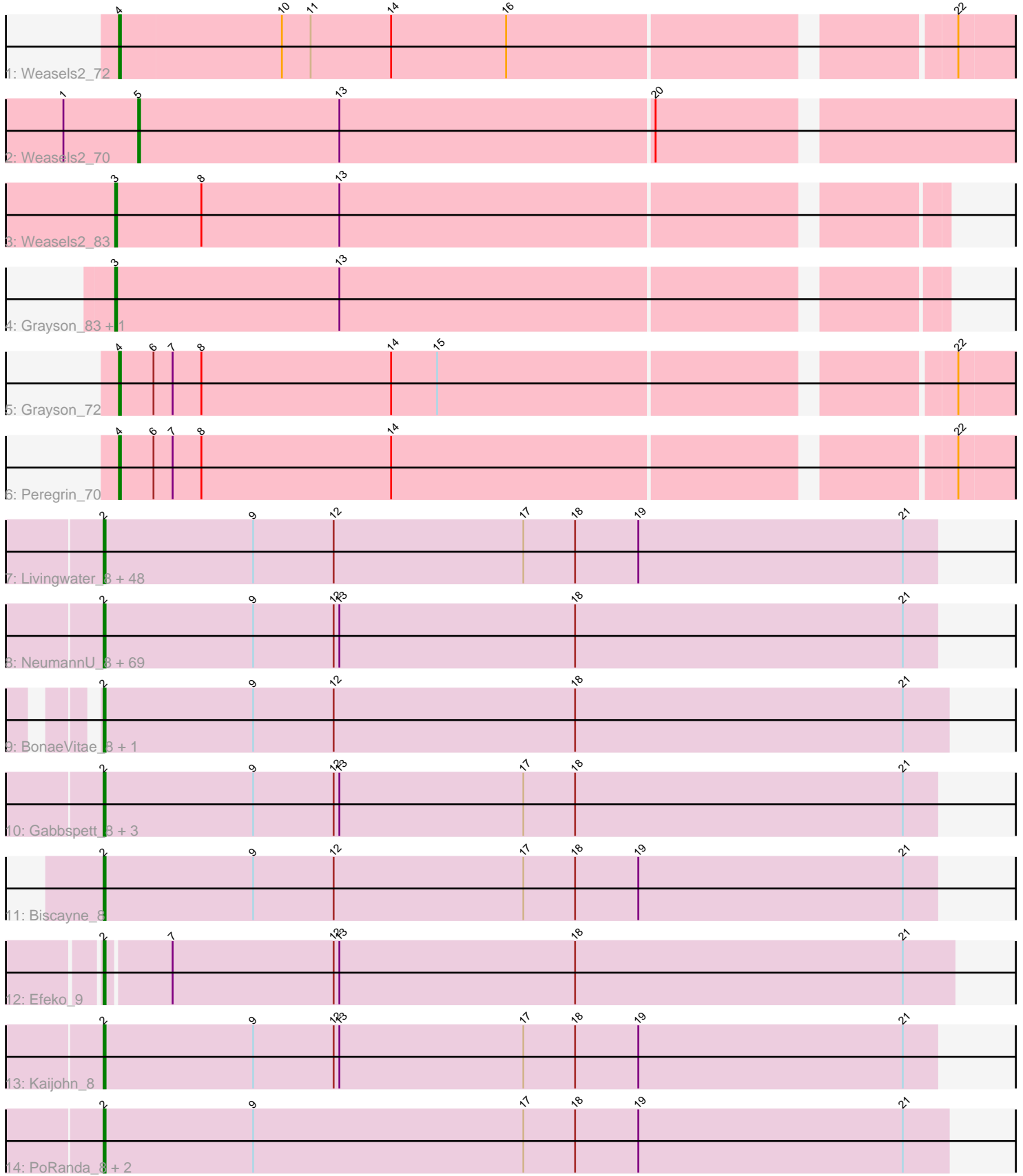


Pham 167999



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 167999 Report

This analysis was run 07/09/24 on database version 566.

Pham number 167999 has 138 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Weasels2\_72
- Track 2 : Weasels2\_70
- Track 3 : Weasels2\_83
- Track 4 : Grayson\_83, Peregrin\_81
- Track 5 : Grayson\_72
- Track 6 : Peregrin\_70
- Track 7 : Livingwater\_8, KillerTomato\_8, Namsahir\_8, Nobel\_8, Baine\_8, Lola20\_8, TinyTruffula\_8, HarperAnne\_8, Slizam\_8, MrGreen\_8, JRok\_8, McShie\_8, Ekko14\_8, Elspeth\_8, Cayde6\_8, Lunatic\_8, JooneeDee\_8, BrokMonster\_8, Concrete\_8, Quaker\_8, Miaurora\_8, MelBee03\_8, Belthelas\_8, Bri160\_8, TomBrady12\_8, Niffler\_8, Bodhi17\_8, Bintii\_8, Bullzi2019\_8, Oaklynn\_8, Anseraureola\_8, Noelani\_8, Kevanna\_8, Yami\_8, Snuffles\_9, Cazares\_8, Sippinontea\_8, PuffyCat\_8, Stem\_8, Loca\_8, Duggie\_8, Leafy\_8, Publix\_8, Clownery\_8, Wolfpack\_8, BoomRoasted\_8, KayPaulus\_8, Azizam\_8, Trireme\_8
- Track 8 : NeumannU\_8, KyriosFaba\_8, Goobery\_8, Luxx\_8, Majesty\_8, Alucard\_8, SeaWolves\_8, Erin\_8, Minima\_8, Scamander\_8, Ciel\_8, ManAs\_8, JoBros\_8, Yasuo\_8, Jahseh\_8, Eightball\_8, Horacetta\_8, RoscoWindex\_8, Aztec\_8, Vanisius\_8, TimoTea\_8, Owens\_8, Avvas\_8, Gillker\_8, SantasSleigh\_8, Gardevoir\_8, Bradley2\_8, Dooby\_8, Dongwon\_8, Jannah\_8, TeddyBoy\_8, GoldenBlanche\_8, MasterPitts\_8, LionelHutz\_8, Otwor\_8, Charbie\_8, JaimeB\_8, Astro16\_8, Picnic\_8, LaviMo\_8, Sara\_8, DaftyDuck\_8, Rhogar\_8, Slentz\_8, PaoPu\_8, Puddles3\_8, LemonPepper\_8, Maneater\_8, Josuke\_8, Yubaba\_8, BarBear\_8, Burgy\_8, BurtonThePup\_8, YertPhresh\_8, Hulk\_8, Danimal\_8, Godfather\_8, Octopus\_8, Rhysand\_8, Chatham\_8, Sage7\_8, BinkBonk\_8, EdElric\_8, Scrunchy\_8, Aries55\_8, Danno\_8, Pondwater\_8, Witch\_8, Kojax4\_8, Cheesecake\_8
- Track 9 : BonaeVitae\_8, Naby\_8
- Track 10 : Gabbspett\_8, VitulaEligans\_8, Jerky\_8, Hernandez44\_8
- Track 11 : Biscayne\_8
- Track 12 : Efeko\_9
- Track 13 : Kaijohn\_8
- Track 14 : PoRanda\_8, MirimarMandM\_8, Upsilon\_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 111 of the 118 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alucard\_8, Anseraureola\_8, Aries55\_8, Astro16\_8, Avvas\_8, Azizam\_8, Aztec\_8, Baine\_8, BarBear\_8, Belthelas\_8, BinkBonk\_8, Bintii\_8, Biscayne\_8, Bodhi17\_8, BonaeVitae\_8, BoomRoasted\_8, Bradley2\_8, Bri160\_8, BrokMonster\_8, Bullzi2019\_8, Burgy\_8, BurtonThePup\_8, Cayde6\_8, Cazares\_8, Charbie\_8, Chatham\_8, Cheesecake\_8, Ciel\_8, Clownery\_8, Concrete\_8, DaftyDuck\_8, Danimal\_8, Danno\_8, Dongwon\_8, Dooby\_8, Douggie\_8, EdElric\_8, Efeko\_9, Eightball\_8, Ekko14\_8, Elspeth\_8, Erin\_8, Gabbspett\_8, Gardevoir\_8, Gillker\_8, Godfather\_8, GoldenBlanche\_8, Goobery\_8, HarperAnne\_8, Hernandez44\_8, Horacetta\_8, Hulk\_8, JRok\_8, Jahseh\_8, JaimeB\_8, Jannah\_8, Jerky\_8, JoBros\_8, JooneeDee\_8, Josuke\_8, Kaijohn\_8, KayPaulus\_8, Kevanna\_8, KillerTomato\_8, Kojax4\_8, KyriosFaba\_8, LaviMo\_8, Leafy\_8, LemonPepper\_8, LionelHutz\_8, Livingwater\_8, Loca\_8, Lola20\_8, Lunatic\_8, Luxx\_8, Majesty\_8, ManAs\_8, Maneater\_8, MasterPitts\_8, McShie\_8, MelBee03\_8, Miaurora\_8, Minima\_8, MirimarMandM\_8, MrGreen\_8, Naby\_8, Namsahir\_8, NeumannU\_8, Niffler\_8, Nobel\_8, Noelani\_8, Oaklynn\_8, Octopus\_8, Otwor\_8, Owens\_8, PaoPu\_8, Picnic\_8, PoRanda\_8, Pondwater\_8, Publix\_8, Puddles3\_8, PuffyCat\_8, Quaker\_8, Rhogar\_8, Rhysand\_8, RoscoWindex\_8, Sage7\_8, SantasSleigh\_8, Sara\_8, Scamander\_8, Scrunchy\_8, SeaWolves\_8, Sippinontea\_8, Slentz\_8, Slizam\_8, Snuffles\_9, Stem\_8, TeddyBoy\_8, TimoTea\_8, TinyTruffula\_8, TomBrady12\_8, Trireme\_8, Upsilon\_8, Vanisius\_8, VitulaEligans\_8, Witch\_8, Wolfpack\_8, Yami\_8, Yasuo\_8, YertPhresh\_8, Yubaba\_8,

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

- 

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

- Grayson\_72, Grayson\_83, Peregrin\_70, Peregrin\_81, Weasels2\_70, Weasels2\_72, Weasels2\_83,

### Summary by start number:

Start 2:

- Found in 131 of 138 ( 94.9% ) of genes in pham
- Manual Annotations of this start: 111 of 118
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alucard\_8 (EE), Anseraureola\_8 (EE), Aries55\_8 (EE), Astro16\_8 (EE), Avvas\_8 (EE), Azizam\_8 (EE), Aztec\_8 (EE), Baine\_8 (EE), BarBear\_8 (EE), Belthelas\_8 (EE), BinkBonk\_8 (EE), Bintii\_8 (EE), Biscayne\_8 (EE), Bodhi17\_8 (EE), BonaeVitae\_8 (EE), BoomRoasted\_8 (EE), Bradley2\_8 (EE), Bri160\_8 (EE), BrokMonster\_8 (EE), Bullzi2019\_8 (EE), Burgy\_8 (EE), BurtonThePup\_8 (EE), Cayde6\_8 (EE), Cazares\_8 (EE), Charbie\_8 (EE), Chatham\_8 (EE), Cheesecake\_8 (EE), Ciel\_8 (EE), Clownery\_8 (EE), Concrete\_8 (EE), DaftyDuck\_8 (EE), Danimal\_8 (EE), Danno\_8 (EE), Dongwon\_8 (EE), Dooby\_8 (EE), Douggie\_8 (EE), EdElric\_8 (EE), Efeko\_9 (EE), Eightball\_8 (EE), Ekko14\_8 (EE), Elspeth\_8 (EE), Erin\_8 (EE), Gabbspett\_8 (EE), Gardevoir\_8 (EE), Gillker\_8 (EE), Godfather\_8 (EE), GoldenBlanche\_8 (EE), Goobery\_8 (EE), HarperAnne\_8 (EE), Hernandez44\_8 (EE), Horacetta\_8 (EE), Hulk\_8 (EE), JRok\_8 (EE), Jahseh\_8 (EE), JaimeB\_8 (EE), Jannah\_8 (EE), Jerky\_8 (EE), JoBros\_8 (EE), JooneeDee\_8 (EE), Josuke\_8 (EE), Kaijohn\_8 (EE), KayPaulus\_8 (EE), Kevanna\_8 (EE),

KillerTomato\_8 (EE), Kojax4\_8 (EE), KyriosFaba\_8 (EE), LaviMo\_8 (EE), Leafy\_8 (EE), LemonPepper\_8 (EE), LionelHutz\_8 (EE), Livingwater\_8 (EE), Loca\_8 (EE), Lola20\_8 (EE), Lunatic\_8 (EE), Luxx\_8 (EE), Majesty\_8 (EE), ManAs\_8 (EE), Maneater\_8 (EE), MasterPitts\_8 (EE), McShie\_8 (EE), MelBee03\_8 (EE), Miaurora\_8 (EE), Minima\_8 (EE), MirimarMandM\_8 (EE), MrGreen\_8 (EE), Naby\_8 (EE), Namsahir\_8 (EE), NeumannU\_8 (EE), Niffler\_8 (EE), Nobel\_8 (EE), Noelani\_8 (EE), Oaklynn\_8 (EE), Octopus\_8 (EE), Otwor\_8 (EE), Owens\_8 (EE), PaoPu\_8 (EE), Picnic\_8 (EE), PoRanda\_8 (EE), Pondwater\_8 (EE), Publix\_8 (EE), Puddles3\_8 (EE), PuffyCat\_8 (EE), Quaker\_8 (EE), Rhogar\_8 (EE), Rhysand\_8 (EE), RoscoWindex\_8 (EE), Sage7\_8 (EE), SantasSleigh\_8 (EE), Sara\_8 (EE), Scamander\_8 (EE), Scrunchy\_8 (EE), SeaWolves\_8 (EE), Sippinontea\_8 (EE), Slentz\_8 (EE), Slizam\_8 (EE), Snuffles\_9 (EE), Stem\_8 (EE), TeddyBoy\_8 (EE), TimoTea\_8 (EE), TinyTruffula\_8 (EE), TomBrady12\_8 (EE), Trireme\_8 (EE), Upsilon\_8 (EE), Vanisius\_8 (EE), VitulaEligans\_8 (EE), Witch\_8 (EE), Wolfpack\_8 (EE), Yami\_8 (EE), Yasuo\_8 (EE), YertPhresh\_8 (EE), Yubaba\_8 (EE),

#### Start 3:

- Found in 3 of 138 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 3 of 118
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_83 (CB), Peregrin\_81 (CB), Weasels2\_83 (CB),

#### Start 4:

- Found in 3 of 138 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 3 of 118
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_72 (CB), Peregrin\_70 (CB), Weasels2\_72 (CB),

#### Start 5:

- Found in 1 of 138 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 118
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Weasels2\_70 (CB),

### **Summary by clusters:**

There are 2 clusters represented in this pham: EE, CB,

Info for manual annotations of cluster CB:

- Start number 3 was manually annotated 3 times for cluster CB.
- Start number 4 was manually annotated 3 times for cluster CB.
- Start number 5 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster EE:

- Start number 2 was manually annotated 111 times for cluster EE.

### **Gene Information:**

Gene: Alucard\_8 Start: 6143, Stop: 6577, Start Num: 2

Candidate Starts for Alucard\_8:

(Start: 2 @6143 has 111 MA's), (9, 6221), (12, 6263), (13, 6266), (18, 6389), (21, 6560),

Gene: Anseraureola\_8 Start: 6166, Stop: 6600, Start Num: 2

Candidate Starts for Anseraureola\_8:

(Start: 2 @6166 has 111 MA's), (9, 6244), (12, 6286), (17, 6385), (18, 6412), (19, 6445), (21, 6583),

Gene: Aries55\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Aries55\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Astro16\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Astro16\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Avvas\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Avvas\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Azizam\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Azizam\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (17, 6361), (18, 6388), (19, 6421), (21, 6559),

Gene: Aztec\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Aztec\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Baine\_8 Start: 6139, Stop: 6573, Start Num: 2

Candidate Starts for Baine\_8:

(Start: 2 @6139 has 111 MA's), (9, 6217), (12, 6259), (17, 6358), (18, 6385), (19, 6418), (21, 6556),

Gene: BarBear\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for BarBear\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Belthelas\_8 Start: 6193, Stop: 6627, Start Num: 2

Candidate Starts for Belthelas\_8:

(Start: 2 @6193 has 111 MA's), (9, 6271), (12, 6313), (17, 6412), (18, 6439), (19, 6472), (21, 6610),

Gene: BinkBonk\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for BinkBonk\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Bintii\_8 Start: 6169, Stop: 6609, Start Num: 2

Candidate Starts for Bintii\_8:

(Start: 2 @6169 has 111 MA's), (9, 6247), (12, 6289), (17, 6388), (18, 6415), (19, 6448), (21, 6586),

Gene: Biscayne\_8 Start: 6202, Stop: 6636, Start Num: 2

Candidate Starts for Biscayne\_8:

(Start: 2 @6202 has 111 MA's), (9, 6280), (12, 6322), (17, 6421), (18, 6448), (19, 6481), (21, 6619),

Gene: Bodhi17\_8 Start: 6136, Stop: 6570, Start Num: 2

Candidate Starts for Bodhi17\_8:

(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: BonaeVitae\_8 Start: 5865, Stop: 6305, Start Num: 2

Candidate Starts for BonaeVitae\_8:

(Start: 2 @5865 has 111 MA's), (9, 5943), (12, 5985), (18, 6111), (21, 6282),

Gene: BoomRoasted\_8 Start: 6190, Stop: 6624, Start Num: 2

Candidate Starts for BoomRoasted\_8:

(Start: 2 @6190 has 111 MA's), (9, 6268), (12, 6310), (17, 6409), (18, 6436), (19, 6469), (21, 6607),

Gene: Bradley2\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Bradley2\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Bri160\_8 Start: 6190, Stop: 6624, Start Num: 2

Candidate Starts for Bri160\_8:

(Start: 2 @6190 has 111 MA's), (9, 6268), (12, 6310), (17, 6409), (18, 6436), (19, 6469), (21, 6607),

Gene: BrokMonster\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for BrokMonster\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (17, 6361), (18, 6388), (19, 6421), (21, 6559),

Gene: Bullzi2019\_8 Start: 6160, Stop: 6597, Start Num: 2

Candidate Starts for Bullzi2019\_8:

(Start: 2 @6160 has 111 MA's), (9, 6238), (12, 6280), (17, 6379), (18, 6406), (19, 6439), (21, 6577),

Gene: Burgy\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Burgy\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: BurtonThePup\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for BurtonThePup\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Cayde6\_8 Start: 6139, Stop: 6573, Start Num: 2

Candidate Starts for Cayde6\_8:

(Start: 2 @6139 has 111 MA's), (9, 6217), (12, 6259), (17, 6358), (18, 6385), (19, 6418), (21, 6556),

Gene: Cazares\_8 Start: 6130, Stop: 6567, Start Num: 2

Candidate Starts for Cazares\_8:

(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (17, 6349), (18, 6376), (19, 6409), (21, 6547),

Gene: Charbie\_8 Start: 6130, Stop: 6564, Start Num: 2

Candidate Starts for Charbie\_8:

(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (13, 6253), (18, 6376), (21, 6547),

Gene: Chatham\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Chatham\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Cheesecake\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Cheesecake\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Ciel\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Ciel\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Clownery\_8 Start: 6247, Stop: 6684, Start Num: 2

Candidate Starts for Clownery\_8:

(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (17, 6466), (18, 6493), (19, 6526), (21, 6664),

Gene: Concrete\_8 Start: 6190, Stop: 6624, Start Num: 2

Candidate Starts for Concrete\_8:

(Start: 2 @6190 has 111 MA's), (9, 6268), (12, 6310), (17, 6409), (18, 6436), (19, 6469), (21, 6607),

Gene: DaftyDuck\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for DaftyDuck\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Danimal\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Danimal\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Danno\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Danno\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Dongwon\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Dongwon\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Dooby\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Dooby\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Douggie\_8 Start: 6136, Stop: 6570, Start Num: 2

Candidate Starts for Douggie\_8:

(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: EdElric\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for EdElric\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Efeko\_9 Start: 6030, Stop: 6470, Start Num: 2

Candidate Starts for Efeko\_9:

(Start: 2 @6030 has 111 MA's), (7, 6063), (12, 6147), (13, 6150), (18, 6273), (21, 6444),

Gene: Eightball\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Eightball\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Ekko14\_8 Start: 6127, Stop: 6564, Start Num: 2

Candidate Starts for Ekko14\_8:

(Start: 2 @6127 has 111 MA's), (9, 6205), (12, 6247), (17, 6346), (18, 6373), (19, 6406), (21, 6544),

Gene: Elspeth\_8 Start: 6127, Stop: 6564, Start Num: 2  
Candidate Starts for Elspeth\_8:  
(Start: 2 @6127 has 111 MA's), (9, 6205), (12, 6247), (17, 6346), (18, 6373), (19, 6406), (21, 6544),

Gene: Erin\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Erin\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Gabbspett\_8 Start: 6247, Stop: 6681, Start Num: 2  
Candidate Starts for Gabbspett\_8:  
(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (13, 6370), (17, 6466), (18, 6493), (21, 6664),

Gene: Gardevoir\_8 Start: 6143, Stop: 6577, Start Num: 2  
Candidate Starts for Gardevoir\_8:  
(Start: 2 @6143 has 111 MA's), (9, 6221), (12, 6263), (13, 6266), (18, 6389), (21, 6560),

Gene: Gillker\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Gillker\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Godfather\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Godfather\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: GoldenBlanche\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for GoldenBlanche\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Goobery\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Goobery\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Grayson\_83 Start: 43154, Stop: 43570, Start Num: 3  
Candidate Starts for Grayson\_83:  
(Start: 3 @43154 has 3 MA's), (13, 43271),

Gene: Grayson\_72 Start: 32748, Stop: 33194, Start Num: 4  
Candidate Starts for Grayson\_72:  
(Start: 4 @32748 has 3 MA's), (6, 32766), (7, 32775), (8, 32790), (14, 32889), (15, 32913), (22, 33165),

Gene: HarperAnne\_8 Start: 6127, Stop: 6564, Start Num: 2  
Candidate Starts for HarperAnne\_8:  
(Start: 2 @6127 has 111 MA's), (9, 6205), (12, 6247), (17, 6346), (18, 6373), (19, 6406), (21, 6544),

Gene: Hernandez44\_8 Start: 6247, Stop: 6681, Start Num: 2  
Candidate Starts for Hernandez44\_8:  
(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (13, 6370), (17, 6466), (18, 6493), (21, 6664),

Gene: Horacetta\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Horacetta\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),



Gene: Hulk\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Hulk\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: JRok\_8 Start: 6139, Stop: 6573, Start Num: 2  
Candidate Starts for JRok\_8:  
(Start: 2 @6139 has 111 MA's), (9, 6217), (12, 6259), (17, 6358), (18, 6385), (19, 6418), (21, 6556),

Gene: Jahseh\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Jahseh\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: JaimeB\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for JaimeB\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Jannah\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Jannah\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Jerky\_8 Start: 6226, Stop: 6660, Start Num: 2  
Candidate Starts for Jerky\_8:  
(Start: 2 @6226 has 111 MA's), (9, 6304), (12, 6346), (13, 6349), (17, 6445), (18, 6472), (21, 6643),

Gene: JoBros\_8 Start: 6143, Stop: 6577, Start Num: 2  
Candidate Starts for JoBros\_8:  
(Start: 2 @6143 has 111 MA's), (9, 6221), (12, 6263), (13, 6266), (18, 6389), (21, 6560),

Gene: JooneeDee\_8 Start: 6169, Stop: 6609, Start Num: 2  
Candidate Starts for JooneeDee\_8:  
(Start: 2 @6169 has 111 MA's), (9, 6247), (12, 6289), (17, 6388), (18, 6415), (19, 6448), (21, 6586),

Gene: Josuke\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Josuke\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Kaijohn\_8 Start: 6145, Stop: 6579, Start Num: 2  
Candidate Starts for Kaijohn\_8:  
(Start: 2 @6145 has 111 MA's), (9, 6223), (12, 6265), (13, 6268), (17, 6364), (18, 6391), (19, 6424),  
(21, 6562),

Gene: KayPaulus\_8 Start: 6136, Stop: 6570, Start Num: 2  
Candidate Starts for KayPaulus\_8:  
(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Kevanna\_8 Start: 6136, Stop: 6570, Start Num: 2  
Candidate Starts for Kevanna\_8:  
(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: KillerTomato\_8 Start: 6190, Stop: 6624, Start Num: 2  
Candidate Starts for KillerTomato\_8:  
(Start: 2 @6190 has 111 MA's), (9, 6268), (12, 6310), (17, 6409), (18, 6436), (19, 6469), (21, 6607),

Gene: Kojax4\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Kojax4\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: KyriosFaba\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for KyriosFaba\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: LaviMo\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for LaviMo\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Leafy\_8 Start: 6160, Stop: 6594, Start Num: 2  
Candidate Starts for Leafy\_8:  
(Start: 2 @6160 has 111 MA's), (9, 6238), (12, 6280), (17, 6379), (18, 6406), (19, 6439), (21, 6577),

Gene: LemonPepper\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for LemonPepper\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: LionelHutz\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for LionelHutz\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Livingwater\_8 Start: 6136, Stop: 6570, Start Num: 2  
Candidate Starts for Livingwater\_8:  
(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Loca\_8 Start: 6163, Stop: 6597, Start Num: 2  
Candidate Starts for Loca\_8:  
(Start: 2 @6163 has 111 MA's), (9, 6241), (12, 6283), (17, 6382), (18, 6409), (19, 6442), (21, 6580),

Gene: Lola20\_8 Start: 6139, Stop: 6573, Start Num: 2  
Candidate Starts for Lola20\_8:  
(Start: 2 @6139 has 111 MA's), (9, 6217), (12, 6259), (17, 6358), (18, 6385), (19, 6418), (21, 6556),

Gene: Lunatic\_8 Start: 6130, Stop: 6567, Start Num: 2  
Candidate Starts for Lunatic\_8:  
(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (17, 6349), (18, 6376), (19, 6409), (21, 6547),

Gene: Luxx\_8 Start: 6166, Stop: 6600, Start Num: 2  
Candidate Starts for Luxx\_8:  
(Start: 2 @6166 has 111 MA's), (9, 6244), (12, 6286), (13, 6289), (18, 6412), (21, 6583),

Gene: Majesty\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Majesty\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: ManAs\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for ManAs\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Maneater\_8 Start: 6130, Stop: 6564, Start Num: 2

Candidate Starts for Maneater\_8:

(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (13, 6253), (18, 6376), (21, 6547),

Gene: MasterPitts\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for MasterPitts\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: McShie\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for McShie\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (17, 6361), (18, 6388), (19, 6421), (21, 6559),

Gene: MelBee03\_8 Start: 6136, Stop: 6570, Start Num: 2

Candidate Starts for MelBee03\_8:

(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Miaurora\_8 Start: 6247, Stop: 6684, Start Num: 2

Candidate Starts for Miaurora\_8:

(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (17, 6466), (18, 6493), (19, 6526), (21, 6664),

Gene: Minima\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Minima\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: MirimarMandM\_8 Start: 6211, Stop: 6651, Start Num: 2

Candidate Starts for MirimarMandM\_8:

(Start: 2 @6211 has 111 MA's), (9, 6289), (17, 6430), (18, 6457), (19, 6490), (21, 6628),

Gene: MrGreen\_8 Start: 6157, Stop: 6591, Start Num: 2

Candidate Starts for MrGreen\_8:

(Start: 2 @6157 has 111 MA's), (9, 6235), (12, 6277), (17, 6376), (18, 6403), (19, 6436), (21, 6574),

Gene: Naby\_8 Start: 5865, Stop: 6305, Start Num: 2

Candidate Starts for Naby\_8:

(Start: 2 @5865 has 111 MA's), (9, 5943), (12, 5985), (18, 6111), (21, 6282),

Gene: Namsahir\_8 Start: 6202, Stop: 6639, Start Num: 2

Candidate Starts for Namsahir\_8:

(Start: 2 @6202 has 111 MA's), (9, 6280), (12, 6322), (17, 6421), (18, 6448), (19, 6481), (21, 6619),

Gene: NeumannU\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for NeumannU\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Niffler\_8 Start: 6220, Stop: 6657, Start Num: 2

Candidate Starts for Niffler\_8:

(Start: 2 @6220 has 111 MA's), (9, 6298), (12, 6340), (17, 6439), (18, 6466), (19, 6499), (21, 6637),

Gene: Nobel\_8 Start: 6247, Stop: 6684, Start Num: 2

Candidate Starts for Nobel\_8:

(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (17, 6466), (18, 6493), (19, 6526), (21, 6664),

Gene: Noelani\_8 Start: 6127, Stop: 6561, Start Num: 2

Candidate Starts for Noelani\_8:

(Start: 2 @6127 has 111 MA's), (9, 6205), (12, 6247), (17, 6346), (18, 6373), (19, 6406), (21, 6544),

Gene: Oaklynn\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Oaklynn\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (17, 6361), (18, 6388), (19, 6421), (21, 6559),

Gene: Octopus\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Octopus\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Otwor\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Otwor\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Owens\_8 Start: 6154, Stop: 6588, Start Num: 2

Candidate Starts for Owens\_8:

(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: PaoPu\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for PaoPu\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Peregrin\_81 Start: 41934, Stop: 42350, Start Num: 3

Candidate Starts for Peregrin\_81:

(Start: 3 @41934 has 3 MA's), (13, 42051),

Gene: Peregrin\_70 Start: 31530, Stop: 31976, Start Num: 4

Candidate Starts for Peregrin\_70:

(Start: 4 @31530 has 3 MA's), (6, 31548), (7, 31557), (8, 31572), (14, 31671), (22, 31947),

Gene: Picnic\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Picnic\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: PoRanda\_8 Start: 6211, Stop: 6651, Start Num: 2

Candidate Starts for PoRanda\_8:

(Start: 2 @6211 has 111 MA's), (9, 6289), (17, 6430), (18, 6457), (19, 6490), (21, 6628),

Gene: Pondwater\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Pondwater\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Publix\_8 Start: 6202, Stop: 6639, Start Num: 2

Candidate Starts for Publix\_8:

(Start: 2 @6202 has 111 MA's), (9, 6280), (12, 6322), (17, 6421), (18, 6448), (19, 6481), (21, 6619),

Gene: Puddles3\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for Puddles3\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: PuffyCat\_8 Start: 6172, Stop: 6609, Start Num: 2

Candidate Starts for PuffyCat\_8:

(Start: 2 @6172 has 111 MA's), (9, 6250), (12, 6292), (17, 6391), (18, 6418), (19, 6451), (21, 6589),

Gene: Quaker\_8 Start: 6136, Stop: 6570, Start Num: 2  
Candidate Starts for Quaker\_8:  
(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Rhogar\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Rhogar\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Rhysand\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Rhysand\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: RoscoWindex\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for RoscoWindex\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Sage7\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Sage7\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: SantasSleigh\_8 Start: 6178, Stop: 6612, Start Num: 2  
Candidate Starts for SantasSleigh\_8:  
(Start: 2 @6178 has 111 MA's), (9, 6256), (12, 6298), (13, 6301), (18, 6424), (21, 6595),

Gene: Sara\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for Sara\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Scamander\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Scamander\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Scrunchy\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Scrunchy\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: SeaWolves\_8 Start: 6142, Stop: 6576, Start Num: 2  
Candidate Starts for SeaWolves\_8:  
(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Sippinontea\_8 Start: 6136, Stop: 6570, Start Num: 2  
Candidate Starts for Sippinontea\_8:  
(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Slentz\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Slentz\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: Slizam\_8 Start: 6178, Stop: 6615, Start Num: 2  
Candidate Starts for Slizam\_8:  
(Start: 2 @6178 has 111 MA's), (9, 6256), (12, 6298), (17, 6397), (18, 6424), (19, 6457), (21, 6595),

Gene: Snuffles\_9 Start: 6348, Stop: 6785, Start Num: 2  
Candidate Starts for Snuffles\_9:  
(Start: 2 @6348 has 111 MA's), (9, 6426), (12, 6468), (17, 6567), (18, 6594), (19, 6627), (21, 6765),

Gene: Stem\_8 Start: 6178, Stop: 6615, Start Num: 2  
Candidate Starts for Stem\_8:  
(Start: 2 @6178 has 111 MA's), (9, 6256), (12, 6298), (17, 6397), (18, 6424), (19, 6457), (21, 6595),

Gene: TeddyBoy\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for TeddyBoy\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: TimoTea\_8 Start: 6130, Stop: 6564, Start Num: 2  
Candidate Starts for TimoTea\_8:  
(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (13, 6253), (18, 6376), (21, 6547),

Gene: TinyTruffula\_8 Start: 6247, Stop: 6684, Start Num: 2  
Candidate Starts for TinyTruffula\_8:  
(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (17, 6466), (18, 6493), (19, 6526), (21, 6664),

Gene: TomBrady12\_8 Start: 6178, Stop: 6615, Start Num: 2  
Candidate Starts for TomBrady12\_8:  
(Start: 2 @6178 has 111 MA's), (9, 6256), (12, 6298), (17, 6397), (18, 6424), (19, 6457), (21, 6595),

Gene: Trireme\_8 Start: 6247, Stop: 6684, Start Num: 2  
Candidate Starts for Trireme\_8:  
(Start: 2 @6247 has 111 MA's), (9, 6325), (12, 6367), (17, 6466), (18, 6493), (19, 6526), (21, 6664),

Gene: Upsilon\_8 Start: 6211, Stop: 6651, Start Num: 2  
Candidate Starts for Upsilon\_8:  
(Start: 2 @6211 has 111 MA's), (9, 6289), (17, 6430), (18, 6457), (19, 6490), (21, 6628),

Gene: Vanisius\_8 Start: 6154, Stop: 6588, Start Num: 2  
Candidate Starts for Vanisius\_8:  
(Start: 2 @6154 has 111 MA's), (9, 6232), (12, 6274), (13, 6277), (18, 6400), (21, 6571),

Gene: VitulaEligans\_8 Start: 6226, Stop: 6660, Start Num: 2  
Candidate Starts for VitulaEligans\_8:  
(Start: 2 @6226 has 111 MA's), (9, 6304), (12, 6346), (13, 6349), (17, 6445), (18, 6472), (21, 6643),

Gene: Weasels2\_72 Start: 32356, Stop: 32802, Start Num: 4  
Candidate Starts for Weasels2\_72:  
(Start: 4 @32356 has 3 MA's), (10, 32440), (11, 32455), (14, 32497), (16, 32557), (22, 32773),

Gene: Weasels2\_70 Start: 30153, Stop: 30596, Start Num: 5  
Candidate Starts for Weasels2\_70:  
(1, 30114), (Start: 5 @30153 has 1 MA's), (13, 30258), (20, 30420),

Gene: Weasels2\_83 Start: 42792, Stop: 43208, Start Num: 3  
Candidate Starts for Weasels2\_83:  
(Start: 3 @42792 has 3 MA's), (8, 42837), (13, 42909),

Gene: Witch\_8 Start: 6143, Stop: 6577, Start Num: 2

Candidate Starts for Witch\_8:

(Start: 2 @6143 has 111 MA's), (9, 6221), (12, 6263), (13, 6266), (18, 6389), (21, 6560),

Gene: Wolfpack\_8 Start: 6136, Stop: 6570, Start Num: 2

Candidate Starts for Wolfpack\_8:

(Start: 2 @6136 has 111 MA's), (9, 6214), (12, 6256), (17, 6355), (18, 6382), (19, 6415), (21, 6553),

Gene: Yami\_8 Start: 6130, Stop: 6567, Start Num: 2

Candidate Starts for Yami\_8:

(Start: 2 @6130 has 111 MA's), (9, 6208), (12, 6250), (17, 6349), (18, 6376), (19, 6409), (21, 6547),

Gene: Yasuo\_8 Start: 6139, Stop: 6573, Start Num: 2

Candidate Starts for Yasuo\_8:

(Start: 2 @6139 has 111 MA's), (9, 6217), (12, 6259), (13, 6262), (18, 6385), (21, 6556),

Gene: YertPhresh\_8 Start: 6142, Stop: 6576, Start Num: 2

Candidate Starts for YertPhresh\_8:

(Start: 2 @6142 has 111 MA's), (9, 6220), (12, 6262), (13, 6265), (18, 6388), (21, 6559),

Gene: Yubaba\_8 Start: 6143, Stop: 6577, Start Num: 2

Candidate Starts for Yubaba\_8:

(Start: 2 @6143 has 111 MA's), (9, 6221), (12, 6263), (13, 6266), (18, 6389), (21, 6560),