



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 165429 Report

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

Pham number 165429 has 9 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Meyran\_49
- Track 2 : Phishy\_53
- Track 3 : Nyceirae\_54
- Track 4 : Vordorf\_50
- Track 5 : Dogfish\_49
- Track 6 : Ewald\_49
- Track 7 : EvenBluerMoon\_51
- Track 8 : JanetJ\_44
- Track 9 : Aoka\_46

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

The start number called the most often in the published annotations is 5, it was called in 3 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ewald\_49, Meyran\_49, Phishy\_53,

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

- Vordorf\_50,

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

- Aoka\_46, Dogfish\_49, EvenBluerMoon\_51, JanetJ\_44, Nyceirae\_54,

### **Summary by start number:**

Start 5:

- Found in 4 of 9 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Ewald\_49 (DT), Meyran\_49 (DT), Phishy\_53 (DT),

Start 9:

- Found in 8 of 9 ( 88.9% ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aoka\_46 (FO), EvenBluerMoon\_51 (FO), JanetJ\_44 (FO), Vordorf\_50 (DT),

Start 11:

- Found in 6 of 9 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dogfish\_49 (DT), Nyceirae\_54 (DT),

### **Summary by clusters:**

There are 2 clusters represented in this pham: DT, FO,

Info for manual annotations of cluster DT:

- Start number 5 was manually annotated 3 times for cluster DT.
- Start number 11 was manually annotated 2 times for cluster DT.

Info for manual annotations of cluster FO:

- Start number 9 was manually annotated 2 times for cluster FO.

### **Gene Information:**

Gene: Aoka\_46 Start: 32046, Stop: 33164, Start Num: 9

Candidate Starts for Aoka\_46:

(Start: 9 @32046 has 2 MA's), (27, 32361), (35, 33066),

Gene: Dogfish\_49 Start: 36865, Stop: 37968, Start Num: 11

Candidate Starts for Dogfish\_49:

(7, 36796), (10, 36832), (Start: 11 @36865 has 2 MA's), (12, 36886), (13, 36928), (14, 36940), (16, 36985), (18, 37030), (20, 37042), (21, 37048), (22, 37054), (23, 37069), (24, 37078), (29, 37210), (30, 37216), (32, 37345), (33, 37348), (34, 37453),

Gene: EvenBluerMoon\_51 Start: 31418, Stop: 32536, Start Num: 9

Candidate Starts for EvenBluerMoon\_51:

(Start: 9 @31418 has 2 MA's), (27, 31733), (31, 31871), (35, 32438),

Gene: Ewald\_49 Start: 36559, Stop: 37788, Start Num: 5

Candidate Starts for Ewald\_49:

(Start: 5 @36559 has 3 MA's), (6, 36613), (8, 36634), (Start: 9 @36649 has 2 MA's), (Start: 11 @36682 has 2 MA's), (12, 36703), (13, 36745), (14, 36757), (19, 36853), (20, 36859), (21, 36865), (22, 36871), (23, 36886), (28, 37018), (29, 37024), (30, 37030), (32, 37159), (33, 37162), (34, 37267),

Gene: JanetJ\_44 Start: 32563, Stop: 33687, Start Num: 9

Candidate Starts for JanetJ\_44:

(Start: 9 @32563 has 2 MA's), (12, 32617), (15, 32674), (16, 32716), (25, 32833), (26, 32872), (27, 32878), (33, 33091), (35, 33583),

Gene: Meyran\_49 Start: 37660, Stop: 38889, Start Num: 5

Candidate Starts for Meyran\_49:

(1, 37399), (2, 37453), (3, 37462), (4, 37615), (Start: 5 @37660 has 3 MA's), (6, 37714), (8, 37735), (Start: 9 @37750 has 2 MA's), (Start: 11 @37783 has 2 MA's), (12, 37804), (13, 37846), (14, 37858), (19, 37954), (20, 37960), (21, 37966), (22, 37972), (23, 37987), (28, 38119), (29, 38125), (30, 38131), (32, 38260), (33, 38263), (34, 38368),

Gene: Nyceirae\_54 Start: 37807, Stop: 38916, Start Num: 11

Candidate Starts for Nyceirae\_54:

(Start: 9 @37774 has 2 MA's), (Start: 11 @37807 has 2 MA's), (12, 37828), (13, 37870), (17, 37951), (19, 37978), (20, 37984), (21, 37990), (22, 37996), (23, 38011), (28, 38143), (29, 38149), (30, 38155), (32, 38284), (33, 38287), (34, 38392),

Gene: Phishy\_53 Start: 38633, Stop: 39862, Start Num: 5

Candidate Starts for Phishy\_53:

(1, 38372), (2, 38426), (3, 38435), (4, 38588), (Start: 5 @38633 has 3 MA's), (6, 38687), (8, 38708), (Start: 9 @38723 has 2 MA's), (Start: 11 @38756 has 2 MA's), (12, 38777), (13, 38819), (17, 38900), (19, 38927), (20, 38933), (21, 38939), (22, 38945), (23, 38960), (28, 39092), (29, 39098), (30, 39104), (33, 39236), (34, 39341),

Gene: Vordorf\_50 Start: 37013, Stop: 38146, Start Num: 9

Candidate Starts for Vordorf\_50:

(1, 36662), (2, 36716), (3, 36725), (4, 36878), (Start: 5 @36923 has 3 MA's), (6, 36977), (8, 36998), (Start: 9 @37013 has 2 MA's), (Start: 11 @37046 has 2 MA's), (12, 37067), (13, 37109), (14, 37121), (17, 37190), (19, 37217), (20, 37223), (21, 37229), (22, 37235), (23, 37250), (28, 37382), (29, 37388), (30, 37394), (32, 37523), (33, 37526), (34, 37631),