Benjalauren_36, BigRedClifford_36, Blage_36, BonesMcCoy_36, Bonino_35, BouleyBill_34, Bustleton_33, Byron23_36, Calix_35, CaptainRex_33, Carostasia_32, Chako_35, Chamuel_35, Cheeto1_36, Chepli_35, ChickenKing_35, ChikPic_34, Christoph_35, Clancy_35, Clock_33, ColaCorta_34, Convict_36, Dave_36, Delphidian_37, Den3_36, Dothraki_36, Duocatuli_35, Eleri_34, Endor_36, Erla_35, Espinosa_35, Etna_35, Etta_35, FarmerDoug_35, Figueroism_36, Finny_34, Fulton_34, GaeCeo_36, GardenB_35, Garey24_35, Gargoyle_36, Gelo_35, Gershwin_35, Glamour_33, Golden_33, GreenIvy_33, Greys_36, Gubbabump_35, Guetzie_33, Hamlet_35, HanSolo_35, HankSprout_36, Hasitha_33, HerculesXL_34, HungryHenry_35, Ilzat_35, Inventa_36, Ioannes_36, Ixel_34, Janus167_35, JasonD_40, JasperRussell_35, Jemerald_36, Jenos_39, Jerbirus_36, JeriBeth_36, Juanyo_33, Juicer_36, Kale_35, KannH_35, KatChan_35, Kauala_33, KingJulien_35,

Klimt_35, Knox_36, Koji_33, Kurt1_36, Leafus_35, Librie_33, LilTerminator_34, Lovelyunicorn_36, Lucky3_33, Ludgate_36, Luna18_35, MCubed_34, MaeLinda_36, ManRay_35, Mandalorian_32, Martin_37, McGalleon_38, Mercedes_30, MillyPhilly_36, MonChoix_34, Morigan_35, MrWorldwide_36, Nagem_36, Nattles_35, Nebulous_33, Neferthena_33, NickSell_37, Nucci_32, Oats_35, OldNelly_36, Oxtober96_36, Papafritta_35, ParleG_36, Peep_36, Peppino_35, Pherbot_33, Pherferi_36, Phiderman_36, Phireproof_36, PhredFlintston_36, Phriends_36, Pocket_35, PrincePhergus_33, PuppyEggo_36, QuadZero_33, Quartz_33, Raccoon_35, Rappheph_36, Raptor_36, Redfield_35, Renzie_36, Riyhil_36, Robinson_36, Rog141_35, SJay_36, Sansa_33, Saratos_34, Schimmels22_34, Schnapsidee_35, Schubert_33, Sedgewig_35, ShaiHulud_36, Shamu_34, Shee_36, Sinatra_33, SirVictor_33, SoilGremlin_36, SonOfLevi_35, Stanktossa_36, StingRay_35, StirfryIV_36, Stormbreaker8_35, Strathdee_36, Superfresh_36, TatarkaPM_36, Teagan_36, TeddyBear_35, Tenda_35, Thompsone_36, Thorongil_36, TinSulphur_36, Tinyman4_34, Velene_36, Vispistious_36, WestPM_32, WildNOut_36, WilliamStrong_34, Winzigespinne_35, YuuY_34, Zada_36, Zayuliv_33, Zenitsu_34, Zepp_34,

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

- Casey_32, Pajaza_32, Pikmin_32,

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

- Agente005_36, Huwbert_82, Triscuit_81,

Summary by start number:

Start 15:

- Found in 3 of 187 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Casey_32 (EA3), Pajaza_32 (EA3), Pikmin_32 (EA3),

Start 17:

- Found in 3 of 187 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agente005_36 (EA1), Huwbert_82 (GG), Triscuit_81 (GG),

Start 18:

- Found in 184 of 187 (98.4%) of genes in pham
- Manual Annotations of this start: 164 of 169
- Called 98.4% of time when present
- Phage (with cluster) where this start called: Acosta_37 (EA1), Alakazam_34 (EA5), AlexAdler_36 (EA1), Alyxandracam_36 (EA1), Andromedas_34 (EA2), Antoinette_36 (EA1), AranulaLuti_35 (EA1), Asta_35 (EA1), Aubergine_35 (EA1), AxiPup_36 (EA1), Baines_35 (EA1), Balsa_35 (EA1), Bandik_36 (EA1), BeautPeep30_36 (EA1), BeeBee8_36 (EA1), Benjalauen_36 (EA1), BigRedClifford_36 (EA1), Blage_36 (EA1), BonesMcCoy_36 (EA1), Bonino_35 (EA1), BouleyBill_34 (EA4), Bustleton_33 (EA4), Byron23_36 (EA1), Calix_35 (EA1), CaptainRex_33 (EA5), Carostasia_32 (EA10), Chako_35 (EA1), Chamuel_35 (EA1), Cheeto1_36 (EA9), Chepli_35 (EA6), ChickenKing_35 (EA9), ChikPic_34 (EA2), Christoph_35 (EA1), Clancy_35 (EA1),

Clock_33 (EA5), ColaCorta_34 (EA2), Convict_36 (EA1), Dave_36 (EA1), Delphidian_37 (EA1), Den3_36 (EA1), Dothraki_36 (EA1), Duocatuli_35 (EA1), Eleri_34 (EA2), Endor_36 (EA1), Erla_35 (EA1), Espinosa_35 (EA1), Etna_35 (EA1), Etta_35 (EA1), FarmerDoug_35 (EA1), Figueroism_36 (EA1), Finny_34 (EA2), Fulton_34 (EA5), GaeCeo_36 (EA9), GardenB_35 (EA1), Garey24_35 (EA1), Gargoyle_36 (EA1), Gelo_35 (EA1), Gershwin_35 (EA1), Glamour_33 (EA2), Golden_33 (EA4), Greenlvy_33 (EA5), Greys_36 (EA1), Gubbabump_35 (EA1), Guetzle_33 (EA4), Hamlet_35 (EA1), HanSolo_35 (EA1), HankSprout_36 (EA1), Hasitha_33 (EA5), HerculesXL_34 (EA11), HungryHenry_35 (EA1), Ilzat_35 (EA1), Inventa_36 (EA1), Ioannes_36 (EA1), Ixel_34 (EA11), Janus167_35 (EA1), JasonD_40 (EA1), JasperRussell_35 (EA1), Jemerald_36 (EA6), Jenos_39 (EA1), Jerbirus_36 (EA1), JeriBeth_36 (EA1), Juanyo_33 (EA10), Juicer_36 (EA6), Kale_35 (EA1), KannH_35 (EA1), KatChan_35 (EA6), Kauala_33 (EA4), KingJulien_35 (EA1), Klimt_35 (EA1), Knox_36 (EA1), Koji_33 (EA4), Kurt1_36 (EA1), Leafus_35 (EA1), Librie_33 (EA5), LilTerminator_34 (EA5), Lovelyunicorn_36 (EA1), Lucky3_33 (EA4), Ludgate_36 (EA1), Luna18_35 (EA6), MCubed_34 (EA2), MaeLinda_36 (EA1), ManRay_35 (EA1), Mandalorian_32 (EA10), Martin_37 (EA1), McGalleon_38 (EA1), Mercedes_30 (EA), MillyPhilly_36 (EA1), MonChoix_34 (EA1), Morrigan_35 (EA6), MrWorldwide_36 (EA1), Nagem_36 (EA1), Nattles_35 (EA1), Nebulous_33 (EA5), Neferthena_33 (EA5), NickSell_37 (EA1), Nucci_32 (EA10), Oats_35 (EA1), OldNelly_36 (EA1), Oxtober96_36 (EA1), Papafritta_35 (EA1), ParleG_36 (EA1), Peep_36 (EA1), Peppino_35 (EA1), Pherbot_33 (EA4), Pherferi_36 (EA1), Phiderman_36 (EA1), Phireproof_36 (EA1), PhredFlintston_36 (EA1), Phriends_36 (EA1), Pocket_35 (EA1), PrincePhergus_33 (EA4), PuppyEggo_36 (EA1), QuadZero_33 (EA5), Quartz_33 (EA10), Raccoon_35 (EA1), Rapheph_36 (EA1), Raptor_36 (EA1), Redfield_35 (EA1), Renzie_36 (EA1), Riyhil_36 (EA1), Robinson_36 (EA1), Rog141_35 (EA1), SJay_36 (EA1), Sansa_33 (EA2), Saratos_34 (EA2), Schimmels22_34 (EA11), Schnapsidee_35 (EA1), Schubert_33 (EA8), Sedgewig_35 (EA1), ShaiHulud_36 (EA1), Shamu_34 (EA2), Shee_36 (EA1), Sinatra_33 (EA4), SirVictor_33 (EA4), SoilGremlin_36 (EA1), SonOfLevi_35 (EA1), Stanktossa_36 (EA1), StingRay_35 (EA1), StirfryIV_36 (EA1), Stormbreaker8_35 (EA1), Strathdee_36 (EA1), Superfresh_36 (EA1), TatarkaPM_36 (EA1), Teagan_36 (EA1), TeddyBear_35 (EA1), Tenda_35 (EA1), Thompsone_36 (EA1), Thorongil_36 (EA1), TinSulphur_36 (EA1), Tinyman4_34 (EA11), Velene_36 (EA1), Vispistious_36 (EA1), WestPM_32 (EA11), WildNOut_36 (EA1), WilliamStrong_34 (EA6), Winzigespinne_35 (EA1), YuuY_34 (EA10), Zada_36 (EA1), Zayuliv_33 (EA5), Zenitsu_34 (EA2), Zepp_34 (EA5),

Summary by clusters:

There are 12 clusters represented in this pham: EA9, EA11, EA10, EA, GG, EA8, EA1, EA3, EA2, EA5, EA4, EA6,

Info for manual annotations of cluster EA:

- Start number 18 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:

- Start number 18 was manually annotated 111 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 18 was manually annotated 5 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 18 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 18 was manually annotated 11 times for cluster EA2.

Info for manual annotations of cluster EA3:

- Start number 15 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 18 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA5:

- Start number 18 was manually annotated 10 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 18 was manually annotated 7 times for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 18 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 18 was manually annotated 3 times for cluster EA9.

Info for manual annotations of cluster GG:

- Start number 17 was manually annotated 2 times for cluster GG.

Gene Information:

Gene: Acosta_37 Start: 25604, Stop: 24759, Start Num: 18

Candidate Starts for Acosta_37:

(1, 25907), (6, 25760), (Start: 18 @25604 has 164 MA's), (21, 25538), (22, 25526), (26, 25502), (29, 25469), (34, 25361), (37, 25343), (43, 25280),

Gene: Agente005_36 Start: 25439, Stop: 24585, Start Num: 17

Candidate Starts for Agente005_36:

(Start: 17 @25439 has 2 MA's), (19, 25424), (23, 25349), (25, 25340), (29, 25301), (34, 25193), (42, 25118), (51, 25025),

Gene: Alakazam_34 Start: 24747, Stop: 23875, Start Num: 18

Candidate Starts for Alakazam_34:

(Start: 18 @24747 has 164 MA's), (21, 24681), (26, 24645), (29, 24612), (52, 24129), (53, 24111),

Gene: AlexAdler_36 Start: 25200, Stop: 24361, Start Num: 18

Candidate Starts for AlexAdler_36:

(Start: 18 @25200 has 164 MA's), (21, 25134), (29, 25065), (31, 25047), (34, 24957), (37, 24939), (44, 24873),

Gene: Alyxandracam_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for Alyxandracam_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Andromedas_34 Start: 24807, Stop: 23983, Start Num: 18
Candidate Starts for Andromedas_34:
(Start: 18 @24807 has 164 MA's), (23, 24720), (29, 24672), (30, 24666), (31, 24654), (34, 24564), (37, 24546), (54, 24201),

Gene: Antoinette_36 Start: 25197, Stop: 24358, Start Num: 18
Candidate Starts for Antoinette_36:
(Start: 18 @25197 has 164 MA's), (21, 25131), (29, 25062), (31, 25044), (34, 24954), (37, 24936), (44, 24870),

Gene: AranulaLuti_35 Start: 24894, Stop: 24055, Start Num: 18
Candidate Starts for AranulaLuti_35:
(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: Asta_35 Start: 24907, Stop: 24068, Start Num: 18
Candidate Starts for Asta_35:
(Start: 18 @24907 has 164 MA's), (21, 24841), (25, 24811), (29, 24772), (34, 24664), (37, 24646), (44, 24580),

Gene: Aubergine_35 Start: 24907, Stop: 24068, Start Num: 18
Candidate Starts for Aubergine_35:
(Start: 18 @24907 has 164 MA's), (21, 24841), (29, 24772), (31, 24754), (34, 24664), (37, 24646), (44, 24580),

Gene: AxiPup_36 Start: 25179, Stop: 24370, Start Num: 18
Candidate Starts for AxiPup_36:
(Start: 18 @25179 has 164 MA's), (21, 25113), (29, 25044), (31, 25026), (34, 24936), (37, 24918), (44, 24852),

Gene: Baines_35 Start: 24897, Stop: 24055, Start Num: 18
Candidate Starts for Baines_35:
(Start: 18 @24897 has 164 MA's), (21, 24831), (25, 24801), (29, 24762), (34, 24654), (37, 24636), (44, 24570),

Gene: Balsa_35 Start: 25329, Stop: 24475, Start Num: 18
Candidate Starts for Balsa_35:
(Start: 18 @25329 has 164 MA's), (19, 25314), (23, 25239), (25, 25230), (29, 25191), (34, 25083), (42, 25008), (51, 24915),

Gene: Bandik_36 Start: 25205, Stop: 24366, Start Num: 18
Candidate Starts for Bandik_36:
(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: BeautPeep30_36 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for BeautPeep30_36:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: BeeBee8_36 Start: 25499, Stop: 24642, Start Num: 18
Candidate Starts for BeeBee8_36:

(Start: 18 @25499 has 164 MA's), (19, 25484), (23, 25409), (25, 25400), (29, 25361), (34, 25253), (42, 25178), (51, 25085),

Gene: Benjalauren_36 Start: 24910, Stop: 24065, Start Num: 18

Candidate Starts for Benjalauren_36:

(Start: 18 @24910 has 164 MA's), (21, 24844), (29, 24775), (31, 24757), (34, 24667), (37, 24649), (44, 24583),

Gene: BigRedClifford_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for BigRedClifford_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Blage_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for Blage_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: BonesMcCoy_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for BonesMcCoy_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Bonino_35 Start: 24883, Stop: 24044, Start Num: 18

Candidate Starts for Bonino_35:

(Start: 18 @24883 has 164 MA's), (21, 24817), (25, 24787), (29, 24748), (34, 24640), (37, 24622), (44, 24556),

Gene: BouleyBill_34 Start: 24669, Stop: 23935, Start Num: 18

Candidate Starts for BouleyBill_34:

(Start: 18 @24669 has 164 MA's), (23, 24582), (26, 24567), (29, 24534), (37, 24408), (39, 24390), (48, 24306),

Gene: Bustleton_33 Start: 24672, Stop: 23935, Start Num: 18

Candidate Starts for Bustleton_33:

(Start: 18 @24672 has 164 MA's), (23, 24585), (26, 24570), (29, 24537), (37, 24411), (39, 24393), (48, 24309),

Gene: Byron23_36 Start: 25208, Stop: 24375, Start Num: 18

Candidate Starts for Byron23_36:

(Start: 18 @25208 has 164 MA's), (21, 25142), (29, 25073), (31, 25055), (34, 24965), (37, 24947), (44, 24881),

Gene: Calix_35 Start: 24890, Stop: 24048, Start Num: 18

Candidate Starts for Calix_35:

(Start: 18 @24890 has 164 MA's), (21, 24824), (25, 24794), (29, 24755), (34, 24647), (37, 24629), (44, 24563),

Gene: CaptainRex_33 Start: 23072, Stop: 22209, Start Num: 18

Candidate Starts for CaptainRex_33:

(Start: 18 @23072 has 164 MA's), (21, 23006), (26, 22970), (29, 22937), (37, 22811), (40, 22772),

Gene: Carostasia_32 Start: 24484, Stop: 23654, Start Num: 18

Candidate Starts for Carostasia_32:

(Start: 18 @24484 has 164 MA's), (21, 24418), (26, 24382), (29, 24349), (33, 24244), (41, 24163), (53, 23866),

Gene: Casey_32 Start: 24108, Stop: 23335, Start Num: 15

Candidate Starts for Casey_32:

(Start: 15 @24108 has 3 MA's), (Start: 18 @24066 has 164 MA's), (24, 23973), (29, 23931), (30, 23925), (35, 23811), (49, 23694), (50, 23658),

Gene: Chako_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for Chako_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: Chamuel_35 Start: 24883, Stop: 24050, Start Num: 18

Candidate Starts for Chamuel_35:

(Start: 18 @24883 has 164 MA's), (21, 24817), (25, 24787), (29, 24748), (34, 24640), (37, 24622), (44, 24556),

Gene: Cheeto1_36 Start: 25345, Stop: 24524, Start Num: 18

Candidate Starts for Cheeto1_36:

(Start: 18 @25345 has 164 MA's), (21, 25279), (28, 25237), (29, 25210), (30, 25204), (34, 25102), (47, 24982),

Gene: Chepli_35 Start: 24293, Stop: 23439, Start Num: 18

Candidate Starts for Chepli_35:

(Start: 18 @24293 has 164 MA's), (21, 24227), (23, 24206), (26, 24191), (29, 24158), (30, 24152), (34, 24050), (37, 24032), (39, 24014),

Gene: ChickenKing_35 Start: 25261, Stop: 24437, Start Num: 18

Candidate Starts for ChickenKing_35:

(Start: 18 @25261 has 164 MA's), (21, 25195), (29, 25126), (30, 25120), (34, 25018),

Gene: ChikPic_34 Start: 24817, Stop: 23999, Start Num: 18

Candidate Starts for ChikPic_34:

(Start: 18 @24817 has 164 MA's), (23, 24730), (29, 24682), (30, 24676), (31, 24664), (34, 24574), (37, 24556), (54, 24211),

Gene: Christoph_35 Start: 24905, Stop: 24066, Start Num: 18

Candidate Starts for Christoph_35:

(Start: 18 @24905 has 164 MA's), (21, 24839), (29, 24770), (31, 24752), (34, 24662), (37, 24644), (44, 24578),

Gene: Clancy_35 Start: 24939, Stop: 24100, Start Num: 18

Candidate Starts for Clancy_35:

(Start: 18 @24939 has 164 MA's), (21, 24873), (29, 24804), (31, 24786), (34, 24696), (37, 24678), (44, 24612),

Gene: Clock_33 Start: 25904, Stop: 25053, Start Num: 18

Candidate Starts for Clock_33:

(Start: 18 @25904 has 164 MA's), (21, 25838), (26, 25802), (29, 25769), (37, 25643), (53, 25292),

Gene: ColaCorta_34 Start: 24807, Stop: 23983, Start Num: 18

Candidate Starts for ColaCorta_34:

(Start: 18 @24807 has 164 MA's), (23, 24720), (29, 24672), (30, 24666), (31, 24654), (34, 24564), (37, 24546), (54, 24201),

Gene: Convict_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for Convict_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Dave_36 Start: 25197, Stop: 24358, Start Num: 18

Candidate Starts for Dave_36:

(Start: 18 @25197 has 164 MA's), (21, 25131), (29, 25062), (34, 24954), (37, 24936), (44, 24870),

Gene: Delphidian_37 Start: 25208, Stop: 24369, Start Num: 18

Candidate Starts for Delphidian_37:

(Start: 18 @25208 has 164 MA's), (21, 25142), (29, 25073), (31, 25055), (34, 24965), (37, 24947), (44, 24881),

Gene: Den3_36 Start: 25214, Stop: 24375, Start Num: 18

Candidate Starts for Den3_36:

(Start: 18 @25214 has 164 MA's), (21, 25148), (29, 25079), (31, 25061), (34, 24971), (37, 24953), (44, 24887),

Gene: Dothraki_36 Start: 25205, Stop: 24372, Start Num: 18

Candidate Starts for Dothraki_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: Duocatuli_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for Duocatuli_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: Eleri_34 Start: 24808, Stop: 23996, Start Num: 18

Candidate Starts for Eleri_34:

(Start: 18 @24808 has 164 MA's), (23, 24721), (29, 24673), (30, 24667), (31, 24655), (34, 24565), (37, 24547), (54, 24202),

Gene: Endor_36 Start: 25556, Stop: 24702, Start Num: 18

Candidate Starts for Endor_36:

(Start: 18 @25556 has 164 MA's), (19, 25541), (23, 25466), (29, 25418), (34, 25310), (42, 25235), (51, 25142),

Gene: Erla_35 Start: 24887, Stop: 24048, Start Num: 18

Candidate Starts for Erla_35:

(Start: 18 @24887 has 164 MA's), (21, 24821), (25, 24791), (29, 24752), (34, 24644), (37, 24626), (44, 24560),

Gene: Espinosa_35 Start: 24905, Stop: 24066, Start Num: 18

Candidate Starts for Espinosa_35:

(Start: 18 @24905 has 164 MA's), (21, 24839), (29, 24770), (31, 24752), (34, 24662), (37, 24644), (44, 24578),

Gene: Etna_35 Start: 25340, Stop: 24477, Start Num: 18

Candidate Starts for Etna_35:

(Start: 18 @25340 has 164 MA's), (19, 25325), (23, 25250), (25, 25241), (29, 25202), (34, 25094), (42, 25019), (51, 24926),

Gene: Etta_35 Start: 24891, Stop: 24052, Start Num: 18

Candidate Starts for Etta_35:

(Start: 18 @24891 has 164 MA's), (21, 24825), (25, 24795), (29, 24756), (34, 24648), (37, 24630), (44, 24564),

Gene: FarmerDoug_35 Start: 25191, Stop: 24343, Start Num: 18

Candidate Starts for FarmerDoug_35:

(Start: 18 @25191 has 164 MA's), (19, 25176), (23, 25101), (29, 25053), (34, 24945), (37, 24927), (42, 24870), (51, 24777),

Gene: Figueroism_36 Start: 25199, Stop: 24357, Start Num: 18

Candidate Starts for Figueroism_36:

(Start: 18 @25199 has 164 MA's), (21, 25133), (29, 25064), (31, 25046), (34, 24956), (37, 24938), (44, 24872),

Gene: Finny_34 Start: 24848, Stop: 24036, Start Num: 18

Candidate Starts for Finny_34:

(Start: 18 @24848 has 164 MA's), (23, 24761), (29, 24713), (30, 24707), (31, 24695), (34, 24605), (37, 24587),

Gene: Fulton_34 Start: 23073, Stop: 22213, Start Num: 18

Candidate Starts for Fulton_34:

(Start: 18 @23073 has 164 MA's), (21, 23007), (26, 22971), (29, 22938), (37, 22812), (40, 22773),

Gene: GaeCeo_36 Start: 25494, Stop: 24673, Start Num: 18

Candidate Starts for GaeCeo_36:

(Start: 18 @25494 has 164 MA's), (21, 25428), (29, 25359), (30, 25353), (34, 25251),

Gene: GardenB_35 Start: 25305, Stop: 24466, Start Num: 18

Candidate Starts for GardenB_35:

(Start: 18 @25305 has 164 MA's), (19, 25290), (23, 25215), (25, 25206), (29, 25167), (34, 25059), (42, 24984), (51, 24891),

Gene: Garey24_35 Start: 24873, Stop: 24031, Start Num: 18

Candidate Starts for Garey24_35:

(Start: 18 @24873 has 164 MA's), (21, 24807), (29, 24738), (31, 24720), (34, 24630), (37, 24612), (44, 24546),

Gene: Gargoyle_36 Start: 25214, Stop: 24372, Start Num: 18

Candidate Starts for Gargoyle_36:

(Start: 18 @25214 has 164 MA's), (21, 25148), (29, 25079), (31, 25061), (34, 24971), (37, 24953), (44, 24887),

Gene: Gelo_35 Start: 24897, Stop: 24052, Start Num: 18

Candidate Starts for Gelo_35:

(Start: 18 @24897 has 164 MA's), (21, 24831), (25, 24801), (29, 24762), (34, 24654), (37, 24636), (44, 24570),

Gene: Gershwin_35 Start: 24907, Stop: 24068, Start Num: 18

Candidate Starts for Gershwin_35:

(Start: 18 @24907 has 164 MA's), (21, 24841), (25, 24811), (29, 24772), (34, 24664), (37, 24646), (44, 24580),

Gene: Glamour_33 Start: 24799, Stop: 23984, Start Num: 18

Candidate Starts for Glamour_33:

(Start: 18 @24799 has 164 MA's), (23, 24712), (29, 24664), (30, 24658), (31, 24646), (34, 24556), (37, 24538), (54, 24196),

Gene: Golden_33 Start: 24767, Stop: 24036, Start Num: 18

Candidate Starts for Golden_33:

(Start: 18 @24767 has 164 MA's), (23, 24680), (24, 24674), (26, 24665), (29, 24632), (30, 24626), (34, 24524), (39, 24488), (40, 24467), (48, 24404),

Gene: Greenlvy_33 Start: 23662, Stop: 22799, Start Num: 18

Candidate Starts for Greenlvy_33:

(Start: 18 @23662 has 164 MA's), (21, 23596), (26, 23560), (29, 23527), (37, 23401), (40, 23362),

Gene: Greys_36 Start: 25207, Stop: 24368, Start Num: 18

Candidate Starts for Greys_36:

(Start: 18 @25207 has 164 MA's), (21, 25141), (29, 25072), (31, 25054), (34, 24964), (37, 24946), (44, 24880),

Gene: Gubbabump_35 Start: 24887, Stop: 24057, Start Num: 18

Candidate Starts for Gubbabump_35:

(Start: 18 @24887 has 164 MA's), (21, 24821), (29, 24752), (31, 24734), (34, 24644), (37, 24626), (44, 24560),

Gene: Guetzie_33 Start: 24752, Stop: 24024, Start Num: 18

Candidate Starts for Guetzie_33:

(Start: 18 @24752 has 164 MA's), (23, 24665), (24, 24659), (26, 24650), (29, 24617), (30, 24611), (34, 24509), (39, 24473), (40, 24452), (48, 24389),

Gene: Hamlet_35 Start: 25338, Stop: 24475, Start Num: 18

Candidate Starts for Hamlet_35:

(Start: 18 @25338 has 164 MA's), (19, 25323), (23, 25248), (25, 25239), (29, 25200), (34, 25092), (42, 25017), (51, 24924),

Gene: HanSolo_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for HanSolo_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: HankSprout_36 Start: 24774, Stop: 23935, Start Num: 18

Candidate Starts for HankSprout_36:

(Start: 18 @24774 has 164 MA's), (21, 24708), (29, 24639), (31, 24621), (34, 24531), (37, 24513), (44, 24447),

Gene: Hasitha_33 Start: 23085, Stop: 22225, Start Num: 18

Candidate Starts for Hasitha_33:

(Start: 18 @23085 has 164 MA's), (21, 23019), (26, 22983), (29, 22950), (37, 22824), (40, 22785),

Gene: HerculesXL_34 Start: 23550, Stop: 22687, Start Num: 18

Candidate Starts for HerculesXL_34:

(9, 23682), (14, 23610), (Start: 18 @23550 has 164 MA's), (23, 23463), (24, 23457), (27, 23445), (29, 23415), (31, 23397), (34, 23307), (35, 23295), (40, 23250), (45, 23214), (49, 23178),

Gene: HungryHenry_35 Start: 24899, Stop: 24066, Start Num: 18

Candidate Starts for HungryHenry_35:

(Start: 18 @24899 has 164 MA's), (21, 24833), (29, 24764), (31, 24746), (34, 24656), (37, 24638), (44, 24572),

Gene: Huwbert_82 Start: 50681, Stop: 51508, Start Num: 17

Candidate Starts for Huwbert_82:

(11, 50609), (13, 50618), (16, 50645), (Start: 17 @50681 has 2 MA's), (20, 50714), (32, 50900), (37, 50945), (55, 51326),

Gene: Ilzat_35 Start: 24910, Stop: 24065, Start Num: 18

Candidate Starts for Ilzat_35:

(Start: 18 @24910 has 164 MA's), (21, 24844), (29, 24775), (31, 24757), (34, 24667), (37, 24649), (44, 24583),

Gene: Inventa_36 Start: 25205, Stop: 24372, Start Num: 18

Candidate Starts for Inventa_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: loannes_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for loannes_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Ixel_34 Start: 23501, Stop: 22647, Start Num: 18

Candidate Starts for Ixel_34:

(Start: 18 @23501 has 164 MA's), (21, 23435), (29, 23366), (36, 23243), (46, 23138),

Gene: Janus167_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for Janus167_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: JasonD_40 Start: 25754, Stop: 24891, Start Num: 18

Candidate Starts for JasonD_40:

(6, 25910), (Start: 18 @25754 has 164 MA's), (21, 25688), (22, 25676), (23, 25667), (26, 25652), (29, 25619), (34, 25511), (37, 25493), (43, 25430),

Gene: JasperRussell_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for JasperRussell_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: Jemerald_36 Start: 25457, Stop: 24711, Start Num: 18

Candidate Starts for Jemerald_36:

(4, 25640), (10, 25580), (12, 25526), (14, 25517), (Start: 18 @25457 has 164 MA's), (21, 25391), (23, 25370), (29, 25322), (31, 25304), (37, 25196), (38, 25181), (49, 25085),

Gene: Jenos_39 Start: 26401, Stop: 25553, Start Num: 18

Candidate Starts for Jenos_39:

(Start: 18 @26401 has 164 MA's), (21, 26335), (22, 26323), (29, 26266), (34, 26158),

Gene: Jerbirus_36 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for Jerbirus_36:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: JeriBeth_36 Start: 24757, Stop: 23912, Start Num: 18

Candidate Starts for JeriBeth_36:

(Start: 18 @24757 has 164 MA's), (21, 24691), (29, 24622), (31, 24604), (34, 24514), (37, 24496), (44, 24430),

Gene: Juanyo_33 Start: 24567, Stop: 23710, Start Num: 18

Candidate Starts for Juanyo_33:

(2, 24819), (8, 24711), (Start: 18 @24567 has 164 MA's), (21, 24501), (26, 24465), (29, 24432), (33, 24327), (35, 24312), (41, 24246), (56, 23724),

Gene: Juicer_36 Start: 25457, Stop: 24711, Start Num: 18

Candidate Starts for Juicer_36:

(4, 25640), (10, 25580), (12, 25526), (14, 25517), (Start: 18 @25457 has 164 MA's), (21, 25391), (23, 25370), (29, 25322), (31, 25304), (37, 25196), (38, 25181), (49, 25085),

Gene: Kale_35 Start: 24909, Stop: 24070, Start Num: 18

Candidate Starts for Kale_35:

(Start: 18 @24909 has 164 MA's), (21, 24843), (25, 24813), (29, 24774), (34, 24666), (37, 24648), (44, 24582),

Gene: KannH_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for KannH_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: KatChan_35 Start: 24305, Stop: 23445, Start Num: 18

Candidate Starts for KatChan_35:

(Start: 18 @24305 has 164 MA's), (21, 24239), (23, 24218), (26, 24203), (29, 24170), (30, 24164), (34, 24062), (37, 24044), (39, 24026),

Gene: Kauala_33 Start: 24653, Stop: 23928, Start Num: 18

Candidate Starts for Kauala_33:

(Start: 18 @24653 has 164 MA's), (23, 24566), (24, 24560), (29, 24518), (39, 24374), (48, 24290),

Gene: KingJulien_35 Start: 25328, Stop: 24468, Start Num: 18

Candidate Starts for KingJulien_35:

(Start: 18 @25328 has 164 MA's), (19, 25313), (23, 25238), (25, 25229), (29, 25190), (34, 25082), (42, 25007), (51, 24914),

Gene: Klimt_35 Start: 24889, Stop: 24050, Start Num: 18

Candidate Starts for Klimt_35:

(Start: 18 @24889 has 164 MA's), (21, 24823), (25, 24793), (29, 24754), (34, 24646), (37, 24628), (44, 24562),

Gene: Knox_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for Knox_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Koji_33 Start: 24845, Stop: 24063, Start Num: 18

Candidate Starts for Koji_33:

(Start: 18 @24845 has 164 MA's), (23, 24758), (26, 24743), (29, 24710), (34, 24602), (37, 24584), (39, 24566), (48, 24482),

Gene: Kurt1_36 Start: 25205, Stop: 24372, Start Num: 18

Candidate Starts for Kurt1_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: Leafus_35 Start: 25473, Stop: 24610, Start Num: 18

Candidate Starts for Leafus_35:

(Start: 18 @25473 has 164 MA's), (19, 25458), (23, 25383), (25, 25374), (29, 25335), (34, 25227), (42, 25152), (51, 25059),

Gene: Librie_33 Start: 23072, Stop: 22209, Start Num: 18

Candidate Starts for Librie_33:

(Start: 18 @23072 has 164 MA's), (21, 23006), (26, 22970), (29, 22937), (37, 22811), (40, 22772),

Gene: LilTerminator_34 Start: 23094, Stop: 22231, Start Num: 18

Candidate Starts for LilTerminator_34:

(Start: 18 @23094 has 164 MA's), (21, 23028), (26, 22992), (29, 22959), (37, 22833), (40, 22794),

Gene: Lovelyunicorn_36 Start: 25210, Stop: 24371, Start Num: 18

Candidate Starts for Lovelyunicorn_36:

(Start: 18 @25210 has 164 MA's), (21, 25144), (29, 25075), (31, 25057), (34, 24967), (37, 24949), (44, 24883),

Gene: Lucky3_33 Start: 24767, Stop: 24036, Start Num: 18

Candidate Starts for Lucky3_33:

(Start: 18 @24767 has 164 MA's), (23, 24680), (24, 24674), (26, 24665), (29, 24632), (30, 24626), (34, 24524), (39, 24488), (40, 24467), (48, 24404),

Gene: Ludgate_36 Start: 25205, Stop: 24366, Start Num: 18

Candidate Starts for Ludgate_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (44, 24878),

Gene: Luna18_35 Start: 24305, Stop: 23445, Start Num: 18

Candidate Starts for Luna18_35:

(Start: 18 @24305 has 164 MA's), (21, 24239), (23, 24218), (26, 24203), (29, 24170), (30, 24164), (34, 24062), (37, 24044), (39, 24026),

Gene: MCubed_34 Start: 24824, Stop: 24006, Start Num: 18

Candidate Starts for MCubed_34:

(Start: 18 @24824 has 164 MA's), (23, 24737), (29, 24689), (30, 24683), (31, 24671), (34, 24581), (37, 24563),

Gene: MaeLinda_36 Start: 25209, Stop: 24373, Start Num: 18

Candidate Starts for MaeLinda_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: ManRay_35 Start: 24907, Stop: 24068, Start Num: 18

Candidate Starts for ManRay_35:

(Start: 18 @24907 has 164 MA's), (21, 24841), (29, 24772), (31, 24754), (34, 24664), (37, 24646), (44, 24580),

Gene: Mandalorian_32 Start: 24494, Stop: 23652, Start Num: 18

Candidate Starts for Mandalorian_32:

(Start: 18 @24494 has 164 MA's), (21, 24428), (26, 24392), (29, 24359), (33, 24254), (41, 24173), (53, 23876),

Gene: Martin_37 Start: 25214, Stop: 24372, Start Num: 18

Candidate Starts for Martin_37:

(Start: 18 @25214 has 164 MA's), (21, 25148), (29, 25079), (31, 25061), (34, 24971), (37, 24953), (44, 24887),

Gene: McGalleon_38 Start: 26612, Stop: 25770, Start Num: 18

Candidate Starts for McGalleon_38:

(Start: 18 @26612 has 164 MA's), (21, 26546), (22, 26534), (29, 26477), (34, 26369), (37, 26351),

Gene: Mercedes_30 Start: 22076, Stop: 21222, Start Num: 18

Candidate Starts for Mercedes_30:

(Start: 18 @22076 has 164 MA's), (21, 22010), (29, 21941), (37, 21815), (49, 21704), (52, 21473),

Gene: MillyPhilly_36 Start: 25202, Stop: 24369, Start Num: 18

Candidate Starts for MillyPhilly_36:

(Start: 18 @25202 has 164 MA's), (21, 25136), (29, 25067), (31, 25049), (34, 24959), (37, 24941), (44, 24875),

Gene: MonChoix_34 Start: 25226, Stop: 24372, Start Num: 18

Candidate Starts for MonChoix_34:

(Start: 18 @25226 has 164 MA's), (23, 25139), (25, 25130), (29, 25091), (31, 25073), (34, 24983), (37, 24965), (39, 24947), (42, 24908),

Gene: Morrigan_35 Start: 24326, Stop: 23475, Start Num: 18

Candidate Starts for Morrigan_35:

(Start: 18 @24326 has 164 MA's), (21, 24260), (23, 24239), (26, 24224), (29, 24191), (30, 24185), (34, 24083), (39, 24047), (40, 24026),

Gene: MrWorldwide_36 Start: 25212, Stop: 24373, Start Num: 18

Candidate Starts for MrWorldwide_36:

(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: Nagem_36 Start: 25205, Stop: 24366, Start Num: 18

Candidate Starts for Nagem_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (25, 25109), (29, 25070), (34, 24962), (37, 24944), (44, 24878),

Gene: Nattles_35 Start: 24894, Stop: 24055, Start Num: 18
Candidate Starts for Nattles_35:
(Start: 18 @24894 has 164 MA's), (21, 24828), (25, 24798), (29, 24759), (34, 24651), (37, 24633), (44, 24567),

Gene: Nebulous_33 Start: 26085, Stop: 25234, Start Num: 18
Candidate Starts for Nebulous_33:
(Start: 18 @26085 has 164 MA's), (21, 26019), (26, 25983), (29, 25950), (37, 25824), (53, 25473),

Gene: Neferthena_33 Start: 25172, Stop: 24324, Start Num: 18
Candidate Starts for Neferthena_33:
(Start: 18 @25172 has 164 MA's), (21, 25106), (26, 25070), (29, 25037), (37, 24911), (53, 24560),

Gene: NickSell_37 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for NickSell_37:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: Nucci_32 Start: 24489, Stop: 23641, Start Num: 18
Candidate Starts for Nucci_32:
(Start: 18 @24489 has 164 MA's), (21, 24423), (26, 24387), (29, 24354), (33, 24249), (41, 24168), (53, 23871),

Gene: Oats_35 Start: 24907, Stop: 24068, Start Num: 18
Candidate Starts for Oats_35:
(Start: 18 @24907 has 164 MA's), (21, 24841), (29, 24772), (31, 24754), (34, 24664), (37, 24646), (44, 24580),

Gene: OldNelly_36 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for OldNelly_36:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: Oxtober96_36 Start: 25210, Stop: 24371, Start Num: 18
Candidate Starts for Oxtober96_36:
(Start: 18 @25210 has 164 MA's), (21, 25144), (29, 25075), (31, 25057), (34, 24967), (37, 24949), (44, 24883),

Gene: Pajaza_32 Start: 24108, Stop: 23335, Start Num: 15
Candidate Starts for Pajaza_32:
(Start: 15 @24108 has 3 MA's), (Start: 18 @24066 has 164 MA's), (24, 23973), (29, 23931), (30, 23925), (35, 23811), (50, 23658),

Gene: Papafritta_35 Start: 24915, Stop: 24064, Start Num: 18
Candidate Starts for Papafritta_35:
(Start: 18 @24915 has 164 MA's), (21, 24849), (29, 24780), (31, 24762), (34, 24672), (37, 24654), (44, 24588),

Gene: ParleG_36 Start: 25212, Stop: 24373, Start Num: 18
Candidate Starts for ParleG_36:
(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: Peep_36 Start: 25197, Stop: 24358, Start Num: 18
Candidate Starts for Peep_36:
(Start: 18 @25197 has 164 MA's), (21, 25131), (29, 25062), (34, 24954), (37, 24936), (44, 24870),

Gene: Peppino_35 Start: 25321, Stop: 24467, Start Num: 18
Candidate Starts for Peppino_35:
(Start: 18 @25321 has 164 MA's), (19, 25306), (23, 25231), (25, 25222), (29, 25183), (34, 25075), (42, 25000), (51, 24907),

Gene: Pherbot_33 Start: 24659, Stop: 23934, Start Num: 18
Candidate Starts for Pherbot_33:
(Start: 18 @24659 has 164 MA's), (23, 24572), (26, 24557), (29, 24524), (37, 24398), (39, 24380), (48, 24296),

Gene: Pherferi_36 Start: 25205, Stop: 24372, Start Num: 18
Candidate Starts for Pherferi_36:
(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: Phiderman_36 Start: 25202, Stop: 24369, Start Num: 18
Candidate Starts for Phiderman_36:
(Start: 18 @25202 has 164 MA's), (21, 25136), (29, 25067), (31, 25049), (34, 24959), (37, 24941), (44, 24875),

Gene: Phireproof_36 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for Phireproof_36:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: PhredFlintston_36 Start: 25205, Stop: 24372, Start Num: 18
Candidate Starts for PhredFlintston_36:
(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: Phriends_36 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for Phriends_36:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: Pikmin_32 Start: 24108, Stop: 23335, Start Num: 15
Candidate Starts for Pikmin_32:
(Start: 15 @24108 has 3 MA's), (Start: 18 @24066 has 164 MA's), (24, 23973), (29, 23931), (30, 23925), (35, 23811), (49, 23694), (50, 23658),

Gene: Pocket_35 Start: 24898, Stop: 24053, Start Num: 18
Candidate Starts for Pocket_35:
(Start: 18 @24898 has 164 MA's), (21, 24832), (25, 24802), (29, 24763), (34, 24655), (37, 24637), (44, 24571),

Gene: PrincePhergus_33 Start: 24674, Stop: 23937, Start Num: 18
Candidate Starts for PrincePhergus_33:
(Start: 18 @24674 has 164 MA's), (23, 24587), (26, 24572), (29, 24539), (37, 24413), (39, 24395), (48, 24311),

Gene: PuppyEggo_36 Start: 25212, Stop: 24370, Start Num: 18

Candidate Starts for PuppyEggo_36:

(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: QuadZero_33 Start: 23099, Stop: 22239, Start Num: 18

Candidate Starts for QuadZero_33:

(Start: 18 @23099 has 164 MA's), (21, 23033), (26, 22997), (29, 22964), (37, 22838), (40, 22799),

Gene: Quartz_33 Start: 24607, Stop: 23777, Start Num: 18

Candidate Starts for Quartz_33:

(Start: 18 @24607 has 164 MA's), (21, 24541), (26, 24505), (29, 24472), (33, 24367), (41, 24286), (53, 23998),

Gene: Raccoon_35 Start: 25296, Stop: 24433, Start Num: 18

Candidate Starts for Raccoon_35:

(Start: 18 @25296 has 164 MA's), (19, 25281), (23, 25206), (25, 25197), (29, 25158), (34, 25050), (42, 24975), (51, 24882),

Gene: Rapheph_36 Start: 25205, Stop: 24372, Start Num: 18

Candidate Starts for Rapheph_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: Raptor_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for Raptor_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (25, 25113), (29, 25074), (34, 24966), (37, 24948), (44, 24882),

Gene: Redfield_35 Start: 25328, Stop: 24474, Start Num: 18

Candidate Starts for Redfield_35:

(Start: 18 @25328 has 164 MA's), (19, 25313), (23, 25238), (25, 25229), (29, 25190), (34, 25082), (42, 25007), (51, 24914),

Gene: Renzie_36 Start: 25197, Stop: 24358, Start Num: 18

Candidate Starts for Renzie_36:

(Start: 18 @25197 has 164 MA's), (21, 25131), (29, 25062), (34, 24954), (37, 24936), (44, 24870),

Gene: Riyhil_36 Start: 25214, Stop: 24372, Start Num: 18

Candidate Starts for Riyhil_36:

(Start: 18 @25214 has 164 MA's), (21, 25148), (29, 25079), (31, 25061), (34, 24971), (37, 24953), (44, 24887),

Gene: Robinson_36 Start: 25203, Stop: 24364, Start Num: 18

Candidate Starts for Robinson_36:

(Start: 18 @25203 has 164 MA's), (21, 25137), (29, 25068), (31, 25050), (34, 24960), (37, 24942), (44, 24876),

Gene: Rog141_35 Start: 24894, Stop: 24055, Start Num: 18

Candidate Starts for Rog141_35:

(Start: 18 @24894 has 164 MA's), (21, 24828), (29, 24759), (31, 24741), (34, 24651), (37, 24633), (44, 24567),

Gene: SJay_36 Start: 25206, Stop: 24367, Start Num: 18

Candidate Starts for SJay_36:

(Start: 18 @25206 has 164 MA's), (21, 25140), (25, 25110), (29, 25071), (34, 24963), (37, 24945), (44, 24879),

Gene: Sansa_33 Start: 24885, Stop: 24067, Start Num: 18

Candidate Starts for Sansa_33:

(Start: 18 @24885 has 164 MA's), (23, 24798), (29, 24750), (30, 24744), (31, 24732), (34, 24642), (37, 24624), (54, 24273),

Gene: Saratos_34 Start: 24793, Stop: 23981, Start Num: 18

Candidate Starts for Saratos_34:

(Start: 18 @24793 has 164 MA's), (23, 24706), (29, 24658), (30, 24652), (31, 24640), (34, 24550), (37, 24532), (54, 24187),

Gene: Schimmels22_34 Start: 23924, Stop: 23061, Start Num: 18

Candidate Starts for Schimmels22_34:

(3, 24137), (5, 24101), (9, 24056), (14, 23984), (Start: 18 @23924 has 164 MA's), (23, 23837), (24, 23831), (27, 23819), (29, 23789), (31, 23771), (34, 23681), (35, 23669), (40, 23624), (45, 23588), (49, 23552),

Gene: Schnapsidee_35 Start: 25334, Stop: 24468, Start Num: 18

Candidate Starts for Schnapsidee_35:

(Start: 18 @25334 has 164 MA's), (19, 25319), (23, 25244), (25, 25235), (29, 25196), (34, 25088), (42, 25013), (51, 24920),

Gene: Schubert_33 Start: 24621, Stop: 23938, Start Num: 18

Candidate Starts for Schubert_33:

(Start: 18 @24621 has 164 MA's), (26, 24519), (29, 24486), (30, 24480), (31, 24468), (34, 24378), (35, 24366), (37, 24360), (48, 24258),

Gene: Sedgewig_35 Start: 24892, Stop: 24047, Start Num: 18

Candidate Starts for Sedgewig_35:

(Start: 18 @24892 has 164 MA's), (21, 24826), (29, 24757), (31, 24739), (34, 24649), (37, 24631), (44, 24565),

Gene: ShaiHulud_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for ShaiHulud_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: Shamu_34 Start: 24814, Stop: 23996, Start Num: 18

Candidate Starts for Shamu_34:

(Start: 18 @24814 has 164 MA's), (23, 24727), (29, 24679), (30, 24673), (31, 24661), (34, 24571), (37, 24553), (54, 24208),

Gene: Shee_36 Start: 25202, Stop: 24369, Start Num: 18

Candidate Starts for Shee_36:

(Start: 18 @25202 has 164 MA's), (21, 25136), (29, 25067), (31, 25049), (34, 24959), (37, 24941), (44, 24875),

Gene: Sinatra_33 Start: 24670, Stop: 23933, Start Num: 18

Candidate Starts for Sinatra_33:

(Start: 18 @24670 has 164 MA's), (23, 24583), (26, 24568), (29, 24535), (37, 24409), (39, 24391), (48, 24307),

Gene: SirVictor_33 Start: 24752, Stop: 24024, Start Num: 18

Candidate Starts for SirVictor_33:

(Start: 18 @24752 has 164 MA's), (23, 24665), (24, 24659), (26, 24650), (29, 24617), (30, 24611), (34, 24509), (39, 24473), (40, 24452), (48, 24389),

Gene: SoilGremlin_36 Start: 25208, Stop: 24369, Start Num: 18

Candidate Starts for SoilGremlin_36:

(Start: 18 @25208 has 164 MA's), (21, 25142), (29, 25073), (31, 25055), (34, 24965), (37, 24947), (44, 24881),

Gene: SonOfLevi_35 Start: 24889, Stop: 24050, Start Num: 18

Candidate Starts for SonOfLevi_35:

(Start: 18 @24889 has 164 MA's), (21, 24823), (25, 24793), (29, 24754), (34, 24646), (37, 24628), (44, 24562),

Gene: Stanktossa_36 Start: 25205, Stop: 24372, Start Num: 18

Candidate Starts for Stanktossa_36:

(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: StingRay_35 Start: 24910, Stop: 24065, Start Num: 18

Candidate Starts for StingRay_35:

(Start: 18 @24910 has 164 MA's), (21, 24844), (29, 24775), (31, 24757), (34, 24667), (37, 24649), (44, 24583),

Gene: StirfryIV_36 Start: 24903, Stop: 24055, Start Num: 18

Candidate Starts for StirfryIV_36:

(Start: 18 @24903 has 164 MA's), (21, 24837), (29, 24768), (31, 24750), (34, 24660), (37, 24642), (44, 24576),

Gene: Stormbreaker8_35 Start: 25328, Stop: 24468, Start Num: 18

Candidate Starts for Stormbreaker8_35:

(Start: 18 @25328 has 164 MA's), (19, 25313), (23, 25238), (25, 25229), (29, 25190), (34, 25082), (42, 25007), (51, 24914),

Gene: Strathdee_36 Start: 25210, Stop: 24371, Start Num: 18

Candidate Starts for Strathdee_36:

(Start: 18 @25210 has 164 MA's), (21, 25144), (29, 25075), (31, 25057), (34, 24967), (37, 24949), (44, 24883),

Gene: Superfresh_36 Start: 25197, Stop: 24358, Start Num: 18

Candidate Starts for Superfresh_36:

(Start: 18 @25197 has 164 MA's), (21, 25131), (29, 25062), (34, 24954), (37, 24936), (44, 24870),

Gene: TatarkaPM_36 Start: 25211, Stop: 24372, Start Num: 18

Candidate Starts for TatarkaPM_36:

(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: Teagan_36 Start: 25205, Stop: 24366, Start Num: 18
Candidate Starts for Teagan_36:
(Start: 18 @25205 has 164 MA's), (21, 25139), (29, 25070), (31, 25052), (34, 24962), (37, 24944), (44, 24878),

Gene: TeddyBear_35 Start: 24907, Stop: 24068, Start Num: 18
Candidate Starts for TeddyBear_35:
(Start: 18 @24907 has 164 MA's), (21, 24841), (25, 24811), (29, 24772), (34, 24664), (37, 24646), (44, 24580),

Gene: Tenda_35 Start: 24905, Stop: 24066, Start Num: 18
Candidate Starts for Tenda_35:
(Start: 18 @24905 has 164 MA's), (21, 24839), (29, 24770), (31, 24752), (34, 24662), (37, 24644), (44, 24578),

Gene: Thompsone_36 Start: 25212, Stop: 24370, Start Num: 18
Candidate Starts for Thompsone_36:
(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: Thorongil_36 Start: 25212, Stop: 24370, Start Num: 18
Candidate Starts for Thorongil_36:
(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: TinSulphur_36 Start: 25211, Stop: 24372, Start Num: 18
Candidate Starts for TinSulphur_36:
(Start: 18 @25211 has 164 MA's), (21, 25145), (29, 25076), (31, 25058), (34, 24968), (37, 24950), (44, 24884),

Gene: Tinyman4_34 Start: 23550, Stop: 22687, Start Num: 18
Candidate Starts for Tinyman4_34:
(9, 23682), (14, 23610), (Start: 18 @23550 has 164 MA's), (23, 23463), (24, 23457), (27, 23445), (29, 23415), (31, 23397), (34, 23307), (35, 23295), (40, 23250), (45, 23214), (49, 23178),

Gene: Triscuit_81 Start: 50647, Stop: 51474, Start Num: 17
Candidate Starts for Triscuit_81:
(11, 50575), (13, 50584), (16, 50611), (Start: 17 @50647 has 2 MA's), (20, 50680), (32, 50866), (37, 50911),

Gene: Velene_36 Start: 25210, Stop: 24371, Start Num: 18
Candidate Starts for Velene_36:
(Start: 18 @25210 has 164 MA's), (21, 25144), (29, 25075), (31, 25057), (34, 24967), (37, 24949), (44, 24883),

Gene: Vispitious_36 Start: 25212, Stop: 24370, Start Num: 18
Candidate Starts for Vispitious_36:
(Start: 18 @25212 has 164 MA's), (21, 25146), (29, 25077), (31, 25059), (34, 24969), (37, 24951), (44, 24885),

Gene: WestPM_32 Start: 23407, Stop: 22544, Start Num: 18
Candidate Starts for WestPM_32:

(7, 23557), (9, 23539), (10, 23530), (14, 23467), (Start: 18 @23407 has 164 MA's), (23, 23320), (24, 23314), (27, 23302), (29, 23272), (31, 23254), (34, 23164), (35, 23152), (37, 23146), (40, 23107), (45, 23071), (49, 23035),

Gene: WildNOut_36 Start: 25209, Stop: 24370, Start Num: 18

Candidate Starts for WildNOut_36:

(Start: 18 @25209 has 164 MA's), (21, 25143), (29, 25074), (31, 25056), (34, 24966), (37, 24948), (44, 24882),

Gene: WilliamStrong_34 Start: 24626, Stop: 23769, Start Num: 18

Candidate Starts for WilliamStrong_34:

(Start: 18 @24626 has 164 MA's), (21, 24560), (23, 24539), (26, 24524), (29, 24491), (31, 24473), (34, 24383), (37, 24365), (39, 24347),

Gene: Winzigespinne_35 Start: 24893, Stop: 24054, Start Num: 18

Candidate Starts for Winzigespinne_35:

(Start: 18 @24893 has 164 MA's), (21, 24827), (29, 24758), (31, 24740), (34, 24650), (37, 24632), (44, 24566),

Gene: YuuY_34 Start: 25236, Stop: 24385, Start Num: 18

Candidate Starts for YuuY_34:

(Start: 18 @25236 has 164 MA's), (21, 25170), (26, 25134), (29, 25101), (31, 25083), (33, 24996), (35, 24981), (52, 24624), (53, 24606),

Gene: Zada_36 Start: 25181, Stop: 24351, Start Num: 18

Candidate Starts for Zada_36:

(Start: 18 @25181 has 164 MA's), (21, 25115), (29, 25046), (31, 25028), (34, 24938), (37, 24920), (44, 24854),

Gene: Zayuliv_33 Start: 23672, Stop: 22821, Start Num: 18

Candidate Starts for Zayuliv_33:

(Start: 18 @23672 has 164 MA's), (21, 23606), (26, 23570), (29, 23537), (37, 23411), (40, 23372),

Gene: Zenitsu_34 Start: 24829, Stop: 24011, Start Num: 18

Candidate Starts for Zenitsu_34:

(Start: 18 @24829 has 164 MA's), (23, 24742), (29, 24694), (30, 24688), (31, 24676), (34, 24586), (37, 24568), (54, 24223),

Gene: Zepp_34 Start: 23131, Stop: 22289, Start Num: 18

Candidate Starts for Zepp_34:

(Start: 18 @23131 has 164 MA's), (21, 23065), (26, 23029), (29, 22996), (37, 22870), (40, 22831),