



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 216001 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216001 has 111 members, 6 are drafts.

Phages represented in each track:

- Track 1 : SJay\_7, Ludgate\_7, Nagem\_7, Teagan\_7, Bandik\_7
- Track 2 : Greys\_7, TinSulphur\_7, Benjalauren\_7, Duocatuli\_7, Raptor\_7, MaeLinda\_7, Rapheph\_7, Lovelyunicorn\_7, Delphidian\_7, Pocket\_7, PhredFlintston\_7, Jerbirus\_7, AxiPup\_7, Oats\_7, HanSolo\_7, RosieMae\_7, Convict\_7, WildNOut\_7, HankSprout\_7, Exploradora\_7, Oxtober96\_7, Chako\_7, Kale\_7, Bonino\_7, Asta\_7, Aubergine\_7, Phireproof\_7, MonChoix\_7, Blage\_7, Baines\_7, AranulaLuti\_7, Stanktossa\_7, Papafritta\_7, Shee\_7, JasperRussell\_7, Figueroism\_7, HungryHenry\_7, StirfryIV\_7, Inventa\_7, Byron23\_7, MillyPhilly\_7, Ilzat\_7, OldNelly\_7, ParleG\_7, Janus167\_7, Gargoyle\_7, Kurt1\_7, Pherferi\_7, Calix\_7, Robinson\_7, Strathdee\_7, AlexAdler\_7, Phriends\_7, Tenda\_7, Espinosa\_7, Nattles\_7, Gubbabump\_7, Winzigespinne\_7, Martin\_8, Vispistious\_7, Klimt\_7, MrWorldwide\_7, PuppyEggo\_7, Erla\_7, Gershwin\_7, ManRay\_7, KannH\_7, BonesMcCoy\_7, Gelo\_7, Garey24\_7, Zada\_7, Velene\_7, ShaiHulud\_7, Chamuel\_7, Symere\_7, Sedgewig\_7, JeriBeth\_7, Rog141\_7, Den3\_7, Dothraki\_7, Ioannes\_7, Knox\_7, Alyxandracam\_7, BigRedClifford\_7, BeautPeep30\_7, TeddyBear\_7, StingRay\_7, Riyhil\_7, Phiderman\_7, SoilGremlin\_7, Clancy\_7, Thompsone\_7, SonOfLevi\_7, TatarkaPM\_7, NickSell\_7, Christoph\_7, Etta\_7
- Track 3 : Dave\_7, Renzie\_7, Peep\_7, Antoinette\_7, Superfresh\_7
- Track 4 : Thorongil\_7
- Track 5 : ChickenKing\_7
- Track 6 : Cheeto1\_8
- Track 7 : GaeCeo\_8

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

The start number called the most often in the published annotations is 2, it was called in 104 of the 105 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlexAdler\_7, Alyxandracam\_7, Antoinette\_7, AranulaLuti\_7, Asta\_7, Aubergine\_7, AxiPup\_7, Baines\_7, Bandik\_7, BeautPeep30\_7, Benjalauren\_7, BigRedClifford\_7, Blage\_7, BonesMcCoy\_7, Bonino\_7, Byron23\_7, Calix\_7, Chako\_7, Chamuel\_7, ChickenKing\_7, Christoph\_7, Clancy\_7, Convict\_7, Dave\_7, Delphidian\_7, Den3\_7, Dothraki\_7, Duocatuli\_7, Erla\_7, Espinosa\_7, Etta\_7, Exploradora\_7, Figueroism\_7,

GaeCeo\_8, Garey24\_7, Gargoyle\_7, Gelo\_7, Gershwin\_7, Greys\_7, Gubbabump\_7, HanSolo\_7, HankSprout\_7, HungryHenry\_7, Ilzat\_7, Inventa\_7, Ioannes\_7, Janus167\_7, JasperRussell\_7, Jerbirus\_7, JeriBeth\_7, Kale\_7, KannH\_7, Klimt\_7, Knox\_7, Kurt1\_7, Lovelyunicorn\_7, Ludgate\_7, MaeLinda\_7, ManRay\_7, Martin\_8, MillyPhilly\_7, MonChoix\_7, MrWorldwide\_7, Nagem\_7, Nattles\_7, NickSell\_7, Oats\_7, OldNelly\_7, Oxtober96\_7, Papafritta\_7, ParleG\_7, Peep\_7, Pherferi\_7, Phiderman\_7, Phireproof\_7, PhredFlintston\_7, Phriends\_7, Pocket\_7, PuppyEggo\_7, Rappheph\_7, Raptor\_7, Renzie\_7, Riyhil\_7, Robinson\_7, Rog141\_7, RosieMae\_7, SJay\_7, Sedgewig\_7, ShaiHulud\_7, Shee\_7, SoilGremlin\_7, SonOfLevi\_7, Stanktossa\_7, StingRay\_7, StirfryIV\_7, Strathdee\_7, Superfresh\_7, Symere\_7, TatarkaPM\_7, Teagan\_7, TeddyBear\_7, Tenda\_7, Thompstone\_7, Thorongil\_7, TinSulphur\_7, Velene\_7, Vispistious\_7, WildNOut\_7, Winzigespinne\_7, Zada\_7,

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

- 

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

- Cheeto1\_8,

### Summary by start number:

Start 1:

- Found in 1 of 111 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 1 of 105
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cheeto1\_8 (EA9),

Start 2:

- Found in 110 of 111 ( 99.1% ) of genes in pham
- Manual Annotations of this start: 104 of 105
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlexAdler\_7 (EA1), Alyxandracam\_7 (EA1), Antoinette\_7 (EA1), AranulaLuti\_7 (EA1), Asta\_7 (EA1), Aubergine\_7 (EA1), AxiPup\_7 (EA1), Baines\_7 (EA1), Bandik\_7 (EA1), BeautPeep30\_7 (EA1), Benjalauen\_7 (EA1), BigRedClifford\_7 (EA1), Blage\_7 (EA1), BonesMcCoy\_7 (EA1), Bonino\_7 (EA1), Byron23\_7 (EA1), Calix\_7 (EA1), Chako\_7 (EA1), Chamuel\_7 (EA1), ChickenKing\_7 (EA9), Christoph\_7 (EA1), Clancy\_7 (EA1), Convict\_7 (EA1), Dave\_7 (EA1), Delphidian\_7 (EA1), Den3\_7 (EA1), Dothraki\_7 (EA1), Duocatuli\_7 (EA1), Erla\_7 (EA1), Espinosa\_7 (EA1), Etta\_7 (EA1), Exploradora\_7 (UNK), Figueroism\_7 (EA1), GaeCeo\_8 (EA9), Garey24\_7 (EA1), Gargoyle\_7 (EA1), Gelo\_7 (EA1), Gershwin\_7 (EA1), Greys\_7 (EA1), Gubbabump\_7 (EA1), HanSolo\_7 (EA1), HankSprout\_7 (EA1), HungryHenry\_7 (EA1), Ilzat\_7 (EA1), Inventa\_7 (EA1), Ioannes\_7 (EA1), Janus167\_7 (EA1), JasperRussell\_7 (EA1), Jerbirus\_7 (EA1), JeriBeth\_7 (EA1), Kale\_7 (EA1), KannH\_7 (EA1), Klimt\_7 (EA1), Knox\_7 (EA1), Kurt1\_7 (EA1), Lovelyunicorn\_7 (EA1), Ludgate\_7 (EA1), MaeLinda\_7 (EA1), ManRay\_7 (EA1), Martin\_8 (EA1), MillyPhilly\_7 (EA1), MonChoix\_7 (EA1), MrWorldwide\_7 (EA1), Nagem\_7 (EA1), Nattles\_7 (EA1), NickSell\_7 (EA1), Oats\_7 (EA1), OldNelly\_7 (EA1), Oxtober96\_7 (EA1), Papafritta\_7 (EA1), ParleG\_7 (EA1), Peep\_7 (EA1), Pherferi\_7 (EA1), Phiderman\_7 (EA1), Phireproof\_7 (EA1), PhredFlintston\_7 (EA1), Phriends\_7 (EA1), Pocket\_7 (EA1), PuppyEggo\_7 (EA1), Rappheph\_7 (EA1), Raptor\_7 (EA1), Renzie\_7 (EA1), Riyhil\_7 (EA1), Robinson\_7 (EA1), Rog141\_7 (EA1), RosieMae\_7 (EA1), SJay\_7 (EA1), Sedgewig\_7 (EA1), ShaiHulud\_7 (EA1), Shee\_7 (EA1), SoilGremlin\_7 (EA1), SonOfLevi\_7 (EA1),

Stanktossa\_7 (EA1), StingRay\_7 (EA1), StirfryIV\_7 (EA1), Strathdee\_7 (EA1), Superfresh\_7 (EA1), Symere\_7 (EA1), TatarkaPM\_7 (EA1), Teagan\_7 (EA1), TeddyBear\_7 (EA1), Tenda\_7 (EA1), Thompson\_7 (EA1), Thorongil\_7 (EA1), TinSulphur\_7 (EA1), Velene\_7 (EA1), Vispistious\_7 (EA1), WildNOut\_7 (EA1), Winzigespinne\_7 (EA1), Zada\_7 (EA1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: EA1, EA9, UNK,

Info for manual annotations of cluster EA1:

- Start number 2 was manually annotated 102 times for cluster EA1.

Info for manual annotations of cluster EA9:

- Start number 1 was manually annotated 1 time for cluster EA9.
- Start number 2 was manually annotated 2 times for cluster EA9.

### **Gene Information:**

Gene: AlexAdler\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for AlexAdler\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Alyxandracam\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Alyxandracam\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Antoinette\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Antoinette\_7:

(Start: 2 @5631 has 104 MA's), (4, 5697), (6, 5781),

Gene: AranulaLuti\_7 Start: 5631, Stop: 5882, Start Num: 2

Candidate Starts for AranulaLuti\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Asta\_7 Start: 5645, Stop: 5896, Start Num: 2

Candidate Starts for Asta\_7:

(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: Aubergine\_7 Start: 5645, Stop: 5896, Start Num: 2

Candidate Starts for Aubergine\_7:

(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: AxiPup\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for AxiPup\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Baines\_7 Start: 5631, Stop: 5882, Start Num: 2

Candidate Starts for Baines\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Bandik\_7 Start: 5631, Stop: 5873, Start Num: 2  
Candidate Starts for Bandik\_7:  
(Start: 2 @5631 has 104 MA's), (7, 5793),

Gene: BeautPeep30\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for BeautPeep30\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Benjalauren\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Benjalauren\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: BigRedClifford\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for BigRedClifford\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Blage\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Blage\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: BonesMcCoy\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for BonesMcCoy\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Bonino\_7 Start: 5630, Stop: 5875, Start Num: 2  
Candidate Starts for Bonino\_7:  
(Start: 2 @5630 has 104 MA's), (6, 5780),

Gene: Byron23\_7 Start: 5634, Stop: 5882, Start Num: 2  
Candidate Starts for Byron23\_7:  
(Start: 2 @5634 has 104 MA's), (6, 5784),

Gene: Calix\_7 Start: 5630, Stop: 5875, Start Num: 2  
Candidate Starts for Calix\_7:  
(Start: 2 @5630 has 104 MA's), (6, 5780),

Gene: Chako\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Chako\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Chamuel\_7 Start: 5632, Stop: 5877, Start Num: 2  
Candidate Starts for Chamuel\_7:  
(Start: 2 @5632 has 104 MA's), (6, 5782),

Gene: Cheeto1\_8 Start: 5764, Stop: 6009, Start Num: 1  
Candidate Starts for Cheeto1\_8:  
(Start: 1 @5764 has 1 MA's), (5, 5887),

Gene: ChickenKing\_7 Start: 5587, Stop: 5829, Start Num: 2  
Candidate Starts for ChickenKing\_7:  
(Start: 2 @5587 has 104 MA's), (5, 5707),

Gene: Christoph\_7 Start: 5643, Stop: 5894, Start Num: 2  
Candidate Starts for Christoph\_7:  
(Start: 2 @5643 has 104 MA's), (6, 5793),

Gene: Clancy\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Clancy\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Convict\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Convict\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Dave\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Dave\_7:  
(Start: 2 @5631 has 104 MA's), (4, 5697), (6, 5781),

Gene: Delphidian\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Delphidian\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Den3\_7 Start: 5635, Stop: 5883, Start Num: 2  
Candidate Starts for Den3\_7:  
(Start: 2 @5635 has 104 MA's), (6, 5785),

Gene: Dothraki\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Dothraki\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Duocatuli\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Duocatuli\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Erla\_7 Start: 5630, Stop: 5875, Start Num: 2  
Candidate Starts for Erla\_7:  
(Start: 2 @5630 has 104 MA's), (6, 5780),

Gene: Espinosa\_7 Start: 5643, Stop: 5894, Start Num: 2  
Candidate Starts for Espinosa\_7:  
(Start: 2 @5643 has 104 MA's), (6, 5793),

Gene: Etta\_7 Start: 5634, Stop: 5879, Start Num: 2  
Candidate Starts for Etta\_7:  
(Start: 2 @5634 has 104 MA's), (6, 5784),

Gene: Exploradora\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Exploradora\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Figueroism\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Figueroism\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: GaeCeo\_8 Start: 5757, Stop: 5999, Start Num: 2

Candidate Starts for GaeCeo\_8:  
(Start: 2 @5757 has 104 MA's), (5, 5877),

Gene: Garey24\_7 Start: 5636, Stop: 5881, Start Num: 2  
Candidate Starts for Garey24\_7:  
(Start: 2 @5636 has 104 MA's), (6, 5786),

Gene: Gargoyle\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Gargoyle\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Gelo\_7 Start: 5634, Stop: 5879, Start Num: 2  
Candidate Starts for Gelo\_7:  
(Start: 2 @5634 has 104 MA's), (6, 5784),

Gene: Gershwin\_7 Start: 5645, Stop: 5896, Start Num: 2  
Candidate Starts for Gershwin\_7:  
(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: Greys\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Greys\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Gubbabump\_7 Start: 5633, Stop: 5884, Start Num: 2  
Candidate Starts for Gubbabump\_7:  
(Start: 2 @5633 has 104 MA's), (6, 5783),

Gene: HanSolo\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for HanSolo\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: HankSprout\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for HankSprout\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: HungryHenry\_7 Start: 5632, Stop: 5883, Start Num: 2  
Candidate Starts for HungryHenry\_7:  
(Start: 2 @5632 has 104 MA's), (6, 5782),

Gene: Ilzat\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Ilzat\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Inventa\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Inventa\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Ioannes\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Ioannes\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Janus167\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Janus167\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: JasperRussell\_7 Start: 5631, Stop: 5882, Start Num: 2

Candidate Starts for JasperRussell\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Jerbirus\_7 Start: 5631, Stop: 5882, Start Num: 2

Candidate Starts for Jerbirus\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: JeriBeth\_7 Start: 5631, Stop: 5876, Start Num: 2

Candidate Starts for JeriBeth\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Kale\_7 Start: 5647, Stop: 5898, Start Num: 2

Candidate Starts for Kale\_7:

(Start: 2 @5647 has 104 MA's), (6, 5797),

Gene: KannH\_7 Start: 5631, Stop: 5882, Start Num: 2

Candidate Starts for KannH\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Klimt\_7 Start: 5632, Stop: 5877, Start Num: 2

Candidate Starts for Klimt\_7:

(Start: 2 @5632 has 104 MA's), (6, 5782),

Gene: Knox\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Knox\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Kurt1\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Kurt1\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Lovelyunicorn\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Lovelyunicorn\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Ludgate\_7 Start: 5631, Stop: 5873, Start Num: 2

Candidate Starts for Ludgate\_7:

(Start: 2 @5631 has 104 MA's), (7, 5793),

Gene: MaeLinda\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for MaeLinda\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: ManRay\_7 Start: 5645, Stop: 5896, Start Num: 2

Candidate Starts for ManRay\_7:

(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: Martin\_8 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Martin\_8:

(Start: 2 @5631 has 104 MA's), (6, 5781),



Gene: MillyPhilly\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for MillyPhilly\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: MonChoix\_7 Start: 5651, Stop: 5911, Start Num: 2  
Candidate Starts for MonChoix\_7:  
(Start: 2 @5651 has 104 MA's), (6, 5801),

Gene: MrWorldwide\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for MrWorldwide\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Nagem\_7 Start: 5631, Stop: 5873, Start Num: 2  
Candidate Starts for Nagem\_7:  
(Start: 2 @5631 has 104 MA's), (7, 5793),

Gene: Nattles\_7 Start: 5636, Stop: 5881, Start Num: 2  
Candidate Starts for Nattles\_7:  
(Start: 2 @5636 has 104 MA's), (6, 5786),

Gene: NickSell\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for NickSell\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Oats\_7 Start: 5645, Stop: 5896, Start Num: 2  
Candidate Starts for Oats\_7:  
(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: OldNelly\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for OldNelly\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Oxtober96\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Oxtober96\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Papafritta\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Papafritta\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: ParleG\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for ParleG\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Peep\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Peep\_7:  
(Start: 2 @5631 has 104 MA's), (4, 5697), (6, 5781),

Gene: Pherferi\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Pherferi\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Phiderman\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Phiderman\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Phireproof\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Phireproof\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: PhredFlintston\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for PhredFlintston\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Phriends\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Phriends\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Pocket\_7 Start: 5630, Stop: 5881, Start Num: 2  
Candidate Starts for Pocket\_7:  
(Start: 2 @5630 has 104 MA's), (6, 5780),

Gene: PuppyEggo\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for PuppyEggo\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Rapheph\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Rapheph\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Raptor\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Raptor\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Renzie\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Renzie\_7:  
(Start: 2 @5631 has 104 MA's), (4, 5697), (6, 5781),

Gene: Riyhil\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Riyhil\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Robinson\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Robinson\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Rog141\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Rog141\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: RosieMae\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for RosieMae\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: SJay\_7 Start: 5632, Stop: 5874, Start Num: 2

Candidate Starts for SJay\_7:  
(Start: 2 @5632 has 104 MA's), (7, 5794),

Gene: Sedgewig\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Sedgewig\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: ShaiHulud\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for ShaiHulud\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Shee\_7 Start: 5628, Stop: 5876, Start Num: 2  
Candidate Starts for Shee\_7:  
(Start: 2 @5628 has 104 MA's), (6, 5778),

Gene: SoilGremlin\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for SoilGremlin\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: SonOfLevi\_7 Start: 5632, Stop: 5877, Start Num: 2  
Candidate Starts for SonOfLevi\_7:  
(Start: 2 @5632 has 104 MA's), (6, 5782),

Gene: Stanktossa\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Stanktossa\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: StingRay\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for StingRay\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: StirfryIV\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for StirfryIV\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Strathdee\_7 Start: 5632, Stop: 5880, Start Num: 2  
Candidate Starts for Strathdee\_7:  
(Start: 2 @5632 has 104 MA's), (6, 5782),

Gene: Superfresh\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for Superfresh\_7:  
(Start: 2 @5631 has 104 MA's), (4, 5697), (6, 5781),

Gene: Symere\_7 Start: 5631, Stop: 5882, Start Num: 2  
Candidate Starts for Symere\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: TatarkaPM\_7 Start: 5631, Stop: 5879, Start Num: 2  
Candidate Starts for TatarkaPM\_7:  
(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Teagan\_7 Start: 5631, Stop: 5873, Start Num: 2  
Candidate Starts for Teagan\_7:

(Start: 2 @5631 has 104 MA's), (7, 5793),

Gene: TeddyBear\_7 Start: 5645, Stop: 5896, Start Num: 2

Candidate Starts for TeddyBear\_7:

(Start: 2 @5645 has 104 MA's), (6, 5795),

Gene: Tenda\_7 Start: 5643, Stop: 5894, Start Num: 2

Candidate Starts for Tenda\_7:

(Start: 2 @5643 has 104 MA's), (6, 5793),

Gene: Thompsone\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Thompsone\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Thorongil\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Thorongil\_7:

(Start: 2 @5631 has 104 MA's), (3, 5637), (6, 5781),

Gene: TinSulphur\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for TinSulphur\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Velene\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Velene\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Vispitious\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Vispitious\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: WildNOut\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for WildNOut\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),

Gene: Winzigespinne\_7 Start: 5630, Stop: 5881, Start Num: 2

Candidate Starts for Winzigespinne\_7:

(Start: 2 @5630 has 104 MA's), (6, 5780),

Gene: Zada\_7 Start: 5631, Stop: 5879, Start Num: 2

Candidate Starts for Zada\_7:

(Start: 2 @5631 has 104 MA's), (6, 5781),