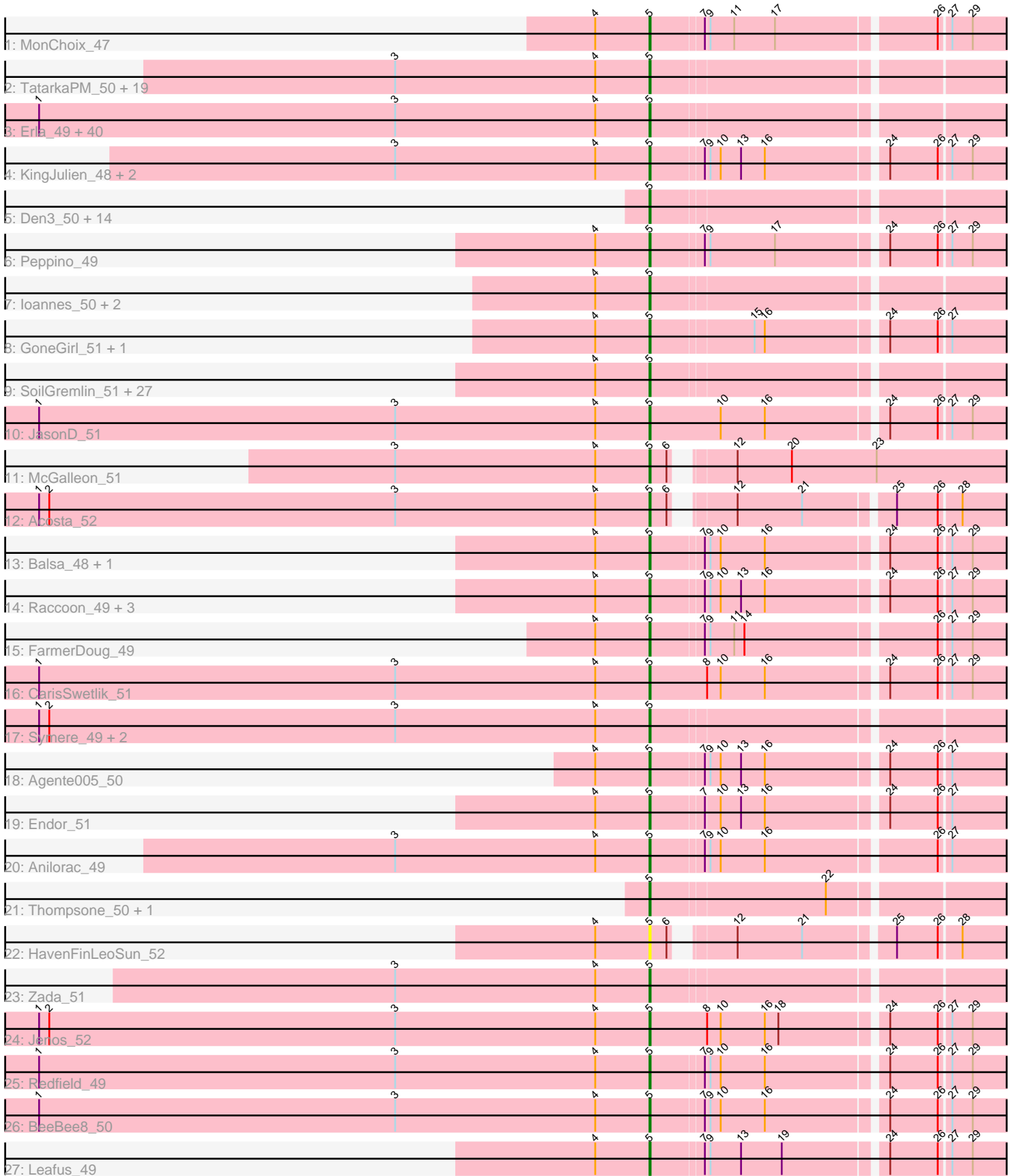


Pham 292550



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 292550 Report

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

Pham number 292550 has 139 members, 10 are drafts.

Phages represented in each track:

- Track 1 : MonChoix_47
- Track 2 : TatarkaPM_50, PhredFlintston_50, TinSulphur_51, Dothraki_50, Inventa_50, ParleG_50, BeautPeep30_50, MillyPhilly_50, Stanktossa_49, Rappheph_50, Byron23_51, Pherferi_50, Phiderman_50, MrWorldwide_50, Shee_50, Riyhil_50, NickSell_50, Martin_51, Kurt1_50, Bandik_50
- Track 3 : Erla_49, StingRay_49, Pocket_49, Aubergine_49, SJay_50, Klimt_50, Kale_49, Kouch_50, TeddyBear_49, Papafritta_49, Winzigespinne_49, ManRay_49, Benjalauren_50, Garey24_50, KellyGreen_51, Espinosa_49, Nagem_50, Baines_49, Exploradora_49, Chamuel_49, Nattles_49, SonOfLevi_50, AranulaLuti_49, Rog141_49, Asta_49, Gershwin_49, KannH_49, JeriBeth_49, Calix_49, Christoph_49, RosieMae_49, Etta_49, Gelo_49, Janus167_49, Oats_49, Tenda_49, HankSprout_50, Chako_49, Bonino_49, JasperRussell_49, Jerbirus_51
- Track 4 : KingJulien_48, Stormbreaker8_48, Soror1_48
- Track 5 : Den3_50, BonesMcCoy_50, Blage_50, Phireproof_50, BigRedClifford_50, Velene_50, AxiPup_50, Convict_50, WildNOut_50, Knox_50, GoingMerry_51, Lovelyunicorn_50, Teagan_50, Oxtober96_51, Raptor_50
- Track 6 : Peppino_49
- Track 7 : Ioannes_50, Duocatuli_49, HanSolo_49
- Track 8 : GoneGirl_51, GardenB_50
- Track 9 : SoilGremlin_51, Renzie_50, StirfryIV_49, SolidSnake_52, Thorongil_50, HungryHenry_49, Strathdee_50, Alyxandracam_50, Peep_50, Ilzat_49, Dave_50, Clancy_49, Robinson_50, Antoinette_50, Superfresh_50, Phriends_50, Delphidian_50, Merida02_52, Figueroism_50, AlexAdler_50, ShaiHulud_50, Vispistious_50, PuppyEggo_50, MaeLinda_50, CoraRita_51, OldNelly_51, Ludgate_50, Gubbabump_49
- Track 10 : JasonD_51
- Track 11 : McGalleon_51
- Track 12 : Acosta_52
- Track 13 : Balsa_48, Schnapsidee_49
- Track 14 : Raccoon_49, Etna_49, Hamlet_49, PhillyPhantom_49
- Track 15 : FarmerDoug_49
- Track 16 : CarisSwetlik_51
- Track 17 : Symere_49, Greys_50, Sedgewig_49
- Track 18 : Agente005_50
- Track 19 : Endor_51
- Track 20 : Anilorac_49
- Track 21 : Thompsone_50, Gargoyle_50

- Track 22 : HavenFinLeoSun_52
- Track 23 : Zada_51
- Track 24 : Jenos_52
- Track 25 : Redfield_49
- Track 26 : BeeBee8_50
- Track 27 : Leafus_49

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

The start number called the most often in the published annotations is 5, it was called in 129 of the 129 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_52, Agente005_50, AlexAdler_50, Alyxandracam_50, Anilorac_49, Antoinette_50, AranulaLuti_49, Asta_49, Aubergine_49, AxiPup_50, Baines_49, Balsa_48, Bandik_50, BeautPeep30_50, BeeBee8_50, Benjalauren_50, BigRedClifford_50, Blage_50, BonesMcCoy_50, Bonino_49, Byron23_51, Calix_49, CarisSwetlik_51, Chako_49, Chamuel_49, Christoph_49, Clancy_49, Convict_50, CoraRita_51, Dave_50, Delphidian_50, Den3_50, Dothraki_50, Duocatuli_49, Endor_51, Erla_49, Espinosa_49, Etna_49, Etta_49, Exploradora_49, FarmerDoug_49, Figueroism_50, GardenB_50, Garey24_50, Gargoyle_50, Gelo_49, Gershwin_49, GoingMerry_51, GoneGirl_51, Greys_50, Gubbabump_49, Hamlet_49, HanSolo_49, HankSprout_50, HavenFinLeoSun_52, HungryHenry_49, Ilzat_49, Inventa_50, Ioannes_50, Janus167_49, JasonD_51, JasperRussell_49, Jenos_52, Jerbirus_51, JeriBeth_49, Kale_49, KannH_49, KellyGreen_51, KingJulien_48, Klimt_50, Knox_50, Kouch_50, Kurt1_50, Leafus_49, Lovelyunicorn_50, Ludgate_50, MaeLinda_50, ManRay_49, Martin_51, McGalleon_51, Merida02_52, MillyPhilly_50, MonChoix_47, MrWorldwide_50, Nagem_50, Nattles_49, NickSell_50, Oats_49, OldNelly_51, Oxtober96_51, Papafritta_49, ParleG_50, Peep_50, Peppino_49, Pherferi_50, Phiderman_50, PhillyPhantom_49, Phireproof_50, PhredFlintston_50, Phriends_50, Pocket_49, PuppyEggo_50, Raccoon_49, Rappheph_50, Raptor_50, Redfield_49, Renzie_50, Rihhil_50, Robinson_50, Rog141_49, RosieMae_49, SJay_50, Schnapsidee_49, Sedgewig_49, ShaiHulud_50, Shee_50, SoilGremlin_51, SolidSnake_52, SonOfLevi_50, Soror1_48, Stanktossa_49, StingRay_49, StirfryIV_49, Stormbreaker8_48, Strathdee_50, Superfresh_50, Symere_49, TatarkaPM_50, Teagan_50, TeddyBear_49, Tenda_49, Thompsone_50, Thorongil_50, TinSulphur_51, Velene_50, Vispistious_50, WildNOOut_50, Winzigespinne_49, Zada_51,

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

-

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

-

Summary by start number:

Start 5:

- Found in 139 of 139 (100.0%) of genes in pham
- Manual Annotations of this start: 129 of 129

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_52 (EA1), Agente005_50 (EA1), AlexAdler_50 (EA1), Alyxandracam_50 (EA1), Anilorac_49 (EA1), Antoinette_50 (EA1), AranulaLuti_49 (EA1), Asta_49 (EA1), Aubergine_49 (EA1), AxiPup_50 (EA1), Baines_49 (EA1), Balsa_48 (EA1), Bandik_50 (EA1), BeautPeep30_50 (EA1), BeeBee8_50 (EA1), Benjalauren_50 (EA1), BigRedClifford_50 (EA1), Blage_50 (EA1), BonesMcCoy_50 (EA1), Bonino_49 (EA1), Byron23_51 (EA1), Calix_49 (EA1), CarisSwetlik_51 (EA1), Chako_49 (EA1), Chamuel_49 (EA1), Christoph_49 (EA1), Clancy_49 (EA1), Convict_50 (EA1), CoraRita_51 (EA1), Dave_50 (EA1), Delphidian_50 (EA1), Den3_50 (EA1), Dothraki_50 (EA1), Duocatuli_49 (EA1), Endor_51 (EA1), Erla_49 (EA1), Espinosa_49 (EA1), Etna_49 (EA1), Etta_49 (EA1), Exploradora_49 (EA1), FarmerDoug_49 (EA1), Figueroism_50 (EA1), GardenB_50 (EA1), Garey24_50 (EA1), Gargoyle_50 (EA1), Gelo_49 (EA1), Gershwin_49 (EA1), GoingMerry_51 (EA1), GoneGirl_51 (EA1), Greys_50 (EA1), Gubbabump_49 (EA1), Hamlet_49 (EA1), HanSolo_49 (EA1), HankSprout_50 (EA1), HavenFinLeoSun_52 (EA1), HungryHenry_49 (EA1), Ilzat_49 (EA1), Inventa_50 (EA1), Ioannes_50 (EA1), Janus167_49 (EA1), JasonD_51 (EA1), JasperRussell_49 (EA1), Jenos_52 (EA1), Jerbirus_51 (EA1), JeriBeth_49 (EA1), Kale_49 (EA1), KannH_49 (EA1), KellyGreen_51 (EA1), KingJulien_48 (EA1), Klimt_50 (EA1), Knox_50 (EA1), Kouch_50 (EA1), Kurt1_50 (EA1), Leafus_49 (EA1), Lovelyunicorn_50 (EA1), Ludgate_50 (EA1), MaeLinda_50 (EA1), ManRay_49 (EA1), Martin_51 (EA1), McGalleon_51 (EA1), Merida02_52 (EA1), MillyPhilly_50 (EA1), MonChoix_47 (EA1), MrWorldwide_50 (EA1), Nagem_50 (EA1), Nattles_49 (EA1), NickSell_50 (EA1), Oats_49 (EA1), OldNelly_51 (EA1), Oxtober96_51 (EA1), Papafritta_49 (EA1), ParleG_50 (EA1), Peep_50 (EA1), Peppino_49 (EA1), Pherferi_50 (EA1), Phiderman_50 (EA1), PhillyPhantom_49 (EA1), Phireproof_50 (EA1), PhredFlintston_50 (EA1), Phriends_50 (EA1), Pocket_49 (EA1), PuppyEggo_50 (EA1), Raccoon_49 (EA1), Rapheph_50 (EA1), Raptor_50 (EA1), Redfield_49 (EA1), Renzie_50 (EA1), Rihhil_50 (EA1), Robinson_50 (EA1), Rog141_49 (EA1), RosieMae_49 (EA1), SJay_50 (EA1), Schnapsidee_49 (EA1), Sedgewig_49 (EA1), ShaiHulud_50 (EA1), Shee_50 (EA1), SoilGremlin_51 (EA1), SolidSnake_52 (EA1), SonOfLevi_50 (EA1), Soror1_48 (EA1), Stanktossa_49 (EA1), StingRay_49 (EA1), StiryfryIV_49 (EA1), Stormbreaker8_48 (EA1), Strathdee_50 (EA1), Superfresh_50 (EA1), Symere_49 (EA1), TatarkaPM_50 (EA1), Teagan_50 (EA1), TeddyBear_49 (EA1), Tenda_49 (EA1), Thompsone_50 (EA1), Thorongil_50 (EA1), TinSulphur_51 (EA1), Velene_50 (EA1), Vispistious_50 (EA1), WildNOut_50 (EA1), Winzigespinne_49 (EA1), Zada_51 (EA1),

Summary by clusters:

There is one cluster represented in this pham: EA1

Info for manual annotations of cluster EA1:

- Start number 5 was manually annotated 129 times for cluster EA1.

Gene Information:

Gene: Acosta_52 Start: 36041, Stop: 35763, Start Num: 5

Candidate Starts for Acosta_52:

(1, 36581), (2, 36572), (3, 36266), (4, 36089), (Start: 5 @36041 has 129 MA's), (6, 36026), (12, 35987), (21, 35930), (25, 35858), (26, 35822), (28, 35804),

Gene: Agente005_50 Start: 35925, Stop: 35587, Start Num: 5

Candidate Starts for Agente005_50:

(4, 35973), (Start: 5 @35925 has 129 MA's), (7, 35880), (9, 35877), (10, 35868), (13, 35850), (16, 35829), (24, 35730), (26, 35688), (27, 35679),

Gene: AlexAdler_50 Start: 35893, Stop: 35597, Start Num: 5

Candidate Starts for AlexAdler_50:

(4, 35941), (Start: 5 @35893 has 129 MA's),

Gene: Alyxandracam_50 Start: 35903, Stop: 35607, Start Num: 5

Candidate Starts for Alyxandracam_50:

(4, 35951), (Start: 5 @35903 has 129 MA's),

Gene: Anilorac_49 Start: 35867, Stop: 35529, Start Num: 5

Candidate Starts for Anilorac_49:

(3, 36092), (4, 35915), (Start: 5 @35867 has 129 MA's), (7, 35822), (9, 35819), (10, 35810), (16, 35771), (26, 35630), (27, 35621),

Gene: Antoinette_50 Start: 35893, Stop: 35597, Start Num: 5

Candidate Starts for Antoinette_50:

(4, 35941), (Start: 5 @35893 has 129 MA's),

Gene: AranulaLuti_49 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for AranulaLuti_49:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: Asta_49 Start: 35615, Stop: 35319, Start Num: 5

Candidate Starts for Asta_49:

(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: Aubergine_49 Start: 35615, Stop: 35319, Start Num: 5

Candidate Starts for Aubergine_49:

(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: AxiPup_50 Start: 35872, Stop: 35576, Start Num: 5

Candidate Starts for AxiPup_50:

(Start: 5 @35872 has 129 MA's),

Gene: Baines_49 Start: 35608, Stop: 35312, Start Num: 5

Candidate Starts for Baines_49:

(1, 36148), (3, 35833), (4, 35656), (Start: 5 @35608 has 129 MA's),

Gene: Balsa_48 Start: 35687, Stop: 35349, Start Num: 5

Candidate Starts for Balsa_48:

(4, 35735), (Start: 5 @35687 has 129 MA's), (7, 35642), (9, 35639), (10, 35630), (16, 35591), (24, 35492), (26, 35450), (27, 35441), (29, 35423),

Gene: Bandik_50 Start: 35898, Stop: 35602, Start Num: 5

Candidate Starts for Bandik_50:

(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: BeautPeep30_50 Start: 35904, Stop: 35608, Start Num: 5

Candidate Starts for BeautPeep30_50:
(3, 36129), (4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: BeeBee8_50 Start: 35858, Stop: 35520, Start Num: 5
Candidate Starts for BeeBee8_50:
(1, 36398), (3, 36083), (4, 35906), (Start: 5 @35858 has 129 MA's), (7, 35813), (9, 35810), (10, 35801),
(16, 35762), (24, 35663), (26, 35621), (27, 35612), (29, 35594),

Gene: Benjalauren_50 Start: 35621, Stop: 35325, Start Num: 5
Candidate Starts for Benjalauren_50:
(1, 36161), (3, 35846), (4, 35669), (Start: 5 @35621 has 129 MA's),

Gene: BigRedClifford_50 Start: 35899, Stop: 35603, Start Num: 5
Candidate Starts for BigRedClifford_50:
(Start: 5 @35899 has 129 MA's),

Gene: Blage_50 Start: 35899, Stop: 35603, Start Num: 5
Candidate Starts for Blage_50:
(Start: 5 @35899 has 129 MA's),

Gene: BonesMcCoy_50 Start: 35899, Stop: 35603, Start Num: 5
Candidate Starts for BonesMcCoy_50:
(Start: 5 @35899 has 129 MA's),

Gene: Bonino_49 Start: 35594, Stop: 35298, Start Num: 5
Candidate Starts for Bonino_49:
(1, 36134), (3, 35819), (4, 35642), (Start: 5 @35594 has 129 MA's),

Gene: Byron23_51 Start: 35901, Stop: 35605, Start Num: 5
Candidate Starts for Byron23_51:
(3, 36126), (4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: Calix_49 Start: 35601, Stop: 35305, Start Num: 5
Candidate Starts for Calix_49:
(1, 36141), (3, 35826), (4, 35649), (Start: 5 @35601 has 129 MA's),

Gene: CarisSwetlik_51 Start: 36277, Stop: 35933, Start Num: 5
Candidate Starts for CarisSwetlik_51:
(1, 36817), (3, 36502), (4, 36325), (Start: 5 @36277 has 129 MA's), (8, 36226), (10, 36214), (16,
36175), (24, 36076), (26, 36034), (27, 36025), (29, 36007),

Gene: Chako_49 Start: 35605, Stop: 35309, Start Num: 5
Candidate Starts for Chako_49:
(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: Chamuel_49 Start: 35627, Stop: 35331, Start Num: 5
Candidate Starts for Chamuel_49:
(1, 36167), (3, 35852), (4, 35675), (Start: 5 @35627 has 129 MA's),

Gene: Christoph_49 Start: 35614, Stop: 35318, Start Num: 5
Candidate Starts for Christoph_49:
(1, 36154), (3, 35839), (4, 35662), (Start: 5 @35614 has 129 MA's),

Gene: Clancy_49 Start: 35650, Stop: 35354, Start Num: 5
Candidate Starts for Clancy_49:
(4, 35698), (Start: 5 @35650 has 129 MA's),

Gene: Convict_50 Start: 35899, Stop: 35603, Start Num: 5
Candidate Starts for Convict_50:
(Start: 5 @35899 has 129 MA's),

Gene: CoraRita_51 Start: 35620, Stop: 35324, Start Num: 5
Candidate Starts for CoraRita_51:
(4, 35668), (Start: 5 @35620 has 129 MA's),

Gene: Dave_50 Start: 35893, Stop: 35597, Start Num: 5
Candidate Starts for Dave_50:
(4, 35941), (Start: 5 @35893 has 129 MA's),

Gene: Delphidian_50 Start: 35901, Stop: 35605, Start Num: 5
Candidate Starts for Delphidian_50:
(4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: Den3_50 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for Den3_50:
(Start: 5 @35904 has 129 MA's),

Gene: Dothraki_50 Start: 35901, Stop: 35605, Start Num: 5
Candidate Starts for Dothraki_50:
(3, 36126), (4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: Duocatuli_49 Start: 35605, Stop: 35309, Start Num: 5
Candidate Starts for Duocatuli_49:
(4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: Endor_51 Start: 36129, Stop: 35791, Start Num: 5
Candidate Starts for Endor_51:
(4, 36177), (Start: 5 @36129 has 129 MA's), (7, 36084), (10, 36072), (13, 36054), (16, 36033), (24, 35934), (26, 35892), (27, 35883),

Gene: Erla_49 Start: 35598, Stop: 35302, Start Num: 5
Candidate Starts for Erla_49:
(1, 36138), (3, 35823), (4, 35646), (Start: 5 @35598 has 129 MA's),

Gene: Espinosa_49 Start: 35613, Stop: 35317, Start Num: 5
Candidate Starts for Espinosa_49:
(1, 36153), (3, 35838), (4, 35661), (Start: 5 @35613 has 129 MA's),

Gene: Etna_49 Start: 35734, Stop: 35396, Start Num: 5
Candidate Starts for Etna_49:
(4, 35782), (Start: 5 @35734 has 129 MA's), (7, 35689), (9, 35686), (10, 35677), (13, 35659), (16, 35638), (24, 35539), (26, 35497), (27, 35488), (29, 35470),

Gene: Etta_49 Start: 35602, Stop: 35306, Start Num: 5
Candidate Starts for Etta_49:
(1, 36142), (3, 35827), (4, 35650), (Start: 5 @35602 has 129 MA's),

Gene: Exploradora_49 Start: 35605, Stop: 35309, Start Num: 5
Candidate Starts for Exploradora_49:
(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: FarmerDoug_49 Start: 35636, Stop: 35298, Start Num: 5
Candidate Starts for FarmerDoug_49:
(4, 35684), (Start: 5 @35636 has 129 MA's), (7, 35591), (9, 35588), (11, 35567), (14, 35558), (26, 35399), (27, 35390), (29, 35372),

Gene: Figueroism_50 Start: 35892, Stop: 35596, Start Num: 5
Candidate Starts for Figueroism_50:
(4, 35940), (Start: 5 @35892 has 129 MA's),

Gene: GardenB_50 Start: 35899, Stop: 35561, Start Num: 5
Candidate Starts for GardenB_50:
(4, 35947), (Start: 5 @35899 has 129 MA's), (15, 35812), (16, 35803), (24, 35704), (26, 35662), (27, 35653),

Gene: Garey24_50 Start: 35581, Stop: 35285, Start Num: 5
Candidate Starts for Garey24_50:
(1, 36121), (3, 35806), (4, 35629), (Start: 5 @35581 has 129 MA's),

Gene: Gargoyle_50 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for Gargoyle_50:
(Start: 5 @35904 has 129 MA's), (22, 35754),

Gene: Gelo_49 Start: 35608, Stop: 35312, Start Num: 5
Candidate Starts for Gelo_49:
(1, 36148), (3, 35833), (4, 35656), (Start: 5 @35608 has 129 MA's),

Gene: Gershwin_49 Start: 35615, Stop: 35319, Start Num: 5
Candidate Starts for Gershwin_49:
(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: GoingMerry_51 Start: 35882, Stop: 35586, Start Num: 5
Candidate Starts for GoingMerry_51:
(Start: 5 @35882 has 129 MA's),

Gene: GoneGirl_51 Start: 35892, Stop: 35554, Start Num: 5
Candidate Starts for GoneGirl_51:
(4, 35940), (Start: 5 @35892 has 129 MA's), (15, 35805), (16, 35796), (24, 35697), (26, 35655), (27, 35646),

Gene: Greys_50 Start: 35900, Stop: 35604, Start Num: 5
Candidate Starts for Greys_50:
(1, 36440), (2, 36431), (3, 36125), (4, 35948), (Start: 5 @35900 has 129 MA's),

Gene: Gubbabump_49 Start: 35595, Stop: 35299, Start Num: 5
Candidate Starts for Gubbabump_49:
(4, 35643), (Start: 5 @35595 has 129 MA's),

Gene: Hamlet_49 Start: 35679, Stop: 35341, Start Num: 5

Candidate Starts for Hamlet_49:

(4, 35727), (Start: 5 @35679 has 129 MA's), (7, 35634), (9, 35631), (10, 35622), (13, 35604), (16, 35583), (24, 35484), (26, 35442), (27, 35433), (29, 35415),

Gene: HanSolo_49 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for HanSolo_49:

(4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: HankSprout_50 Start: 35482, Stop: 35186, Start Num: 5

Candidate Starts for HankSprout_50:

(1, 36022), (3, 35707), (4, 35530), (Start: 5 @35482 has 129 MA's),

Gene: HavenFinLeoSun_52 Start: 35987, Stop: 35709, Start Num: 5

Candidate Starts for HavenFinLeoSun_52:

(4, 36035), (Start: 5 @35987 has 129 MA's), (6, 35972), (12, 35933), (21, 35876), (25, 35804), (26, 35768), (28, 35750),

Gene: HungryHenry_49 Start: 35610, Stop: 35314, Start Num: 5

Candidate Starts for HungryHenry_49:

(4, 35658), (Start: 5 @35610 has 129 MA's),

Gene: Ilzat_49 Start: 35621, Stop: 35325, Start Num: 5

Candidate Starts for Ilzat_49:

(4, 35669), (Start: 5 @35621 has 129 MA's),

Gene: Inventa_50 Start: 35898, Stop: 35602, Start Num: 5

Candidate Starts for Inventa_50:

(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Ioannes_50 Start: 35902, Stop: 35606, Start Num: 5

Candidate Starts for Ioannes_50:

(4, 35950), (Start: 5 @35902 has 129 MA's),

Gene: Janus167_49 Start: 35632, Stop: 35336, Start Num: 5

Candidate Starts for Janus167_49:

(1, 36172), (3, 35857), (4, 35680), (Start: 5 @35632 has 129 MA's),

Gene: JasonD_51 Start: 35820, Stop: 35476, Start Num: 5

Candidate Starts for JasonD_51:

(1, 36360), (3, 36045), (4, 35868), (Start: 5 @35820 has 129 MA's), (10, 35757), (16, 35718), (24, 35619), (26, 35577), (27, 35568), (29, 35550),

Gene: JasperRussell_49 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for JasperRussell_49:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: Jenos_52 Start: 36555, Stop: 36211, Start Num: 5

Candidate Starts for Jenos_52:

(1, 37095), (2, 37086), (3, 36780), (4, 36603), (Start: 5 @36555 has 129 MA's), (8, 36504), (10, 36492), (16, 36453), (18, 36441), (24, 36354), (26, 36312), (27, 36303), (29, 36285),

Gene: Jerbirus_51 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for Jerbirus_51:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: JeriBeth_49 Start: 35468, Stop: 35172, Start Num: 5

Candidate Starts for JeriBeth_49:

(1, 36008), (3, 35693), (4, 35516), (Start: 5 @35468 has 129 MA's),

Gene: Kale_49 Start: 35617, Stop: 35321, Start Num: 5

Candidate Starts for Kale_49:

(1, 36157), (3, 35842), (4, 35665), (Start: 5 @35617 has 129 MA's),

Gene: KannH_49 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for KannH_49:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: KellyGreen_51 Start: 35599, Stop: 35303, Start Num: 5

Candidate Starts for KellyGreen_51:

(1, 36139), (3, 35824), (4, 35647), (Start: 5 @35599 has 129 MA's),

Gene: KingJulien_48 Start: 35570, Stop: 35232, Start Num: 5

Candidate Starts for KingJulien_48:

(3, 35795), (4, 35618), (Start: 5 @35570 has 129 MA's), (7, 35525), (9, 35522), (10, 35513), (13, 35495), (16, 35474), (24, 35375), (26, 35333), (27, 35324), (29, 35306),

Gene: Klimt_50 Start: 35633, Stop: 35337, Start Num: 5

Candidate Starts for Klimt_50:

(1, 36173), (3, 35858), (4, 35681), (Start: 5 @35633 has 129 MA's),

Gene: Knox_50 Start: 35899, Stop: 35603, Start Num: 5

Candidate Starts for Knox_50:

(Start: 5 @35899 has 129 MA's),

Gene: Kouch_50 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for Kouch_50:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: Kurt1_50 Start: 35898, Stop: 35602, Start Num: 5

Candidate Starts for Kurt1_50:

(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Leafus_49 Start: 35833, Stop: 35495, Start Num: 5

Candidate Starts for Leafus_49:

(4, 35881), (Start: 5 @35833 has 129 MA's), (7, 35788), (9, 35785), (13, 35758), (19, 35722), (24, 35638), (26, 35596), (27, 35587), (29, 35569),

Gene: Lovelyunicorn_50 Start: 35900, Stop: 35604, Start Num: 5

Candidate Starts for Lovelyunicorn_50:

(Start: 5 @35900 has 129 MA's),

Gene: Ludgate_50 Start: 35901, Stop: 35605, Start Num: 5

Candidate Starts for Ludgate_50:

(4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: MaeLinda_50 Start: 35902, Stop: 35606, Start Num: 5

Candidate Starts for MaeLinda_50:
(4, 35950), (Start: 5 @35902 has 129 MA's),

Gene: ManRay_49 Start: 35615, Stop: 35319, Start Num: 5
Candidate Starts for ManRay_49:
(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: Martin_51 Start: 35907, Stop: 35611, Start Num: 5
Candidate Starts for Martin_51:
(3, 36132), (4, 35955), (Start: 5 @35907 has 129 MA's),

Gene: McGalleon_51 Start: 36692, Stop: 36399, Start Num: 5
Candidate Starts for McGalleon_51:
(3, 36917), (4, 36740), (Start: 5 @36692 has 129 MA's), (6, 36677), (12, 36638), (20, 36590), (23, 36515),

Gene: Merida02_52 Start: 35901, Stop: 35605, Start Num: 5
Candidate Starts for Merida02_52:
(4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: MillyPhilly_50 Start: 35895, Stop: 35599, Start Num: 5
Candidate Starts for MillyPhilly_50:
(3, 36120), (4, 35943), (Start: 5 @35895 has 129 MA's),

Gene: MonChoix_47 Start: 35482, Stop: 35144, Start Num: 5
Candidate Starts for MonChoix_47:
(4, 35530), (Start: 5 @35482 has 129 MA's), (7, 35437), (9, 35434), (11, 35413), (17, 35377), (26, 35245), (27, 35236), (29, 35218),

Gene: MrWorldwide_50 Start: 35905, Stop: 35609, Start Num: 5
Candidate Starts for MrWorldwide_50:
(3, 36130), (4, 35953), (Start: 5 @35905 has 129 MA's),

Gene: Nagem_50 Start: 35898, Stop: 35602, Start Num: 5
Candidate Starts for Nagem_50:
(1, 36438), (3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Nattles_49 Start: 35602, Stop: 35306, Start Num: 5
Candidate Starts for Nattles_49:
(1, 36142), (3, 35827), (4, 35650), (Start: 5 @35602 has 129 MA's),

Gene: NickSell_50 Start: 35908, Stop: 35612, Start Num: 5
Candidate Starts for NickSell_50:
(3, 36133), (4, 35956), (Start: 5 @35908 has 129 MA's),

Gene: Oats_49 Start: 35615, Stop: 35319, Start Num: 5
Candidate Starts for Oats_49:
(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: OldNelly_51 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for OldNelly_51:
(4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: Oxtober96_51 Start: 35900, Stop: 35604, Start Num: 5
Candidate Starts for Oxtober96_51:
(Start: 5 @35900 has 129 MA's),

Gene: Papafritta_49 Start: 35656, Stop: 35360, Start Num: 5
Candidate Starts for Papafritta_49:
(1, 36196), (3, 35881), (4, 35704), (Start: 5 @35656 has 129 MA's),

Gene: ParleG_50 Start: 35905, Stop: 35609, Start Num: 5
Candidate Starts for ParleG_50:
(3, 36130), (4, 35953), (Start: 5 @35905 has 129 MA's),

Gene: Peep_50 Start: 35890, Stop: 35594, Start Num: 5
Candidate Starts for Peep_50:
(4, 35938), (Start: 5 @35890 has 129 MA's),

Gene: Peppino_49 Start: 35679, Stop: 35341, Start Num: 5
Candidate Starts for Peppino_49:
(4, 35727), (Start: 5 @35679 has 129 MA's), (7, 35634), (9, 35631), (17, 35574), (24, 35484), (26, 35442), (27, 35433), (29, 35415),

Gene: Pherferi_50 Start: 35898, Stop: 35602, Start Num: 5
Candidate Starts for Pherferi_50:
(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Phiderman_50 Start: 35895, Stop: 35599, Start Num: 5
Candidate Starts for Phiderman_50:
(3, 36120), (4, 35943), (Start: 5 @35895 has 129 MA's),

Gene: PhillyPhantom_49 Start: 35669, Stop: 35331, Start Num: 5
Candidate Starts for PhillyPhantom_49:
(4, 35717), (Start: 5 @35669 has 129 MA's), (7, 35624), (9, 35621), (10, 35612), (13, 35594), (16, 35573), (24, 35474), (26, 35432), (27, 35423), (29, 35405),

Gene: Phireproof_50 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for Phireproof_50:
(Start: 5 @35904 has 129 MA's),

Gene: PhredFlintston_50 Start: 35898, Stop: 35602, Start Num: 5
Candidate Starts for PhredFlintston_50:
(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Phriends_50 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for Phriends_50:
(4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: Pocket_49 Start: 35642, Stop: 35346, Start Num: 5
Candidate Starts for Pocket_49:
(1, 36182), (3, 35867), (4, 35690), (Start: 5 @35642 has 129 MA's),

Gene: PuppyEggo_50 Start: 35905, Stop: 35609, Start Num: 5
Candidate Starts for PuppyEggo_50:
(4, 35953), (Start: 5 @35905 has 129 MA's),

Gene: Raccoon_49 Start: 35636, Stop: 35298, Start Num: 5

Candidate Starts for Raccoon_49:

(4, 35684), (Start: 5 @35636 has 129 MA's), (7, 35591), (9, 35588), (10, 35579), (13, 35561), (16, 35540), (24, 35441), (26, 35399), (27, 35390), (29, 35372),

Gene: Rapheph_50 Start: 35898, Stop: 35602, Start Num: 5

Candidate Starts for Rapheph_50:

(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: Raptor_50 Start: 35902, Stop: 35606, Start Num: 5

Candidate Starts for Raptor_50:

(Start: 5 @35902 has 129 MA's),

Gene: Redfield_49 Start: 35687, Stop: 35349, Start Num: 5

Candidate Starts for Redfield_49:

(1, 36227), (3, 35912), (4, 35735), (Start: 5 @35687 has 129 MA's), (7, 35642), (9, 35639), (10, 35630), (16, 35591), (24, 35492), (26, 35450), (27, 35441), (29, 35423),

Gene: Renzie_50 Start: 35893, Stop: 35597, Start Num: 5

Candidate Starts for Renzie_50:

(4, 35941), (Start: 5 @35893 has 129 MA's),

Gene: Riyhil_50 Start: 35908, Stop: 35612, Start Num: 5

Candidate Starts for Riyhil_50:

(3, 36133), (4, 35956), (Start: 5 @35908 has 129 MA's),

Gene: Robinson_50 Start: 35896, Stop: 35600, Start Num: 5

Candidate Starts for Robinson_50:

(4, 35944), (Start: 5 @35896 has 129 MA's),

Gene: Rog141_49 Start: 35605, Stop: 35309, Start Num: 5

Candidate Starts for Rog141_49:

(1, 36145), (3, 35830), (4, 35653), (Start: 5 @35605 has 129 MA's),

Gene: RosieMae_49 Start: 35660, Stop: 35364, Start Num: 5

Candidate Starts for RosieMae_49:

(1, 36200), (3, 35885), (4, 35708), (Start: 5 @35660 has 129 MA's),

Gene: SJay_50 Start: 35899, Stop: 35603, Start Num: 5

Candidate Starts for SJay_50:

(1, 36439), (3, 36124), (4, 35947), (Start: 5 @35899 has 129 MA's),

Gene: Schnapsidee_49 Start: 35694, Stop: 35356, Start Num: 5

Candidate Starts for Schnapsidee_49:

(4, 35742), (Start: 5 @35694 has 129 MA's), (7, 35649), (9, 35646), (10, 35637), (16, 35598), (24, 35499), (26, 35457), (27, 35448), (29, 35430),

Gene: Sedgewig_49 Start: 35603, Stop: 35307, Start Num: 5

Candidate Starts for Sedgewig_49:

(1, 36143), (2, 36134), (3, 35828), (4, 35651), (Start: 5 @35603 has 129 MA's),

Gene: ShaiHulud_50 Start: 35914, Stop: 35618, Start Num: 5

Candidate Starts for ShaiHulud_50:
(4, 35962), (Start: 5 @35914 has 129 MA's),

Gene: Shee_50 Start: 35895, Stop: 35599, Start Num: 5
Candidate Starts for Shee_50:
(3, 36120), (4, 35943), (Start: 5 @35895 has 129 MA's),

Gene: SoilGremlin_51 Start: 35901, Stop: 35605, Start Num: 5
Candidate Starts for SoilGremlin_51:
(4, 35949), (Start: 5 @35901 has 129 MA's),

Gene: SolidSnake_52 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for SolidSnake_52:
(4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: SonOfLevi_50 Start: 35633, Stop: 35337, Start Num: 5
Candidate Starts for SonOfLevi_50:
(1, 36173), (3, 35858), (4, 35681), (Start: 5 @35633 has 129 MA's),

Gene: Soror1_48 Start: 35585, Stop: 35247, Start Num: 5
Candidate Starts for Soror1_48:
(3, 35810), (4, 35633), (Start: 5 @35585 has 129 MA's), (7, 35540), (9, 35537), (10, 35528), (13, 35510), (16, 35489), (24, 35390), (26, 35348), (27, 35339), (29, 35321),

Gene: Stanktossa_49 Start: 35898, Stop: 35602, Start Num: 5
Candidate Starts for Stanktossa_49:
(3, 36123), (4, 35946), (Start: 5 @35898 has 129 MA's),

Gene: StingRay_49 Start: 35619, Stop: 35323, Start Num: 5
Candidate Starts for StingRay_49:
(1, 36159), (3, 35844), (4, 35667), (Start: 5 @35619 has 129 MA's),

Gene: StirfryIV_49 Start: 35614, Stop: 35318, Start Num: 5
Candidate Starts for StirfryIV_49:
(4, 35662), (Start: 5 @35614 has 129 MA's),

Gene: Stormbreaker8_48 Start: 35571, Stop: 35233, Start Num: 5
Candidate Starts for Stormbreaker8_48:
(3, 35796), (4, 35619), (Start: 5 @35571 has 129 MA's), (7, 35526), (9, 35523), (10, 35514), (13, 35496), (16, 35475), (24, 35376), (26, 35334), (27, 35325), (29, 35307),

Gene: Strathdee_50 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for Strathdee_50:
(4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: Superfresh_50 Start: 35893, Stop: 35597, Start Num: 5
Candidate Starts for Superfresh_50:
(4, 35941), (Start: 5 @35893 has 129 MA's),

Gene: Symere_49 Start: 35613, Stop: 35317, Start Num: 5
Candidate Starts for Symere_49:
(1, 36153), (2, 36144), (3, 35838), (4, 35661), (Start: 5 @35613 has 129 MA's),

Gene: TatarkaPM_50 Start: 35908, Stop: 35612, Start Num: 5
Candidate Starts for TatarkaPM_50:
(3, 36133), (4, 35956), (Start: 5 @35908 has 129 MA's),

Gene: Teagan_50 Start: 35895, Stop: 35599, Start Num: 5
Candidate Starts for Teagan_50:
(Start: 5 @35895 has 129 MA's),

Gene: TeddyBear_49 Start: 35615, Stop: 35319, Start Num: 5
Candidate Starts for TeddyBear_49:
(1, 36155), (3, 35840), (4, 35663), (Start: 5 @35615 has 129 MA's),

Gene: Tenda_49 Start: 35613, Stop: 35317, Start Num: 5
Candidate Starts for Tenda_49:
(1, 36153), (3, 35838), (4, 35661), (Start: 5 @35613 has 129 MA's),

Gene: Thompsone_50 Start: 35902, Stop: 35606, Start Num: 5
Candidate Starts for Thompsone_50:
(Start: 5 @35902 has 129 MA's), (22, 35752),

Gene: Thorongil_50 Start: 35419, Stop: 35123, Start Num: 5
Candidate Starts for Thorongil_50:
(4, 35467), (Start: 5 @35419 has 129 MA's),

Gene: TinSulphur_51 Start: 35904, Stop: 35608, Start Num: 5
Candidate Starts for TinSulphur_51:
(3, 36129), (4, 35952), (Start: 5 @35904 has 129 MA's),

Gene: Velene_50 Start: 35900, Stop: 35604, Start Num: 5
Candidate Starts for Velene_50:
(Start: 5 @35900 has 129 MA's),

Gene: Vispitious_50 Start: 35905, Stop: 35609, Start Num: 5
Candidate Starts for Vispitious_50:
(4, 35953), (Start: 5 @35905 has 129 MA's),

Gene: WildNOut_50 Start: 35898, Stop: 35602, Start Num: 5
Candidate Starts for WildNOut_50:
(Start: 5 @35898 has 129 MA's),

Gene: Winzigespinne_49 Start: 35601, Stop: 35305, Start Num: 5
Candidate Starts for Winzigespinne_49:
(1, 36141), (3, 35826), (4, 35649), (Start: 5 @35601 has 129 MA's),

Gene: Zada_51 Start: 35874, Stop: 35578, Start Num: 5
Candidate Starts for Zada_51:
(3, 36099), (4, 35922), (Start: 5 @35874 has 129 MA's),