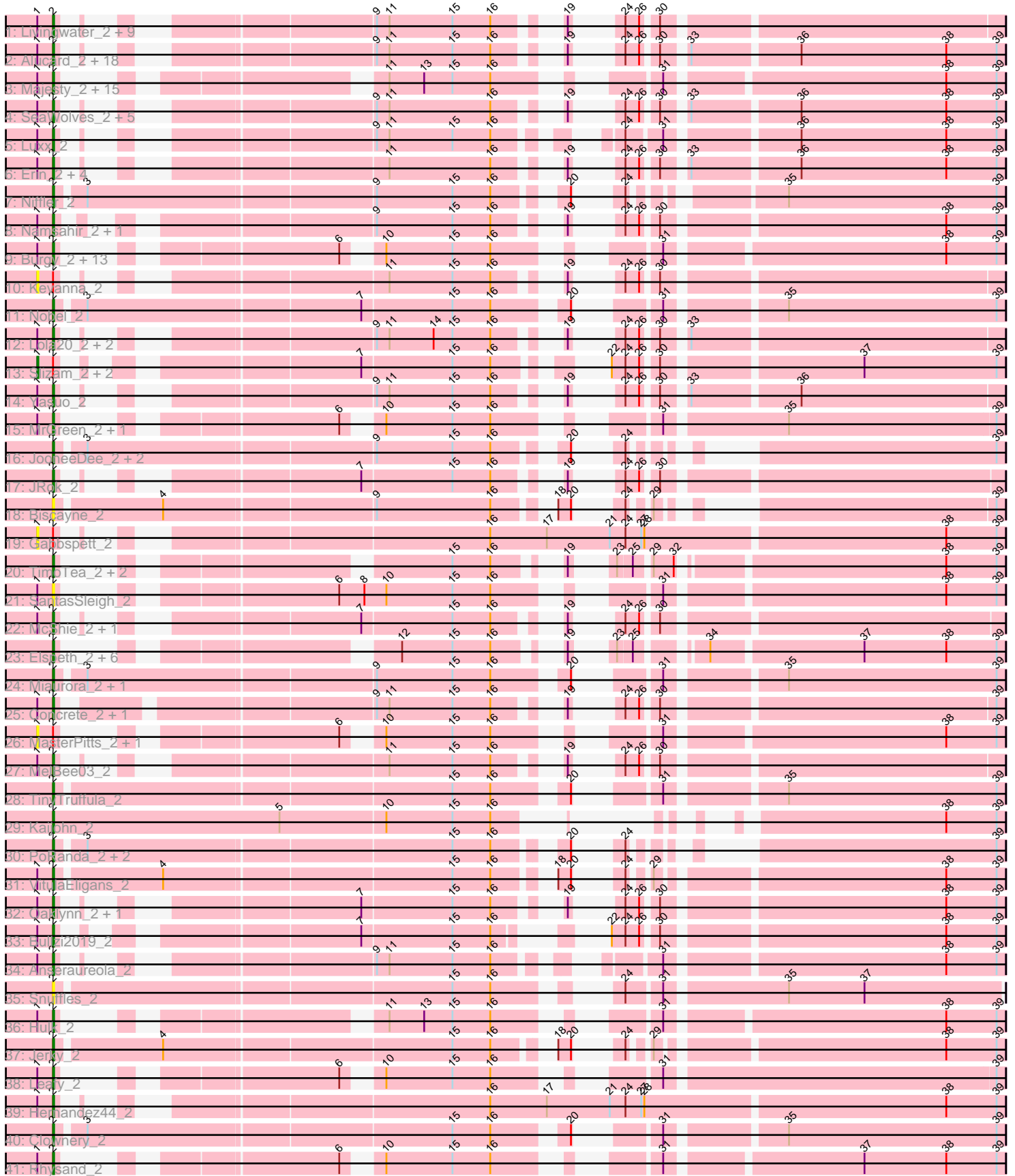


# Pham 85210



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 85210 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85210 has 128 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Livingwater\_2, KillerTomato\_2, Douggie\_2, Quaker\_2, Sippinontea\_2, Belthelas\_2, Bodhi17\_2, Wolfpack\_2, BoomRoasted\_2, KayPaulus\_2
- Track 2 : Alucard\_2, Minima\_2, ManAs\_2, EdElric\_2, Jahseh\_2, Horacetta\_2, Gardevoir\_2, Jannah\_2, GoldenBlanche\_2, Witch\_2, Picnic\_2, Sara\_2, Pondwater\_2, Puddles3\_2, PaoPu\_2, Yubaba\_2, KyriosFaba\_2, JoBros\_2, Danimal\_2
- Track 3 : Majesty\_2, Goobery\_2, NeumannU\_2, Eightball\_2, Owens\_2, TeddyBoy\_2, LionelHutz\_2, JaimeB\_2, Slentz\_2, Rhogar\_2, Astro16\_2, BinkBonk\_2, BarBear\_2, BurtonThePup\_2, Scrunchy\_2, Ciel\_2
- Track 4 : SeaWolves\_2, Dooby\_2, Dongwon\_2, YertPhresh\_2, Chatham\_2, LemonPepper\_2
- Track 5 : Luxx\_2
- Track 6 : Erin\_2, Aztec\_2, Gillker\_2, Bradley2\_2, Octopus\_2
- Track 7 : Niffler\_2
- Track 8 : Namsahir\_2, Publix\_2
- Track 9 : Burgy\_2, Scamander\_2, Vanisius\_2, RoscoWindex\_2, Avvas\_2, Otwor\_2, LaviMo\_2, Josuke\_2, Godfather\_2, Sage7\_2, Danno\_2, Aries55\_2, Cheesecake\_2, Kojax4\_2
- Track 10 : Kevanna\_2
- Track 11 : Nobel\_2
- Track 12 : Lola20\_2, Cayde6\_2, Baine\_2
- Track 13 : Slizam\_2, TomBrady12\_2, Stem\_2
- Track 14 : Yasuo\_2
- Track 15 : MrGreen\_2, Loca\_2
- Track 16 : JooneeDee\_2, Bintii\_2, PuffyCat\_2
- Track 17 : JRok\_2
- Track 18 : Biscayne\_2
- Track 19 : Gabbspett\_2
- Track 20 : TimoTea\_2, Charbie\_2, Maneater\_2
- Track 21 : SantasSleigh\_2
- Track 22 : McShie\_2, BrokMonster\_2
- Track 23 : Elspeth\_2, Ekko14\_2, Lunatic\_2, Yami\_2, Noelani\_2, Cazares\_2, HarperAnne\_2
- Track 24 : Miaurora\_2, Trireme\_2
- Track 25 : Concrete\_2, Bri160\_2
- Track 26 : MasterPitts\_2, DaftyDuck\_2
- Track 27 : MelBee03\_2
- Track 28 : TinyTruffula\_2

- Track 29 : Kaijohn\_2
- Track 30 : PoRanda\_2, MirimarMandM\_2, Upsilon\_2
- Track 31 : VitulaEligans\_2
- Track 32 : Oaklynn\_2, Azizam\_2
- Track 33 : Bullzi2019\_2
- Track 34 : Anseraureola\_2
- Track 35 : Snuffles\_2
- Track 36 : Hulk\_2
- Track 37 : Jerky\_2
- Track 38 : Leafy\_2
- Track 39 : Hernandez44\_2
- Track 40 : Clownery\_2
- Track 41 : Rhysand\_2

***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 101 of the 102 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alucard\_2, Anseraureola\_2, Aries55\_2, Astro16\_2, Avvas\_2, Azizam\_2, Aztec\_2, Baine\_2, BarBear\_2, Belthelas\_2, BinkBonk\_2, Bintii\_2, Biscayne\_2, Bodhi17\_2, BoomRoasted\_2, Bradley2\_2, Bri160\_2, BrokMonster\_2, Bullzi2019\_2, Burgy\_2, BurtonThePup\_2, Cayde6\_2, Cazares\_2, Charbie\_2, Chatham\_2, Cheesecake\_2, Ciel\_2, Clownery\_2, Concrete\_2, Danimal\_2, Danno\_2, Dongwon\_2, Dooby\_2, Duggie\_2, EdElric\_2, Eightball\_2, Ekko14\_2, Elspeth\_2, Erin\_2, Gardevoir\_2, Gillker\_2, Godfather\_2, GoldenBlanche\_2, Goobery\_2, HarperAnne\_2, Hernandez44\_2, Horacetta\_2, Hulk\_2, JRok\_2, Jahseh\_2, JaimeB\_2, Jannah\_2, Jerky\_2, JoBros\_2, JooneeDee\_2, Josuke\_2, Kaijohn\_2, KayPaulus\_2, KillerTomato\_2, Kojax4\_2, KyriosFaba\_2, LaviMo\_2, Leafy\_2, LemonPepper\_2, LionelHutz\_2, Livingwater\_2, Loca\_2, Lola20\_2, Lunatic\_2, Luxx\_2, Majesty\_2, ManAs\_2, Maneater\_2, McShie\_2, MelBee03\_2, Miaurora\_2, Minima\_2, MirimarMandM\_2, MrGreen\_2, Namsahir\_2, NeumannU\_2, Niffler\_2, Nobel\_2, Noelani\_2, Oaklynn\_2, Octopus\_2, Otwor\_2, Owens\_2, PaoPu\_2, Picnic\_2, PoRanda\_2, Pondwater\_2, Publix\_2, Puddles3\_2, PuffyCat\_2, Quaker\_2, Rhogar\_2, Rhysand\_2, RoscoWindex\_2, Sage7\_2, SantasSleigh\_2, Sara\_2, Scamander\_2, Scrunchy\_2, SeaWolves\_2, Sippinontea\_2, Slentz\_2, Snuffles\_2, TeddyBoy\_2, TimoTea\_2, TinyTruffula\_2, Trireme\_2, Upsilon\_2, Vanisius\_2, VitulaEligans\_2, Witch\_2, Wolfpack\_2, Yami\_2, Yasuo\_2, YertPhresh\_2, Yubaba\_2,

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

- DaftyDuck\_2, Gabbspett\_2, Kevanna\_2, MasterPitts\_2, Slizam\_2, Stem\_2, TomBrady12\_2,

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

- 

**Summary by start number:**

Start 1:

- Found in 101 of 128 ( 78.9% ) of genes in pham
- Manual Annotations of this start: 1 of 102
- Called 6.9% of time when present
- Phage (with cluster) where this start called: DaftyDuck\_2 (EE), Gabbspett\_2 (EE), Kevanna\_2 (EE), MasterPitts\_2 (EE), Slizam\_2 (EE), Stem\_2 (EE), TomBrady12\_2 (EE),

Start 2:

- Found in 128 of 128 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 101 of 102
- Called 94.5% of time when present
- Phage (with cluster) where this start called: Alucard\_2 (EE), Anseraureola\_2 (EE), Aries55\_2 (EE), Astro16\_2 (EE), Avvas\_2 (EE), Azizam\_2 (EE), Aztec\_2 (EE), Baine\_2 (EE), BarBear\_2 (EE), Belthelas\_2 (EE), BinkBonk\_2 (EE), Bintii\_2 (EE), Biscayne\_2 (EE), Bodhi17\_2 (EE), BoomRoasted\_2 (EE), Bradley2\_2 (EE), Bri160\_2 (EE), BrokMonster\_2 (EE), Bullzi2019\_2 (EE), Burgy\_2 (EE), BurtonThePup\_2 (EE), Cayde6\_2 (EE), Cazares\_2 (EE), Charbie\_2 (EE), Chatham\_2 (EE), Cheesecake\_2 (EE), Ciel\_2 (EE), Clownery\_2 (EE), Concrete\_2 (EE), Danimal\_2 (EE), Danno\_2 (EE), Dongwon\_2 (EE), Dooby\_2 (EE), Douggie\_2 (EE), EdElric\_2 (EE), Eightball\_2 (EE), Ekko14\_2 (EE), Elspeth\_2 (EE), Erin\_2 (EE), Gardevoir\_2 (EE), Gillker\_2 (EE), Godfather\_2 (EE), GoldenBlanche\_2 (EE), Goobery\_2 (EE), HarperAnne\_2 (EE), Hernandez44\_2 (EE), Horacetta\_2 (EE), Hulk\_2 (EE), JRok\_2 (EE), Jahseh\_2 (EE), JaimeB\_2 (EE), Jannah\_2 (EE), Jerky\_2 (EE), JoBros\_2 (EE), JooneeDee\_2 (EE), Josuke\_2 (EE), Kaijohn\_2 (EE), KayPaulus\_2 (EE), KillerTomato\_2 (EE), Kojax4\_2 (EE), KyriosFaba\_2 (EE), LaviMo\_2 (EE), Leafy\_2 (EE), LemonPepper\_2 (EE), LionelHutz\_2 (EE), Livingwater\_2 (EE), Loca\_2 (EE), Lola20\_2 (EE), Lunatic\_2 (EE), Luxx\_2 (EE), Majesty\_2 (EE), ManAs\_2 (EE), Maneater\_2 (EE), McShie\_2 (EE), MelBee03\_2 (EE), Miaurora\_2 (EE), Minima\_2 (EE), MirimarMandM\_2 (EE), MrGreen\_2 (EE), Namsahir\_2 (EE), NeumannU\_2 (EE), Niffler\_2 (EE), Nobel\_2 (EE), Noelani\_2 (EE), Oaklynn\_2 (EE), Octopus\_2 (EE), Otwor\_2 (EE), Owens\_2 (EE), PaoPu\_2 (EE), Picnic\_2 (EE), PoRanda\_2 (EE), Pondwater\_2 (EE), Publix\_2 (EE), Puddles3\_2 (EE), PuffyCat\_2 (EE), Quaker\_2 (EE), Rhogar\_2 (EE), Rhysand\_2 (EE), RoscoWindex\_2 (EE), Sage7\_2 (EE), SantasSleigh\_2 (EE), Sara\_2 (EE), Scamander\_2 (EE), Scrunchy\_2 (EE), SeaWolves\_2 (EE), Sippinontea\_2 (EE), Slentz\_2 (EE), Snuffles\_2 (EE), TeddyBoy\_2 (EE), TimoTea\_2 (EE), TinyTruffula\_2 (EE), Trireme\_2 (EE), Upsilon\_2 (EE), Vanisius\_2 (EE), VitulaEligans\_2 (EE), Witch\_2 (EE), Wolfpack\_2 (EE), Yami\_2 (EE), Yasuo\_2 (EE), YertPhresh\_2 (EE), Yubaba\_2 (EE),

## Summary by clusters:

There is one cluster represented in this pham: EE

Info for manual annotations of cluster EE:

- Start number 1 was manually annotated 1 time for cluster EE.
- Start number 2 was manually annotated 101 times for cluster EE.

## Gene Information:

Gene: Alucard\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Alucard\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Anseraureola\_2 Start: 376, Stop: 1095, Start Num: 2

Candidate Starts for Anseraureola\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (31, 790), (38, 1039), (39, 1087),

Gene: Aries55\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Aries55\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Astro16\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Astro16\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Avvas\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Avvas\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Azizam\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Azizam\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 571), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (38, 1015), (39, 1063),

Gene: Aztec\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Aztec\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Baine\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Baine\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (14, 637), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: BarBear\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for BarBear\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Belthelas\_2 Start: 376, Stop: 1122, Start Num: 2

Candidate Starts for Belthelas\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 637), (11, 649), (15, 709), (16, 745), (19, 781), (24, 793), (26, 805), (30, 817),

Gene: BinkBonk\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for BinkBonk\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Bintii\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for Bintii\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: Biscayne\_2 Start: 376, Stop: 1098, Start Num: 2

Candidate Starts for Biscayne\_2:

(Start: 2 @376 has 101 MA's), (4, 472), (9, 664), (16, 772), (18, 808), (20, 820), (24, 832), (29, 844), (39, 1090),

Gene: Bodhi17\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Bodhi17\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: BoomRoasted\_2 Start: 376, Stop: 1122, Start Num: 2

Candidate Starts for BoomRoasted\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 637), (11, 649), (15, 709), (16, 745), (19, 781), (24, 793), (26, 805), (30, 817),

Gene: Bradley2\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Bradley2\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Bri160\_2 Start: 376, Stop: 1122, Start Num: 2

Candidate Starts for Bri160\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 637), (11, 649), (15, 709), (16, 745), (19, 781), (24, 793), (26, 805), (30, 817), (39, 1114),

Gene: BrokMonster\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for BrokMonster\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 571), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Bullzi2019\_2 Start: 376, Stop: 1092, Start Num: 2

Candidate Starts for Bullzi2019\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 592), (15, 676), (16, 712), (22, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: Burgy\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Burgy\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: BurtonThePup\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for BurtonThePup\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Cayde6\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Cayde6\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (14, 637), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: Cazares\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Cazares\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Charbie\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Charbie\_2:

(Start: 2 @376 has 101 MA's), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: Chatham\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Chatham\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Cheesecake\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Cheesecake\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Ciel\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Ciel\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Clownery\_2 Start: 376, Stop: 1176, Start Num: 2

Candidate Starts for Clownery\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (15, 736), (16, 772), (20, 829), (31, 871), (35, 970), (39, 1168),

Gene: Concrete\_2 Start: 376, Stop: 1122, Start Num: 2

Candidate Starts for Concrete\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 637), (11, 649), (15, 709), (16, 745), (19, 781), (24, 793), (26, 805), (30, 817), (39, 1114),

Gene: DaftyDuck\_2 Start: 361, Stop: 1083, Start Num: 1

Candidate Starts for DaftyDuck\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Danimal\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Danimal\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Danno\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Danno\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Dongwon\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Dongwon\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Dooby\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Dooby\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Douggie\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Douggie\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: EdElric\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for EdElric\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Eightball\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Eightball\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Ekko14\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Ekko14\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Elspeth\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Elspeth\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Erin\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Erin\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Gabbspett\_2 Start: 361, Stop: 1173, Start Num: 1

Candidate Starts for Gabbspett\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (16, 691), (17, 745), (21, 805), (24, 820), (27, 835), (28, 838), (38, 1117), (39, 1165),

Gene: Gardevoir\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Gardevoir\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Gillker\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Gillker\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),



Gene: Godfather\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Godfather\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: GoldenBlanche\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for GoldenBlanche\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Goobery\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Goobery\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: HarperAnne\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for HarperAnne\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Hernandez44\_2 Start: 376, Stop: 1173, Start Num: 2

Candidate Starts for Hernandez44\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (16, 691), (17, 745), (21, 805), (24, 820), (27, 835), (28, 838), (38, 1117), (39, 1165),

Gene: Horacetta\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Horacetta\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Hulk\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Hulk\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: JRok\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for JRok\_2:

(Start: 2 @376 has 101 MA's), (7, 571), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Jahseh\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Jahseh\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: JaimeB\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for JaimeB\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Jannah\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Jannah\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Jerky\_2 Start: 376, Stop: 1152, Start Num: 2

Candidate Starts for Jerky\_2:

(Start: 2 @376 has 101 MA's), (4, 472), (15, 736), (16, 772), (18, 808), (20, 820), (24, 832), (29, 844), (38, 1096), (39, 1144),

Gene: JoBros\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for JoBros\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: JooneeDee\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for JooneeDee\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: Josuke\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Josuke\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Kaijohn\_2 Start: 376, Stop: 1077, Start Num: 2

Candidate Starts for Kaijohn\_2:

(Start: 2 @376 has 101 MA's), (5, 592), (10, 691), (15, 754), (16, 790), (38, 1021), (39, 1069),

Gene: KayPaulus\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for KayPaulus\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Kevanna\_2 Start: 361, Stop: 1068, Start Num: 1

Candidate Starts for Kevanna\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: KillerTomato\_2 Start: 376, Stop: 1122, Start Num: 2

Candidate Starts for KillerTomato\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 637), (11, 649), (15, 709), (16, 745), (19, 781), (24, 793), (26, 805), (30, 817),

Gene: Kojax4\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Kojax4\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: KyriosFaba\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for KyriosFaba\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: LaviMo\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for LaviMo\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Leafy\_2 Start: 376, Stop: 1089, Start Num: 2

Candidate Starts for Leafy\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (39, 1081),

Gene: LemonPepper\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for LemonPepper\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: LionelHutz\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for LionelHutz\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Livingwater\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Livingwater\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Loca\_2 Start: 376, Stop: 1089, Start Num: 2

Candidate Starts for Loca\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (35, 886), (39, 1081),

Gene: Lola20\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Lola20\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (14, 637), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781),

Gene: Lunatic\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Lunatic\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Luxx\_2 Start: 376, Stop: 1095, Start Num: 2

Candidate Starts for Luxx\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (24, 760), (31, 790), (36, 901), (38, 1039), (39, 1087),

Gene: Majesty\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Majesty\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: ManAs\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for ManAs\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Maneater\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Maneater\_2:

(Start: 2 @376 has 101 MA's), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: MasterPitts\_2 Start: 361, Stop: 1083, Start Num: 1

Candidate Starts for MasterPitts\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: McShie\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for McShie\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 571), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: MelBee03\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for MelBee03\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Miaurora\_2 Start: 376, Stop: 1176, Start Num: 2

Candidate Starts for Miaurora\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 829), (31, 871), (35, 970), (39, 1168),

Gene: Minima\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Minima\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: MirimarMandM\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for MirimarMandM\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: MrGreen\_2 Start: 376, Stop: 1089, Start Num: 2

Candidate Starts for MrGreen\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (35, 886), (39, 1081),

Gene: Namsahir\_2 Start: 376, Stop: 1092, Start Num: 2

Candidate Starts for Namsahir\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 604), (15, 676), (16, 712), (19, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: NeumannU\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for NeumannU\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Niffler\_2 Start: 376, Stop: 1149, Start Num: 2

Candidate Starts for Niffler\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 820), (24, 832), (35, 943), (39, 1141),

Gene: Nobel\_2 Start: 376, Stop: 1176, Start Num: 2

Candidate Starts for Nobel\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (7, 652), (15, 736), (16, 772), (20, 829), (31, 871), (35, 970), (39, 1168),

Gene: Noelani\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Noelani\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Oaklynn\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Oaklynn\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 571), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (38, 1015), (39, 1063),

Gene: Octopus\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Octopus\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Otwor\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Otwor\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Owens\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Owens\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: PaoPu\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for PaoPu\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Picnic\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Picnic\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: PoRanda\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for PoRanda\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: Pondwater\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Pondwater\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Publix\_2 Start: 376, Stop: 1092, Start Num: 2

Candidate Starts for Publix\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 604), (15, 676), (16, 712), (19, 748), (24, 760), (26, 772), (30, 784), (38, 1036), (39, 1084),

Gene: Puddles3\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Puddles3\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: PuffyCat\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for PuffyCat\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: Quaker\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Quaker\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Rhogar\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Rhogar\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Rhysand\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Rhysand\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (37, 949), (38, 1027), (39, 1075),

Gene: RoscoWindex\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for RoscoWindex\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Sage7\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Sage7\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: SantasSleigh\_2 Start: 376, Stop: 1107, Start Num: 2

Candidate Starts for SantasSleigh\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (8, 583), (10, 604), (15, 667), (16, 703), (31, 802), (38, 1051), (39, 1099),

Gene: Sara\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Sara\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Scamander\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Scamander\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Scrunchy\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Scrunchy\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: SeaWolves\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for SeaWolves\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Sippinontea\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Sippinontea\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Slentz\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Slentz\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: Slizam\_2 Start: 361, Stop: 1110, Start Num: 1

Candidate Starts for Slizam\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 592), (15, 676), (16, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: Snuffles\_2 Start: 376, Stop: 1179, Start Num: 2

Candidate Starts for Snuffles\_2:

(Start: 2 @376 has 101 MA's), (15, 736), (16, 772), (24, 841), (31, 871), (35, 979), (37, 1051),

Gene: Stem\_2 Start: 361, Stop: 1110, Start Num: 1

Candidate Starts for Stem\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 592), (15, 676), (16, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: TeddyBoy\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for TeddyBoy\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (11, 583), (13, 616), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: TimoTea\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for TimoTea\_2:

(Start: 2 @376 has 101 MA's), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (29, 751), (32, 769), (38, 1003), (39, 1051),

Gene: TinyTruffula\_2 Start: 376, Stop: 1176, Start Num: 2

Candidate Starts for TinyTruffula\_2:

(Start: 2 @376 has 101 MA's), (15, 736), (16, 772), (20, 829), (31, 871), (35, 970), (39, 1168),

Gene: TomBrady12\_2 Start: 361, Stop: 1110, Start Num: 1

Candidate Starts for TomBrady12\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (7, 592), (15, 676), (16, 712), (22, 766), (24, 778), (26, 790), (30, 802), (37, 976), (39, 1102),

Gene: Trireme\_2 Start: 376, Stop: 1176, Start Num: 2

Candidate Starts for Trireme\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (9, 664), (15, 736), (16, 772), (20, 829), (31, 871), (35, 970), (39, 1168),

Gene: Upsilon\_2 Start: 376, Stop: 1101, Start Num: 2

Candidate Starts for Upsilon\_2:

(Start: 2 @376 has 101 MA's), (3, 400), (15, 736), (16, 772), (20, 820), (24, 832), (39, 1093),

Gene: Vanisius\_2 Start: 376, Stop: 1083, Start Num: 2

Candidate Starts for Vanisius\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (6, 559), (10, 580), (15, 643), (16, 679), (31, 778), (38, 1027), (39, 1075),

Gene: VitulaEligans\_2 Start: 376, Stop: 1152, Start Num: 2

Candidate Starts for VitulaEligans\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (4, 472), (15, 736), (16, 772), (18, 808), (20, 820), (24, 832), (29, 844), (38, 1096), (39, 1144),

Gene: Witch\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Witch\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Wolfpack\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Wolfpack\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763),

Gene: Yami\_2 Start: 376, Stop: 1059, Start Num: 2

Candidate Starts for Yami\_2:

(Start: 2 @376 has 101 MA's), (12, 595), (15, 643), (16, 679), (19, 715), (23, 727), (25, 739), (34, 787), (37, 925), (38, 1003), (39, 1051),

Gene: Yasuo\_2 Start: 376, Stop: 1068, Start Num: 2

Candidate Starts for Yasuo\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877),

Gene: YertPhresh\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for YertPhresh\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),

Gene: Yubaba\_2 Start: 376, Stop: 1071, Start Num: 2

Candidate Starts for Yubaba\_2:

(Start: 1 @361 has 1 MA's), (Start: 2 @376 has 101 MA's), (9, 583), (11, 595), (15, 655), (16, 691), (19, 727), (24, 739), (26, 751), (30, 763), (33, 781), (36, 877), (38, 1015), (39, 1063),