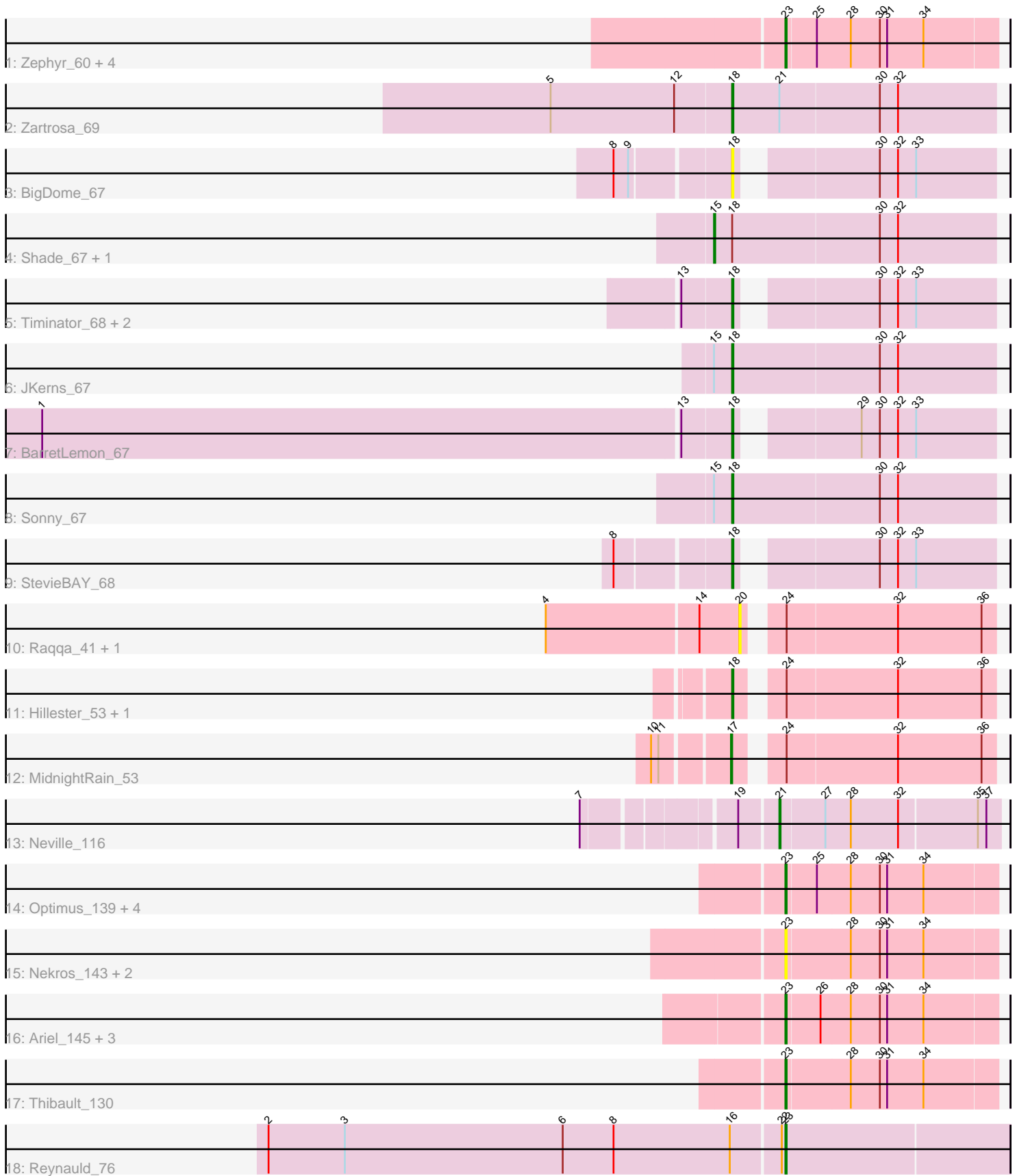


Pham 216363



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 216363 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216363 has 36 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Zephyr\_60, Sibs6\_61, MPlant7149\_58, PinkPlastic\_59, Magnito\_58
- Track 2 : Zartrosa\_69
- Track 3 : BigDome\_67
- Track 4 : Shade\_67, Jordan\_68
- Track 5 : Timinator\_68, LeeroyJ\_68, GravityBall\_67
- Track 6 : JKerns\_67
- Track 7 : BarretLemon\_67
- Track 8 : Sonny\_67
- Track 9 : StevieBAY\_68
- Track 10 : Raqqa\_41, Windest\_52
- Track 11 : Hillester\_53, RadFad\_53
- Track 12 : MidnightRain\_53
- Track 13 : Neville\_116
- Track 14 : Optimus\_139, Bagrid\_149, BAKA\_148, EricMillard\_140, Duke13\_144
- Track 15 : Nekros\_143, Gonephishing\_139, Rearden\_144
- Track 16 : Ariel\_145, Courthouse\_141, Hannaconda\_139, Superphikiman\_143
- Track 17 : Thibault\_130
- Track 18 : Reynauld\_76

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

The start number called the most often in the published annotations is 23, it was called in 15 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_145, BAKA\_148, Bagrid\_149, Courthouse\_141, Duke13\_144, EricMillard\_140, Gonephishing\_139, Hannaconda\_139, MPlant7149\_58, Magnito\_58, Nekros\_143, Optimus\_139, PinkPlastic\_59, Rearden\_144, Reynauld\_76, Sibs6\_61, Superphikiman\_143, Thibault\_130, Zephyr\_60,

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

- 

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

- BarretLemon\_67, BigDome\_67, GravityBall\_67, Hillester\_53, JKerns\_67, Jordan\_68, LeeroyJ\_68, MidnightRain\_53, Neville\_116, RadFad\_53, Raqqa\_41, Shade\_67, Sonny\_67, StevieBAY\_68, Timinator\_68, Windest\_52, Zartrosa\_69,

### Summary by start number:

#### Start 15:

- Found in 4 of 36 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jordan\_68 (AO2), Shade\_67 (AO2),

#### Start 17:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MidnightRain\_53 (AY),

#### Start 18:

- Found in 13 of 36 ( 36.1% ) of genes in pham
- Manual Annotations of this start: 9 of 28
- Called 84.6% of time when present
- Phage (with cluster) where this start called: BarretLemon\_67 (AO2), BigDome\_67 (AO2), GravityBall\_67 (AO2), Hillester\_53 (AY), JKerns\_67 (AO2), LeeroyJ\_68 (AO2), RadFad\_53 (AY), Sonny\_67 (AO2), StevieBAY\_68 (AO2), Timinator\_68 (AO2), Zartrosa\_69 (AO2),

#### Start 20:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Raqqa\_41 (AY), Windest\_52 (AY),

#### Start 21:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Neville\_116 (DU2),

#### Start 23:

- Found in 19 of 36 ( 52.8% ) of genes in pham
- Manual Annotations of this start: 15 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_145 (J), BAKA\_148 (J), Bagrid\_149 (J), Courthouse\_141 (J), Duke13\_144 (J), EricMillard\_140 (J), Gonephishing\_139 (J), Hannaconda\_139 (J), MPlant7149\_58 (A1), Magnito\_58 (A1), Nekros\_143 (J), Optimus\_139 (J), PinkPlastic\_59 (A1), Rearden\_144 (J), Reynauld\_76 (singleton), Sibs6\_61 (A1), Superphikiman\_143 (J), Thibault\_130 (J), Zephyr\_60 (A1),

### Summary by clusters:

There are 6 clusters represented in this pham: singleton, J, A1, AO2, AY, DU2,

Info for manual annotations of cluster A1:

- Start number 23 was manually annotated 5 times for cluster A1.

Info for manual annotations of cluster AO2:

- Start number 15 was manually annotated 2 times for cluster AO2.
- Start number 18 was manually annotated 8 times for cluster AO2.

Info for manual annotations of cluster AY:

- Start number 17 was manually annotated 1 time for cluster AY.
- Start number 18 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster DU2:

- Start number 21 was manually annotated 1 time for cluster DU2.

Info for manual annotations of cluster J:

- Start number 23 was manually annotated 9 times for cluster J.

### **Gene Information:**

Gene: Ariel\_145 Start: 73854, Stop: 74024, Start Num: 23

Candidate Starts for Ariel\_145:

(Start: 23 @73854 has 15 MA's), (26, 73881), (28, 73905), (30, 73929), (31, 73935), (34, 73965),

Gene: BAKA\_148 Start: 77184, Stop: 77354, Start Num: 23

Candidate Starts for BAKA\_148:

(Start: 23 @77184 has 15 MA's), (25, 77208), (28, 77235), (30, 77259), (31, 77265), (34, 77295),

Gene: Bagrid\_149 Start: 77879, Stop: 78049, Start Num: 23

Candidate Starts for Bagrid\_149:

(Start: 23 @77879 has 15 MA's), (25, 77903), (28, 77930), (30, 77954), (31, 77960), (34, 77990),

Gene: BarretLemon\_67 Start: 43635, Stop: 43826, Start Num: 18

Candidate Starts for BarretLemon\_67:

(1, 43074), (13, 43596), (Start: 18 @43635 has 9 MA's), (29, 43716), (30, 43731), (32, 43746), (33, 43761),

Gene: BigDome\_67 Start: 43919, Stop: 44110, Start Num: 18

Candidate Starts for BigDome\_67:

(8, 43832), (9, 43844), (Start: 18 @43919 has 9 MA's), (30, 44015), (32, 44030), (33, 44045),

Gene: Courthouse\_141 Start: 73712, Stop: 73882, Start Num: 23

Candidate Starts for Courthouse\_141:

(Start: 23 @73712 has 15 MA's), (26, 73739), (28, 73763), (30, 73787), (31, 73793), (34, 73823),

Gene: Duke13\_144 Start: 75469, Stop: 75639, Start Num: 23

Candidate Starts for Duke13\_144:

(Start: 23 @75469 has 15 MA's), (25, 75493), (28, 75520), (30, 75544), (31, 75550), (34, 75580),

Gene: EricMillard\_140 Start: 76821, Stop: 76991, Start Num: 23

Candidate Starts for EricMillard\_140:

(Start: 23 @76821 has 15 MA's), (25, 76845), (28, 76872), (30, 76896), (31, 76902), (34, 76932),

Gene: Gonephishing\_139 Start: 73945, Stop: 74115, Start Num: 23

Candidate Starts for Gonephishing\_139:

(Start: 23 @73945 has 15 MA's), (28, 73996), (30, 74020), (31, 74026), (34, 74056),

Gene: GravityBall\_67 Start: 43935, Stop: 44126, Start Num: 18

Candidate Starts for GravityBall\_67:

(13, 43896), (Start: 18 @43935 has 9 MA's), (30, 44031), (32, 44046), (33, 44061),

Gene: Hannaconda\_139 Start: 74461, Stop: 74631, Start Num: 23

Candidate Starts for Hannaconda\_139:

(Start: 23 @74461 has 15 MA's), (26, 74488), (28, 74512), (30, 74536), (31, 74542), (34, 74572),

Gene: Hillester\_53 Start: 31772, Stop: 31969, Start Num: 18

Candidate Starts for Hillester\_53:

(Start: 18 @31772 has 9 MA's), (24, 31799), (32, 31889), (36, 31958),

Gene: JKerns\_67 Start: 44127, Stop: 44342, Start Num: 18

Candidate Starts for JKerns\_67:

(Start: 15 @44112 has 2 MA's), (Start: 18 @44127 has 9 MA's), (30, 44247), (32, 44262),

Gene: Jordan\_68 Start: 44237, Stop: 44467, Start Num: 15

Candidate Starts for Jordan\_68:

(Start: 15 @44237 has 2 MA's), (Start: 18 @44252 has 9 MA's), (30, 44372), (32, 44387),

Gene: LeeroyJ\_68 Start: 43864, Stop: 44055, Start Num: 18

Candidate Starts for LeeroyJ\_68:

(13, 43825), (Start: 18 @43864 has 9 MA's), (30, 43960), (32, 43975), (33, 43990),

Gene: MPlant7149\_58 Start: 38800, Stop: 38630, Start Num: 23

Candidate Starts for MPlant7149\_58:

(Start: 23 @38800 has 15 MA's), (25, 38776), (28, 38749), (30, 38725), (31, 38719), (34, 38689),

Gene: Magnito\_58 Start: 39967, Stop: 39797, Start Num: 23

Candidate Starts for Magnito\_58:

(Start: 23 @39967 has 15 MA's), (25, 39943), (28, 39916), (30, 39892), (31, 39886), (34, 39856),

Gene: MidnightRain\_53 Start: 31954, Stop: 32151, Start Num: 17

Candidate Starts for MidnightRain\_53:

(10, 31897), (11, 31903), (Start: 17 @31954 has 1 MA's), (24, 31981), (32, 32071), (36, 32140),

Gene: Nekros\_143 Start: 77051, Stop: 77221, Start Num: 23

Candidate Starts for Nekros\_143:

(Start: 23 @77051 has 15 MA's), (28, 77102), (30, 77126), (31, 77132), (34, 77162),

Gene: Neville\_116 Start: 66352, Stop: 66528, Start Num: 21

Candidate Starts for Neville\_116:

(7, 66211), (19, 66322), (Start: 21 @66352 has 1 MA's), (27, 66388), (28, 66409), (32, 66448), (35, 66511), (37, 66517),

Gene: Optimus\_139 Start: 75143, Stop: 75313, Start Num: 23

Candidate Starts for Optimus\_139:

(Start: 23 @75143 has 15 MA's), (25, 75167), (28, 75194), (30, 75218), (31, 75224), (34, 75254),

Gene: PinkPlastic\_59 Start: 39832, Stop: 39662, Start Num: 23

Candidate Starts for PinkPlastic\_59:

(Start: 23 @39832 has 15 MA's), (25, 39808), (28, 39781), (30, 39757), (31, 39751), (34, 39721),

Gene: RadFad\_53 Start: 31772, Stop: 31969, Start Num: 18

Candidate Starts for RadFad\_53:

(Start: 18 @31772 has 9 MA's), (24, 31799), (32, 31889), (36, 31958),

Gene: Raqqa\_41 Start: 27644, Stop: 27835, Start Num: 20

Candidate Starts for Raqqa\_41:

(4, 27488), (14, 27611), (20, 27644), (24, 27665), (32, 27755), (36, 27824),

Gene: Rearden\_144 Start: 76460, Stop: 76630, Start Num: 23

Candidate Starts for Rearden\_144:

(Start: 23 @76460 has 15 MA's), (28, 76511), (30, 76535), (31, 76541), (34, 76571),

Gene: Reynauld\_76 Start: 62933, Stop: 62751, Start Num: 23

Candidate Starts for Reynauld\_76:

(2, 63356), (3, 63293), (6, 63113), (8, 63071), (16, 62975), (22, 62936), (Start: 23 @62933 has 15 MA's),

Gene: Shade\_67 Start: 43875, Stop: 44105, Start Num: 15

Candidate Starts for Shade\_67:

(Start: 15 @43875 has 2 MA's), (Start: 18 @43890 has 9 MA's), (30, 44010), (32, 44025),

Gene: Sibs6\_61 Start: 38862, Stop: 38692, Start Num: 23

Candidate Starts for Sibs6\_61:

(Start: 23 @38862 has 15 MA's), (25, 38838), (28, 38811), (30, 38787), (31, 38781), (34, 38751),

Gene: Sonny\_67 Start: 43813, Stop: 44028, Start Num: 18

Candidate Starts for Sonny\_67:

(Start: 15 @43798 has 2 MA's), (Start: 18 @43813 has 9 MA's), (30, 43933), (32, 43948),

Gene: StevieBAY\_68 Start: 44157, Stop: 44348, Start Num: 18

Candidate Starts for StevieBAY\_68:

(8, 44070), (Start: 18 @44157 has 9 MA's), (30, 44253), (32, 44268), (33, 44283),

Gene: Superphikiman\_143 Start: 73994, Stop: 74164, Start Num: 23

Candidate Starts for Superphikiman\_143:

(Start: 23 @73994 has 15 MA's), (26, 74021), (28, 74045), (30, 74069), (31, 74075), (34, 74105),

Gene: Thibault\_130 Start: 74570, Stop: 74740, Start Num: 23

Candidate Starts for Thibault\_130:

(Start: 23 @74570 has 15 MA's), (28, 74621), (30, 74645), (31, 74651), (34, 74681),

Gene: Timinator\_68 Start: 43977, Stop: 44168, Start Num: 18

Candidate Starts for Timinator\_68:

(13, 43938), (Start: 18 @43977 has 9 MA's), (30, 44073), (32, 44088), (33, 44103),

Gene: Windest\_52 Start: 29708, Stop: 29899, Start Num: 20

Candidate Starts for Windest\_52:

(4, 29552), (14, 29675), (20, 29708), (24, 29729), (32, 29819), (36, 29888),

Gene: Zartrosa\_69 Start: 44139, Stop: 44354, Start Num: 18

Candidate Starts for Zartrosa\_69:

(5, 43992), (12, 44094), (Start: 18 @44139 has 9 MA's), (Start: 21 @44178 has 1 MA's), (30, 44259), (32, 44274),

Gene: Zephyr\_60 Start: 39858, Stop: 39688, Start Num: 23

Candidate Starts for Zephyr\_60:

(Start: 23 @39858 has 15 MA's), (25, 39834), (28, 39807), (30, 39783), (31, 39777), (34, 39747),