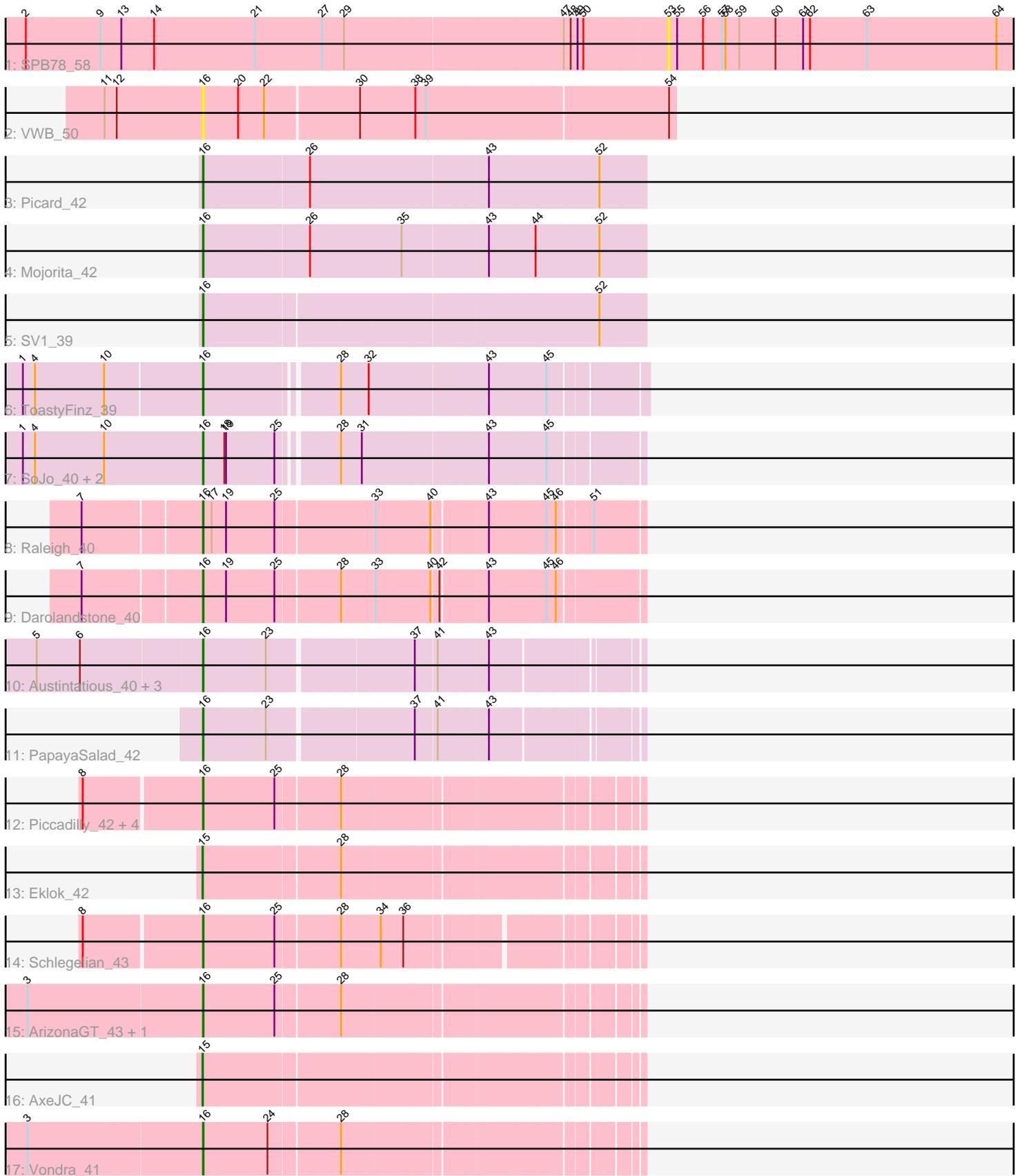


# Pham 289663



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 289663 Report

This analysis was run 03/28/26 on database version 641.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 289663 has 27 members, 3 are drafts.

Phages represented in each track:

- Track 1 : SPB78\_58
- Track 2 : VWB\_50
- Track 3 : Picard\_42
- Track 4 : Mojorita\_42
- Track 5 : SV1\_39
- Track 6 : ToastyFinz\_39
- Track 7 : SoJo\_40, Tubberson\_40, DaRealMyers\_40
- Track 8 : Raleigh\_40
- Track 9 : Darolandstone\_40
- Track 10 : Austintatious\_40, Ididsumtinwong\_44, Lishka\_40, Bioscum\_43
- Track 11 : PapayaSalad\_42
- Track 12 : Piccadilly\_42, Eastland\_42, HFrancette\_43, Ignacio\_42, FrumpyGal\_43
- Track 13 : Eklok\_42
- Track 14 : Schlegelian\_43
- Track 15 : ArizonaGT\_43, Cumberbatch\_43
- Track 16 : AxeJC\_41
- Track 17 : Vondra\_41

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

The start number called the most often in the published annotations is 16, it was called in 22 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT\_43, Austintatious\_40, Bioscum\_43, Cumberbatch\_43, DaRealMyers\_40, Darolandstone\_40, Eastland\_42, FrumpyGal\_43, HFrancette\_43, Ididsumtinwong\_44, Ignacio\_42, Lishka\_40, Mojorita\_42, PapayaSalad\_42, Picard\_42, Piccadilly\_42, Raleigh\_40, SV1\_39, Schlegelian\_43, SoJo\_40, ToastyFinz\_39, Tubberson\_40, VWB\_50, Vondra\_41,

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

- 

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

- AxeJC\_41, Eklok\_42, SPB78\_58,

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

Start 15:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC\_41 (BP), Eklok\_42 (BP),

Start 16:

- Found in 24 of 27 ( 88.9% ) of genes in pham
- Manual Annotations of this start: 22 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_43 (BP), Austintatious\_40 (BC3), Bioscum\_43 (BC3), Cumberbatch\_43 (BP), DaRealMyers\_40 (BC1), Darolandstone\_40 (BC2), Eastland\_42 (BP), FrumpyGal\_43 (BP), HFrancette\_43 (BP), Ididsumtinwong\_44 (BC3), Ignacio\_42 (BP), Lishka\_40 (BC3), Mojourita\_42 (BC1), PapayaSalad\_42 (BC3), Picard\_42 (BC1), Piccadilly\_42 (BP), Raleigh\_40 (BC2), SV1\_39 (BC1), Schlegelian\_43 (BP), SoJo\_40 (BC1), ToastyFinz\_39 (BC1), Tubberson\_40 (BC1), VWB\_50 (BA), Vondra\_41 (BP),

Start 53:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78\_58 (BA),

### **Summary by clusters:**

There are 5 clusters represented in this pham: BA, BP, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 16 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 16 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 16 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:

- Start number 15 was manually annotated 2 times for cluster BP.
- Start number 16 was manually annotated 9 times for cluster BP.

### **Gene Information:**

Gene: ArizonaGT\_43 Start: 29287, Stop: 29967, Start Num: 16  
Candidate Starts for ArizonaGT\_43:  
(3, 28987), (Start: 16 @29287 has 22 MA's), (25, 29410), (28, 29512),

Gene: Austintatious\_40 Start: 26725, Stop: 27405, Start Num: 16  
Candidate Starts for Austintatious\_40:  
(5, 26443), (6, 26518), (Start: 16 @26725 has 22 MA's), (23, 26830), (37, 27061), (41, 27097), (43, 27178),

Gene: AxeJC\_41 Start: 28989, Stop: 29669, Start Num: 15  
Candidate Starts for AxeJC\_41:  
(Start: 15 @28989 has 2 MA's),

Gene: Bioscum\_43 Start: 29021, Stop: 29701, Start Num: 16  
Candidate Starts for Bioscum\_43:  
(5, 28739), (6, 28814), (Start: 16 @29021 has 22 MA's), (23, 29126), (37, 29357), (41, 29393), (43, 29474),

Gene: Cumberbatch\_43 Start: 29287, Stop: 29967, Start Num: 16  
Candidate Starts for Cumberbatch\_43:  
(3, 28987), (Start: 16 @29287 has 22 MA's), (25, 29410), (28, 29512),

Gene: DaRealMyers\_40 Start: 29957, Stop: 30646, Start Num: 16  
Candidate Starts for DaRealMyers\_40:  
(1, 29645), (4, 29666), (10, 29786), (Start: 16 @29957 has 22 MA's), (18, 29993), (19, 29996), (25, 30080), (28, 30167), (31, 30203), (43, 30410), (45, 30506),

Gene: Darolandstone\_40 Start: 31614, Stop: 32318, Start Num: 16  
Candidate Starts for Darolandstone\_40:  
(7, 31419), (Start: 16 @31614 has 22 MA's), (19, 31653), (25, 31737), (28, 31839), (33, 31896), (40, 31989), (42, 32001), (43, 32073), (45, 32169), (46, 32184),

Gene: Eastland\_42 Start: 29247, Stop: 29927, Start Num: 16  
Candidate Starts for Eastland\_42:  
(8, 29049), (Start: 16 @29247 has 22 MA's), (25, 29370), (28, 29472),

Gene: Eklok\_42 Start: 29046, Stop: 29726, Start Num: 15  
Candidate Starts for Eklok\_42:  
(Start: 15 @29046 has 2 MA's), (28, 29271),

Gene: FrumpyGal\_43 Start: 29247, Stop: 29927, Start Num: 16  
Candidate Starts for FrumpyGal\_43:  
(8, 29049), (Start: 16 @29247 has 22 MA's), (25, 29370), (28, 29472),

Gene: HFrancette\_43 Start: 30025, Stop: 30705, Start Num: 16  
Candidate Starts for HFrancette\_43:  
(8, 29827), (Start: 16 @30025 has 22 MA's), (25, 30148), (28, 30250),

Gene: Ididsumtinwong\_44 Start: 29021, Stop: 29701, Start Num: 16  
Candidate Starts for Ididsumtinwong\_44:  
(5, 28739), (6, 28814), (Start: 16 @29021 has 22 MA's), (23, 29126), (37, 29357), (41, 29393), (43, 29474),

Gene: Ignacio\_42 Start: 29928, Stop: 30608, Start Num: 16  
Candidate Starts for Ignacio\_42:  
(8, 29730), (Start: 16 @29928 has 22 MA's), (25, 30051), (28, 30153),

Gene: Lishka\_40 Start: 26725, Stop: 27405, Start Num: 16  
Candidate Starts for Lishka\_40:  
(5, 26443), (6, 26518), (Start: 16 @26725 has 22 MA's), (23, 26830), (37, 27061), (41, 27097), (43, 27178),

Gene: Mojorita\_42 Start: 29163, Stop: 29900, Start Num: 16  
Candidate Starts for Mojorita\_42:  
(Start: 16 @29163 has 22 MA's), (26, 29343), (35, 29496), (43, 29634), (44, 29712), (52, 29820),

Gene: PapayaSalad\_42 Start: 29311, Stop: 29991, Start Num: 16  
Candidate Starts for PapayaSalad\_42:  
(Start: 16 @29311 has 22 MA's), (23, 29416), (37, 29647), (41, 29683), (43, 29764),

Gene: Picard\_42 Start: 29361, Stop: 30098, Start Num: 16  
Candidate Starts for Picard\_42:  
(Start: 16 @29361 has 22 MA's), (26, 29541), (43, 29832), (52, 30018),

Gene: Piccadilly\_42 Start: 29246, Stop: 29926, Start Num: 16  
Candidate Starts for Piccadilly\_42:  
(8, 29048), (Start: 16 @29246 has 22 MA's), (25, 29369), (28, 29471),

Gene: Raleigh\_40 Start: 31982, Stop: 32686, Start Num: 16  
Candidate Starts for Raleigh\_40:  
(7, 31787), (Start: 16 @31982 has 22 MA's), (17, 31997), (19, 32021), (25, 32105), (33, 32264), (40, 32357), (43, 32441), (45, 32537), (46, 32552), (51, 32606),

Gene: SPB78\_58 Start: 39567, Stop: 40202, Start Num: 53  
Candidate Starts for SPB78\_58:  
(2, 38469), (9, 38598), (13, 38634), (14, 38691), (21, 38865), (27, 38982), (29, 39018), (47, 39390), (48, 39402), (49, 39414), (50, 39423), (53, 39567), (55, 39582), (56, 39627), (57, 39660), (58, 39666), (59, 39690), (60, 39753), (61, 39801), (62, 39813), (63, 39912), (64, 40137),

Gene: SV1\_39 Start: 28072, Stop: 28803, Start Num: 16  
Candidate Starts for SV1\_39:  
(Start: 16 @28072 has 22 MA's), (52, 28723),

Gene: Schlegelian\_43 Start: 29811, Stop: 30476, Start Num: 16  
Candidate Starts for Schlegelian\_43:  
(8, 29613), (Start: 16 @29811 has 22 MA's), (25, 29934), (28, 30036), (34, 30102), (36, 30141),

Gene: SoJo\_40 Start: 29952, Stop: 30641, Start Num: 16  
Candidate Starts for SoJo\_40:  
(1, 29640), (4, 29661), (10, 29781), (Start: 16 @29952 has 22 MA's), (18, 29988), (19, 29991), (25, 30075), (28, 30162), (31, 30198), (43, 30405), (45, 30501),

Gene: ToastyFinz\_39 Start: 30745, Stop: 31443, Start Num: 16  
Candidate Starts for ToastyFinz\_39:  
(1, 30439), (4, 30460), (10, 30580), (Start: 16 @30745 has 22 MA's), (28, 30955), (32, 31003), (43, 31198), (45, 31294),

Gene: Tubberson\_40 Start: 29954, Stop: 30643, Start Num: 16

Candidate Starts for Tubberson\_40:

(1, 29642), (4, 29663), (10, 29783), (Start: 16 @29954 has 22 MA's), (18, 29990), (19, 29993), (25, 30077), (28, 30164), (31, 30200), (43, 30407), (45, 30503),

Gene: VWB\_50 Start: 37705, Stop: 38505, Start Num: 16

Candidate Starts for VWB\_50:

(11, 37534), (12, 37555), (Start: 16 @37705 has 22 MA's), (20, 37765), (22, 37810), (30, 37966), (38, 38062), (39, 38080), (54, 38494),

Gene: Vondra\_41 Start: 29098, Stop: 29778, Start Num: 16

Candidate Starts for Vondra\_41:

(3, 28798), (Start: 16 @29098 has 22 MA's), (24, 29209), (28, 29323),