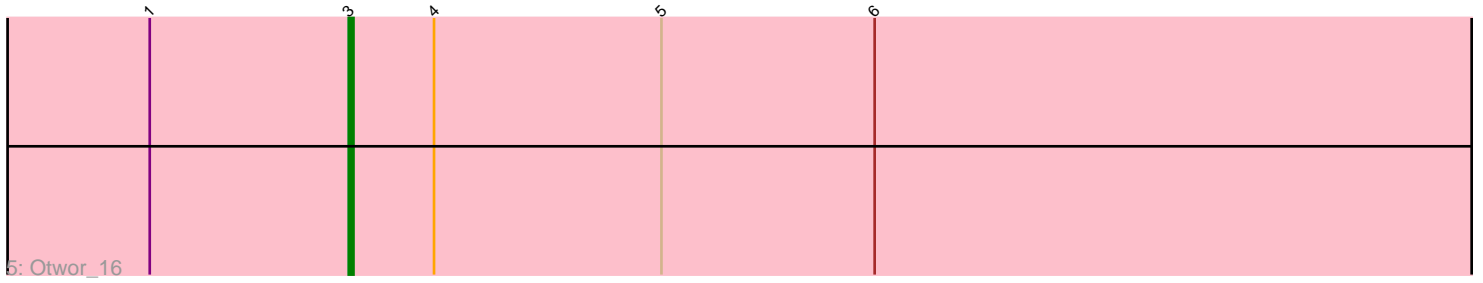
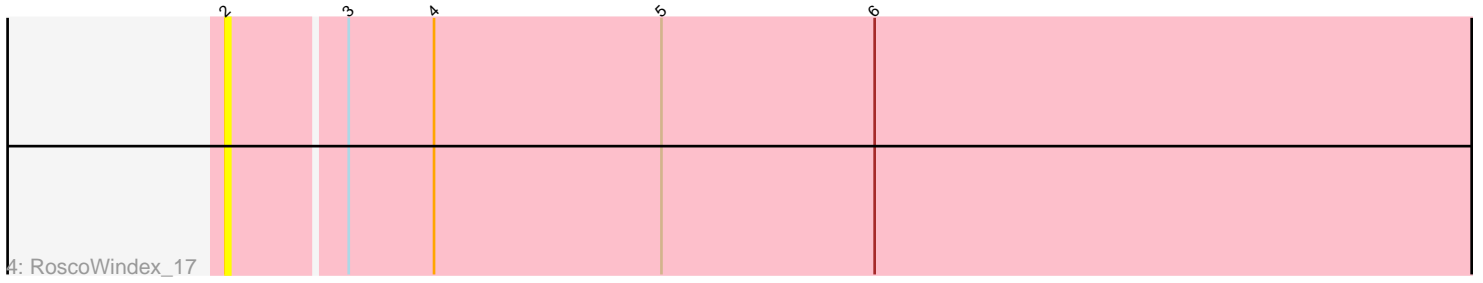
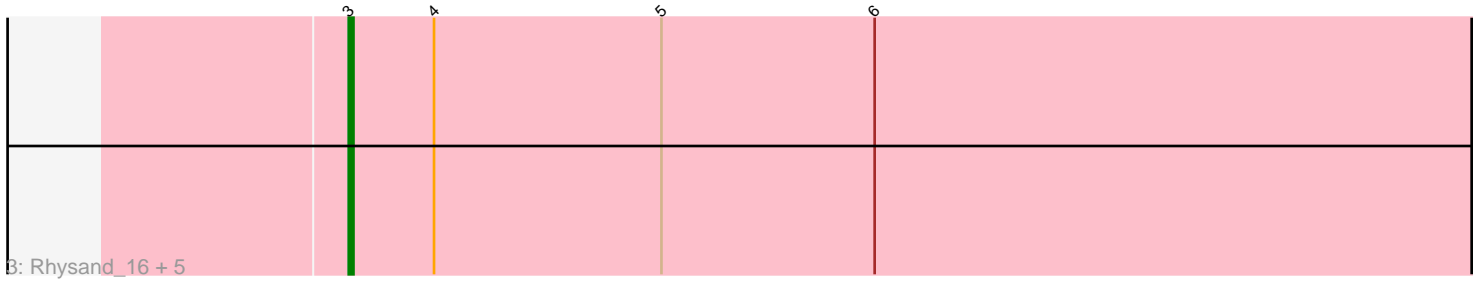
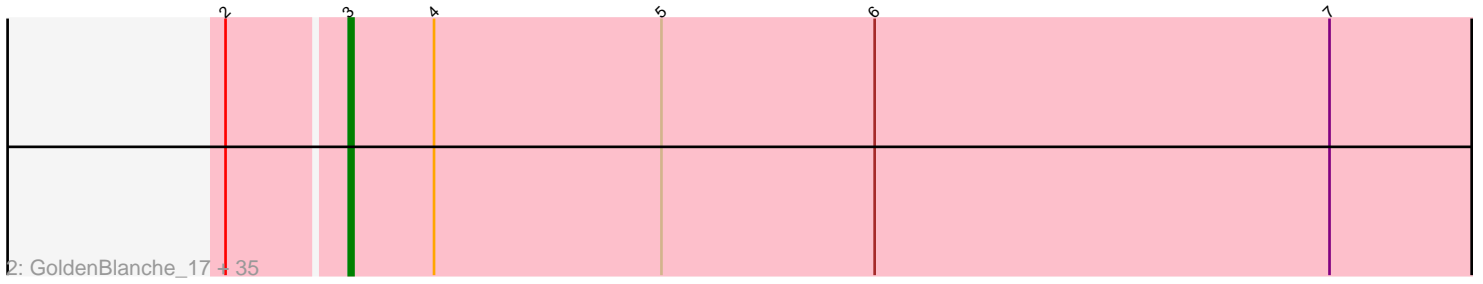
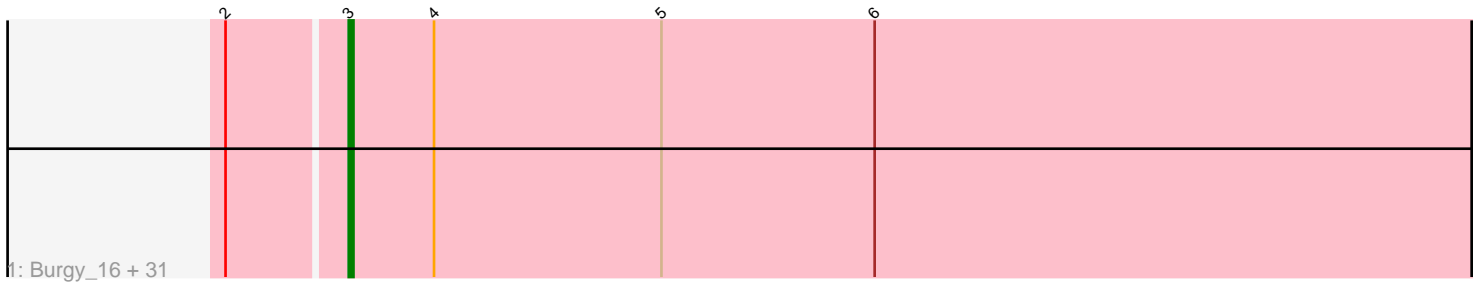


Pham 197917



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 197917 Report

This analysis was run 01/18/25 on database version 583.

Pham number 197917 has 76 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Burgy\_16, BurtonThePup\_16, Goobery\_16, Luxx\_16, Astro16\_16, JaimeB\_16, Hernandez44\_16, Kojax4\_16, Danno\_16, TeddyBoy\_16, Ciel\_16, Eightball\_16, Rhogar\_16, LionelHutz\_16, Owens\_16, TimoTea\_16, NeumannU\_16, Hulk\_16, Avvas\_16, BinkBonk\_16, SantasSleigh\_16, Aries55\_16, Zahlia\_17, Maneater\_16, Scamander\_16, Godfather\_16, Scrunchy\_16, BarBear\_16, Gabbspett\_16, Majesty\_16, Sage7\_16, Slentz\_16
- Track 2 : GoldenBlanche\_17, Dooby\_16, Erin\_16, MasterPitts\_16, Octopus\_16, Madebyisha\_19, Jahseh\_16, Myram\_17, Alucard\_16, PaoPu\_16, YertPhresh\_16, Minima\_16, LemonPepper\_16, EdElric\_16, Chatham\_16, ManAs\_16, Aztec\_16, Jerky\_16, Yasuo\_16, KyriosFaba\_16, Puddles3\_17, Witch\_16, Danimal\_16, Gillker\_16, Picnic\_16, DirtPie\_17, Pondwater\_16, Dongwon\_16, Bradley2\_16, Horacetta\_16, DaftyDuck\_16, SeaWolves\_16, Sara\_16, Gardevoir\_16, JoBros\_16, Yubaba\_16
- Track 3 : Rhysand\_16, LaviMo\_16, Josuke\_16, Cheesecake\_16, Jannah\_16, Vanisius\_16
- Track 4 : RoscoWindex\_17
- Track 5 : Otwor\_16

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

The start number called the most often in the published annotations is 3, it was called in 69 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alucard\_16, Aries55\_16, Astro16\_16, Avvas\_16, Aztec\_16, BarBear\_16, BinkBonk\_16, Bradley2\_16, Burgy\_16, BurtonThePup\_16, Chatham\_16, Cheesecake\_16, Ciel\_16, DaftyDuck\_16, Danimal\_16, Danno\_16, DirtPie\_17, Dongwon\_16, Dooby\_16, EdElric\_16, Eightball\_16, Erin\_16, Gabbspett\_16, Gardevoir\_16, Gillker\_16, Godfather\_16, GoldenBlanche\_17, Goobery\_16, Hernandez44\_16, Horacetta\_16, Hulk\_16, Jahseh\_16, JaimeB\_16, Jannah\_16, Jerky\_16, JoBros\_16, Josuke\_16, Kojax4\_16, KyriosFaba\_16, LaviMo\_16, LemonPepper\_16, LionelHutz\_16, Luxx\_16, Madebyisha\_19, Majesty\_16, ManAs\_16, Maneater\_16, MasterPitts\_16, Minima\_16, Myram\_17, NeumannU\_16, Octopus\_16, Otwor\_16, Owens\_16, PaoPu\_16, Picnic\_16, Pondwater\_16,

Puddles3\_17, Rhogar\_16, Rhysand\_16, Sage7\_16, SantasSleigh\_16, Sara\_16, Scamander\_16, Scrunchy\_16, SeaWolves\_16, Slentz\_16, TeddyBoy\_16, TimoTea\_16, Vanisius\_16, Witch\_16, Yasuo\_16, YertPhresh\_16, Yubaba\_16, Zahlia\_17,

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

- RoscoWindex\_17,

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

- 

### Summary by start number:

Start 2:

- Found in 69 of 76 ( 90.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 1.4% of time when present
- Phage (with cluster) where this start called: RoscoWindex\_17 (EE),

Start 3:

- Found in 76 of 76 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 69 of 69
- Called 98.7% of time when present
- Phage (with cluster) where this start called: Alucard\_16 (EE), Aries55\_16 (EE), Astro16\_16 (EE), Avvas\_16 (EE), Aztec\_16 (EE), BarBear\_16 (EE), BinkBonk\_16 (EE), Bradley2\_16 (EE), Burgy\_16 (EE), BurtonThePup\_16 (EE), Chatham\_16 (EE), Cheesecake\_16 (EE), Ciel\_16 (EE), DaftyDuck\_16 (EE), Danimal\_16 (EE), Danno\_16 (EE), DirtPie\_17 (EE), Dongwon\_16 (EE), Dooby\_16 (EE), EdElric\_16 (EE), Eightball\_16 (EE), Erin\_16 (EE), Gabbspett\_16 (EE), Gardevoir\_16 (EE), Gillker\_16 (EE), Godfather\_16 (EE), GoldenBlanche\_17 (EE), Goobery\_16 (EE), Hernandez44\_16 (EE), Horacetta\_16 (EE), Hulk\_16 (EE), Jahseh\_16 (EE), JaimeB\_16 (EE), Jannah\_16 (EE), Jerky\_16 (EE), JoBros\_16 (EE), Josuke\_16 (EE), Kojax4\_16 (EE), KyriosFaba\_16 (EE), LaviMo\_16 (EE), LemonPepper\_16 (EE), LionelHutz\_16 (EE), Luxx\_16 (EE), Madebyisha\_19 (EE), Majesty\_16 (EE), ManAs\_16 (EE), Maneater\_16 (EE), MasterPitts\_16 (EE), Minima\_16 (EE), Myram\_17 (EE), NeumannU\_16 (EE), Octopus\_16 (EE), Otwor\_16 (EE), Owens\_16 (EE), PaoPu\_16 (EE), Picnic\_16 (EE), Pondwater\_16 (EE), Puddles3\_17 (EE), Rhogar\_16 (EE), Rhysand\_16 (EE), Sage7\_16 (EE), SantasSleigh\_16 (EE), Sara\_16 (EE), Scamander\_16 (EE), Scrunchy\_16 (EE), SeaWolves\_16 (EE), Slentz\_16 (EE), TeddyBoy\_16 (EE), TimoTea\_16 (EE), Vanisius\_16 (EE), Witch\_16 (EE), Yasuo\_16 (EE), YertPhresh\_16 (EE), Yubaba\_16 (EE), Zahlia\_17 (EE),

### Summary by clusters:

There is one cluster represented in this pham: EE

Info for manual annotations of cluster EE:

- Start number 3 was manually annotated 69 times for cluster EE.

### Gene Information:

Gene: Alucard\_16 Start: 13258, Stop: 13545, Start Num: 3  
Candidate Starts for Alucard\_16:  
(2, 13234), (Start: 3 @13258 has 69 MA's), (4, 13276), (5, 13324), (6, 13369), (7, 13465),

Gene: Aries55\_16 Start: 13335, Stop: 13622, Start Num: 3  
Candidate Starts for Aries55\_16:  
(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: Astro16\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Astro16\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Avvas\_16 Start: 13335, Stop: 13622, Start Num: 3  
Candidate Starts for Avvas\_16:  
(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: Aztec\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Aztec\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: BarBear\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for BarBear\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: BinkBonk\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for BinkBonk\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Bradley2\_16 Start: 13256, Stop: 13543, Start Num: 3  
Candidate Starts for Bradley2\_16:  
(2, 13232), (Start: 3 @13256 has 69 MA's), (4, 13274), (5, 13322), (6, 13367), (7, 13463),

Gene: Burgy\_16 Start: 13335, Stop: 13622, Start Num: 3  
Candidate Starts for Burgy\_16:  
(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: BurtonThePup\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for BurtonThePup\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Chatham\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Chatham\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Cheesecake\_16 Start: 13336, Stop: 13623, Start Num: 3  
Candidate Starts for Cheesecake\_16:  
(Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: Ciel\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Ciel\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: DaftyDuck\_16 Start: 13266, Stop: 13553, Start Num: 3

Candidate Starts for DaftyDuck\_16:

(2, 13242), (Start: 3 @13266 has 69 MA's), (4, 13284), (5, 13332), (6, 13377), (7, 13473),

Gene: Danimal\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Danimal\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Danno\_16 Start: 13335, Stop: 13622, Start Num: 3

Candidate Starts for Danno\_16:

(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: DirtPie\_17 Start: 13359, Stop: 13646, Start Num: 3

Candidate Starts for DirtPie\_17:

(2, 13335), (Start: 3 @13359 has 69 MA's), (4, 13377), (5, 13425), (6, 13470), (7, 13566),

Gene: Dongwon\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Dongwon\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Dooby\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Dooby\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: EdElric\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for EdElric\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Eightball\_16 Start: 13329, Stop: 13616, Start Num: 3

Candidate Starts for Eightball\_16:

(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Erin\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Erin\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Gabbspett\_16 Start: 13361, Stop: 13648, Start Num: 3

Candidate Starts for Gabbspett\_16:

(2, 13337), (Start: 3 @13361 has 69 MA's), (4, 13379), (5, 13427), (6, 13472),

Gene: Gardevoir\_16 Start: 13291, Stop: 13578, Start Num: 3

Candidate Starts for Gardevoir\_16:

(2, 13267), (Start: 3 @13291 has 69 MA's), (4, 13309), (5, 13357), (6, 13402), (7, 13498),

Gene: Gillker\_16 Start: 13256, Stop: 13543, Start Num: 3

Candidate Starts for Gillker\_16:

(2, 13232), (Start: 3 @13256 has 69 MA's), (4, 13274), (5, 13322), (6, 13367), (7, 13463),

Gene: Godfather\_16 Start: 13335, Stop: 13622, Start Num: 3

Candidate Starts for Godfather\_16:

(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: GoldenBlanche\_17 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for GoldenBlanche\_17:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Goobery\_16 Start: 13329, Stop: 13616, Start Num: 3

Candidate Starts for Goobery\_16:

(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Hernandez44\_16 Start: 13361, Stop: 13648, Start Num: 3

Candidate Starts for Hernandez44\_16:

(2, 13337), (Start: 3 @13361 has 69 MA's), (4, 13379), (5, 13427), (6, 13472),

Gene: Horacetta\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Horacetta\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Hulk\_16 Start: 13273, Stop: 13560, Start Num: 3

Candidate Starts for Hulk\_16:

(2, 13249), (Start: 3 @13273 has 69 MA's), (4, 13291), (5, 13339), (6, 13384),

Gene: Jahseh\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for Jahseh\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: JaimeB\_16 Start: 13329, Stop: 13616, Start Num: 3

Candidate Starts for JaimeB\_16:

(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Jannah\_16 Start: 13324, Stop: 13611, Start Num: 3

Candidate Starts for Jannah\_16:

(Start: 3 @13324 has 69 MA's), (4, 13342), (5, 13390), (6, 13435),

Gene: Jerky\_16 Start: 13410, Stop: 13697, Start Num: 3

Candidate Starts for Jerky\_16:

(2, 13386), (Start: 3 @13410 has 69 MA's), (4, 13428), (5, 13476), (6, 13521), (7, 13617),

Gene: JoBros\_16 Start: 13258, Stop: 13545, Start Num: 3

Candidate Starts for JoBros\_16:

(2, 13234), (Start: 3 @13258 has 69 MA's), (4, 13276), (5, 13324), (6, 13369), (7, 13465),

Gene: Josuke\_16 Start: 13336, Stop: 13623, Start Num: 3

Candidate Starts for Josuke\_16:

(Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: Kojax4\_16 Start: 13335, Stop: 13622, Start Num: 3

Candidate Starts for Kojax4\_16:

(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: KyriosFaba\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for KyriosFaba\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: LaviMo\_16 Start: 13336, Stop: 13623, Start Num: 3

Candidate Starts for LaviMo\_16:

(Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: LemonPepper\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for LemonPepper\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: LionelHutz\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for LionelHutz\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Luxx\_16 Start: 13347, Stop: 13634, Start Num: 3  
Candidate Starts for Luxx\_16:  
(2, 13323), (Start: 3 @13347 has 69 MA's), (4, 13365), (5, 13413), (6, 13458),

Gene: Madebyisha\_19 Start: 13410, Stop: 13697, Start Num: 3  
Candidate Starts for Madebyisha\_19:  
(2, 13386), (Start: 3 @13410 has 69 MA's), (4, 13428), (5, 13476), (6, 13521), (7, 13617),

Gene: Majesty\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Majesty\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: ManAs\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for ManAs\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Maneater\_16 Start: 13311, Stop: 13598, Start Num: 3  
Candidate Starts for Maneater\_16:  
(2, 13287), (Start: 3 @13311 has 69 MA's), (4, 13329), (5, 13377), (6, 13422),

Gene: MasterPitts\_16 Start: 13266, Stop: 13553, Start Num: 3  
Candidate Starts for MasterPitts\_16:  
(2, 13242), (Start: 3 @13266 has 69 MA's), (4, 13284), (5, 13332), (6, 13377), (7, 13473),

Gene: Minima\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Minima\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Myram\_17 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Myram\_17:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: NeumannU\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for NeumannU\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Octopus\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Octopus\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Otwor\_16 Start: 13337, Stop: 13624, Start Num: 3  
Candidate Starts for Otwor\_16:  
(1, 13295), (Start: 3 @13337 has 69 MA's), (4, 13355), (5, 13403), (6, 13448),

Gene: Owens\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Owens\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: PaoPu\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for PaoPu\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Picnic\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Picnic\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Pondwater\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Pondwater\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Puddles3\_17 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Puddles3\_17:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Rhogar\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Rhogar\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: Rhysand\_16 Start: 13336, Stop: 13623, Start Num: 3  
Candidate Starts for Rhysand\_16:  
(Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: RoscoWindex\_17 Start: 13312, Stop: 13623, Start Num: 2  
Candidate Starts for RoscoWindex\_17:  
(2, 13312), (Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: Sage7\_16 Start: 13335, Stop: 13622, Start Num: 3  
Candidate Starts for Sage7\_16:  
(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: SantasSleigh\_16 Start: 13359, Stop: 13646, Start Num: 3  
Candidate Starts for SantasSleigh\_16:  
(2, 13335), (Start: 3 @13359 has 69 MA's), (4, 13377), (5, 13425), (6, 13470),

Gene: Sara\_16 Start: 13257, Stop: 13544, Start Num: 3  
Candidate Starts for Sara\_16:  
(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Scamander\_16 Start: 13335, Stop: 13622, Start Num: 3  
Candidate Starts for Scamander\_16:  
(2, 13311), (Start: 3 @13335 has 69 MA's), (4, 13353), (5, 13401), (6, 13446),

Gene: Scrunchy\_16 Start: 13329, Stop: 13616, Start Num: 3  
Candidate Starts for Scrunchy\_16:  
(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: SeaWolves\_16 Start: 13257, Stop: 13544, Start Num: 3



Candidate Starts for SeaWolves\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Slentz\_16 Start: 13329, Stop: 13616, Start Num: 3

Candidate Starts for Slentz\_16:

(2, 13305), (Start: 3 @13329 has 69 MA's), (4, 13347), (5, 13395), (6, 13440),

Gene: TeddyBoy\_16 Start: 13330, Stop: 13617, Start Num: 3

Candidate Starts for TeddyBoy\_16:

(2, 13306), (Start: 3 @13330 has 69 MA's), (4, 13348), (5, 13396), (6, 13441),

Gene: TimoTea\_16 Start: 13311, Stop: 13598, Start Num: 3

Candidate Starts for TimoTea\_16:

(2, 13287), (Start: 3 @13311 has 69 MA's), (4, 13329), (5, 13377), (6, 13422),

Gene: Vanisius\_16 Start: 13336, Stop: 13623, Start Num: 3

Candidate Starts for Vanisius\_16:

(Start: 3 @13336 has 69 MA's), (4, 13354), (5, 13402), (6, 13447),

Gene: Witch\_16 Start: 13258, Stop: 13545, Start Num: 3

Candidate Starts for Witch\_16:

(2, 13234), (Start: 3 @13258 has 69 MA's), (4, 13276), (5, 13324), (6, 13369), (7, 13465),

Gene: Yasuo\_16 Start: 13320, Stop: 13607, Start Num: 3

Candidate Starts for Yasuo\_16:

(2, 13296), (Start: 3 @13320 has 69 MA's), (4, 13338), (5, 13386), (6, 13431), (7, 13527),

Gene: YertPhresh\_16 Start: 13257, Stop: 13544, Start Num: 3

Candidate Starts for YertPhresh\_16:

(2, 13233), (Start: 3 @13257 has 69 MA's), (4, 13275), (5, 13323), (6, 13368), (7, 13464),

Gene: Yubaba\_16 Start: 13291, Stop: 13578, Start Num: 3

Candidate Starts for Yubaba\_16:

(2, 13267), (Start: 3 @13291 has 69 MA's), (4, 13309), (5, 13357), (6, 13402), (7, 13498),

Gene: Zahlia\_17 Start: 13365, Stop: 13652, Start Num: 3

Candidate Starts for Zahlia\_17:

(2, 13341), (Start: 3 @13365 has 69 MA's), (4, 13383), (5, 13431), (6, 13476),