

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 203529 Report

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

Pham number 203529 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : Blino\_46, CarolAnn\_45

• Track 2 : JuJu 47

Track 3: ThankyouJordi\_43, WelcomeAyanna\_43

Track 4 : Powerball\_41

Track 5 : Ecliptus\_55

• Track 6 : Malibo\_44

• Track 7 : Ruthy 43

Track 8 : DumpsterDude\_45

Track 9 : ArchiDore\_44

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

The start number called the most often in the published annotations is 14, it was called in 5 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Blino\_46, CarolAnn\_45, JuJu\_47, ThankyouJordi\_43, WelcomeAyanna\_43,

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

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

• ArchiDore\_44, DumpsterDude\_45, Ecliptus\_55, Malibo\_44, Powerball\_41, Ruthy\_43,

## Summary by start number:

#### Start 1:

- Found in 1 of 11 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ecliptus\_55 (DN),

### Start 5:

- Found in 1 of 11 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ruthy\_43 (DW),

## Start 12:

- Found in 5 of 11 (45.5%) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 80.0% of time when present
- Phage (with cluster) where this start called: ArchiDore\_44 (DW), DumpsterDude\_45 (DW), Malibo\_44 (DW), Powerball\_41 (CZ4),

### Start 14:

- Found in 5 of 11 (45.5%) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blino\_46 (CV), CarolAnn\_45 (CV), JuJu\_47 (CV), ThankyouJordi\_43 (CZ1), WelcomeAyanna\_43 (CZ1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: DN, DW, CZ1, CV, CZ4,

Info for manual annotations of cluster CV:

•Start number 14 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CZ1:

•Start number 14 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ4:

•Start number 12 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN:

•Start number 1 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DW:

- •Start number 5 was manually annotated 1 time for cluster DW.
- •Start number 12 was manually annotated 2 times for cluster DW.

#### Gene Information:

Gene: ArchiDore\_44 Start: 35753, Stop: 35109, Start Num: 12

Candidate Starts for ArchiDore\_44:

(10, 35768), (Start: 12 @35753 has 3 MA's), (13, 35744), (17, 35663), (27, 35492), (39, 35255),

Gene: Blino\_46 Start: 37798, Stop: 37088, Start Num: 14

Candidate Starts for Blino 46:

(9, 37834), (Start: 14 @37798 has 5 MA's), (16, 37750), (22, 37621), (23, 37606), (25, 37594), (30, 37510), (31, 37495), (35, 37423), (37, 37360), (38, 37315), (45, 37222), (52, 37147),

Gene: CarolAnn\_45 Start: 37797, Stop: 37087, Start Num: 14

Candidate Starts for CarolAnn 45:

(9, 37833), (Start: 14 @37797 has 5 MA's), (16, 37749), (22, 37620), (23, 37605), (25, 37593), (30, 37509), (31, 37494), (35, 37422), (37, 37359), (38, 37314), (45, 37221), (52, 37146),

Gene: DumpsterDude\_45 Start: 37978, Stop: 37367, Start Num: 12

Candidate Starts for DumpsterDude 45:

(10, 37993), (Start: 12 @37978 has 3 MA's), (13, 37969), (17, 37888), (33, 37645), (39, 37507),

Gene: Ecliptus\_55 Start: 37538, Stop: 36750, Start Num: 1

Candidate Starts for Ecliptus\_55:

(Start: 1 @37538 has 1 MA's), (2, 37529), (7, 37418), (11, 37400), (18, 37244), (26, 37124), (32, 37046), (36, 36992), (39, 36878), (46, 36797), (48, 36782), (50, 36755),

Gene: JuJu\_47 Start: 35584, Stop: 34856, Start Num: 14

Candidate Starts for JuJu\_47:

(9, 35620), (Start: 14 @35584 has 5 MA's), (16, 35536), (22, 35407), (30, 35296), (31, 35281), (34, 35239), (41, 35071), (49, 34969),

Gene: Malibo 44 Start: 34977, Stop: 34357, Start Num: 12

Candidate Starts for Malibo\_44:

(10, 34992), (Start: 12 @34977 has 3 MA's), (13, 34968), (17, 34887), (39, 34503), (42, 34485), (43, 34464), (47, 34422),

Gene: Powerball\_41 Start: 32791, Stop: 32180, Start Num: 12

Candidate Starts for Powerball 41:

(7, 32818), (Start: 12 @32791 has 3 MA's), (13, 32782), (15, 32767), (17, 32701), (27, 32530), (28, 32524), (39, 32308), (40, 32305), (46, 32227), (48, 32212), (50, 32185),

Gene: Ruthy\_43 Start: 35381, Stop: 34722, Start Num: 5

Candidate Starts for Ruthy\_43:

(4, 35393), (Start: 5 @35381 has 1 MA's), (10, 35354), (Start: 12 @35339 has 3 MA's), (13, 35330), (16, 35276), (17, 35249), (23, 35135), (28, 35072), (33, 35006), (39, 34868), (47, 34787),

Gene: ThankyouJordi\_43 Start: 35979, Stop: 35272, Start Num: 14

Candidate Starts for ThankyouJordi 43:

(3, 36063), (6, 36027), (8, 36015), (Start: 14 @35979 has 5 MA's), (19, 35850), (20, 35823), (21, 35814), (23, 35790), (24, 35787), (29, 35697), (30, 35694), (44, 35427), (51, 35352), (53, 35295),

Gene: WelcomeAyanna\_43 Start: 36126, Stop: 35419, Start Num: 14

Candidate Starts for WelcomeAyanna\_43:

(3, 36210), (6, 36174), (8, 36162), (Start: 14 @36126 has 5 MA's), (19, 35997), (20, 35970), (21, 35961), (23, 35937), (24, 35934), (29, 35844), (30, 35841), (44, 35574), (51, 35499), (53, 35442),