

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 221864 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221864 has 16 members, 4 are drafts.

Phages represented in each track:

- Track 1 : StevieBAY 68
- Track 2 : Timinator\_68, LeeroyJ\_68, GravityBall\_67
- Track 3 : Sonny\_67
- Track 4 : Jordan\_68, Shade\_67
- Track 5 : BigDome 67
- Track 6 : JKerns\_ 67
- Track 7 : BarretLemon 67
- Track 8 : Zartrosa 69
- Track 9: Hillester\_53, RadFad\_53
- Track 10 : Raqqa\_41, Windest\_52
- Track 11 : MidnightRain\_53

# 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 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 BarretLemon\_67, BigDome\_67, GravityBall\_67, LeeroyJ\_68, Raqqa\_41, StevieBAY\_68, Timinator\_68, Windest\_52,

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

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

• Hillester\_53, JKerns\_67, Jordan\_68, MidnightRain\_53, RadFad\_53, Shade\_67, Sonny\_67, Zartrosa\_69,

## Summary by start number:

#### Start 9:

- Found in 8 of 16 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 25.0% of time when present

Phage (with cluster) where this start called: Jordan\_68 (AO2), Shade\_67 (AO2),

#### Start 11:

- Found in 5 of 16 (31.2%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 60.0% of time when present
- Phage (with cluster) where this start called: JKerns\_67 (AO2), Sonny\_67 (AO2), Zartrosa\_69 (AO2),

### Start 12:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MidnightRain\_53 (AY),

### Start 13:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hillester\_53 (AY), RadFad\_53 (AY),

#### Start 14:

- Found in 8 of 16 (50.0%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon\_67 (AO2), BigDome\_67 (AO2), GravityBall\_67 (AO2), LeeroyJ\_68 (AO2), Raqqa\_41 (AY), StevieBAY\_68 (AO2), Timinator\_68 (AO2), Windest\_52 (AY),

# Summary by clusters:

There are 2 clusters represented in this pham: AY, AO2,

Info for manual annotations of cluster AO2:

- •Start number 9 was manually annotated 2 times for cluster AO2.
- •Start number 11 was manually annotated 3 times for cluster AO2.
- •Start number 14 was manually annotated 5 times for cluster AO2.

Info for manual annotations of cluster AY:

- •Start number 12 was manually annotated 1 time for cluster AY.
- •Start number 13 was manually annotated 1 time for cluster AY.

### Gene Information:

Gene: BarretLemon\_67 Start: 43635, Stop: 43826, Start Num: 14 Candidate Starts for BarretLemon\_67: (1, 43074), (Start: 9 @43596 has 2 MA's), (Start: 14 @43635 has 5 MA's), (17, 43716), (18, 43731), (19, 43746), (20, 43761),

Gene: BigDome\_67 Start: 43919, Stop: 44110, Start Num: 14 Candidate Starts for BigDome\_67:

(4, 43832), (5, 43844), (Start: 14 @43919 has 5 MA's), (18, 44015), (19, 44030), (20, 44045),

Gene: GravityBall\_67 Start: 43935, Stop: 44126, Start Num: 14

Candidate Starts for GravityBall\_67:

(Start: 9 @43896 has 2 MA's), (Start: 14 @43935 has 5 MA's), (18, 44031), (19, 44046), (20, 44061),

Gene: Hillester\_53 Start: 31772, Stop: 31969, Start Num: 13

Candidate Starts for Hillester 53:

(Start: 13 @31772 has 1 MA's), (16, 31799), (19, 31889), (21, 31958),

Gene: JKerns 67 Start: 44127, Stop: 44342, Start Num: 11

Candidate Starts for JKerns 67:

(Start: 9 @44112 has 2 MA's), (Start: 11 @44127 has 3 MA's), (18, 44247), (19, 44262),

Gene: Jordan\_68 Start: 44237, Stop: 44467, Start Num: 9

Candidate Starts for Jordan\_68:

(Start: 9 @44237 has 2 MA's), (Start: 11 @44252 has 3 MA's), (18, 44372), (19, 44387),

Gene: LeeroyJ 68 Start: 43864, Stop: 44055, Start Num: 14

Candidate Starts for LeeroyJ\_68:

(Start: 9 @ 43825 has 2 MA's), (Start: 14 @ 43864 has 5 MA's), (18, 43960), (19, 43975), (20, 43990),

Gene: MidnightRain\_53 Start: 31954, Stop: 32151, Start Num: 12

Candidate Starts for MidnightRain\_53:

(7, 31897), (8, 31903), (Start: 12 @31954 has 1 MA's), (16, 31981), (19, 32071), (21, 32140),

Gene: RadFad\_53 Start: 31772, Stop: 31969, Start Num: 13

Candidate Starts for RadFad 53:

(Start: 13 @31772 has 1 MA's), (16, 31799), (19, 31889), (21, 31958),

Gene: Raqqa\_41 Start: 27644, Stop: 27835, Start Num: 14

Candidate Starts for Ragga\_41:

(3, 27488), (10, 27611), (Start: 14 @ 27644 has 5 MA's), (16, 27665), (19, 27755), (21, 27824),

Gene: Shade\_67 Start: 43875, Stop: 44105, Start Num: 9

Candidate Starts for Shade\_67:

(Start: 9 @43875 has 2 MA's), (Start: 11 @43890 has 3 MA's), (18, 44010), (19, 44025),

Gene: Sonny\_67 Start: 43813, Stop: 44028, Start Num: 11

Candidate Starts for Sonny\_67:

(Start: 9 @43798 has 2 MA's), (Start: 11 @43813 has 3 MA's), (18, 43933), (19, 43948),

Gene: StevieBAY\_68 Start: 44157, Stop: 44348, Start Num: 14

Candidate Starts for StevieBAY 68:

(4, 44070), (Start: 14 @44157 has 5 MA's), (18, 44253), (19, 44268), (20, 44283),

Gene: Timinator\_68 Start: 43977, Stop: 44168, Start Num: 14

Candidate Starts for Timinator\_68:

(Start: 9 @43938 has 2 MA's), (Start: 14 @43977 has 5 MA's), (18, 44073), (19, 44088), (20, 44103),

Gene: Windest\_52 Start: 29708, Stop: 29899, Start Num: 14

Candidate Starts for Windest 52:

(3, 29552), (10, 29675), (Start: 14 @ 29708 has 5 MA's), (16, 29729), (19, 29819), (21, 29888),

Gene: Zartrosa\_69 Start: 44139, Stop: 44354, Start Num: 11

Candidate Starts for Zartrosa\_69:

(2, 43992), (6, 44094), (Start: 11 @44139 has 3 MA's), (15, 44178), (18, 44259), (19, 44274),