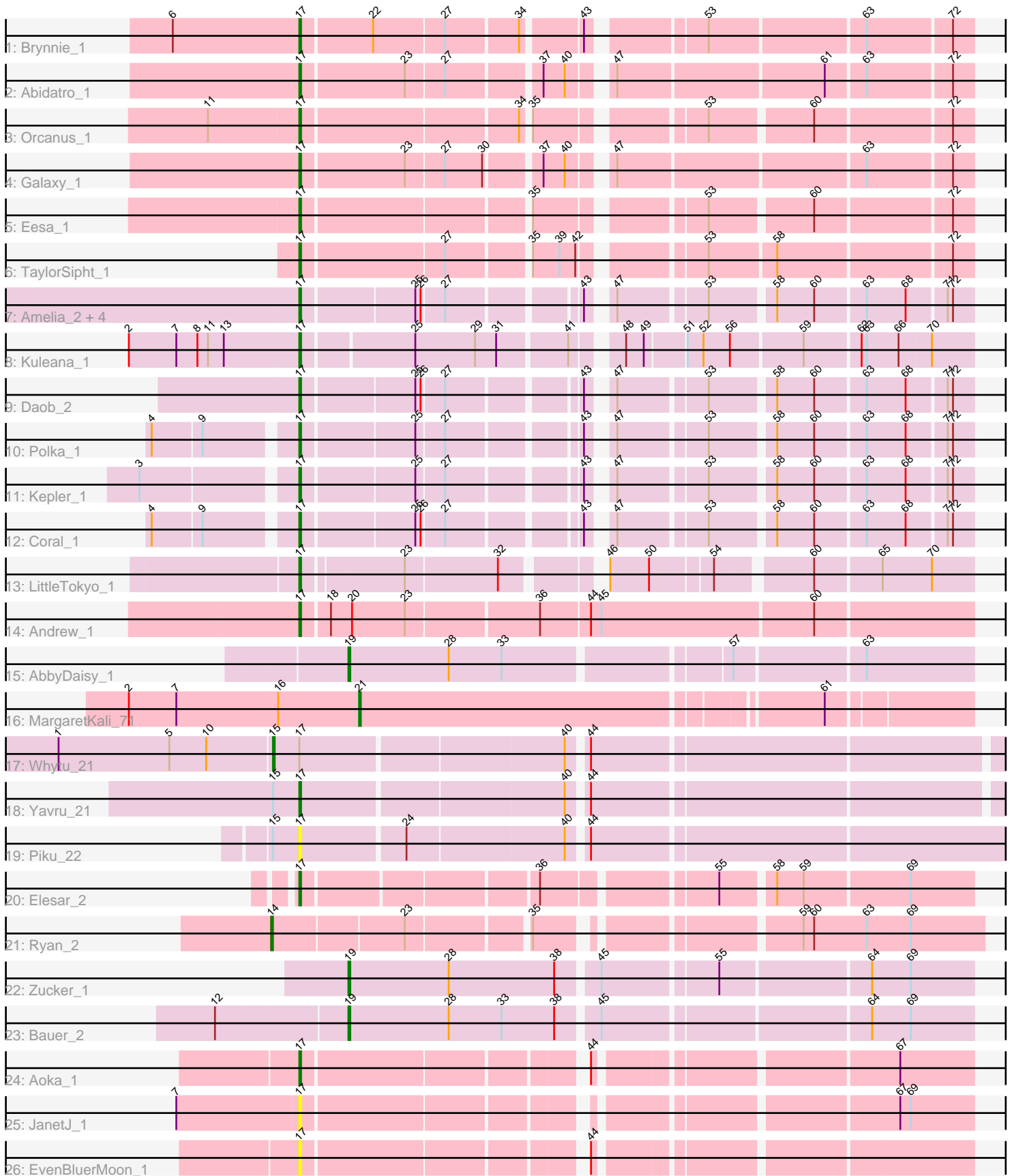


# Pham 158053



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 158053 Report

This analysis was run 04/28/24 on database version 559.

Pham number 158053 has 30 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Brynnie\_1
- Track 2 : Abidatro\_1
- Track 3 : Orcanus\_1
- Track 4 : Galaxy\_1
- Track 5 : Eesa\_1
- Track 6 : TaylorSipht\_1
- Track 7 : Amelia\_2, HannahPhantana\_2, Melons\_2, Lunar\_2, Cote\_2
- Track 8 : Kuleana\_1
- Track 9 : Daob\_2
- Track 10 : Polka\_1
- Track 11 : Kepler\_1
- Track 12 : Coral\_1
- Track 13 : LittleTokyo\_1
- Track 14 : Andrew\_1
- Track 15 : AbbyDaisy\_1
- Track 16 : MargaretKali\_71
- Track 17 : Whytu\_21
- Track 18 : Yavru\_21
- Track 19 : Piku\_22
- Track 20 : Elesar\_2
- Track 21 : Ryan\_2
- Track 22 : Zucker\_1
- Track 23 : Bauer\_2
- Track 24 : Aoka\_1
- Track 25 : JanetJ\_1
- Track 26 : EvenBluerMoon\_1

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

The start number called the most often in the published annotations is 17, it was called in 20 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_1, Amelia\_2, Andrew\_1, Aoka\_1, Brynnie\_1, Coral\_1, Cote\_2, Daob\_2, Eesa\_1, Elesar\_2, EvenBluerMoon\_1, Galaxy\_1, HannahPhantana\_2, JanetJ\_1, Kepler\_1, Kuleana\_1, LittleTokyo\_1, Lunar\_2, Melons\_2, Orcanus\_1, Piku\_22, Polka\_1, TaylorSipht\_1, Yavru\_21,

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

- Whytu\_21,

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

- AbbyDaisy\_1, Bauer\_2, MargaretKali\_71, Ryan\_2, Zucker\_1,

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

Start 14:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ryan\_2 (FF),

Start 15:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Whytu\_21 (FE),

Start 17:

- Found in 25 of 30 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 20 of 26
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_1 (AS1), Amelia\_2 (AS2), Andrew\_1 (AS3), Aoka\_1 (FO), Brynnie\_1 (AS1), Coral\_1 (AS2), Cote\_2 (AS2), Daob\_2 (AS2), Eesa\_1 (AS1), Elesar\_2 (FF), EvenBluerMoon\_1 (FO), Galaxy\_1 (AS1), HannahPhantana\_2 (AS2), JanetJ\_1 (FO), Kepler\_1 (AS2), Kuleana\_1 (AS2), LittleTokyo\_1 (AS2), Lunar\_2 (AS2), Melons\_2 (AS2), Orcanus\_1 (AS1), Piku\_22 (FE), Polka\_1 (AS2), TaylorSipht\_1 (AS1), Yavru\_21 (FE),

Start 19:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_1 (AY), Bauer\_2 (FN), Zucker\_1 (FN),

Start 21:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MargaretKali\_71 (FB),

### **Summary by clusters:**

There are 9 clusters represented in this pham: AS3, AS2, AS1, FB, FE, FF, AY, FN, FO,

Info for manual annotations of cluster AS1:

- Start number 17 was manually annotated 6 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 17 was manually annotated 10 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 17 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 19 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:

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

Info for manual annotations of cluster FE:

- Start number 15 was manually annotated 1 time for cluster FE.
- Start number 17 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster FF:

- Start number 14 was manually annotated 1 time for cluster FF.
- Start number 17 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FN:

- Start number 19 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster FO:

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

### ***Gene Information:***

Gene: AbbyDaisy\_1 Start: 69, Stop: 401, Start Num: 19

Candidate Starts for AbbyDaisy\_1:

(Start: 19 @69 has 3 MA's), (28, 126), (33, 156), (57, 273), (63, 342),

Gene: Abidatro\_1 Start: 98, Stop: 442, Start Num: 17

Candidate Starts for Abidatro\_1:

(Start: 17 @98 has 20 MA's), (23, 155), (27, 176), (37, 224), (40, 236), (47, 254), (61, 365), (63, 386), (72, 431),

Gene: Amelia\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for Amelia\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: Andrew\_1 Start: 98, Stop: 463, Start Num: 17

Candidate Starts for Andrew\_1:

(Start: 17 @98 has 20 MA's), (18, 113), (20, 125), (23, 155), (36, 227), (44, 254), (45, 260), (60, 377),

Gene: Aoka\_1 Start: 69, Stop: 407, Start Num: 17

Candidate Starts for Aoka\_1:

(Start: 17 @69 has 20 MA's), (44, 213), (67, 366),

Gene: Bauer\_2 Start: 736, Stop: 1071, Start Num: 19

Candidate Starts for Bauer\_2:

(12, 664), (Start: 19 @736 has 3 MA's), (28, 793), (33, 823), (38, 853), (45, 874), (64, 1015), (69, 1036),

Gene: Brynnie\_1 Start: 98, Stop: 439, Start Num: 17

Candidate Starts for Brynnie\_1:

(6, 26), (Start: 17 @98 has 20 MA's), (22, 137), (27, 176), (34, 215), (43, 245), (53, 299), (63, 383), (72, 428),

Gene: Coral\_1 Start: 100, Stop: 432, Start Num: 17

Candidate Starts for Coral\_1:

(4, 28), (9, 55), (Start: 17 @100 has 20 MA's), (25, 160), (26, 163), (27, 175), (43, 241), (47, 250), (53, 295), (58, 328), (60, 349), (63, 376), (68, 397), (71, 418), (72, 421),

Gene: Cote\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for Cote\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: Daob\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for Daob\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: Eesa\_1 Start: 97, Stop: 435, Start Num: 17

Candidate Starts for Eesa\_1:

(Start: 17 @97 has 20 MA's), (35, 217), (53, 298), (60, 352), (72, 424),

Gene: Elesar\_2 Start: 346, Stop: 690, Start Num: 17

Candidate Starts for Elesar\_2:

(Start: 17 @346 has 20 MA's), (36, 469), (55, 556), (58, 583), (59, 598), (69, 655),

Gene: EvenBluerMoon\_1 Start: 69, Stop: 407, Start Num: 17

Candidate Starts for EvenBluerMoon\_1:

(Start: 17 @69 has 20 MA's), (44, 213),

Gene: Galaxy\_1 Start: 98, Stop: 442, Start Num: 17

Candidate Starts for Galaxy\_1:

(Start: 17 @98 has 20 MA's), (23, 155), (27, 176), (30, 197), (37, 224), (40, 236), (47, 254), (63, 386), (72, 431),

Gene: HannahPhantana\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for HannahPhantana\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: JanetJ\_1 Start: 70, Stop: 408, Start Num: 17

Candidate Starts for JanetJ\_1:

(7, 1), (Start: 17 @70 has 20 MA's), (67, 367), (69, 373),

Gene: Kepler\_1 Start: 99, Stop: 431, Start Num: 17

Candidate Starts for Kepler\_1:

(3, 21), (Start: 17 @99 has 20 MA's), (25, 159), (27, 174), (43, 240), (47, 249), (53, 294), (58, 327), (60, 348), (63, 375), (68, 396), (71, 417), (72, 420),

Gene: Kuleana\_1 Start: 97, Stop: 444, Start Num: 17

Candidate Starts for Kuleana\_1:

(2, 1), (7, 28), (8, 40), (11, 46), (13, 55), (Start: 17 @97 has 20 MA's), (25, 157), (29, 190), (31, 202), (41, 238), (48, 259), (49, 268), (51, 289), (52, 298), (56, 313), (59, 352), (62, 382), (63, 385), (66, 403), (70, 421),

Gene: LittleTokyo\_1 Start: 92, Stop: 430, Start Num: 17

Candidate Starts for LittleTokyo\_1:

(Start: 17 @92 has 20 MA's), (23, 146), (32, 197), (46, 242), (50, 263), (54, 296), (60, 344), (65, 380), (70, 407),

Gene: Lunar\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for Lunar\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: MargaretKali\_71 Start: 38297, Stop: 38623, Start Num: 21

Candidate Starts for MargaretKali\_71:

(2, 38168), (7, 38195), (16, 38252), (Start: 21 @38297 has 1 MA's), (61, 38546),

Gene: Melons\_2 Start: 264, Stop: 596, Start Num: 17

Candidate Starts for Melons\_2:

(Start: 17 @264 has 20 MA's), (25, 324), (26, 327), (27, 339), (43, 405), (47, 414), (53, 459), (58, 492), (60, 513), (63, 540), (68, 561), (71, 582), (72, 585),

Gene: Orcanus\_1 Start: 97, Stop: 435, Start Num: 17

Candidate Starts for Orcanus\_1:

(11, 46), (Start: 17 @97 has 20 MA's), (34, 214), (35, 217), (53, 298), (60, 352), (72, 424),

Gene: Piku\_22 Start: 15071, Stop: 15454, Start Num: 17

Candidate Starts for Piku\_22:

(Start: 15 @15056 has 1 MA's), (Start: 17 @15071 has 20 MA's), (24, 15128), (40, 15215), (44, 15224),

Gene: Polka\_1 Start: 100, Stop: 432, Start Num: 17

Candidate Starts for Polka\_1:

(4, 28), (9, 55), (Start: 17 @100 has 20 MA's), (25, 160), (27, 175), (43, 241), (47, 250), (53, 295), (58, 328), (60, 349), (63, 376), (68, 397), (71, 418), (72, 421),

Gene: Ryan\_2 Start: 306, Stop: 668, Start Num: 14

Candidate Starts for Ryan\_2:

(Start: 14 @306 has 1 MA's), (23, 378), (35, 441), (59, 567), (60, 573), (63, 603), (69, 627),

Gene: TaylorSipht\_1 Start: 118, Stop: 459, Start Num: 17

Candidate Starts for TaylorSipht\_1:

(Start: 17 @118 has 20 MA's), (27, 196), (35, 238), (39, 253), (42, 262), (53, 319), (58, 355), (72, 448),

Gene: Whytu\_21 Start: 14626, Stop: 15018, Start Num: 15

Candidate Starts for Whytu\_21:

(1, 14506), (5, 14569), (10, 14590), (Start: 15 @14626 has 1 MA's), (Start: 17 @14641 has 20 MA's), (40, 14785), (44, 14794),

Gene: Yavru\_21 Start: 14451, Stop: 14828, Start Num: 17

Candidate Starts for Yavru\_21:

(Start: 15 @14436 has 1 MA's), (Start: 17 @14451 has 20 MA's), (40, 14595), (44, 14604),

Gene: Zucker\_1 Start: 39, Stop: 374, Start Num: 19

Candidate Starts for Zucker\_1:

(Start: 19 @39 has 3 MA's), (28, 96), (38, 156), (45, 177), (55, 237), (64, 318), (69, 339),