





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 283486 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283486 has 212 members, 22 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, Blage\_36, MillyPhilly\_36, StirfryIV\_35, HankSprout\_36, Jerbirus\_36, Kurt1\_36, Figueroism\_36, Robinson\_36, Ilzat\_35, Antoinette\_36, TatarkaPM\_36, AranulaLuti\_35, AlexAdler\_36, Janus167\_35, MaeLinda\_36, TinSulphur\_36, Clancy\_35, Symere\_35, GoingMerry\_36, JeriBeth\_36, Phriends\_36, BigRedClifford\_36, AxiPup\_36, ParleG\_36, Teagan\_36, Aubergine\_35, Pherferi\_36, Gargoyle\_36, Byron23\_36, SolidSnake\_37, RosieMae\_35, Rog141\_35, Velene\_36, Garey24\_35, Delphidian\_36, 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, Papafritta\_35, Bandik\_36, HungryHenry\_35, Chako\_35, OldNelly\_36, Sedgewig\_35, WildNOut\_36, NickSell\_36, Den3\_36, Greys\_36, Thompsone\_36, PhredFlintston\_36, Ioannes\_36, StingRay\_35, Benjalauren\_36, Knox\_36, Oats\_35, Dothraki\_36, BeautPeep30\_36, Lovelyunicorn\_36, CoraRita\_36, Merida02\_37, KannH\_35, Zada\_36, SoilGremlin\_36
- Track 4 : Asta\_35, SonOfLevi\_35, Nattles\_35, TeddyBear\_35, Etta\_35, Erla\_35, Raptor\_36, Chamuel\_35, Kouch\_35, KellyGreen\_36, Calix\_35, Nagem\_36, Gershwin\_35, Baines\_35, Kale\_35, Pocket\_35, Bonino\_35, SJay\_36, Exploradora\_35, Gelo\_35, Klimt\_35
- Track 5 : Leafus\_35, BeeBee8\_36, Peppino\_35, Raccoon\_35, Etna\_35, KingJulien\_35, PhillyPhantom\_35, Redfield\_35, Stormbreaker8\_35, Balsa\_35, Hamlet\_35, Soror1\_35, Schnapsidee\_35
- Track 6 : CarisSwetlik\_39
- Track 7 : Anilorac\_36, Agente005\_36
- Track 8 : Alyxandracam\_36, Riyhil\_36
- Track 9 : FarmerDoug\_35
- Track 10 : McGalleon\_38
- Track 11 : Endor\_36
- Track 12 : GoneGirl\_36
- Track 13 : Superfresh\_36, Peep\_36, Dave\_36, Renzie\_36
- Track 14 : JasonD\_38
- Track 15 : Jenos\_39
- Track 16 : Acosta\_37
- Track 17 : GardenB\_35

- Track 18 : MonChoix\_34
- Track 19 : Quartz\_33, Mandalorian\_32, Nucci\_32, Carostasia\_32
- Track 20 : MiniVolent\_33
- Track 21 : Juanyo\_33
- Track 22 : HairyMan\_31
- Track 23 : YuuY\_34
- Track 24 : Kavo\_33, Scissor2024\_34
- Track 25 : Schimmels22\_34
- Track 26 : WestPM\_32
- Track 27 : Tinyman4\_34, HerculesXL\_34
- Track 28 : Ixel\_34
- Track 29 : Penta\_32
- Track 30 : Eleri\_34, Shamu\_34, ColaCorta\_34, ChikPic\_34, Sansa\_33, Andromedas\_34, Glamour\_33, Xebius\_34, Saratos\_34, PSirce\_34, Zenitsu\_34
- Track 31 : Phanita\_34, Finny\_34, MCubed\_34
- Track 32 : Casey\_32, Pikmin\_32
- Track 33 : Pajaza\_32
- Track 34 : Jingles\_33
- Track 35 : Lucky3\_33, SirVictor\_33, Golden\_33, Guetzie\_33
- Track 36 : Bustleton\_33, PrincePhergus\_33, BouleyBill\_33, Sinatra\_33, RenegadeRaider\_34, Pherbot\_33
- Track 37 : Kauala\_33
- Track 38 : Koji\_33
- Track 39 : Zepp\_34, Librie\_33, Zayuliv\_33, Wardwill\_35, LilTerminator\_33, CaptainRex\_33, Greenlvy\_33, Fulton\_33, BaronJohn\_34, QuadZero\_33, Hasitha\_33
- Track 40 : Neferthena\_33
- Track 41 : Alakazam\_34
- Track 42 : Clock\_33, Nebulous\_33
- Track 43 : TwoBits\_32
- Track 44 : WilliamStrong\_34
- Track 45 : KatChan\_35, Luna18\_35
- Track 46 : Morigan\_35
- Track 47 : Juicer\_36, Jemerald\_36
- Track 48 : Chepli\_35
- Track 49 : Schubert\_33
- Track 50 : Cheeto1\_36
- Track 51 : GaeCeo\_36, ChickenKing\_35

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

The start number called the most often in the published annotations is 15, it was called in 186 of the 190 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, BaronJohn\_34, BeautPeep30\_36, BeeBee8\_36, Benjalauren\_36, BigRedClifford\_36, Blage\_36, BonesMcCoy\_36, Bonino\_35, BouleyBill\_33, Bustleton\_33, Byron23\_36, Calix\_35, CaptainRex\_33, CarisSwetlik\_39, Carostasia\_32, Chako\_35, Chamuel\_35, Cheeto1\_36, Chepli\_35,

ChickenKing\_35, ChikPic\_34, Christoph\_35, Clancy\_35, Clock\_33, ColaCorta\_34, Convict\_36, CoraRita\_36, Dave\_36, Delphidian\_36, Den3\_36, Dothraki\_36, Duocatuli\_35, Eleri\_34, Endor\_36, Erla\_35, Espinosa\_35, Etna\_35, Etta\_35, Exploradora\_35, FarmerDoug\_35, Figueroism\_36, Finny\_34, Fulton\_33, GaeCeo\_36, GardenB\_35, Garey24\_35, Gargoyle\_36, Gelo\_35, Gershwin\_35, Glamour\_33, GoingMerry\_36, Golden\_33, GoneGirl\_36, GreenIvy\_33, Greys\_36, Gubbabump\_35, Guetzie\_33, HairyMan\_31, Hamlet\_35, HanSolo\_35, HankSprout\_36, Hasitha\_33, HerculesXL\_34, HungryHenry\_35, Ilzat\_35, Inventa\_36, Ioannes\_36, Ixel\_34, Janus167\_35, JasonD\_38, JasperRussell\_35, Jemerald\_36, Jenos\_39, Jerbirus\_36, JeriBeth\_36, Jingles\_33, Juanyo\_33, Juicer\_36, Kale\_35, KannH\_35, KatChan\_35, Kauala\_33, Kavo\_33, KellyGreen\_36, KingJulien\_35, Klimt\_35, Knox\_36, Koji\_33, Kouch\_35, Kurt1\_36, Leafus\_35, Librie\_33, LilTerminator\_33, Lovelyunicorn\_36, Lucky3\_33, Ludgate\_36, Luna18\_35, MCubed\_34, MaeLinda\_36, ManRay\_35, Mandalorian\_32, Martin\_37, McGalleon\_38, Mercedes\_30, Merida02\_37, MillyPhilly\_36, MiniVolent\_33, MonChoix\_34, Morigan\_35, MrWorldwide\_36, Nagem\_36, Nattles\_35, Nebulous\_33, Neferthena\_33, NickSell\_36, Nucci\_32, Oats\_35, OldNelly\_36, Oxtober96\_36, PSirce\_34, Papafritta\_35, ParleG\_36, Peep\_36, Penta\_32, Peppino\_35, Phanita\_34, Pherbot\_33, Pherferi\_36, Phiderman\_36, PhillyPhantom\_35, Phireproof\_36, PhredFlintston\_36, Phriends\_36, Pocket\_35, PrincePhergus\_33, PuppyEggo\_36, QuadZero\_33, Quartz\_33, Raccoon\_35, Rapheph\_36, Raptor\_36, Redfield\_35, RenegadeRaider\_34, Renzie\_36, Rihhil\_36, Robinson\_36, Rog141\_35, RosieMae\_35, SJay\_36, Sansa\_33, Saratos\_34, Schimmels22\_34, Schnapsidee\_35, Schubert\_33, Scissor2024\_34, Sedgewig\_35, ShaiHulud\_36, Shamu\_34, Shee\_36, Sinatra\_33, SirVictor\_33, SoilGremlin\_36, SolidSnake\_37, SonOfLevi\_35, Soror1\_35, Stanktossa\_36, StingRay\_35, StirfryIV\_35, Stormbreaker8\_35, Strathdee\_36, Superfresh\_36, Symere\_35, TatarkaPM\_36, Teagan\_36, TeddyBear\_35, Tenda\_35, Thompsone\_36, Thorongil\_36, TinSulphur\_36, Tinyman4\_34, TwoBits\_32, Velene\_36, Vispistious\_36, Wardwill\_35, WestPM\_32, WildNOut\_36, WilliamStrong\_34, Winzigespinne\_35, Xebius\_34, 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, Anilorac\_36,

### Summary by start number:

Start 13:

- Found in 3 of 212 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 3 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Casey\_32 (EA3), Pajaza\_32 (EA3), Pikmin\_32 (EA3),

Start 14:

- Found in 2 of 212 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agente005\_36 (EA1), Anilorac\_36 (EA1),

Start 15:

- Found in 210 of 212 ( 99.1% ) of genes in pham
- Manual Annotations of this start: 186 of 190
- Called 98.6% 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), BaronJohn\_34 (EA5), BeautPeep30\_36 (EA1), BeeBee8\_36 (EA1), Benjalauren\_36 (EA1), BigRedClifford\_36 (EA1), Blage\_36 (EA1), BonesMcCoy\_36 (EA1), Bonino\_35 (EA1), BouleyBill\_33 (EA4), Bustleton\_33 (EA4), Byron23\_36 (EA1), Calix\_35 (EA1), CaptainRex\_33 (EA5), CarisSwetlik\_39 (EA1), 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), CoraRita\_36 (EA1), Dave\_36 (EA1), Delphidian\_36 (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), Exploradora\_35 (EA1), FarmerDoug\_35 (EA1), Figueroism\_36 (EA1), Finny\_34 (EA2), Fulton\_33 (EA5), GaeCeo\_36 (EA9), GardenB\_35 (EA1), Garey24\_35 (EA1), Gargoyle\_36 (EA1), Gelo\_35 (EA1), Gershwin\_35 (EA1), Glamour\_33 (EA2), GoingMerry\_36 (EA1), Golden\_33 (EA4), GoneGirl\_36 (EA1), Greenlvy\_33 (EA5), Greys\_36 (EA1), Gubbabump\_35 (EA1), Guetzie\_33 (EA4), HairyMan\_31 (EA10), 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\_38 (EA1), JasperRussell\_35 (EA1), Jemerald\_36 (EA6), Jenos\_39 (EA1), Jerbirus\_36 (EA1), JeriBeth\_36 (EA1), Jingles\_33 (EA4), Juanyo\_33 (EA10), Juicer\_36 (EA6), Kale\_35 (EA1), KannH\_35 (EA1), KatChan\_35 (EA6), Kauala\_33 (EA4), Kavo\_33 (EA11), KellyGreen\_36 (EA1), KingJulien\_35 (EA1), Klimt\_35 (EA1), Knox\_36 (EA1), Koji\_33 (EA4), Kouch\_35 (EA1), Kurt1\_36 (EA1), Leafus\_35 (EA1), Librie\_33 (EA5), LilTerminator\_33 (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), Merida02\_37 (EA1), MillyPhilly\_36 (EA1), MiniVolent\_33 (EA10), MonChoix\_34 (EA1), Morrigan\_35 (EA6), MrWorldwide\_36 (EA1), Nagem\_36 (EA1), Nattles\_35 (EA1), Nebulous\_33 (EA5), Neferthena\_33 (EA5), NickSell\_36 (EA1), Nucci\_32 (EA10), Oats\_35 (EA1), OldNelly\_36 (EA1), Oxtober96\_36 (EA1), PSirce\_34 (EA2), Papafritta\_35 (EA1), ParleG\_36 (EA1), Peep\_36 (EA1), Penta\_32 (EA11), Peppino\_35 (EA1), Phanita\_34 (EA2), Pherbot\_33 (EA4), Pherferi\_36 (EA1), Phiderman\_36 (EA1), PhillyPhantom\_35 (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), Rappheph\_36 (EA1), Raptor\_36 (EA1), Redfield\_35 (EA1), RenegadeRaider\_34 (EA4), Renzie\_36 (EA1), Riyhil\_36 (EA1), Robinson\_36 (EA1), Rog141\_35 (EA1), RosieMae\_35 (EA1), SJay\_36 (EA1), Sansa\_33 (EA2), Saratos\_34 (EA2), Schimmels22\_34 (EA11), Schnapsidee\_35 (EA1), Schubert\_33 (EA8), Scissor2024\_34 (EA11), Sedgewig\_35 (EA1), ShaiHulud\_36 (EA1), Shamu\_34 (EA2), Shee\_36 (EA1), Sinatra\_33 (EA4), SirVictor\_33 (EA4), SoilGremlin\_36 (EA1), SolidSnake\_37 (EA1), SonOfLevi\_35 (EA1), Soror1\_35 (EA1), Stanktossa\_36 (EA1), StingRay\_35 (EA1), StirfryIV\_35 (EA1), Stormbreaker8\_35 (EA1), Strathdee\_36 (EA1), Superfresh\_36 (EA1), Symere\_35 (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), TwoBits\_32 (EA5), Velene\_36 (EA1), Vispistious\_36 (EA1), Wardwill\_35 (EA5), WestPM\_32 (EA11), WildNOut\_36 (EA1), WilliamStrong\_34 (EA6), Winzigespinne\_35 (EA1), Xebius\_34 (EA2), YuuY\_34 (EA10), Zada\_36 (EA1), Zayuliv\_33 (EA5), Zenitsu\_34 (EA2), Zepp\_34 (EA5),

### **Summary by clusters:**

There are 11 clusters represented in this pham: EA11, EA10, EA, EA9, EA8, EA1, EA3, EA2, EA5, EA4, EA6,

Info for manual annotations of cluster EA:

- Start number 15 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:

- Start number 14 was manually annotated 1 time for cluster EA1.
- Start number 15 was manually annotated 125 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 15 was manually annotated 7 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 15 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 15 was manually annotated 13 times for cluster EA2.

Info for manual annotations of cluster EA3:

- Start number 13 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 15 was manually annotated 11 times for cluster EA4.

Info for manual annotations of cluster EA5:

- Start number 15 was manually annotated 13 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 15 was manually annotated 7 times for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 15 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 15 was manually annotated 3 times for cluster EA9.

### **Gene Information:**

Gene: Acosta\_37 Start: 25604, Stop: 24759, Start Num: 15

Candidate Starts for Acosta\_37:

(1, 25907), (6, 25760), (Start: 15 @25604 has 186 MA's), (17, 25538), (18, 25526), (22, 25502), (25, 25469), (30, 25361), (33, 25343), (39, 25280),

Gene: Agente005\_36 Start: 25439, Stop: 24585, Start Num: 14

Candidate Starts for Agente005\_36:

(Start: 14 @25439 has 1 MA's), (16, 25424), (19, 25349), (21, 25340), (25, 25301), (30, 25193), (38, 25118), (46, 25025),

Gene: Alakazam\_34 Start: 24747, Stop: 23875, Start Num: 15

Candidate Starts for Alakazam\_34:

(Start: 15 @24747 has 186 MA's), (17, 24681), (22, 24645), (25, 24612), (47, 24129), (48, 24111),

Gene: AlexAdler\_36 Start: 25200, Stop: 24361, Start Num: 15

Candidate Starts for AlexAdler\_36:

(Start: 15 @25200 has 186 MA's), (17, 25134), (25, 25065), (27, 25047), (30, 24957), (33, 24939), (40, 24873),

Gene: Alyxandracam\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for Alyxandracam\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Andromedas\_34 Start: 24807, Stop: 23983, Start Num: 15

Candidate Starts for Andromedas\_34:

(Start: 15 @24807 has 186 MA's), (19, 24720), (25, 24672), (26, 24666), (27, 24654), (30, 24564), (33, 24546), (49, 24201),

Gene: Anilorac\_36 Start: 25283, Stop: 24429, Start Num: 14

Candidate Starts for Anilorac\_36:

(Start: 14 @25283 has 1 MA's), (16, 25268), (19, 25193), (21, 25184), (25, 25145), (30, 25037), (38, 24962), (46, 24869),

Gene: Antoinette\_36 Start: 25197, Stop: 24358, Start Num: 15

Candidate Starts for Antoinette\_36:

(Start: 15 @25197 has 186 MA's), (17, 25131), (25, 25062), (27, 25044), (30, 24954), (33, 24936), (40, 24870),

Gene: AranulaLuti\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for AranulaLuti\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: Asta\_35 Start: 24907, Stop: 24068, Start Num: 15

Candidate Starts for Asta\_35:

(Start: 15 @24907 has 186 MA's), (17, 24841), (21, 24811), (25, 24772), (30, 24664), (33, 24646), (40, 24580),

Gene: Aubergine\_35 Start: 24907, Stop: 24068, Start Num: 15

Candidate Starts for Aubergine\_35:

(Start: 15 @24907 has 186 MA's), (17, 24841), (25, 24772), (27, 24754), (30, 24664), (33, 24646), (40, 24580),

Gene: AxiPup\_36 Start: 25179, Stop: 24370, Start Num: 15

Candidate Starts for AxiPup\_36:

(Start: 15 @25179 has 186 MA's), (17, 25113), (25, 25044), (27, 25026), (30, 24936), (33, 24918), (40, 24852),

Gene: Baines\_35 Start: 24897, Stop: 24055, Start Num: 15

Candidate Starts for Baines\_35:

(Start: 15 @24897 has 186 MA's), (17, 24831), (21, 24801), (25, 24762), (30, 24654), (33, 24636), (40, 24570),

Gene: Balsa\_35 Start: 25329, Stop: 24475, Start Num: 15

Candidate Starts for Balsa\_35:

(Start: 15 @25329 has 186 MA's), (16, 25314), (19, 25239), (21, 25230), (25, 25191), (30, 25083), (38, 25008), (46, 24915),

Gene: Bandik\_36 Start: 25205, Stop: 24366, Start Num: 15

Candidate Starts for Bandik\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: BaronJohn\_34 Start: 23660, Stop: 22797, Start Num: 15

Candidate Starts for BaronJohn\_34:

(Start: 15 @23660 has 186 MA's), (17, 23594), (22, 23558), (25, 23525), (33, 23399), (36, 23360),

Gene: BeautPeep30\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for BeautPeep30\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: BeeBee8\_36 Start: 25499, Stop: 24642, Start Num: 15

Candidate Starts for BeeBee8\_36:

(Start: 15 @25499 has 186 MA's), (16, 25484), (19, 25409), (21, 25400), (25, 25361), (30, 25253), (38, 25178), (46, 25085),

Gene: Benjalauren\_36 Start: 24910, Stop: 24065, Start Num: 15

Candidate Starts for Benjalauren\_36:

(Start: 15 @24910 has 186 MA's), (17, 24844), (25, 24775), (27, 24757), (30, 24667), (33, 24649), (40, 24583),

Gene: BigRedClifford\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for BigRedClifford\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Blage\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for Blage\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: BonesMcCoy\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for BonesMcCoy\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Bonino\_35 Start: 24883, Stop: 24044, Start Num: 15

Candidate Starts for Bonino\_35:

(Start: 15 @24883 has 186 MA's), (17, 24817), (21, 24787), (25, 24748), (30, 24640), (33, 24622), (40, 24556),

Gene: BouleyBill\_33 Start: 24669, Stop: 23935, Start Num: 15

Candidate Starts for BouleyBill\_33:

(Start: 15 @24669 has 186 MA's), (19, 24582), (22, 24567), (25, 24534), (33, 24408), (35, 24390), (44, 24306),

Gene: Bustleton\_33 Start: 24672, Stop: 23935, Start Num: 15

Candidate Starts for Bustleton\_33:

(Start: 15 @24672 has 186 MA's), (19, 24585), (22, 24570), (25, 24537), (33, 24411), (35, 24393), (44, 24309),

Gene: Byron23\_36 Start: 25208, Stop: 24375, Start Num: 15

Candidate Starts for Byron23\_36:

(Start: 15 @25208 has 186 MA's), (17, 25142), (25, 25073), (27, 25055), (30, 24965), (33, 24947), (40, 24881),

Gene: Calix\_35 Start: 24890, Stop: 24048, Start Num: 15

Candidate Starts for Calix\_35:

(Start: 15 @24890 has 186 MA's), (17, 24824), (21, 24794), (25, 24755), (30, 24647), (33, 24629), (40, 24563),

Gene: CaptainRex\_33 Start: 23072, Stop: 22209, Start Num: 15

Candidate Starts for CaptainRex\_33:

(Start: 15 @23072 has 186 MA's), (17, 23006), (22, 22970), (25, 22937), (33, 22811), (36, 22772),

Gene: CarisSwetlik\_39 Start: 26104, Stop: 25256, Start Num: 15

Candidate Starts for CarisSwetlik\_39:

(Start: 15 @26104 has 186 MA's), (17, 26038), (18, 26026), (25, 25969), (30, 25861), (39, 25780),

Gene: Carostasia\_32 Start: 24484, Stop: 23654, Start Num: 15

Candidate Starts for Carostasia\_32:

(Start: 15 @24484 has 186 MA's), (17, 24418), (22, 24382), (25, 24349), (29, 24244), (37, 24163), (48, 23866),

Gene: Casey\_32 Start: 24108, Stop: 23335, Start Num: 13

Candidate Starts for Casey\_32:

(Start: 13 @24108 has 3 MA's), (Start: 15 @24066 has 186 MA's), (20, 23973), (25, 23931), (26, 23925), (31, 23811), (45, 23694), (46, 23658),

Gene: Chako\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Chako\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: Chamuel\_35 Start: 24883, Stop: 24050, Start Num: 15

Candidate Starts for Chamuel\_35:

(Start: 15 @24883 has 186 MA's), (17, 24817), (21, 24787), (25, 24748), (30, 24640), (33, 24622), (40, 24556),

Gene: Cheeto1\_36 Start: 25345, Stop: 24524, Start Num: 15

Candidate Starts for Cheeto1\_36:

(Start: 15 @25345 has 186 MA's), (17, 25279), (24, 25237), (25, 25210), (26, 25204), (30, 25102), (43, 24982),

Gene: Chepli\_35 Start: 24293, Stop: 23439, Start Num: 15

Candidate Starts for Chepli\_35:

(Start: 15 @24293 has 186 MA's), (17, 24227), (19, 24206), (22, 24191), (25, 24158), (26, 24152), (30, 24050), (33, 24032), (35, 24014),

Gene: ChickenKing\_35 Start: 25261, Stop: 24437, Start Num: 15

Candidate Starts for ChickenKing\_35:

(Start: 15 @25261 has 186 MA's), (17, 25195), (25, 25126), (26, 25120), (30, 25018),

Gene: ChikPic\_34 Start: 24817, Stop: 23999, Start Num: 15

Candidate Starts for ChikPic\_34:

(Start: 15 @24817 has 186 MA's), (19, 24730), (25, 24682), (26, 24676), (27, 24664), (30, 24574), (33, 24556), (49, 24211),

Gene: Christoph\_35 Start: 24905, Stop: 24066, Start Num: 15

Candidate Starts for Christoph\_35:

(Start: 15 @24905 has 186 MA's), (17, 24839), (25, 24770), (27, 24752), (30, 24662), (33, 24644), (40, 24578),

Gene: Clancy\_35 Start: 24939, Stop: 24100, Start Num: 15

Candidate Starts for Clancy\_35:

(Start: 15 @24939 has 186 MA's), (17, 24873), (25, 24804), (27, 24786), (30, 24696), (33, 24678), (40, 24612),

Gene: Clock\_33 Start: 25904, Stop: 25053, Start Num: 15

Candidate Starts for Clock\_33:

(Start: 15 @25904 has 186 MA's), (17, 25838), (22, 25802), (25, 25769), (33, 25643), (48, 25292),

Gene: ColaCorta\_34 Start: 24807, Stop: 23983, Start Num: 15

Candidate Starts for ColaCorta\_34:

(Start: 15 @24807 has 186 MA's), (19, 24720), (25, 24672), (26, 24666), (27, 24654), (30, 24564), (33, 24546), (49, 24201),

Gene: Convict\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for Convict\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: CoraRita\_36 Start: 24909, Stop: 24064, Start Num: 15

Candidate Starts for CoraRita\_36:

(Start: 15 @24909 has 186 MA's), (17, 24843), (25, 24774), (27, 24756), (30, 24666), (33, 24648), (40, 24582),

Gene: Dave\_36 Start: 25197, Stop: 24358, Start Num: 15

Candidate Starts for Dave\_36:

(Start: 15 @25197 has 186 MA's), (17, 25131), (25, 25062), (30, 24954), (33, 24936), (40, 24870),

Gene: Delphidian\_36 Start: 25208, Stop: 24369, Start Num: 15

Candidate Starts for Delphidian\_36:

(Start: 15 @25208 has 186 MA's), (17, 25142), (25, 25073), (27, 25055), (30, 24965), (33, 24947), (40, 24881),

Gene: Den3\_36 Start: 25214, Stop: 24375, Start Num: 15

Candidate Starts for Den3\_36:

(Start: 15 @25214 has 186 MA's), (17, 25148), (25, 25079), (27, 25061), (30, 24971), (33, 24953), (40, 24887),

Gene: Dothraki\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Dothraki\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: Duocatuli\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Duocatuli\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: Eleri\_34 Start: 24808, Stop: 23996, Start Num: 15

Candidate Starts for Eleri\_34:

(Start: 15 @24808 has 186 MA's), (19, 24721), (25, 24673), (26, 24667), (27, 24655), (30, 24565), (33, 24547), (49, 24202),

Gene: Endor\_36 Start: 25556, Stop: 24702, Start Num: 15

Candidate Starts for Endor\_36:

(Start: 15 @25556 has 186 MA's), (16, 25541), (19, 25466), (25, 25418), (30, 25310), (38, 25235), (46, 25142),

Gene: Erla\_35 Start: 24887, Stop: 24048, Start Num: 15

Candidate Starts for Erla\_35:

(Start: 15 @24887 has 186 MA's), (17, 24821), (21, 24791), (25, 24752), (30, 24644), (33, 24626), (40, 24560),

Gene: Espinosa\_35 Start: 24905, Stop: 24066, Start Num: 15

Candidate Starts for Espinosa\_35:

(Start: 15 @24905 has 186 MA's), (17, 24839), (25, 24770), (27, 24752), (30, 24662), (33, 24644), (40, 24578),

Gene: Etna\_35 Start: 25340, Stop: 24477, Start Num: 15

Candidate Starts for Etna\_35:

(Start: 15 @25340 has 186 MA's), (16, 25325), (19, 25250), (21, 25241), (25, 25202), (30, 25094), (38, 25019), (46, 24926),

Gene: Etta\_35 Start: 24891, Stop: 24052, Start Num: 15

Candidate Starts for Etta\_35:

(Start: 15 @24891 has 186 MA's), (17, 24825), (21, 24795), (25, 24756), (30, 24648), (33, 24630), (40, 24564),

Gene: Exploradora\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Exploradora\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (21, 24798), (25, 24759), (30, 24651), (33, 24633), (40, 24567),

Gene: FarmerDoug\_35 Start: 25191, Stop: 24343, Start Num: 15  
Candidate Starts for FarmerDoug\_35:  
(Start: 15 @25191 has 186 MA's), (16, 25176), (19, 25101), (25, 25053), (30, 24945), (33, 24927), (38, 24870), (46, 24777),

Gene: Figueroism\_36 Start: 25199, Stop: 24357, Start Num: 15  
Candidate Starts for Figueroism\_36:  
(Start: 15 @25199 has 186 MA's), (17, 25133), (25, 25064), (27, 25046), (30, 24956), (33, 24938), (40, 24872),

Gene: Finny\_34 Start: 24848, Stop: 24036, Start Num: 15  
Candidate Starts for Finny\_34:  
(Start: 15 @24848 has 186 MA's), (19, 24761), (25, 24713), (26, 24707), (27, 24695), (30, 24605), (33, 24587),

Gene: Fulton\_33 Start: 23073, Stop: 22213, Start Num: 15  
Candidate Starts for Fulton\_33:  
(Start: 15 @23073 has 186 MA's), (17, 23007), (22, 22971), (25, 22938), (33, 22812), (36, 22773),

Gene: GaeCeo\_36 Start: 25494, Stop: 24673, Start Num: 15  
Candidate Starts for GaeCeo\_36:  
(Start: 15 @25494 has 186 MA's), (17, 25428), (25, 25359), (26, 25353), (30, 25251),

Gene: GardenB\_35 Start: 25305, Stop: 24466, Start Num: 15  
Candidate Starts for GardenB\_35:  
(Start: 15 @25305 has 186 MA's), (16, 25290), (19, 25215), (21, 25206), (25, 25167), (30, 25059), (38, 24984), (46, 24891),

Gene: Garey24\_35 Start: 24873, Stop: 24031, Start Num: 15  
Candidate Starts for Garey24\_35:  
(Start: 15 @24873 has 186 MA's), (17, 24807), (25, 24738), (27, 24720), (30, 24630), (33, 24612), (40, 24546),

Gene: Gargoyle\_36 Start: 25214, Stop: 24372, Start Num: 15  
Candidate Starts for Gargoyle\_36:  
(Start: 15 @25214 has 186 MA's), (17, 25148), (25, 25079), (27, 25061), (30, 24971), (33, 24953), (40, 24887),

Gene: Gelo\_35 Start: 24897, Stop: 24052, Start Num: 15  
Candidate Starts for Gelo\_35:  
(Start: 15 @24897 has 186 MA's), (17, 24831), (21, 24801), (25, 24762), (30, 24654), (33, 24636), (40, 24570),

Gene: Gershwin\_35 Start: 24907, Stop: 24068, Start Num: 15  
Candidate Starts for Gershwin\_35:  
(Start: 15 @24907 has 186 MA's), (17, 24841), (21, 24811), (25, 24772), (30, 24664), (33, 24646), (40, 24580),

Gene: Glamour\_33 Start: 24799, Stop: 23984, Start Num: 15  
Candidate Starts for Glamour\_33:  
(Start: 15 @24799 has 186 MA's), (19, 24712), (25, 24664), (26, 24658), (27, 24646), (30, 24556), (33, 24538), (49, 24196),

Gene: GoingMerry\_36 Start: 25219, Stop: 24380, Start Num: 15

Candidate Starts for GoingMerry\_36:

(Start: 15 @25219 has 186 MA's), (17, 25153), (25, 25084), (27, 25066), (30, 24976), (33, 24958), (40, 24892),

Gene: Golden\_33 Start: 24767, Stop: 24036, Start Num: 15

Candidate Starts for Golden\_33:

(Start: 15 @24767 has 186 MA's), (19, 24680), (20, 24674), (22, 24665), (25, 24632), (26, 24626), (30, 24524), (35, 24488), (36, 24467), (44, 24404),

Gene: GoneGirl\_36 Start: 25301, Stop: 24462, Start Num: 15

Candidate Starts for GoneGirl\_36:

(Start: 15 @25301 has 186 MA's), (16, 25286), (19, 25211), (21, 25202), (25, 25163), (30, 25055), (38, 24980), (46, 24887),

Gene: Greenlvy\_33 Start: 23662, Stop: 22799, Start Num: 15

Candidate Starts for Greenlvy\_33:

(Start: 15 @23662 has 186 MA's), (17, 23596), (22, 23560), (25, 23527), (33, 23401), (36, 23362),

Gene: Greys\_36 Start: 25207, Stop: 24368, Start Num: 15

Candidate Starts for Greys\_36:

(Start: 15 @25207 has 186 MA's), (17, 25141), (25, 25072), (27, 25054), (30, 24964), (33, 24946), (40, 24880),

Gene: Gubbabump\_35 Start: 24887, Stop: 24057, Start Num: 15

Candidate Starts for Gubbabump\_35:

(Start: 15 @24887 has 186 MA's), (17, 24821), (25, 24752), (27, 24734), (30, 24644), (33, 24626), (40, 24560),

Gene: Guetzie\_33 Start: 24752, Stop: 24024, Start Num: 15

Candidate Starts for Guetzie\_33:

(Start: 15 @24752 has 186 MA's), (19, 24665), (20, 24659), (22, 24650), (25, 24617), (26, 24611), (30, 24509), (35, 24473), (36, 24452), (44, 24389),

Gene: HairyMan\_31 Start: 24080, Stop: 23172, Start Num: 15

Candidate Starts for HairyMan\_31:

(Start: 15 @24080 has 186 MA's), (19, 23993), (25, 23945), (27, 23927), (28, 23852), (33, 23819), (45, 23705),

Gene: Hamlet\_35 Start: 25338, Stop: 24475, Start Num: 15

Candidate Starts for Hamlet\_35:

(Start: 15 @25338 has 186 MA's), (16, 25323), (19, 25248), (21, 25239), (25, 25200), (30, 25092), (38, 25017), (46, 24924),

Gene: HanSolo\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for HanSolo\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: HankSprout\_36 Start: 24774, Stop: 23935, Start Num: 15

Candidate Starts for HankSprout\_36:

(Start: 15 @24774 has 186 MA's), (17, 24708), (25, 24639), (27, 24621), (30, 24531), (33, 24513), (40, 24447),

Gene: Hasitha\_33 Start: 23085, Stop: 22225, Start Num: 15

Candidate Starts for Hasitha\_33:

(Start: 15 @23085 has 186 MA's), (17, 23019), (22, 22983), (25, 22950), (33, 22824), (36, 22785),

Gene: HerculesXL\_34 Start: 23550, Stop: 22687, Start Num: 15

Candidate Starts for HerculesXL\_34:

(9, 23682), (12, 23610), (Start: 15 @23550 has 186 MA's), (19, 23463), (20, 23457), (23, 23445), (25, 23415), (27, 23397), (30, 23307), (31, 23295), (36, 23250), (41, 23214), (45, 23178),

Gene: HungryHenry\_35 Start: 24899, Stop: 24066, Start Num: 15

Candidate Starts for HungryHenry\_35:

(Start: 15 @24899 has 186 MA's), (17, 24833), (25, 24764), (27, 24746), (30, 24656), (33, 24638), (40, 24572),

Gene: Ilzat\_35 Start: 24910, Stop: 24065, Start Num: 15

Candidate Starts for Ilzat\_35:

(Start: 15 @24910 has 186 MA's), (17, 24844), (25, 24775), (27, 24757), (30, 24667), (33, 24649), (40, 24583),

Gene: Inventa\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Inventa\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: loannes\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for loannes\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Ixel\_34 Start: 23501, Stop: 22647, Start Num: 15

Candidate Starts for Ixel\_34:

(Start: 15 @23501 has 186 MA's), (17, 23435), (25, 23366), (32, 23243), (42, 23138),

Gene: Janus167\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Janus167\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: JasonD\_38 Start: 25754, Stop: 24891, Start Num: 15

Candidate Starts for JasonD\_38:

(6, 25910), (Start: 15 @25754 has 186 MA's), (17, 25688), (18, 25676), (19, 25667), (22, 25652), (25, 25619), (30, 25511), (33, 25493), (39, 25430),

Gene: JasperRussell\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for JasperRussell\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: Jemerald\_36 Start: 25457, Stop: 24711, Start Num: 15

Candidate Starts for Jemerald\_36:

(4, 25640), (10, 25580), (11, 25526), (12, 25517), (Start: 15 @25457 has 186 MA's), (17, 25391), (19, 25370), (25, 25322), (27, 25304), (33, 25196), (34, 25181), (45, 25085),

Gene: Jenos\_39 Start: 26401, Stop: 25553, Start Num: 15

Candidate Starts for Jenos\_39:

(Start: 15 @26401 has 186 MA's), (17, 26335), (18, 26323), (25, 26266), (30, 26158),

Gene: Jerbirus\_36 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Jerbirus\_36:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: JeriBeth\_36 Start: 24757, Stop: 23912, Start Num: 15

Candidate Starts for JeriBeth\_36:

(Start: 15 @24757 has 186 MA's), (17, 24691), (25, 24622), (27, 24604), (30, 24514), (33, 24496), (40, 24430),

Gene: Jingles\_33 Start: 24667, Stop: 23942, Start Num: 15

Candidate Starts for Jingles\_33:

(Start: 15 @24667 has 186 MA's), (19, 24580), (22, 24565), (25, 24532), (33, 24406), (35, 24388), (44, 24304),

Gene: Juanyo\_33 Start: 24567, Stop: 23710, Start Num: 15

Candidate Starts for Juanyo\_33:

(2, 24819), (8, 24711), (Start: 15 @24567 has 186 MA's), (17, 24501), (22, 24465), (25, 24432), (29, 24327), (31, 24312), (37, 24246), (50, 23724),

Gene: Juicer\_36 Start: 25457, Stop: 24711, Start Num: 15

Candidate Starts for Juicer\_36:

(4, 25640), (10, 25580), (11, 25526), (12, 25517), (Start: 15 @25457 has 186 MA's), (17, 25391), (19, 25370), (25, 25322), (27, 25304), (33, 25196), (34, 25181), (45, 25085),

Gene: Kale\_35 Start: 24909, Stop: 24070, Start Num: 15

Candidate Starts for Kale\_35:

(Start: 15 @24909 has 186 MA's), (17, 24843), (21, 24813), (25, 24774), (30, 24666), (33, 24648), (40, 24582),

Gene: KannH\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for KannH\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: KatChan\_35 Start: 24305, Stop: 23445, Start Num: 15

Candidate Starts for KatChan\_35:

(Start: 15 @24305 has 186 MA's), (17, 24239), (19, 24218), (22, 24203), (25, 24170), (26, 24164), (30, 24062), (33, 24044), (35, 24026),

Gene: Kauala\_33 Start: 24653, Stop: 23928, Start Num: 15

Candidate Starts for Kauala\_33:

(Start: 15 @24653 has 186 MA's), (19, 24566), (20, 24560), (25, 24518), (35, 24374), (44, 24290),

Gene: Kavo\_33 Start: 23387, Stop: 22524, Start Num: 15

Candidate Starts for Kavo\_33:

(Start: 15 @23387 has 186 MA's), (19, 23300), (20, 23294), (23, 23282), (25, 23252), (27, 23234), (30, 23144), (31, 23132), (36, 23087), (41, 23051), (45, 23015),

Gene: KellyGreen\_36 Start: 24888, Stop: 24055, Start Num: 15

Candidate Starts for KellyGreen\_36:

(Start: 15 @24888 has 186 MA's), (17, 24822), (21, 24792), (25, 24753), (30, 24645), (33, 24627), (40, 24561),

Gene: KingJulien\_35 Start: 25328, Stop: 24468, Start Num: 15

Candidate Starts for KingJulien\_35:

(Start: 15 @25328 has 186 MA's), (16, 25313), (19, 25238), (21, 25229), (25, 25190), (30, 25082), (38, 25007), (46, 24914),

Gene: Klimt\_35 Start: 24889, Stop: 24050, Start Num: 15

Candidate Starts for Klimt\_35:

(Start: 15 @24889 has 186 MA's), (17, 24823), (21, 24793), (25, 24754), (30, 24646), (33, 24628), (40, 24562),

Gene: Knox\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for Knox\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Koji\_33 Start: 24845, Stop: 24063, Start Num: 15

Candidate Starts for Koji\_33:

(Start: 15 @24845 has 186 MA's), (19, 24758), (22, 24743), (25, 24710), (30, 24602), (33, 24584), (35, 24566), (44, 24482),

Gene: Kouch\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Kouch\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (21, 24798), (25, 24759), (30, 24651), (33, 24633), (40, 24567),

Gene: Kurt1\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Kurt1\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: Leafus\_35 Start: 25473, Stop: 24610, Start Num: 15

Candidate Starts for Leafus\_35:

(Start: 15 @25473 has 186 MA's), (16, 25458), (19, 25383), (21, 25374), (25, 25335), (30, 25227), (38, 25152), (46, 25059),

Gene: Librie\_33 Start: 23072, Stop: 22209, Start Num: 15

Candidate Starts for Librie\_33:

(Start: 15 @23072 has 186 MA's), (17, 23006), (22, 22970), (25, 22937), (33, 22811), (36, 22772),

Gene: LilTerminator\_33 Start: 23094, Stop: 22231, Start Num: 15

Candidate Starts for LilTerminator\_33:

(Start: 15 @23094 has 186 MA's), (17, 23028), (22, 22992), (25, 22959), (33, 22833), (36, 22794),

Gene: Lovelyunicorn\_36 Start: 25210, Stop: 24371, Start Num: 15

Candidate Starts for Lovelyunicorn\_36:

(Start: 15 @25210 has 186 MA's), (17, 25144), (25, 25075), (27, 25057), (30, 24967), (33, 24949), (40, 24883),

Gene: Lucky3\_33 Start: 24767, Stop: 24036, Start Num: 15

Candidate Starts for Lucky3\_33:

(Start: 15 @24767 has 186 MA's), (19, 24680), (20, 24674), (22, 24665), (25, 24632), (26, 24626), (30, 24524), (35, 24488), (36, 24467), (44, 24404),

Gene: Ludgate\_36 Start: 25205, Stop: 24366, Start Num: 15

Candidate Starts for Ludgate\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (40, 24878),

Gene: Luna18\_35 Start: 24305, Stop: 23445, Start Num: 15

Candidate Starts for Luna18\_35:

(Start: 15 @24305 has 186 MA's), (17, 24239), (19, 24218), (22, 24203), (25, 24170), (26, 24164), (30, 24062), (33, 24044), (35, 24026),

Gene: MCubed\_34 Start: 24824, Stop: 24006, Start Num: 15

Candidate Starts for MCubed\_34:

(Start: 15 @24824 has 186 MA's), (19, 24737), (25, 24689), (26, 24683), (27, 24671), (30, 24581), (33, 24563),

Gene: MaeLinda\_36 Start: 25209, Stop: 24373, Start Num: 15

Candidate Starts for MaeLinda\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: ManRay\_35 Start: 24907, Stop: 24068, Start Num: 15

Candidate Starts for ManRay\_35:

(Start: 15 @24907 has 186 MA's), (17, 24841), (25, 24772), (27, 24754), (30, 24664), (33, 24646), (40, 24580),

Gene: Mandalorian\_32 Start: 24494, Stop: 23652, Start Num: 15

Candidate Starts for Mandalorian\_32:

(Start: 15 @24494 has 186 MA's), (17, 24428), (22, 24392), (25, 24359), (29, 24254), (37, 24173), (48, 23876),

Gene: Martin\_37 Start: 25214, Stop: 24372, Start Num: 15

Candidate Starts for Martin\_37:

(Start: 15 @25214 has 186 MA's), (17, 25148), (25, 25079), (27, 25061), (30, 24971), (33, 24953), (40, 24887),

Gene: McGalleon\_38 Start: 26612, Stop: 25770, Start Num: 15

Candidate Starts for McGalleon\_38:

(Start: 15 @26612 has 186 MA's), (17, 26546), (18, 26534), (25, 26477), (30, 26369), (33, 26351),

Gene: Mercedes\_30 Start: 22076, Stop: 21222, Start Num: 15

Candidate Starts for Mercedes\_30:

(Start: 15 @22076 has 186 MA's), (17, 22010), (25, 21941), (33, 21815), (45, 21704), (47, 21473),

Gene: Merida02\_37 Start: 25208, Stop: 24369, Start Num: 15

Candidate Starts for Merida02\_37:

(Start: 15 @25208 has 186 MA's), (17, 25142), (25, 25073), (27, 25055), (30, 24965), (33, 24947), (40, 24881),

Gene: MillyPhilly\_36 Start: 25202, Stop: 24369, Start Num: 15

Candidate Starts for MillyPhilly\_36:

(Start: 15 @25202 has 186 MA's), (17, 25136), (25, 25067), (27, 25049), (30, 24959), (33, 24941), (40, 24875),

Gene: MiniVolent\_33 Start: 24523, Stop: 23669, Start Num: 15

Candidate Starts for MiniVolent\_33:

(Start: 15 @24523 has 186 MA's), (17, 24457), (22, 24421), (25, 24388), (29, 24283), (31, 24268), (37, 24202), (50, 23683),

Gene: MonChoix\_34 Start: 25226, Stop: 24372, Start Num: 15

Candidate Starts for MonChoix\_34:

(Start: 15 @25226 has 186 MA's), (19, 25139), (21, 25130), (25, 25091), (27, 25073), (30, 24983), (33, 24965), (35, 24947), (38, 24908),

Gene: Morrigan\_35 Start: 24326, Stop: 23475, Start Num: 15

Candidate Starts for Morrigan\_35:

(Start: 15 @24326 has 186 MA's), (17, 24260), (19, 24239), (22, 24224), (25, 24191), (26, 24185), (30, 24083), (35, 24047), (36, 24026),

Gene: MrWorldwide\_36 Start: 25212, Stop: 24373, Start Num: 15

Candidate Starts for MrWorldwide\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: Nagem\_36 Start: 25205, Stop: 24366, Start Num: 15

Candidate Starts for Nagem\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (21, 25109), (25, 25070), (30, 24962), (33, 24944), (40, 24878),

Gene: Nattles\_35 Start: 24894, Stop: 24055, Start Num: 15

Candidate Starts for Nattles\_35:

(Start: 15 @24894 has 186 MA's), (17, 24828), (21, 24798), (25, 24759), (30, 24651), (33, 24633), (40, 24567),

Gene: Nebulous\_33 Start: 26085, Stop: 25234, Start Num: 15

Candidate Starts for Nebulous\_33:

(Start: 15 @26085 has 186 MA's), (17, 26019), (22, 25983), (25, 25950), (33, 25824), (48, 25473),

Gene: Neferthena\_33 Start: 25172, Stop: 24324, Start Num: 15

Candidate Starts for Neferthena\_33:

(Start: 15 @25172 has 186 MA's), (17, 25106), (22, 25070), (25, 25037), (33, 24911), (48, 24560),

Gene: NickSell\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for NickSell\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: Nucci\_32 Start: 24489, Stop: 23641, Start Num: 15

Candidate Starts for Nucci\_32:

(Start: 15 @24489 has 186 MA's), (17, 24423), (22, 24387), (25, 24354), (29, 24249), (37, 24168), (48, 23871),

Gene: Oats\_35 Start: 24907, Stop: 24068, Start Num: 15

Candidate Starts for Oats\_35:

(Start: 15 @24907 has 186 MA's), (17, 24841), (25, 24772), (27, 24754), (30, 24664), (33, 24646), (40, 24580),

Gene: OldNelly\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for OldNelly\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: Oxtober96\_36 Start: 25210, Stop: 24371, Start Num: 15

Candidate Starts for Oxtober96\_36:

(Start: 15 @25210 has 186 MA's), (17, 25144), (25, 25075), (27, 25057), (30, 24967), (33, 24949), (40, 24883),

Gene: PSirce\_34 Start: 24811, Stop: 23999, Start Num: 15

Candidate Starts for PSirce\_34:

(Start: 15 @24811 has 186 MA's), (19, 24724), (25, 24676), (26, 24670), (27, 24658), (30, 24568), (33, 24550), (49, 24205),

Gene: Pajaza\_32 Start: 24108, Stop: 23335, Start Num: 13

Candidate Starts for Pajaza\_32:

(Start: 13 @24108 has 3 MA's), (Start: 15 @24066 has 186 MA's), (20, 23973), (25, 23931), (26, 23925), (31, 23811), (46, 23658),

Gene: Papafritta\_35 Start: 24915, Stop: 24064, Start Num: 15

Candidate Starts for Papafritta\_35:

(Start: 15 @24915 has 186 MA's), (17, 24849), (25, 24780), (27, 24762), (30, 24672), (33, 24654), (40, 24588),

Gene: ParleG\_36 Start: 25212, Stop: 24373, Start Num: 15

Candidate Starts for ParleG\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: Peep\_36 Start: 25197, Stop: 24358, Start Num: 15

Candidate Starts for Peep\_36:

(Start: 15 @25197 has 186 MA's), (17, 25131), (25, 25062), (30, 24954), (33, 24936), (40, 24870),

Gene: Penta\_32 Start: 23244, Stop: 22381, Start Num: 15

Candidate Starts for Penta\_32:

(9, 23376), (10, 23367), (12, 23304), (Start: 15 @23244 has 186 MA's), (19, 23157), (20, 23151), (23, 23139), (25, 23109), (27, 23091), (30, 23001), (31, 22989), (33, 22983), (36, 22944), (41, 22908), (45, 22872),

Gene: Peppino\_35 Start: 25321, Stop: 24467, Start Num: 15

Candidate Starts for Peppino\_35:

(Start: 15 @25321 has 186 MA's), (16, 25306), (19, 25231), (21, 25222), (25, 25183), (30, 25075), (38, 25000), (46, 24907),

Gene: Phanita\_34 Start: 24791, Stop: 23979, Start Num: 15

Candidate Starts for Phanita\_34:

(Start: 15 @24791 has 186 MA's), (19, 24704), (25, 24656), (26, 24650), (27, 24638), (30, 24548), (33, 24530),

Gene: Pherbot\_33 Start: 24659, Stop: 23934, Start Num: 15

Candidate Starts for Pherbot\_33:

(Start: 15 @24659 has 186 MA's), (19, 24572), (22, 24557), (25, 24524), (33, 24398), (35, 24380), (44, 24296),

Gene: Pherferi\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Pherferi\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: Phiderman\_36 Start: 25202, Stop: 24369, Start Num: 15

Candidate Starts for Phiderman\_36:

(Start: 15 @25202 has 186 MA's), (17, 25136), (25, 25067), (27, 25049), (30, 24959), (33, 24941), (40, 24875),

Gene: PhillyPhantom\_35 Start: 25311, Stop: 24448, Start Num: 15

Candidate Starts for PhillyPhantom\_35:

(Start: 15 @25311 has 186 MA's), (16, 25296), (19, 25221), (21, 25212), (25, 25173), (30, 25065), (38, 24990), (46, 24897),

Gene: Phireproof\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for Phireproof\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: PhredFlintston\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for PhredFlintston\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: Phriends\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for Phriends\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: Pikmin\_32 Start: 24108, Stop: 23335, Start Num: 13

Candidate Starts for Pikmin\_32:

(Start: 13 @24108 has 3 MA's), (Start: 15 @24066 has 186 MA's), (20, 23973), (25, 23931), (26, 23925), (31, 23811), (45, 23694), (46, 23658),

Gene: Pocket\_35 Start: 24898, Stop: 24053, Start Num: 15

Candidate Starts for Pocket\_35:

(Start: 15 @24898 has 186 MA's), (17, 24832), (21, 24802), (25, 24763), (30, 24655), (33, 24637), (40, 24571),

Gene: PrincePhergus\_33 Start: 24674, Stop: 23937, Start Num: 15

Candidate Starts for PrincePhergus\_33:

(Start: 15 @24674 has 186 MA's), (19, 24587), (22, 24572), (25, 24539), (33, 24413), (35, 24395), (44, 24311),

Gene: PuppyEggo\_36 Start: 25212, Stop: 24370, Start Num: 15

Candidate Starts for PuppyEggo\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: QuadZero\_33 Start: 23099, Stop: 22239, Start Num: 15

Candidate Starts for QuadZero\_33:

(Start: 15 @23099 has 186 MA's), (17, 23033), (22, 22997), (25, 22964), (33, 22838), (36, 22799),

Gene: Quartz\_33 Start: 24607, Stop: 23777, Start Num: 15

Candidate Starts for Quartz\_33:

(Start: 15 @24607 has 186 MA's), (17, 24541), (22, 24505), (25, 24472), (29, 24367), (37, 24286), (48, 23998),

Gene: Raccoon\_35 Start: 25296, Stop: 24433, Start Num: 15

Candidate Starts for Raccoon\_35:

(Start: 15 @25296 has 186 MA's), (16, 25281), (19, 25206), (21, 25197), (25, 25158), (30, 25050), (38, 24975), (46, 24882),

Gene: Rapheph\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Rapheph\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: Raptor\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for Raptor\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (21, 25113), (25, 25074), (30, 24966), (33, 24948), (40, 24882),

Gene: Redfield\_35 Start: 25328, Stop: 24474, Start Num: 15

Candidate Starts for Redfield\_35:

(Start: 15 @25328 has 186 MA's), (16, 25313), (19, 25238), (21, 25229), (25, 25190), (30, 25082), (38, 25007), (46, 24914),

Gene: RenegadeRaider\_34 Start: 24541, Stop: 23780, Start Num: 15

Candidate Starts for RenegadeRaider\_34:

(Start: 15 @24541 has 186 MA's), (19, 24454), (22, 24439), (25, 24406), (33, 24280), (35, 24262), (44, 24178),

Gene: Renzie\_36 Start: 25197, Stop: 24358, Start Num: 15

Candidate Starts for Renzie\_36:

(Start: 15 @25197 has 186 MA's), (17, 25131), (25, 25062), (30, 24954), (33, 24936), (40, 24870),

Gene: Riyhil\_36 Start: 25214, Stop: 24372, Start Num: 15

Candidate Starts for Riyhil\_36:

(Start: 15 @25214 has 186 MA's), (17, 25148), (25, 25079), (27, 25061), (30, 24971), (33, 24953), (40, 24887),

Gene: Robinson\_36 Start: 25203, Stop: 24364, Start Num: 15

Candidate Starts for Robinson\_36:

(Start: 15 @25203 has 186 MA's), (17, 25137), (25, 25068), (27, 25050), (30, 24960), (33, 24942), (40, 24876),

Gene: Rog141\_35 Start: 24894, Stop: 24055, Start Num: 15  
Candidate Starts for Rog141\_35:  
(Start: 15 @24894 has 186 MA's), (17, 24828), (25, 24759), (27, 24741), (30, 24651), (33, 24633), (40, 24567),

Gene: RosieMae\_35 Start: 24952, Stop: 24110, Start Num: 15  
Candidate Starts for RosieMae\_35:  
(Start: 15 @24952 has 186 MA's), (17, 24886), (25, 24817), (27, 24799), (30, 24709), (33, 24691), (40, 24625),

Gene: SJay\_36 Start: 25206, Stop: 24367, Start Num: 15  
Candidate Starts for SJay\_36:  
(Start: 15 @25206 has 186 MA's), (17, 25140), (21, 25110), (25, 25071), (30, 24963), (33, 24945), (40, 24879),

Gene: Sansa\_33 Start: 24885, Stop: 24067, Start Num: 15  
Candidate Starts for Sansa\_33:  
(Start: 15 @24885 has 186 MA's), (19, 24798), (25, 24750), (26, 24744), (27, 24732), (30, 24642), (33, 24624), (49, 24273),

Gene: Saratos\_34 Start: 24793, Stop: 23981, Start Num: 15  
Candidate Starts for Saratos\_34:  
(Start: 15 @24793 has 186 MA's), (19, 24706), (25, 24658), (26, 24652), (27, 24640), (30, 24550), (33, 24532), (49, 24187),

Gene: Schimmels22\_34 Start: 23924, Stop: 23061, Start Num: 15  
Candidate Starts for Schimmels22\_34:  
(3, 24137), (5, 24101), (9, 24056), (12, 23984), (Start: 15 @23924 has 186 MA's), (19, 23837), (20, 23831), (23, 23819), (25, 23789), (27, 23771), (30, 23681), (31, 23669), (36, 23624), (41, 23588), (45, 23552),

Gene: Schnapsidee\_35 Start: 25334, Stop: 24468, Start Num: 15  
Candidate Starts for Schnapsidee\_35:  
(Start: 15 @25334 has 186 MA's), (16, 25319), (19, 25244), (21, 25235), (25, 25196), (30, 25088), (38, 25013), (46, 24920),

Gene: Schubert\_33 Start: 24621, Stop: 23938, Start Num: 15  
Candidate Starts for Schubert\_33:  
(Start: 15 @24621 has 186 MA's), (22, 24519), (25, 24486), (26, 24480), (27, 24468), (30, 24378), (31, 24366), (33, 24360), (44, 24258),

Gene: Scissor2024\_34 Start: 23560, Stop: 22697, Start Num: 15  
Candidate Starts for Scissor2024\_34:  
(Start: 15 @23560 has 186 MA's), (19, 23473), (20, 23467), (23, 23455), (25, 23425), (27, 23407), (30, 23317), (31, 23305), (36, 23260), (41, 23224), (45, 23188),

Gene: Sedgewig\_35 Start: 24892, Stop: 24047, Start Num: 15  
Candidate Starts for Sedgewig\_35:  
(Start: 15 @24892 has 186 MA's), (17, 24826), (25, 24757), (27, 24739), (30, 24649), (33, 24631), (40, 24565),

Gene: ShaiHulud\_36 Start: 25209, Stop: 24370, Start Num: 15  
Candidate Starts for ShaiHulud\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: Shamu\_34 Start: 24814, Stop: 23996, Start Num: 15

Candidate Starts for Shamu\_34:

(Start: 15 @24814 has 186 MA's), (19, 24727), (25, 24679), (26, 24673), (27, 24661), (30, 24571), (33, 24553), (49, 24208),

Gene: Shee\_36 Start: 25202, Stop: 24369, Start Num: 15

Candidate Starts for Shee\_36:

(Start: 15 @25202 has 186 MA's), (17, 25136), (25, 25067), (27, 25049), (30, 24959), (33, 24941), (40, 24875),

Gene: Sinatra\_33 Start: 24670, Stop: 23933, Start Num: 15

Candidate Starts for Sinatra\_33:

(Start: 15 @24670 has 186 MA's), (19, 24583), (22, 24568), (25, 24535), (33, 24409), (35, 24391), (44, 24307),

Gene: SirVictor\_33 Start: 24752, Stop: 24024, Start Num: 15

Candidate Starts for SirVictor\_33:

(Start: 15 @24752 has 186 MA's), (19, 24665), (20, 24659), (22, 24650), (25, 24617), (26, 24611), (30, 24509), (35, 24473), (36, 24452), (44, 24389),

Gene: SoilGremlin\_36 Start: 25208, Stop: 24369, Start Num: 15

Candidate Starts for SoilGremlin\_36:

(Start: 15 @25208 has 186 MA's), (17, 25142), (25, 25073), (27, 25055), (30, 24965), (33, 24947), (40, 24881),

Gene: SolidSnake\_37 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for SolidSnake\_37:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: SonOfLevi\_35 Start: 24889, Stop: 24050, Start Num: 15

Candidate Starts for SonOfLevi\_35:

(Start: 15 @24889 has 186 MA's), (17, 24823), (21, 24793), (25, 24754), (30, 24646), (33, 24628), (40, 24562),

Gene: Soror1\_35 Start: 25343, Stop: 24477, Start Num: 15

Candidate Starts for Soror1\_35:

(Start: 15 @25343 has 186 MA's), (16, 25328), (19, 25253), (21, 25244), (25, 25205), (30, 25097), (38, 25022), (46, 24929),

Gene: Stanktossa\_36 Start: 25205, Stop: 24372, Start Num: 15

Candidate Starts for Stanktossa\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: StingRay\_35 Start: 24910, Stop: 24065, Start Num: 15

Candidate Starts for StingRay\_35:

(Start: 15 @24910 has 186 MA's), (17, 24844), (25, 24775), (27, 24757), (30, 24667), (33, 24649), (40, 24583),

Gene: StirfryIV\_35 Start: 24903, Stop: 24055, Start Num: 15

Candidate Starts for StirfryIV\_35:

(Start: 15 @24903 has 186 MA's), (17, 24837), (25, 24768), (27, 24750), (30, 24660), (33, 24642), (40, 24576),

Gene: Stormbreaker8\_35 Start: 25328, Stop: 24468, Start Num: 15

Candidate Starts for Stormbreaker8\_35:

(Start: 15 @25328 has 186 MA's), (16, 25313), (19, 25238), (21, 25229), (25, 25190), (30, 25082), (38, 25007), (46, 24914),

Gene: Strathdee\_36 Start: 25210, Stop: 24371, Start Num: 15

Candidate Starts for Strathdee\_36:

(Start: 15 @25210 has 186 MA's), (17, 25144), (25, 25075), (27, 25057), (30, 24967), (33, 24949), (40, 24883),

Gene: Superfresh\_36 Start: 25197, Stop: 24358, Start Num: 15

Candidate Starts for Superfresh\_36:

(Start: 15 @25197 has 186 MA's), (17, 25131), (25, 25062), (30, 24954), (33, 24936), (40, 24870),

Gene: Symere\_35 Start: 24890, Stop: 24045, Start Num: 15

Candidate Starts for Symere\_35:

(Start: 15 @24890 has 186 MA's), (17, 24824), (25, 24755), (27, 24737), (30, 24647), (33, 24629), (40, 24563),

Gene: TatarkaPM\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for TatarkaPM\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: Teagan\_36 Start: 25205, Stop: 24366, Start Num: 15

Candidate Starts for Teagan\_36:

(Start: 15 @25205 has 186 MA's), (17, 25139), (25, 25070), (27, 25052), (30, 24962), (33, 24944), (40, 24878),

Gene: TeddyBear\_35 Start: 24907, Stop: 24068, Start Num: 15

Candidate Starts for TeddyBear\_35:

(Start: 15 @24907 has 186 MA's), (17, 24841), (21, 24811), (25, 24772), (30, 24664), (33, 24646), (40, 24580),

Gene: Tenda\_35 Start: 24905, Stop: 24066, Start Num: 15

Candidate Starts for Tenda\_35:

(Start: 15 @24905 has 186 MA's), (17, 24839), (25, 24770), (27, 24752), (30, 24662), (33, 24644), (40, 24578),

Gene: Thompsone\_36 Start: 25212, Stop: 24370, Start Num: 15

Candidate Starts for Thompsone\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: Thorongil\_36 Start: 25212, Stop: 24370, Start Num: 15

Candidate Starts for Thorongil\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: TinSulphur\_36 Start: 25211, Stop: 24372, Start Num: 15

Candidate Starts for TinSulphur\_36:

(Start: 15 @25211 has 186 MA's), (17, 25145), (25, 25076), (27, 25058), (30, 24968), (33, 24950), (40, 24884),

Gene: Tinyman4\_34 Start: 23550, Stop: 22687, Start Num: 15

Candidate Starts for Tinyman4\_34:

(9, 23682), (12, 23610), (Start: 15 @23550 has 186 MA's), (19, 23463), (20, 23457), (23, 23445), (25, 23415), (27, 23397), (30, 23307), (31, 23295), (36, 23250), (41, 23214), (45, 23178),

Gene: TwoBits\_32 Start: 23509, Stop: 22622, Start Num: 15

Candidate Starts for TwoBits\_32:

(Start: 15 @23509 has 186 MA's), (17, 23443), (22, 23407), (25, 23374), (33, 23248), (39, 23185), (45, 23137),

Gene: Velene\_36 Start: 25210, Stop: 24371, Start Num: 15

Candidate Starts for Velene\_36:

(Start: 15 @25210 has 186 MA's), (17, 25144), (25, 25075), (27, 25057), (30, 24967), (33, 24949), (40, 24883),

Gene: Vispistious\_36 Start: 25212, Stop: 24370, Start Num: 15

Candidate Starts for Vispistious\_36:

(Start: 15 @25212 has 186 MA's), (17, 25146), (25, 25077), (27, 25059), (30, 24969), (33, 24951), (40, 24885),

Gene: Wardwill\_35 Start: 23253, Stop: 22393, Start Num: 15

Candidate Starts for Wardwill\_35:

(Start: 15 @23253 has 186 MA's), (17, 23187), (22, 23151), (25, 23118), (33, 22992), (36, 22953),

Gene: WestPM\_32 Start: 23407, Stop: 22544, Start Num: 15

Candidate Starts for WestPM\_32:

(7, 23557), (9, 23539), (10, 23530), (12, 23467), (Start: 15 @23407 has 186 MA's), (19, 23320), (20, 23314), (23, 23302), (25, 23272), (27, 23254), (30, 23164), (31, 23152), (33, 23146), (36, 23107), (41, 23071), (45, 23035),

Gene: WildNOut\_36 Start: 25209, Stop: 24370, Start Num: 15

Candidate Starts for WildNOut\_36:

(Start: 15 @25209 has 186 MA's), (17, 25143), (25, 25074), (27, 25056), (30, 24966), (33, 24948), (40, 24882),

Gene: WilliamStrong\_34 Start: 24626, Stop: 23769, Start Num: 15

Candidate Starts for WilliamStrong\_34:

(Start: 15 @24626 has 186 MA's), (17, 24560), (19, 24539), (22, 24524), (25, 24491), (27, 24473), (30, 24383), (33, 24365), (35, 24347),

Gene: Winzigespinne\_35 Start: 24893, Stop: 24054, Start Num: 15

Candidate Starts for Winzigespinne\_35:

(Start: 15 @24893 has 186 MA's), (17, 24827), (25, 24758), (27, 24740), (30, 24650), (33, 24632), (40, 24566),

Gene: Xebius\_34 Start: 24796, Stop: 23984, Start Num: 15

Candidate Starts for Xebius\_34:

(Start: 15 @24796 has 186 MA's), (19, 24709), (25, 24661), (26, 24655), (27, 24643), (30, 24553), (33, 24535), (49, 24190),

Gene: YuuY\_34 Start: 25236, Stop: 24385, Start Num: 15

Candidate Starts for YuuY\_34:

(Start: 15 @25236 has 186 MA's), (17, 25170), (22, 25134), (25, 25101), (27, 25083), (29, 24996), (31, 24981), (47, 24624), (48, 24606),

Gene: Zada\_36 Start: 25181, Stop: 24351, Start Num: 15

Candidate Starts for Zada\_36:

(Start: 15 @25181 has 186 MA's), (17, 25115), (25, 25046), (27, 25028), (30, 24938), (33, 24920), (40, 24854),

Gene: Zayuliv\_33 Start: 23672, Stop: 22821, Start Num: 15

Candidate Starts for Zayuliv\_33:

(Start: 15 @23672 has 186 MA's), (17, 23606), (22, 23570), (25, 23537), (33, 23411), (36, 23372),

Gene: Zenitsu\_34 Start: 24829, Stop: 24011, Start Num: 15

Candidate Starts for Zenitsu\_34:

(Start: 15 @24829 has 186 MA's), (19, 24742), (25, 24694), (26, 24688), (27, 24676), (30, 24586), (33, 24568), (49, 24223),

Gene: Zepp\_34 Start: 23131, Stop: 22289, Start Num: 15

Candidate Starts for Zepp\_34:

(Start: 15 @23131 has 186 MA's), (17, 23065), (22, 23029), (25, 22996), (33, 22870), (36, 22831),