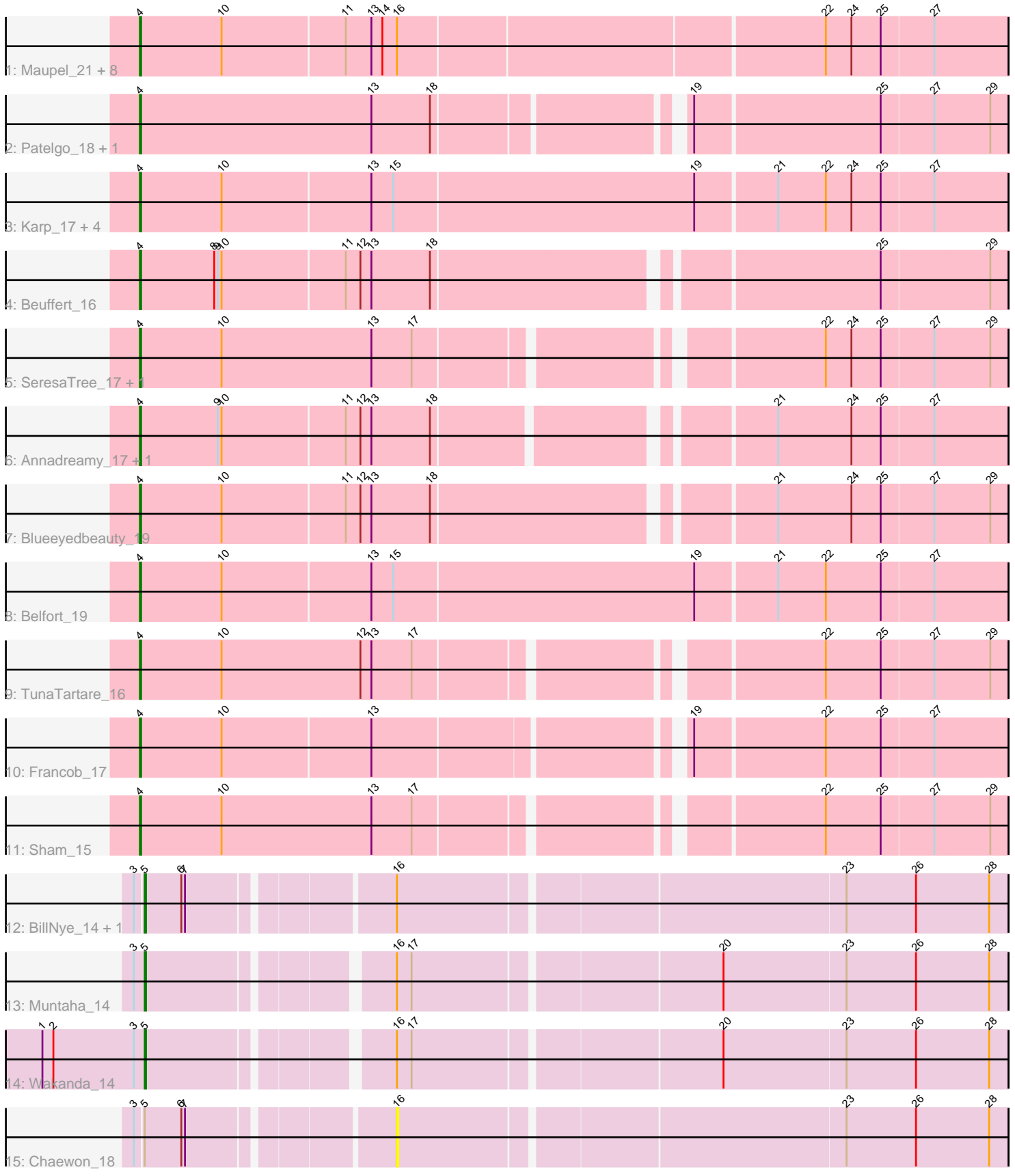


Pham 309024



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 309024 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309024 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Maupel\_21, Phredrick\_19, DeluluLabubu\_19, Kenrey\_21, Forrest\_21, Gilson\_21, Emma1919\_21, MeganTheeKilla\_19, Jada\_19
- Track 2 : Patelgo\_18, Moab\_18
- Track 3 : Karp\_17, Westy\_18, Comrade\_18, SparkleGoddess\_18, Stigma\_18
- Track 4 : Beuffert\_16
- Track 5 : SeresaTree\_17, Faust\_17
- Track 6 : Annadreamy\_17, Limpid\_17
- Track 7 : Blueeyedbeauty\_19
- Track 8 : Belfort\_19
- Track 9 : TunaTartare\_16
- Track 10 : Francob\_17
- Track 11 : Sham\_15
- Track 12 : BillNye\_14, Circinus\_16
- Track 13 : Muntaha\_14
- Track 14 : Wakanda\_14
- Track 15 : Chaewon\_18

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

The start number called the most often in the published annotations is 4, it was called in 24 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annadreamy\_17, Belfort\_19, Beuffert\_16, Blueeyedbeauty\_19, Comrade\_18, DeluluLabubu\_19, Emma1919\_21, Faust\_17, Forrest\_21, Francob\_17, Gilson\_21, Jada\_19, Karp\_17, Kenrey\_21, Limpid\_17, Maupel\_21, MeganTheeKilla\_19, Moab\_18, Patelgo\_18, Phredrick\_19, SeresaTree\_17, Sham\_15, SparkleGoddess\_18, Stigma\_18, TunaTartare\_16, Westy\_18,

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

- 

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

- BillNye\_14, Chaewon\_18, Circinus\_16, Muntaha\_14, Wakanda\_14,

## Summary by start number:

### Start 4:

- Found in 26 of 31 ( 83.9% ) of genes in pham
- Manual Annotations of this start: 24 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_17 (BK1), Belfort\_19 (BK1), Beuffert\_16 (BK1), Blueeyedbeauty\_19 (BK1), Comrade\_18 (BK1), DeluluLabubu\_19 (BK1), Emma1919\_21 (BK1), Faust\_17 (BK1), Forrest\_21 (BK1), Francob\_17 (BK1), Gilson\_21 (BK1), Jada\_19 (BK1), Karp\_17 (BK1), Kenrey\_21 (BK1), Limpid\_17 (BK1), Maupel\_21 (BK1), MeganTheeKilla\_19 (BK1), Moab\_18 (BK1), Patelgo\_18 (BK1), Phredrick\_19 (BK1), SeresaTree\_17 (BK1), Sham\_15 (BK1), SparkleGoddess\_18 (BK1), Stigma\_18 (BK1), TunaTartare\_16 (BK1), Westy\_18 (BK1),

### Start 5:

- Found in 5 of 31 ( 16.1% ) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BillNye\_14 (BK2), Circinus\_16 (BK2), Muntaha\_14 (BK2), Wakanda\_14 (BK2),

### Start 16:

- Found in 14 of 31 ( 45.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Chaewon\_18 (BK2),

## Summary by clusters:

There are 2 clusters represented in this pham: BK1, BK2,

### Info for manual annotations of cluster BK1:

- Start number 4 was manually annotated 24 times for cluster BK1.

### Info for manual annotations of cluster BK2:

- Start number 5 was manually annotated 4 times for cluster BK2.

## Gene Information:

Gene: Annadreamy\_17 Start: 5520, Stop: 4855, Start Num: 4

Candidate Starts for Annadreamy\_17:

(Start: 4 @5520 has 24 MA's), (9, 5457), (10, 5454), (11, 5355), (12, 5343), (13, 5334), (18, 5286), (21, 5040), (24, 4980), (25, 4956), (27, 4914),

Gene: Belfort\_19 Start: 6267, Stop: 5572, Start Num: 4

Candidate Starts for Belfort\_19:

(Start: 4 @6267 has 24 MA's), (10, 6201), (13, 6081), (15, 6063), (19, 5820), (21, 5757), (22, 5718), (25, 5673), (27, 5631),

Gene: Beuffert\_16 Start: 5170, Stop: 4496, Start Num: 4

Candidate Starts for Beuffert\_16:

(Start: 4 @5170 has 24 MA's), (8, 5110), (9, 5107), (10, 5104), (11, 5005), (12, 4993), (13, 4984), (18, 4936), (25, 4597), (29, 4510),

Gene: BillNye\_14 Start: 5976, Stop: 5308, Start Num: 5

Candidate Starts for BillNye\_14:

(3, 5982), (Start: 5 @5976 has 4 MA's), (6, 5946), (7, 5943), (16, 5790), (23, 5439), (26, 5382), (28, 5322),

Gene: Blueeyedbeauty\_19 Start: 6014, Stop: 5340, Start Num: 4

Candidate Starts for Blueeyedbeauty\_19:

(Start: 4 @6014 has 24 MA's), (10, 5948), (11, 5849), (12, 5837), (13, 5828), (18, 5780), (21, 5525), (24, 5465), (25, 5441), (27, 5399), (29, 5354),

Gene: Chaewon\_18 Start: 5570, Stop: 5088, Start Num: 16

Candidate Starts for Chaewon\_18:

(3, 5762), (Start: 5 @5756 has 4 MA's), (6, 5726), (7, 5723), (16, 5570), (23, 5219), (26, 5162), (28, 5102),

Gene: Circinus\_16 Start: 6116, Stop: 5448, Start Num: 5

Candidate Starts for Circinus\_16:

(3, 6122), (Start: 5 @6116 has 4 MA's), (6, 6086), (7, 6083), (16, 5930), (23, 5579), (26, 5522), (28, 5462),

Gene: Comrade\_18 Start: 5882, Stop: 5187, Start Num: 4

Candidate Starts for Comrade\_18:

(Start: 4 @5882 has 24 MA's), (10, 5816), (13, 5696), (15, 5678), (19, 5435), (21, 5372), (22, 5333), (24, 5312), (25, 5288), (27, 5246),

Gene: DeluluLabubu\_19 Start: 5765, Stop: 5076, Start Num: 4

Candidate Starts for DeluluLabubu\_19:

(Start: 4 @5765 has 24 MA's), (10, 5699), (11, 5600), (13, 5579), (14, 5570), (16, 5558), (22, 5222), (24, 5201), (25, 5177), (27, 5135),

Gene: Emma1919\_21 Start: 6460, Stop: 5771, Start Num: 4

Candidate Starts for Emma1919\_21:

(Start: 4 @6460 has 24 MA's), (10, 6394), (11, 6295), (13, 6274), (14, 6265), (16, 6253), (22, 5917), (24, 5896), (25, 5872), (27, 5830),

Gene: Faust\_17 Start: 5779, Stop: 5114, Start Num: 4

Candidate Starts for Faust\_17:

(Start: 4 @5779 has 24 MA's), (10, 5713), (13, 5590), (17, 5557), (22, 5260), (24, 5239), (25, 5215), (27, 5173), (29, 5128),

Gene: Forrest\_21 Start: 6584, Stop: 5895, Start Num: 4

Candidate Starts for Forrest\_21:

(Start: 4 @6584 has 24 MA's), (10, 6518), (11, 6419), (13, 6398), (14, 6389), (16, 6377), (22, 6041), (24, 6020), (25, 5996), (27, 5954),

Gene: Francob\_17 Start: 5376, Stop: 4711, Start Num: 4

Candidate Starts for Francob\_17:

(Start: 4 @5376 has 24 MA's), (10, 5310), (13, 5190), (19, 4959), (22, 4857), (25, 4812), (27, 4770),

Gene: Gilson\_21 Start: 6413, Stop: 5724, Start Num: 4

Candidate Starts for Gilson\_21:

(Start: 4 @6413 has 24 MA's), (10, 6347), (11, 6248), (13, 6227), (14, 6218), (16, 6206), (22, 5870), (24, 5849), (25, 5825), (27, 5783),

Gene: Jada\_19 Start: 5765, Stop: 5076, Start Num: 4

Candidate Starts for Jada\_19:

(Start: 4 @5765 has 24 MA's), (10, 5699), (11, 5600), (13, 5579), (14, 5570), (16, 5558), (22, 5222), (24, 5201), (25, 5177), (27, 5135),

Gene: Karp\_17 Start: 5483, Stop: 4788, Start Num: 4

Candidate Starts for Karp\_17:

(Start: 4 @5483 has 24 MA's), (10, 5417), (13, 5297), (15, 5279), (19, 5036), (21, 4973), (22, 4934), (24, 4913), (25, 4889), (27, 4847),

Gene: Kenrey\_21 Start: 6465, Stop: 5776, Start Num: 4

Candidate Starts for Kenrey\_21:

(Start: 4 @6465 has 24 MA's), (10, 6399), (11, 6300), (13, 6279), (14, 6270), (16, 6258), (22, 5922), (24, 5901), (25, 5877), (27, 5835),

Gene: Limpid\_17 Start: 5519, Stop: 4854, Start Num: 4

Candidate Starts for Limpid\_17:

(Start: 4 @5519 has 24 MA's), (9, 5456), (10, 5453), (11, 5354), (12, 5342), (13, 5333), (18, 5285), (21, 5039), (24, 4979), (25, 4955), (27, 4913),

Gene: Maupel\_21 Start: 6413, Stop: 5724, Start Num: 4

Candidate Starts for Maupel\_21:

(Start: 4 @6413 has 24 MA's), (10, 6347), (11, 6248), (13, 6227), (14, 6218), (16, 6206), (22, 5870), (24, 5849), (25, 5825), (27, 5783),

Gene: MeganTheeKilla\_19 Start: 5774, Stop: 5085, Start Num: 4

Candidate Starts for MeganTheeKilla\_19:

(Start: 4 @5774 has 24 MA's), (10, 5708), (11, 5609), (13, 5588), (14, 5579), (16, 5567), (22, 5231), (24, 5210), (25, 5186), (27, 5144),

Gene: Moab\_18 Start: 5925, Stop: 5257, Start Num: 4

Candidate Starts for Moab\_18:

(Start: 4 @5925 has 24 MA's), (13, 5736), (18, 5688), (19, 5505), (25, 5358), (27, 5316), (29, 5271),

Gene: Muntaha\_14 Start: 5640, Stop: 4978, Start Num: 5

Candidate Starts for Muntaha\_14:

(3, 5649), (Start: 5 @5640 has 4 MA's), (16, 5460), (17, 5448), (20, 5208), (23, 5109), (26, 5052), (28, 4992),

Gene: Patelgo\_18 Start: 5539, Stop: 4871, Start Num: 4

Candidate Starts for Patelgo\_18:

(Start: 4 @5539 has 24 MA's), (13, 5350), (18, 5302), (19, 5119), (25, 4972), (27, 4930), (29, 4885),

Gene: Phredrick\_19 Start: 5671, Stop: 4982, Start Num: 4

Candidate Starts for Phredrick\_19:

(Start: 4 @5671 has 24 MA's), (10, 5605), (11, 5506), (13, 5485), (14, 5476), (16, 5464), (22, 5128), (24, 5107), (25, 5083), (27, 5041),

Gene: SeresaTree\_17 Start: 5169, Stop: 4504, Start Num: 4

Candidate Starts for SeresaTree\_17:

(Start: 4 @5169 has 24 MA's), (10, 5103), (13, 4980), (17, 4947), (22, 4650), (24, 4629), (25, 4605), (27, 4563), (29, 4518),

Gene: Sham\_15 Start: 4962, Stop: 4297, Start Num: 4

Candidate Starts for Sham\_15:

(Start: 4 @4962 has 24 MA's), (10, 4896), (13, 4773), (17, 4740), (22, 4443), (25, 4398), (27, 4356), (29, 4311),

Gene: SparkleGoddess\_18 Start: 5881, Stop: 5186, Start Num: 4

Candidate Starts for SparkleGoddess\_18:

(Start: 4 @5881 has 24 MA's), (10, 5815), (13, 5695), (15, 5677), (19, 5434), (21, 5371), (22, 5332), (24, 5311), (25, 5287), (27, 5245),

Gene: Stigma\_18 Start: 5885, Stop: 5190, Start Num: 4

Candidate Starts for Stigma\_18:

(Start: 4 @5885 has 24 MA's), (10, 5819), (13, 5699), (15, 5681), (19, 5438), (21, 5375), (22, 5336), (24, 5315), (25, 5291), (27, 5249),

Gene: TunaTartare\_16 Start: 5243, Stop: 4578, Start Num: 4

Candidate Starts for TunaTartare\_16:

(Start: 4 @5243 has 24 MA's), (10, 5177), (12, 5063), (13, 5054), (17, 5021), (22, 4724), (25, 4679), (27, 4637), (29, 4592),

Gene: Wakanda\_14 Start: 5797, Stop: 5135, Start Num: 5

Candidate Starts for Wakanda\_14:

(1, 5881), (2, 5872), (3, 5806), (Start: 5 @5797 has 4 MA's), (16, 5617), (17, 5605), (20, 5365), (23, 5266), (26, 5209), (28, 5149),

Gene: Westy\_18 Start: 5885, Stop: 5190, Start Num: 4

Candidate Starts for Westy\_18:

(Start: 4 @5885 has 24 MA's), (10, 5819), (13, 5699), (15, 5681), (19, 5438), (21, 5375), (22, 5336), (24, 5315), (25, 5291), (27, 5249),