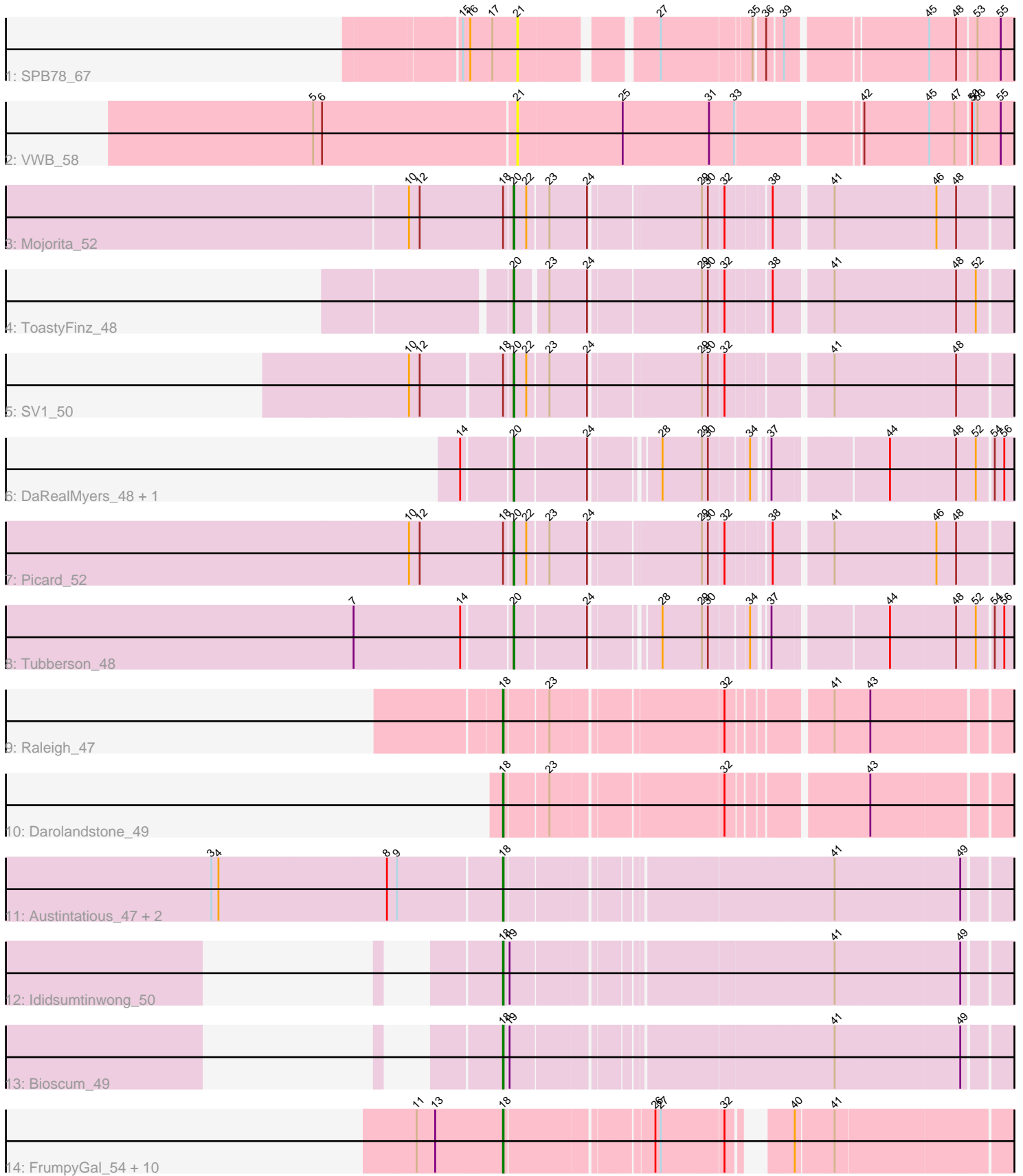


# Zoomed Pham 296822



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 296822 Report

This analysis was run 04/25/26 on database version 644.

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 296822 has 27 members, 3 are drafts.

Phages represented in each track:

- Track 1 : SPB78\_67
- Track 2 : VWB\_58
- Track 3 : Mojorita\_52
- Track 4 : ToastyFinz\_48
- Track 5 : SV1\_50
- Track 6 : DaRealMyers\_48, SoJo\_48
- Track 7 : Picard\_52
- Track 8 : Tubberson\_48
- Track 9 : Raleigh\_47
- Track 10 : Darolandstone\_49
- Track 11 : Austintatious\_47, PapayaSalad\_49, Lishka\_47
- Track 12 : Ididsumtinwong\_50
- Track 13 : Bioscum\_49
- Track 14 : FrumpyGal\_54, Ignacio\_53, Cumberbatch\_54, Piccadilly\_53, Eklok\_53, Eastland\_53, HFrancette\_54, Schlegelian\_52, ArizonaGT\_54, Vondra\_52, AxeJC\_53

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

The start number called the most often in the published annotations is 18, it was called in 18 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT\_54, Austintatious\_47, AxeJC\_53, Bioscum\_49, Cumberbatch\_54, Darolandstone\_49, Eastland\_53, Eklok\_53, FrumpyGal\_54, HFrancette\_54, Ididsumtinwong\_50, Ignacio\_53, Lishka\_47, PapayaSalad\_49, Piccadilly\_53, Raleigh\_47, Schlegelian\_52, Vondra\_52,

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

- Mojorita\_52, Picard\_52, SV1\_50,

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

- DaRealMyers\_48, SPB78\_67, SoJo\_48, ToastyFinz\_48, Tubberson\_48, VWB\_58,

### Summary by start number:

Start 18:

- Found in 21 of 27 ( 77.8% ) of genes in pham
- Manual Annotations of this start: 18 of 24
- Called 85.7% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_54 (BP), Austintatious\_47 (BC3), AxeJC\_53 (BP), Bioscum\_49 (BC3), Cumberbatch\_54 (BP), Darolandstone\_49 (BC2), Eastland\_53 (BP), Eklok\_53 (BP), FrumpyGal\_54 (BP), HFrancette\_54 (BP), Ididsumtinwong\_50 (BC3), Ignacio\_53 (BP), Lishka\_47 (BC3), PapayaSalad\_49 (BC3), Piccadilly\_53 (BP), Raleigh\_47 (BC2), Schlegelian\_52 (BP), Vondra\_52 (BP),

Start 20:

- Found in 7 of 27 ( 25.9% ) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DaRealMyers\_48 (BC1), Moajorita\_52 (BC1), Picard\_52 (BC1), SV1\_50 (BC1), SoJo\_48 (BC1), ToastyFinz\_48 (BC1), Tubberson\_48 (BC1),

Start 21:

- Found in 2 of 27 ( 7.4% ) 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\_67 (BA), VWB\_58 (BA),

### Summary by clusters:

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

Info for manual annotations of cluster BC1:

- Start number 20 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 18 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 18 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:

- Start number 18 was manually annotated 11 times for cluster BP.

### Gene Information:

Gene: ArizonaGT\_54 Start: 33768, Stop: 34595, Start Num: 18

Candidate Starts for ArizonaGT\_54:

(11, 33627), (13, 33657), (Start: 18 @33768 has 18 MA's), (26, 33990), (27, 33999), (32, 34101), (40, 34167), (41, 34227), (58, 34539), (59, 34542),

Gene: Austintatious\_47 Start: 30353, Stop: 31189, Start Num: 18

Candidate Starts for Austintatious\_47:

(3, 29879), (4, 29891), (8, 30170), (9, 30185), (Start: 18 @30353 has 18 MA's), (41, 30842), (49, 31043),

Gene: AxeJC\_53 Start: 33884, Stop: 34711, Start Num: 18

Candidate Starts for AxeJC\_53:

(11, 33743), (13, 33773), (Start: 18 @33884 has 18 MA's), (26, 34106), (27, 34115), (32, 34217), (40, 34283), (41, 34343), (58, 34655), (59, 34658),

Gene: Bioscum\_49 Start: 32463, Stop: 33296, Start Num: 18

Candidate Starts for Bioscum\_49:

(Start: 18 @32463 has 18 MA's), (19, 32469), (41, 32949), (49, 33150),

Gene: Cumberbatch\_54 Start: 33768, Stop: 34595, Start Num: 18

Candidate Starts for Cumberbatch\_54:

(11, 33627), (13, 33657), (Start: 18 @33768 has 18 MA's), (26, 33990), (27, 33999), (32, 34101), (40, 34167), (41, 34227), (58, 34539), (59, 34542),

Gene: DaRealMyers\_48 Start: 34573, Stop: 35367, Start Num: 20

Candidate Starts for DaRealMyers\_48:

(14, 34501), (Start: 20 @34573 has 6 MA's), (24, 34687), (28, 34777), (29, 34843), (30, 34852), (34, 34909), (37, 34927), (44, 35098), (48, 35203), (52, 35236), (54, 35260), (56, 35275), (59, 35326), (61, 35332), (62, 35356),

Gene: Darolandstone\_49 Start: 36242, Stop: 37060, Start Num: 18

Candidate Starts for Darolandstone\_49:

(Start: 18 @36242 has 18 MA's), (23, 36308), (32, 36572), (43, 36767),

Gene: Eastland\_53 Start: 33728, Stop: 34555, Start Num: 18

Candidate Starts for Eastland\_53:

(11, 33587), (13, 33617), (Start: 18 @33728 has 18 MA's), (26, 33950), (27, 33959), (32, 34061), (40, 34127), (41, 34187), (58, 34499), (59, 34502),

Gene: Eklok\_53 Start: 33527, Stop: 34354, Start Num: 18

Candidate Starts for Eklok\_53:

(11, 33386), (13, 33416), (Start: 18 @33527 has 18 MA's), (26, 33749), (27, 33758), (32, 33860), (40, 33926), (41, 33986), (58, 34298), (59, 34301),

Gene: FrumpyGal\_54 Start: 33728, Stop: 34555, Start Num: 18

Candidate Starts for FrumpyGal\_54:

(11, 33587), (13, 33617), (Start: 18 @33728 has 18 MA's), (26, 33950), (27, 33959), (32, 34061), (40, 34127), (41, 34187), (58, 34499), (59, 34502),

Gene: HFrancette\_54 Start: 34416, Stop: 35243, Start Num: 18

Candidate Starts for HFrancette\_54:

(11, 34275), (13, 34305), (Start: 18 @34416 has 18 MA's), (26, 34638), (27, 34647), (32, 34749), (40, 34815), (41, 34875), (58, 35187), (59, 35190),

Gene: Ididsumtinwong\_50 Start: 32455, Stop: 33288, Start Num: 18

Candidate Starts for Ididsumtinwong\_50:

(1, 31462), (2, 31642), (Start: 18 @32455 has 18 MA's), (19, 32461), (41, 32941), (49, 33142),

Gene: Ignacio\_53 Start: 34319, Stop: 35146, Start Num: 18

Candidate Starts for Ignacio\_53:

(11, 34178), (13, 34208), (Start: 18 @34319 has 18 MA's), (26, 34541), (27, 34550), (32, 34652), (40, 34718), (41, 34778), (58, 35090), (59, 35093),

Gene: Lishka\_47 Start: 30355, Stop: 31191, Start Num: 18

Candidate Starts for Lishka\_47:

(3, 29881), (4, 29893), (8, 30172), (9, 30187), (Start: 18 @30355 has 18 MA's), (41, 30844), (49, 31045),

Gene: Mojarita\_52 Start: 34066, Stop: 34896, Start Num: 20

Candidate Starts for Mojarita\_52:

(10, 33901), (12, 33919), (Start: 18 @34054 has 18 MA's), (Start: 20 @34066 has 6 MA's), (22, 34087), (23, 34120), (24, 34183), (29, 34348), (30, 34357), (32, 34381), (38, 34444), (41, 34531), (46, 34696), (48, 34729),

Gene: PapayaSalad\_49 Start: 32950, Stop: 33786, Start Num: 18

Candidate Starts for PapayaSalad\_49:

(3, 32476), (4, 32488), (8, 32767), (9, 32782), (Start: 18 @32950 has 18 MA's), (41, 33439), (49, 33640),

Gene: Picard\_52 Start: 34264, Stop: 35094, Start Num: 20

Candidate Starts for Picard\_52:

(10, 34099), (12, 34117), (Start: 18 @34252 has 18 MA's), (Start: 20 @34264 has 6 MA's), (22, 34285), (23, 34318), (24, 34381), (29, 34546), (30, 34555), (32, 34579), (38, 34642), (41, 34729), (46, 34894), (48, 34927),

Gene: Piccadilly\_53 Start: 33727, Stop: 34554, Start Num: 18

Candidate Starts for Piccadilly\_53:

(11, 33586), (13, 33616), (Start: 18 @33727 has 18 MA's), (26, 33949), (27, 33958), (32, 34060), (40, 34126), (41, 34186), (58, 34498), (59, 34501),

Gene: Raleigh\_47 Start: 36279, Stop: 37097, Start Num: 18

Candidate Starts for Raleigh\_47:

(Start: 18 @36279 has 18 MA's), (23, 36345), (32, 36609), (41, 36750), (43, 36804),

Gene: SPB78\_67 Start: 43466, Stop: 44308, Start Num: 21

Candidate Starts for SPB78\_67:

(15, 43376), (16, 43388), (17, 43424), (21, 43466), (27, 43664), (35, 43805), (36, 43820), (39, 43844), (45, 44060), (48, 44102), (53, 44132), (55, 44168),

Gene: SV1\_50 Start: 32958, Stop: 33791, Start Num: 20

Candidate Starts for SV1\_50:

(10, 32805), (12, 32823), (Start: 18 @32946 has 18 MA's), (Start: 20 @32958 has 6 MA's), (22, 32979), (23, 33012), (24, 33075), (29, 33243), (30, 33252), (32, 33276), (41, 33426), (48, 33624),

Gene: Schlegelian\_52 Start: 33502, Stop: 34329, Start Num: 18

Candidate Starts for Schlegelian\_52:

(11, 33361), (13, 33391), (Start: 18 @33502 has 18 MA's), (26, 33724), (27, 33733), (32, 33835), (40, 33901), (41, 33961), (58, 34273), (59, 34276),

Gene: SoJo\_48 Start: 34568, Stop: 35362, Start Num: 20

Candidate Starts for SoJo\_48:

(14, 34496), (Start: 20 @34568 has 6 MA's), (24, 34682), (28, 34772), (29, 34838), (30, 34847), (34, 34904), (37, 34922), (44, 35093), (48, 35198), (52, 35231), (54, 35255), (56, 35270), (59, 35321), (61, 35327), (62, 35351),

Gene: ToastyFinz\_48 Start: 35454, Stop: 36284, Start Num: 20

Candidate Starts for ToastyFinz\_48:

(Start: 20 @35454 has 6 MA's), (23, 35499), (24, 35562), (29, 35733), (30, 35742), (32, 35766), (38, 35832), (41, 35919), (48, 36117), (52, 36150), (60, 36243),

Gene: Tubberson\_48 Start: 34569, Stop: 35363, Start Num: 20

Candidate Starts for Tubberson\_48:

(7, 34323), (14, 34497), (Start: 20 @34569 has 6 MA's), (24, 34683), (28, 34773), (29, 34839), (30, 34848), (34, 34905), (37, 34923), (44, 35094), (48, 35199), (52, 35232), (54, 35256), (56, 35271), (59, 35322), (61, 35328), (62, 35352),

Gene: VWB\_58 Start: 39970, Stop: 40905, Start Num: 21

Candidate Starts for VWB\_58:

(5, 39637), (6, 39652), (21, 39970), (25, 40141), (31, 40285), (33, 40327), (42, 40513), (45, 40618), (47, 40657), (50, 40681), (51, 40684), (53, 40690), (55, 40729), (57, 40759),

Gene: Vondra\_52 Start: 33313, Stop: 34140, Start Num: 18

Candidate Starts for Vondra\_52:

(11, 33172), (13, 33202), (Start: 18 @33313 has 18 MA's), (26, 33535), (27, 33544), (32, 33646), (40, 33712), (41, 33772), (58, 34084), (59, 34087),