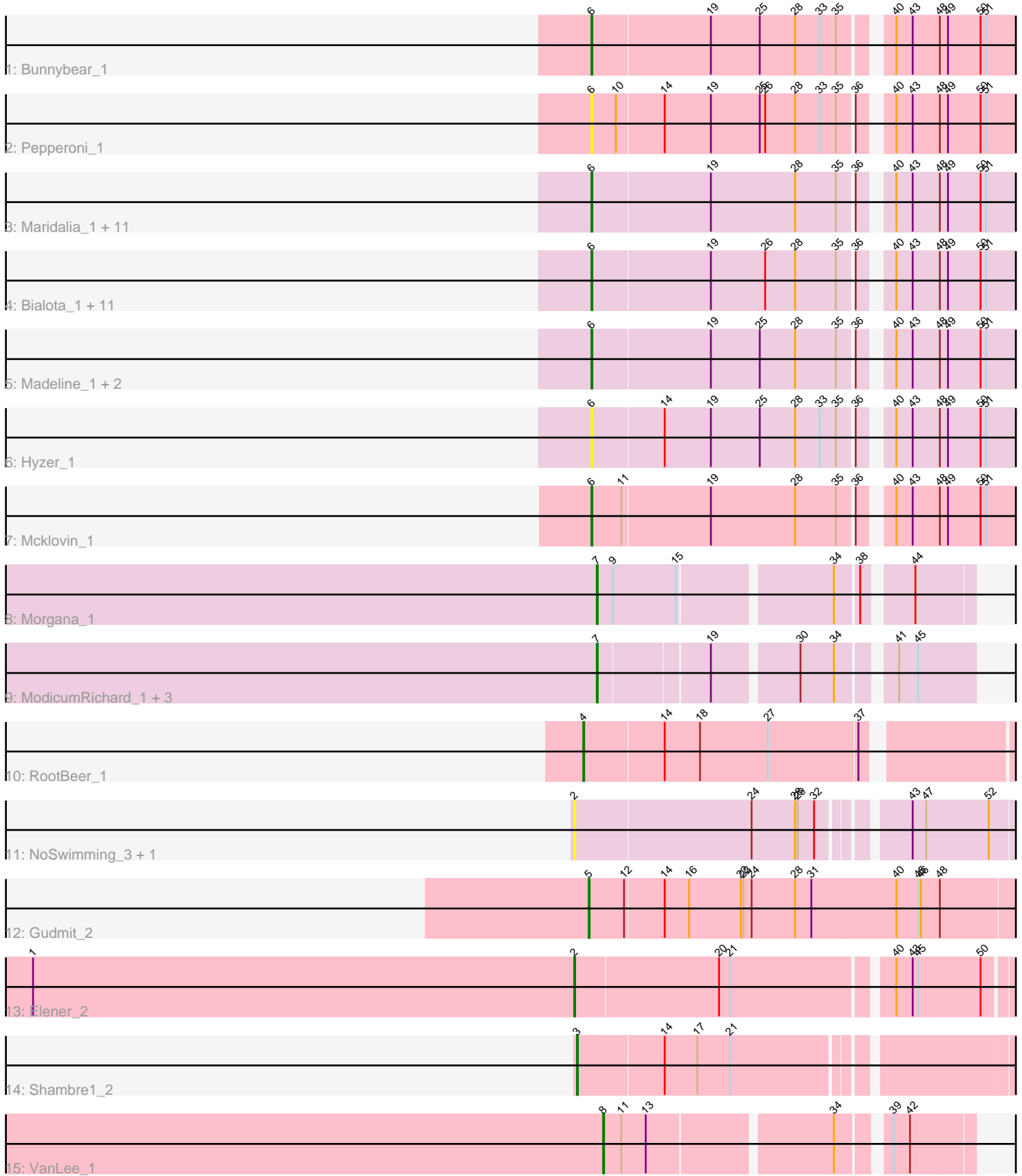


Pham 203085



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 203085 Report

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

Pham number 203085 has 43 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Bunnybear\_1
- Track 2 : Pepperoni\_1
- Track 3 : Maridalia\_1, Kita\_1, Antonio\_1, RavenCo17\_1, Polly\_1, Suscepit\_1, Zameen\_1, Eudoria\_1, Manasvini\_1, Trumpet\_1, Tayonia\_1, Neobush\_1
- Track 4 : Bialota\_1, Agueybana\_1, Bosnia\_1, Hugley\_1, Eviarto\_1, AlumE\_1, BatStarr\_1, BoyNamedSue\_1, Nymphadora\_1, TimTam\_1, Zirinka\_1, Herod\_1
- Track 5 : Madeline\_1, ThankyouJordi\_1, WelcomeAyanna\_1
- Track 6 : Hyzer\_1
- Track 7 : Mcklovin\_1
- Track 8 : Morgana\_1
- Track 9 : ModicumRichard\_1, ObLaDi\_1, Cafasso\_1, Aleemily\_1
- Track 10 : RootBeer\_1
- Track 11 : NoSwimming\_3, Scotia\_3
- Track 12 : Gudmit\_2
- Track 13 : Elener\_2
- Track 14 : Shambre1\_2
- Track 15 : VanLee\_1

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

The start number called the most often in the published annotations is 6, it was called in 28 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agueybana\_1, AlumE\_1, Antonio\_1, BatStarr\_1, Bialota\_1, Bosnia\_1, BoyNamedSue\_1, Bunnybear\_1, Eudoria\_1, Eviarto\_1, Herod\_1, Hugley\_1, Hyzer\_1, Kita\_1, Madeline\_1, Manasvini\_1, Maridalia\_1, Mcklovin\_1, Neobush\_1, Nymphadora\_1, Pepperoni\_1, Polly\_1, RavenCo17\_1, Suscepit\_1, Tayonia\_1, ThankyouJordi\_1, TimTam\_1, Trumpet\_1, WelcomeAyanna\_1, Zameen\_1, Zirinka\_1,

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

- 

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

- Aleemily\_1, Cafasso\_1, Elener\_2, Gudmit\_2, ModicumRichard\_1, Morgana\_1, NoSwimming\_3, ObLaDi\_1, RootBeer\_1, Scotia\_3, Shambre1\_2, VanLee\_1,

### Summary by start number:

#### Start 2:

- Found in 3 of 43 ( 7.0% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elener\_2 (singleton), NoSwimming\_3 (FO), Scotia\_3 (FO),

#### Start 3:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1\_2 (singleton),

#### Start 4:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RootBeer\_1 (FA),

#### Start 5:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit\_2 (singleton),

#### Start 6:

- Found in 31 of 43 ( 72.1% ) of genes in pham
- Manual Annotations of this start: 28 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agueybana\_1 (CZ1), AlumE\_1 (CZ1), Antonio\_1 (CZ1), BatStarr\_1 (CZ1), Bialota\_1 (CZ1), Bosnia\_1 (CZ1), BoyNamedSue\_1 (CZ1), Bunnybear\_1 (CZ), Eudoria\_1 (CZ1), Eviarto\_1 (CZ1), Herod\_1 (CZ1), Hugley\_1 (CZ1), Hyzer\_1 (CZ1), Kita\_1 (CZ1), Madeline\_1 (CZ1), Manasvini\_1 (CZ1), Maridalia\_1 (CZ1), Mcklovin\_1 (CZ4), Neobush\_1 (CZ1), Nymphadora\_1 (CZ1), Pepperoni\_1 (CZ), Polly\_1 (CZ1), RavenCo17\_1 (CZ8), Suscepit\_1 (CZ1), Tayonia\_1 (CZ1), ThankyouJordi\_1 (CZ1), TimTam\_1 (CZ1), Trumpet\_1 (CZ1), WelcomeAyanna\_1 (CZ1), Zameen\_1 (CZ1), Zirinka\_1 (CZ1),

#### Start 7:

- Found in 5 of 43 ( 11.6% ) of genes in pham
- Manual Annotations of this start: 4 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily\_1 (DZ), Cafasso\_1 (DZ), ModicumRichard\_1 (DZ), Morgana\_1 (DZ), ObLaDi\_1 (DZ),

#### Start 8:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37

- Called 100.0% of time when present
- Phage (with cluster) where this start called: VanLee\_1 (singleton),

### **Summary by clusters:**

There are 8 clusters represented in this pham: CZ8, CZ, CZ1, singleton, CZ4, FA, DZ, FO,

Info for manual annotations of cluster CZ:

- Start number 6 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 6 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ4:

- Start number 6 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ8:

- Start number 6 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DZ:

- Start number 7 was manually annotated 4 times for cluster DZ.

Info for manual annotations of cluster FA:

- Start number 4 was manually annotated 1 time for cluster FA.

### **Gene Information:**

Gene: Agueybana\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Agueybana\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Aleemily\_1 Start: 1, Stop: 372, Start Num: 7

Candidate Starts for Aleemily\_1:

(Start: 7 @1 has 4 MA's), (19, 115), (30, 202), (34, 238), (41, 289), (45, 310),

Gene: AlumE\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for AlumE\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Antonio\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Antonio\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: BatStarr\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for BatStarr\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Bialota\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Bialota\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Bosnia\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Bosnia\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: BoyNamedSue\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for BoyNamedSue\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Bunnybear\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Bunnybear\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (25, 239), (28, 278), (33, 305), (35, 323), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Cafasso\_1 Start: 1, Stop: 372, Start Num: 7

Candidate Starts for Cafasso\_1:

(Start: 7 @1 has 4 MA's), (19, 115), (30, 202), (34, 238), (41, 289), (45, 310),

Gene: Elener\_2 Start: 1391, Stop: 1867, Start Num: 2

Candidate Starts for Elener\_2:

(1, 794), (Start: 2 @1391 has 1 MA's), (20, 1547), (21, 1559), (40, 1724), (43, 1742), (45, 1748), (50, 1817),

Gene: Eudoria\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Eudoria\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Eviarto\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Eviarto\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Gudmit\_2 Start: 492, Stop: 980, Start Num: 5

Candidate Starts for Gudmit\_2:

(Start: 5 @492 has 1 MA's), (12, 531), (14, 573), (16, 600), (22, 657), (23, 660), (24, 669), (28, 717), (31, 735), (40, 828), (45, 852), (46, 855), (48, 876),

Gene: Herod\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Herod\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Hugley\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Hugley\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Hyzer\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Hyzer\_1:

(Start: 6 @56 has 28 MA's), (14, 134), (19, 185), (25, 239), (28, 278), (33, 305), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Kita\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Kita\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Madeline\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Madeline\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (25, 239), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Manasvini\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Manasvini\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Maridalia\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Maridalia\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Mcklovin\_1 Start: 57, Stop: 521, Start Num: 6

Candidate Starts for Mcklovin\_1:

(Start: 6 @57 has 28 MA's), (11, 90), (19, 186), (28, 279), (35, 324), (36, 339), (40, 366), (43, 384), (48, 414), (49, 423), (50, 459), (51, 465),

Gene: ModicumRichard\_1 Start: 1, Stop: 372, Start Num: 7

Candidate Starts for ModicumRichard\_1:

(Start: 7 @1 has 4 MA's), (19, 115), (30, 202), (34, 238), (41, 289), (45, 310),

Gene: Morgana\_1 Start: 1, Stop: 375, Start Num: 7

Candidate Starts for Morgana\_1:

(Start: 7 @1 has 4 MA's), (9, 19), (15, 88), (34, 244), (38, 268), (44, 313),

Gene: Neobush\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Neobush\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: NoSwimming\_3 Start: 1735, Stop: 2208, Start Num: 2

Candidate Starts for NoSwimming\_3:

(Start: 2 @1735 has 1 MA's), (24, 1927), (28, 1975), (29, 1978), (32, 1996), (43, 2077), (47, 2092), (52, 2161),

Gene: Nymphadora\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Nymphadora\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: ObLaDi\_1 Start: 1, Stop: 372, Start Num: 7

Candidate Starts for ObLaDi\_1:

(Start: 7 @1 has 4 MA's), (19, 115), (30, 202), (34, 238), (41, 289), (45, 310),

Gene: Pepperoni\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Pepperoni\_1:

(Start: 6 @56 has 28 MA's), (10, 83), (14, 134), (19, 185), (25, 239), (26, 245), (28, 278), (33, 305), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Polly\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Polly\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: RavenCo17\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for RavenCo17\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: RootBeer\_1 Start: 41, Stop: 505, Start Num: 4

Candidate Starts for RootBeer\_1:

(Start: 4 @41 has 1 MA's), (14, 128), (18, 167), (27, 242), (37, 338),

Gene: Scotia\_3 Start: 1735, Stop: 2208, Start Num: 2

Candidate Starts for Scotia\_3:

(Start: 2 @1735 has 1 MA's), (24, 1927), (28, 1975), (29, 1978), (32, 1996), (43, 2077), (47, 2092), (52, 2161),

Gene: Shambre1\_2 Start: 1495, Stop: 1965, Start Num: 3

Candidate Starts for Shambre1\_2:

(Start: 3 @1495 has 1 MA's), (14, 1588), (17, 1624), (21, 1660),

Gene: Suscepit\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Suscepit\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Tayonia\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Tayonia\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: ThankyouJordi\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for ThankyouJordi\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (25, 239), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: TimTam\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for TimTam\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Trumpet\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Trumpet\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: VanLee\_1 Start: 1, Stop: 366, Start Num: 8

Candidate Starts for VanLee\_1:

(Start: 8 @1 has 1 MA's), (11, 19), (13, 46), (34, 235), (39, 280), (42, 298),

Gene: WelcomeAyanna\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for WelcomeAyanna\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (25, 239), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Zameen\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Zameen\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),

Gene: Zirinka\_1 Start: 56, Stop: 520, Start Num: 6

Candidate Starts for Zirinka\_1:

(Start: 6 @56 has 28 MA's), (19, 185), (26, 245), (28, 278), (35, 323), (36, 338), (40, 365), (43, 383), (48, 413), (49, 422), (50, 458), (51, 464),