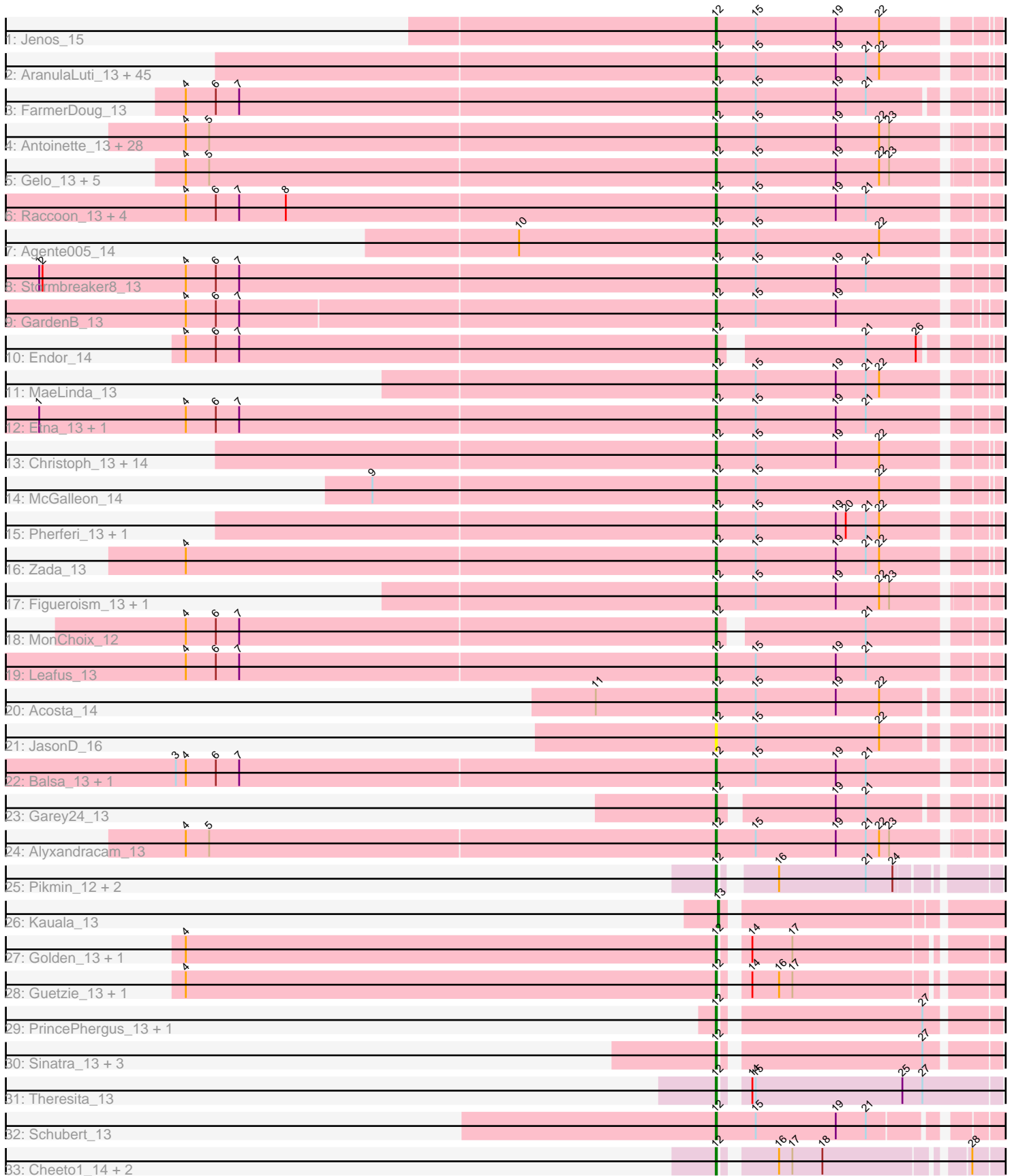


Pham 196350



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 196350 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196350 has 143 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Jenos\_15
- Track 2 : AranulaLuti\_13, Ilzat\_13, Teagan\_13, Janus167\_13, KannH\_13, Duocatuli\_13, Phriends\_13, JasperRussell\_13, HanSolo\_13, Rog141\_13, Sedgewig\_13, MrWorldwide\_13, Rapheph\_13, Byron23\_13, Nagem\_13, Shee\_13, Gargoyle\_13, Gubbabump\_13, NickSell\_13, Martin\_14, Jerbirus\_13, OldNelly\_13, HankSprout\_14, Chako\_13, Bandik\_13, Ludgate\_13, Benjalauren\_13, TatarkaPM\_13, SJay\_13, PhredFlintston\_13, TinSulphur\_13, StingRay\_13, Riyhil\_13, Inventa\_13, JeriBeth\_13, Dothraki\_13, Papafritta\_13, StifryIV\_13, ParleG\_13, BeautPeep30\_13, Stanktossa\_13, Clancy\_13, Winzigespinne\_13, HungryHenry\_13, Phiderman\_13, Phireproof\_13
- Track 3 : FarmerDoug\_13
- Track 4 : Antoinette\_13, Knox\_13, WildNOut\_13, PuppyEggo\_13, ShaiHulud\_13, AlexAdler\_13, Etta\_13, Lovelyunicorn\_13, Convict\_13, Renzie\_13, Den3\_13, Thompsone\_13, Ioannes\_13, AxiPup\_13, Superfresh\_13, Greys\_13, Strathdee\_13, Blage\_13, Nattles\_13, BonesMcCoy\_13, Thorongil\_13, Peep\_13, Velene\_13, Vispistious\_13, Baines\_13, BigRedClifford\_13, Dave\_13, Raptor\_13, Oxtober96\_13
- Track 5 : Gelo\_13, Klimt\_13, Chamuel\_13, Calix\_13, SonOfLevi\_13, Erla\_13
- Track 6 : Raccoon\_13, Schnapsidee\_13, Peppino\_13, BeeBee8\_14, Redfield\_13
- Track 7 : Agente005\_14
- Track 8 : Stormbreaker8\_13
- Track 9 : GardenB\_13
- Track 10 : Endor\_14
- Track 11 : MaeLinda\_13
- Track 12 : Etna\_13, KingJulien\_13
- Track 13 : Christoph\_13, Delphidian\_13, Tenda\_13, Oats\_13, Bonino\_13, Kale\_13, SoilGremlin\_13, Asta\_13, ManRay\_13, Gershwin\_13, TeddyBear\_13, Aubergine\_13, MillyPhilly\_13, Espinosa\_13, Pocket\_13
- Track 14 : McGalleon\_14
- Track 15 : Pherferi\_13, Kurt1\_13
- Track 16 : Zada\_13
- Track 17 : Figueroism\_13, Robinson\_13
- Track 18 : MonChoix\_12
- Track 19 : Leafus\_13
- Track 20 : Acosta\_14
- Track 21 : JasonD\_16
- Track 22 : Balsa\_13, Hamlet\_13
- Track 23 : Garey24\_13

- Track 24 : Alyxandracam\_13
- Track 25 : Pikmin\_12, Pajaza\_12, Casey\_12
- Track 26 : Kauala\_13
- Track 27 : Golden\_13, Lucky3\_13
- Track 28 : Guetzie\_13, SirVictor\_13
- Track 29 : PrincePhergus\_13, Koji\_13
- Track 30 : Sinatra\_13, Pherbot\_13, Bustleton\_13, BouleyBill\_13
- Track 31 : Theresita\_13
- Track 32 : Schubert\_13
- Track 33 : Cheeto1\_14, GaeCeo\_14, ChickenKing\_13

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

The start number called the most often in the published annotations is 12, it was called in 136 of the 137 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta\_14, Agente005\_14, AlexAdler\_13, Alyxandracam\_13, Antoinette\_13, AranulaLuti\_13, Asta\_13, Aubergine\_13, AxiPup\_13, Baines\_13, Balsa\_13, Bandik\_13, BeautPeep30\_13, BeeBee8\_14, Benjalauren\_13, BigRedClifford\_13, Blage\_13, BonesMcCoy\_13, Bonino\_13, BouleyBill\_13, Bustleton\_13, Byron23\_13, Calix\_13, Casey\_12, Chako\_13, Chamuel\_13, Cheeto1\_14, ChickenKing\_13, Christoph\_13, Clancy\_13, Convict\_13, Dave\_13, Delphidian\_13, Den3\_13, Dothraki\_13, Duocatuli\_13, Endor\_14, Erla\_13, Espinosa\_13, Etna\_13, Etta\_13, FarmerDoug\_13, Figueroism\_13, GaeCeo\_14, GardenB\_13, Garey24\_13, Gargoyle\_13, Gelo\_13, Gershwin\_13, Golden\_13, Greys\_13, Gubbabump\_13, Guetzie\_13, Hamlet\_13, HanSolo\_13, HankSprout\_14, HungryHenry\_13, Ilzat\_13, Inventa\_13, Ioannes\_13, Janus167\_13, JasonD\_16, JasperRussell\_13, Jenos\_15, Jerbirus\_13, JeriBeth\_13, Kale\_13, KannH\_13, KingJulien\_13, Klimt\_13, Knox\_13, Koji\_13, Kurt1\_13, Leafus\_13, Lovelyunicorn\_13, Lucky3\_13, Ludgate\_13, MaeLinda\_13, ManRay\_13, Martin\_14, McGalleon\_14, MillyPhilly\_13, MonChoix\_12, MrWorldwide\_13, Nagem\_13, Nattles\_13, NickSell\_13, Oats\_13, OldNelly\_13, Oxtober96\_13, Pajaza\_12, Papafritta\_13, ParleG\_13, Peep\_13, Peppino\_13, Pherbot\_13, Pherferi\_13, Phiderman\_13, Phireproof\_13, PhredFlintston\_13, Phriends\_13, Pikmin\_12, Pocket\_13, PrincePhergus\_13, PuppyEggo\_13, Raccoon\_13, Rappheph\_13, Raptor\_13, Redfield\_13, Renzie\_13, Riyhil\_13, Robinson\_13, Rog141\_13, SJay\_13, Schnapsidee\_13, Schubert\_13, Sedgewig\_13, ShaiHulud\_13, Shee\_13, Sinatra\_13, SirVictor\_13, SoilGremlin\_13, SonOfLevi\_13, Stanktossa\_13, StingRay\_13, StirfryIV\_13, Stormbreaker8\_13, Strathdee\_13, Superfresh\_13, TatarkaPM\_13, Teagan\_13, TeddyBear\_13, Tenda\_13, Theresita\_13, Thompsone\_13, Thorongil\_13, TinSulphur\_13, Velene\_13, Vispistious\_13, WildNOut\_13, Winzigespinne\_13, Zada\_13,

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

- 

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

- Kauala\_13,

**Summary by start number:**

Start 12:

- Found in 142 of 143 ( 99.3% ) of genes in pham
- Manual Annotations of this start: 136 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta\_14 (EA1), Agente005\_14 (EA1), AlexAdler\_13 (EA1), Alyxandracam\_13 (EA1), Antoinette\_13 (EA1), AranulaLuti\_13 (EA1), Asta\_13 (EA1), Aubergine\_13 (EA1), AxiPup\_13 (EA1), Baines\_13 (EA1), Balsa\_13 (EA1), Bandik\_13 (EA1), BeautPeep30\_13 (EA1), BeeBee8\_14 (EA1), Benjalauren\_13 (EA1), BigRedClifford\_13 (EA1), Blage\_13 (EA1), BonesMcCoy\_13 (EA1), Bonino\_13 (EA1), BouleyBill\_13 (EA4), Bustleton\_13 (EA4), Byron23\_13 (EA1), Calix\_13 (EA1), Casey\_12 (EA3), Chako\_13 (EA1), Chamuel\_13 (EA1), Cheeto1\_14 (EA9), ChickenKing\_13 (EA9), Christoph\_13 (EA1), Clancy\_13 (EA1), Convict\_13 (EA1), Dave\_13 (EA1), Delphidian\_13 (EA1), Den3\_13 (EA1), Dothraki\_13 (EA1), Duocatuli\_13 (EA1), Endor\_14 (EA1), Erla\_13 (EA1), Espinosa\_13 (EA1), Etna\_13 (EA1), Etta\_13 (EA1), FarmerDoug\_13 (EA1), Figueroism\_13 (EA1), GaeCeo\_14 (EA9), GardenB\_13 (EA1), Garey24\_13 (EA1), Gargoyle\_13 (EA1), Gelo\_13 (EA1), Gershwin\_13 (EA1), Golden\_13 (EA4), Greys\_13 (EA1), Gubbabump\_13 (EA1), Guetzie\_13 (EA4), Hamlet\_13 (EA1), HanSolo\_13 (EA1), HankSprout\_14 (EA1), HungryHenry\_13 (EA1), Ilzat\_13 (EA1), Inventa\_13 (EA1), Ioannes\_13 (EA1), Janus167\_13 (EA1), JasonD\_16 (EA1), JasperRussell\_13 (EA1), Jenos\_15 (EA1), Jerbirus\_13 (EA1), JeriBeth\_13 (EA1), Kale\_13 (EA1), KannH\_13 (EA1), KingJulien\_13 (EA1), Klimt\_13 (EA1), Knox\_13 (EA1), Koji\_13 (EA4), Kurt1\_13 (EA1), Leafus\_13 (EA1), Lovelyunicorn\_13 (EA1), Lucky3\_13 (EA4), Ludgate\_13 (EA1), MaeLinda\_13 (EA1), ManRay\_13 (EA1), Martin\_14 (EA1), McGalleon\_14 (EA1), MillyPhilly\_13 (EA1), MonChoix\_12 (EA1), MrWorldwide\_13 (EA1), Nagem\_13 (EA1), Nattles\_13 (EA1), NickSell\_13 (EA1), Oats\_13 (EA1), OldNelly\_13 (EA1), Oxtober96\_13 (EA1), Pajaza\_12 (EA3), Papafritta\_13 (EA1), ParleG\_13 (EA1), Peep\_13 (EA1), Peppino\_13 (EA1), Pherbot\_13 (EA4), Pherferi\_13 (EA1), Phiderman\_13 (EA1), Phireproof\_13 (EA1), PhredFlintston\_13 (EA1), Phriends\_13 (EA1), Pikmin\_12 (EA3), Pocket\_13 (EA1), PrincePhergus\_13 (EA4), PuppyEggo\_13 (EA1), Raccoon\_13 (EA1), Rapphep\_13 (EA1), Raptor\_13 (EA1), Redfield\_13 (EA1), Renzie\_13 (EA1), Riyhil\_13 (EA1), Robinson\_13 (EA1), Rog141\_13 (EA1), SJay\_13 (EA1), Schnapsidee\_13 (EA1), Schubert\_13 (EA8), Sedgewig\_13 (EA1), ShaiHulud\_13 (EA1), Shee\_13 (EA1), Sinatra\_13 (EA4), SirVictor\_13 (EA4), SoilGremlin\_13 (EA1), SonOfLevi\_13 (EA1), Stanktossa\_13 (EA1), StingRay\_13 (EA1), StirfryIV\_13 (EA1), Stormbreaker8\_13 (EA1), Strathdee\_13 (EA1), Superfresh\_13 (EA1), TatarkaPM\_13 (EA1), Teagan\_13 (EA1), TeddyBear\_13 (EA1), Tenda\_13 (EA1), Theresita\_13 (EA7), Thompsone\_13 (EA1), Thorongil\_13 (EA1), TinSulphur\_13 (EA1), Velene\_13 (EA1), Vispistious\_13 (EA1), WildNOut\_13 (EA1), Winzigespinne\_13 (EA1), Zada\_13 (EA1),

Start 13:

- Found in 1 of 143 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kauala\_13 (EA4),

**Summary by clusters:**

There are 6 clusters represented in this pham: EA9, EA8, EA1, EA3, EA4, EA7,

Info for manual annotations of cluster EA1:

- Start number 12 was manually annotated 118 times for cluster EA1.

Info for manual annotations of cluster EA3:

- Start number 12 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 12 was manually annotated 10 times for cluster EA4.
- Start number 13 was manually annotated 1 time for cluster EA4.

Info for manual annotations of cluster EA7:

- Start number 12 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA8:

- Start number 12 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 12 was manually annotated 3 times for cluster EA9.

### ***Gene Information:***

Gene: Acosta\_14 Start: 7873, Stop: 8103, Start Num: 12

Candidate Starts for Acosta\_14:

(11, 7765), (Start: 12 @7873 has 136 MA's), (15, 7909), (19, 7981), (22, 8020),

Gene: Agente005\_14 Start: 8160, Stop: 8399, Start Num: 12

Candidate Starts for Agente005\_14:

(10, 7983), (Start: 12 @8160 has 136 MA's), (15, 8196), (22, 8307),

Gene: AlexAdler\_13 Start: 7594, Stop: 7830, Start Num: 12

Candidate Starts for AlexAdler\_13:

(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: Alyxandracam\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Alyxandracam\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (21, 7738), (22, 7750), (23, 7759),

Gene: Antoinette\_13 Start: 7594, Stop: 7830, Start Num: 12

Candidate Starts for Antoinette\_13:

(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: AranulaLuti\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for AranulaLuti\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Asta\_13 Start: 7909, Stop: 8145, Start Num: 12

Candidate Starts for Asta\_13:

(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: Aubergine\_13 Start: 7909, Stop: 8145, Start Num: 12

Candidate Starts for Aubergine\_13:

(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: AxiPup\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for AxiPup\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Baines\_13 Start: 7893, Stop: 8129, Start Num: 12

Candidate Starts for Baines\_13:

(4, 7419), (5, 7440), (Start: 12 @7893 has 136 MA's), (15, 7929), (19, 8001), (22, 8040), (23, 8049),

Gene: Balsa\_13 Start: 8011, Stop: 8250, Start Num: 12

Candidate Starts for Balsa\_13:

(3, 7528), (4, 7537), (6, 7564), (7, 7585), (Start: 12 @8011 has 136 MA's), (15, 8047), (19, 8119), (21, 8146),

Gene: Bandik\_13 Start: 7600, Stop: 7836, Start Num: 12

Candidate Starts for Bandik\_13:

(Start: 12 @7600 has 136 MA's), (15, 7636), (19, 7708), (21, 7735), (22, 7747),

Gene: BeautPeep30\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for BeautPeep30\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: BeeBee8\_14 Start: 8174, Stop: 8413, Start Num: 12

Candidate Starts for BeeBee8\_14:

(4, 7700), (6, 7727), (7, 7748), (8, 7790), (Start: 12 @8174 has 136 MA's), (15, 8210), (19, 8282), (21, 8309),

Gene: Benjalauren\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Benjalauren\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: BigRedClifford\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for BigRedClifford\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Blage\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Blage\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: BonesMcCoy\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for BonesMcCoy\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Bonino\_13 Start: 7886, Stop: 8122, Start Num: 12

Candidate Starts for Bonino\_13:

(Start: 12 @7886 has 136 MA's), (15, 7922), (19, 7994), (22, 8033),

Gene: BouleyBill\_13 Start: 7871, Stop: 8098, Start Num: 12

Candidate Starts for BouleyBill\_13:

(Start: 12 @7871 has 136 MA's), (27, 8039),

Gene: Bustleton\_13 Start: 7859, Stop: 8086, Start Num: 12

Candidate Starts for Bustleton\_13:  
(Start: 12 @7859 has 136 MA's), (27, 8027),

Gene: Byron23\_13 Start: 7609, Stop: 7845, Start Num: 12  
Candidate Starts for Byron23\_13:  
(Start: 12 @7609 has 136 MA's), (15, 7645), (19, 7717), (21, 7744), (22, 7756),

Gene: Calix\_13 Start: 7886, Stop: 8122, Start Num: 12  
Candidate Starts for Calix\_13:  
(4, 7412), (5, 7433), (Start: 12 @7886 has 136 MA's), (15, 7922), (19, 7994), (22, 8033), (23, 8042),

Gene: Casey\_12 Start: 7906, Stop: 8121, Start Num: 12  
Candidate Starts for Casey\_12:  
(Start: 12 @7906 has 136 MA's), (16, 7942), (21, 8020), (24, 8044),

Gene: Chako\_13 Start: 7896, Stop: 8132, Start Num: 12  
Candidate Starts for Chako\_13:  
(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Chamuel\_13 Start: 7888, Stop: 8124, Start Num: 12  
Candidate Starts for Chamuel\_13:  
(4, 7414), (5, 7435), (Start: 12 @7888 has 136 MA's), (15, 7924), (19, 7996), (22, 8035), (23, 8044),

Gene: Cheeto1\_14 Start: 7774, Stop: 8001, Start Num: 12  
Candidate Starts for Cheeto1\_14:  
(Start: 12 @7774 has 136 MA's), (16, 7813), (17, 7825), (18, 7852), (28, 7966),

Gene: ChickenKing\_13 Start: 7594, Stop: 7821, Start Num: 12  
Candidate Starts for ChickenKing\_13:  
(Start: 12 @7594 has 136 MA's), (16, 7633), (17, 7645), (18, 7672), (28, 7786),

Gene: Christoph\_13 Start: 7907, Stop: 8143, Start Num: 12  
Candidate Starts for Christoph\_13:  
(Start: 12 @7907 has 136 MA's), (15, 7943), (19, 8015), (22, 8054),

Gene: Clancy\_13 Start: 7896, Stop: 8132, Start Num: 12  
Candidate Starts for Clancy\_13:  
(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Convict\_13 Start: 7603, Stop: 7839, Start Num: 12  
Candidate Starts for Convict\_13:  
(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Dave\_13 Start: 7594, Stop: 7830, Start Num: 12  
Candidate Starts for Dave\_13:  
(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: Delphidian\_13 Start: 7603, Stop: 7839, Start Num: 12  
Candidate Starts for Delphidian\_13:  
(Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750),

Gene: Den3\_13 Start: 7607, Stop: 7843, Start Num: 12  
Candidate Starts for Den3\_13:

(4, 7133), (5, 7154), (Start: 12 @7607 has 136 MA's), (15, 7643), (19, 7715), (22, 7754), (23, 7763),

Gene: Dothraki\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Dothraki\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Duocatuli\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Duocatuli\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Endor\_14 Start: 8172, Stop: 8384, Start Num: 12

Candidate Starts for Endor\_14:

(4, 7698), (6, 7725), (7, 7746), (Start: 12 @8172 has 136 MA's), (21, 8289), (26, 8334),

Gene: Erla\_13 Start: 7886, Stop: 8122, Start Num: 12

Candidate Starts for Erla\_13:

(4, 7412), (5, 7433), (Start: 12 @7886 has 136 MA's), (15, 7922), (19, 7994), (22, 8033), (23, 8042),

Gene: Espinosa\_13 Start: 7907, Stop: 8143, Start Num: 12

Candidate Starts for Espinosa\_13:

(Start: 12 @7907 has 136 MA's), (15, 7943), (19, 8015), (22, 8054),

Gene: Etna\_13 Start: 8002, Stop: 8241, Start Num: 12

Candidate Starts for Etna\_13:

(1, 7396), (4, 7528), (6, 7555), (7, 7576), (Start: 12 @8002 has 136 MA's), (15, 8038), (19, 8110), (21, 8137),

Gene: Etta\_13 Start: 7890, Stop: 8126, Start Num: 12

Candidate Starts for Etta\_13:

(4, 7416), (5, 7437), (Start: 12 @7890 has 136 MA's), (15, 7926), (19, 7998), (22, 8037), (23, 8046),

Gene: FarmerDoug\_13 Start: 7731, Stop: 7961, Start Num: 12

Candidate Starts for FarmerDoug\_13:

(4, 7257), (6, 7284), (7, 7305), (Start: 12 @7731 has 136 MA's), (15, 7767), (19, 7839), (21, 7866),

Gene: Figueroism\_13 Start: 7594, Stop: 7830, Start Num: 12

Candidate Starts for Figueroism\_13:

(Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: GaeCeo\_14 Start: 7764, Stop: 7991, Start Num: 12

Candidate Starts for GaeCeo\_14:

(Start: 12 @7764 has 136 MA's), (16, 7803), (17, 7815), (18, 7842), (28, 7956),

Gene: GardenB\_13 Start: 8002, Stop: 8238, Start Num: 12

Candidate Starts for GardenB\_13:

(4, 7531), (6, 7558), (7, 7579), (Start: 12 @8002 has 136 MA's), (15, 8038), (19, 8110),

Gene: Garey24\_13 Start: 7889, Stop: 8104, Start Num: 12

Candidate Starts for Garey24\_13:

(Start: 12 @7889 has 136 MA's), (19, 7982), (21, 8009),

Gene: Gargoyle\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Gargoyle\_13:



(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Gelo\_13 Start: 7890, Stop: 8126, Start Num: 12

Candidate Starts for Gelo\_13:

(4, 7416), (5, 7437), (Start: 12 @7890 has 136 MA's), (15, 7926), (19, 7998), (22, 8037), (23, 8046),

Gene: Gershwin\_13 Start: 7909, Stop: 8145, Start Num: 12

Candidate Starts for Gershwin\_13:

(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: Golden\_13 Start: 7951, Stop: 8181, Start Num: 12

Candidate Starts for Golden\_13:

(4, 7474), (Start: 12 @7951 has 136 MA's), (14, 7966), (17, 8002),

Gene: Greys\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Greys\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Gubbabump\_13 Start: 7898, Stop: 8134, Start Num: 12

Candidate Starts for Gubbabump\_13:

(Start: 12 @7898 has 136 MA's), (15, 7934), (19, 8006), (21, 8033), (22, 8045),

Gene: Guetzie\_13 Start: 7945, Stop: 8175, Start Num: 12

Candidate Starts for Guetzie\_13:

(4, 7468), (Start: 12 @7945 has 136 MA's), (14, 7960), (16, 7984), (17, 7996),

Gene: Hamlet\_13 Start: 8011, Stop: 8250, Start Num: 12

Candidate Starts for Hamlet\_13:

(3, 7528), (4, 7537), (6, 7564), (7, 7585), (Start: 12 @8011 has 136 MA's), (15, 8047), (19, 8119), (21, 8146),

Gene: HanSolo\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for HanSolo\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: HankSprout\_14 Start: 7776, Stop: 8012, Start Num: 12

Candidate Starts for HankSprout\_14:

(Start: 12 @7776 has 136 MA's), (15, 7812), (19, 7884), (21, 7911), (22, 7923),

Gene: HungryHenry\_13 Start: 7897, Stop: 8133, Start Num: 12

Candidate Starts for HungryHenry\_13:

(Start: 12 @7897 has 136 MA's), (15, 7933), (19, 8005), (21, 8032), (22, 8044),

Gene: Ilzat\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Ilzat\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Inventa\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Inventa\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: loannes\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for loannes\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Janus167\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Janus167\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: JasonD\_16 Start: 8034, Stop: 8264, Start Num: 12

Candidate Starts for JasonD\_16:

(Start: 12 @8034 has 136 MA's), (15, 8070), (22, 8181),

Gene: JasperRussell\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for JasperRussell\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Jenos\_15 Start: 8355, Stop: 8591, Start Num: 12

Candidate Starts for Jenos\_15:

(Start: 12 @8355 has 136 MA's), (15, 8391), (19, 8463), (22, 8502),

Gene: Jerbirus\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Jerbirus\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: JeriBeth\_13 Start: 7743, Stop: 7979, Start Num: 12

Candidate Starts for JeriBeth\_13:

(Start: 12 @7743 has 136 MA's), (15, 7779), (19, 7851), (21, 7878), (22, 7890),

Gene: Kale\_13 Start: 7911, Stop: 8147, Start Num: 12

Candidate Starts for Kale\_13:

(Start: 12 @7911 has 136 MA's), (15, 7947), (19, 8019), (22, 8058),

Gene: KannH\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for KannH\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Kauala\_13 Start: 7869, Stop: 8105, Start Num: 13

Candidate Starts for Kauala\_13:

(Start: 13 @7869 has 1 MA's),

Gene: KingJulien\_13 Start: 8002, Stop: 8241, Start Num: 12

Candidate Starts for KingJulien\_13:

(1, 7396), (4, 7528), (6, 7555), (7, 7576), (Start: 12 @8002 has 136 MA's), (15, 8038), (19, 8110), (21, 8137),

Gene: Klimt\_13 Start: 7888, Stop: 8124, Start Num: 12

Candidate Starts for Klimt\_13:

(4, 7414), (5, 7435), (Start: 12 @7888 has 136 MA's), (15, 7924), (19, 7996), (22, 8035), (23, 8044),

Gene: Knox\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Knox\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Koji\_13 Start: 7992, Stop: 8219, Start Num: 12

Candidate Starts for Koji\_13:

(Start: 12 @7992 has 136 MA's), (27, 8160),

Gene: Kurt1\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Kurt1\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (20, 7723), (21, 7741), (22, 7753),

Gene: Leafus\_13 Start: 8149, Stop: 8388, Start Num: 12

Candidate Starts for Leafus\_13:

(4, 7675), (6, 7702), (7, 7723), (Start: 12 @8149 has 136 MA's), (15, 8185), (19, 8257), (21, 8284),

Gene: Lovelyunicorn\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Lovelyunicorn\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Lucky3\_13 Start: 7951, Stop: 8181, Start Num: 12

Candidate Starts for Lucky3\_13:

(4, 7474), (Start: 12 @7951 has 136 MA's), (14, 7966), (17, 8002),

Gene: Ludgate\_13 Start: 7600, Stop: 7836, Start Num: 12

Candidate Starts for Ludgate\_13:

(Start: 12 @7600 has 136 MA's), (15, 7636), (19, 7708), (21, 7735), (22, 7747),

Gene: MaeLinda\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for MaeLinda\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: ManRay\_13 Start: 7909, Stop: 8145, Start Num: 12

Candidate Starts for ManRay\_13:

(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: Martin\_14 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Martin\_14:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: McGalleon\_14 Start: 8474, Stop: 8710, Start Num: 12

Candidate Starts for McGalleon\_14:

(9, 8168), (Start: 12 @8474 has 136 MA's), (15, 8510), (22, 8621),

Gene: MillyPhilly\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for MillyPhilly\_13:

(Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750),

Gene: MonChoix\_12 Start: 7676, Stop: 7897, Start Num: 12

Candidate Starts for MonChoix\_12:

(4, 7202), (6, 7229), (7, 7250), (Start: 12 @7676 has 136 MA's), (21, 7793),

Gene: MrWorldwide\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for MrWorldwide\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Nagem\_13 Start: 7600, Stop: 7836, Start Num: 12

Candidate Starts for Nagem\_13:

(Start: 12 @7600 has 136 MA's), (15, 7636), (19, 7708), (21, 7735), (22, 7747),

Gene: Nattles\_13 Start: 7892, Stop: 8128, Start Num: 12  
Candidate Starts for Nattles\_13:  
(4, 7418), (5, 7439), (Start: 12 @7892 has 136 MA's), (15, 7928), (19, 8000), (22, 8039), (23, 8048),

Gene: NickSell\_13 Start: 7606, Stop: 7842, Start Num: 12  
Candidate Starts for NickSell\_13:  
(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Oats\_13 Start: 7909, Stop: 8145, Start Num: 12  
Candidate Starts for Oats\_13:  
(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: OldNelly\_13 Start: 7606, Stop: 7842, Start Num: 12  
Candidate Starts for OldNelly\_13:  
(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Oxtober96\_13 Start: 7603, Stop: 7839, Start Num: 12  
Candidate Starts for Oxtober96\_13:  
(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Pajaza\_12 Start: 7906, Stop: 8121, Start Num: 12  
Candidate Starts for Pajaza\_12:  
(Start: 12 @7906 has 136 MA's), (16, 7942), (21, 8020), (24, 8044),

Gene: Papafritta\_13 Start: 7896, Stop: 8132, Start Num: 12  
Candidate Starts for Papafritta\_13:  
(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: ParleG\_13 Start: 7606, Stop: 7842, Start Num: 12  
Candidate Starts for ParleG\_13:  
(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Peep\_13 Start: 7594, Stop: 7830, Start Num: 12  
Candidate Starts for Peep\_13:  
(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: Peppino\_13 Start: 8002, Stop: 8241, Start Num: 12  
Candidate Starts for Peppino\_13:  
(4, 7528), (6, 7555), (7, 7576), (8, 7618), (Start: 12 @8002 has 136 MA's), (15, 8038), (19, 8110), (21, 8137),

Gene: Pherbot\_13 Start: 7858, Stop: 8085, Start Num: 12  
Candidate Starts for Pherbot\_13:  
(Start: 12 @7858 has 136 MA's), (27, 8026),

Gene: Pherferi\_13 Start: 7606, Stop: 7842, Start Num: 12  
Candidate Starts for Pherferi\_13:  
(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (20, 7723), (21, 7741), (22, 7753),

Gene: Phiderman\_13 Start: 7603, Stop: 7839, Start Num: 12  
Candidate Starts for Phiderman\_13:  
(Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (21, 7738), (22, 7750),

Gene: Phireproof\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Phireproof\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: PhredFlintston\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for PhredFlintston\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Phriends\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Phriends\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Pikmin\_12 Start: 7906, Stop: 8121, Start Num: 12

Candidate Starts for Pikmin\_12:

(Start: 12 @7906 has 136 MA's), (16, 7942), (21, 8020), (24, 8044),

Gene: Pocket\_13 Start: 7894, Stop: 8130, Start Num: 12

Candidate Starts for Pocket\_13:

(Start: 12 @7894 has 136 MA's), (15, 7930), (19, 8002), (22, 8041),

Gene: PrincePhergus\_13 Start: 7862, Stop: 8089, Start Num: 12

Candidate Starts for PrincePhergus\_13:

(Start: 12 @7862 has 136 MA's), (27, 8030),

Gene: PuppyEggo\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for PuppyEggo\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Raccoon\_13 Start: 8008, Stop: 8247, Start Num: 12

Candidate Starts for Raccoon\_13:

(4, 7534), (6, 7561), (7, 7582), (8, 7624), (Start: 12 @8008 has 136 MA's), (15, 8044), (19, 8116), (21, 8143),

Gene: Rapheph\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Rapheph\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Raptor\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Raptor\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Redfield\_13 Start: 8010, Stop: 8249, Start Num: 12

Candidate Starts for Redfield\_13:

(4, 7536), (6, 7563), (7, 7584), (8, 7626), (Start: 12 @8010 has 136 MA's), (15, 8046), (19, 8118), (21, 8145),

Gene: Renzie\_13 Start: 7594, Stop: 7830, Start Num: 12

Candidate Starts for Renzie\_13:

(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: Riyhil\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Riyhil\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Robinson\_13 Start: 7597, Stop: 7833, Start Num: 12

Candidate Starts for Robinson\_13:

(Start: 12 @7597 has 136 MA's), (15, 7633), (19, 7705), (22, 7744), (23, 7753),

Gene: Rog141\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Rog141\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: SJay\_13 Start: 7601, Stop: 7837, Start Num: 12

Candidate Starts for SJay\_13:

(Start: 12 @7601 has 136 MA's), (15, 7637), (19, 7709), (21, 7736), (22, 7748),

Gene: Schnapsidee\_13 Start: 8001, Stop: 8240, Start Num: 12

Candidate Starts for Schnapsidee\_13:

(4, 7527), (6, 7554), (7, 7575), (8, 7617), (Start: 12 @8001 has 136 MA's), (15, 8037), (19, 8109), (21, 8136),

Gene: Schubert\_13 Start: 8046, Stop: 8288, Start Num: 12

Candidate Starts for Schubert\_13:

(Start: 12 @8046 has 136 MA's), (15, 8082), (19, 8154), (21, 8181),

Gene: Sedgewig\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for Sedgewig\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: ShaiHulud\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for ShaiHulud\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Shee\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Shee\_13:

(Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (21, 7738), (22, 7750),

Gene: Sinatra\_13 Start: 7859, Stop: 8086, Start Num: 12

Candidate Starts for Sinatra\_13:

(Start: 12 @7859 has 136 MA's), (27, 8027),

Gene: SirVictor\_13 Start: 7945, Stop: 8175, Start Num: 12

Candidate Starts for SirVictor\_13:

(4, 7468), (Start: 12 @7945 has 136 MA's), (14, 7960), (16, 7984), (17, 7996),

Gene: SoilGremlin\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for SoilGremlin\_13:

(Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750),

Gene: SonOfLevi\_13 Start: 7888, Stop: 8124, Start Num: 12

Candidate Starts for SonOfLevi\_13:

(4, 7414), (5, 7435), (Start: 12 @7888 has 136 MA's), (15, 7924), (19, 7996), (22, 8035), (23, 8044),

Gene: Stanktossa\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for Stanktossa\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: StingRay\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for StingRay\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: StirfryIV\_13 Start: 7896, Stop: 8132, Start Num: 12

Candidate Starts for StirfryIV\_13:

(Start: 12 @7896 has 136 MA's), (15, 7932), (19, 8004), (21, 8031), (22, 8043),

Gene: Stormbreaker8\_13 Start: 8002, Stop: 8241, Start Num: 12

Candidate Starts for Stormbreaker8\_13:

(1, 7396), (2, 7399), (4, 7528), (6, 7555), (7, 7576), (Start: 12 @8002 has 136 MA's), (15, 8038), (19, 8110), (21, 8137),

Gene: Strathdee\_13 Start: 7604, Stop: 7840, Start Num: 12

Candidate Starts for Strathdee\_13:

(4, 7130), (5, 7151), (Start: 12 @7604 has 136 MA's), (15, 7640), (19, 7712), (22, 7751), (23, 7760),

Gene: Superfresh\_13 Start: 7594, Stop: 7830, Start Num: 12

Candidate Starts for Superfresh\_13:

(4, 7120), (5, 7141), (Start: 12 @7594 has 136 MA's), (15, 7630), (19, 7702), (22, 7741), (23, 7750),

Gene: TatarkaPM\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for TatarkaPM\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Teagan\_13 Start: 7600, Stop: 7836, Start Num: 12

Candidate Starts for Teagan\_13:

(Start: 12 @7600 has 136 MA's), (15, 7636), (19, 7708), (21, 7735), (22, 7747),

Gene: TeddyBear\_13 Start: 7909, Stop: 8145, Start Num: 12

Candidate Starts for TeddyBear\_13:

(Start: 12 @7909 has 136 MA's), (15, 7945), (19, 8017), (22, 8056),

Gene: Tenda\_13 Start: 7907, Stop: 8143, Start Num: 12

Candidate Starts for Tenda\_13:

(Start: 12 @7907 has 136 MA's), (15, 7943), (19, 8015), (22, 8054),

Gene: Theresita\_13 Start: 7443, Stop: 7679, Start Num: 12

Candidate Starts for Theresita\_13:

(Start: 12 @7443 has 136 MA's), (14, 7458), (15, 7461), (25, 7593), (27, 7611),

Gene: Thompsone\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Thompsone\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Thorongil\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Thorongil\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: TinSulphur\_13 Start: 7606, Stop: 7842, Start Num: 12

Candidate Starts for TinSulphur\_13:

(Start: 12 @7606 has 136 MA's), (15, 7642), (19, 7714), (21, 7741), (22, 7753),

Gene: Velene\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Velene\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Vispistious\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for Vispistious\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: WildNOut\_13 Start: 7603, Stop: 7839, Start Num: 12

Candidate Starts for WildNOut\_13:

(4, 7129), (5, 7150), (Start: 12 @7603 has 136 MA's), (15, 7639), (19, 7711), (22, 7750), (23, 7759),

Gene: Winzigespinne\_13 Start: 7895, Stop: 8131, Start Num: 12

Candidate Starts for Winzigespinne\_13:

(Start: 12 @7895 has 136 MA's), (15, 7931), (19, 8003), (21, 8030), (22, 8042),

Gene: Zada\_13 Start: 7597, Stop: 7833, Start Num: 12

Candidate Starts for Zada\_13:

(4, 7123), (Start: 12 @7597 has 136 MA's), (15, 7633), (19, 7705), (21, 7732), (22, 7744),