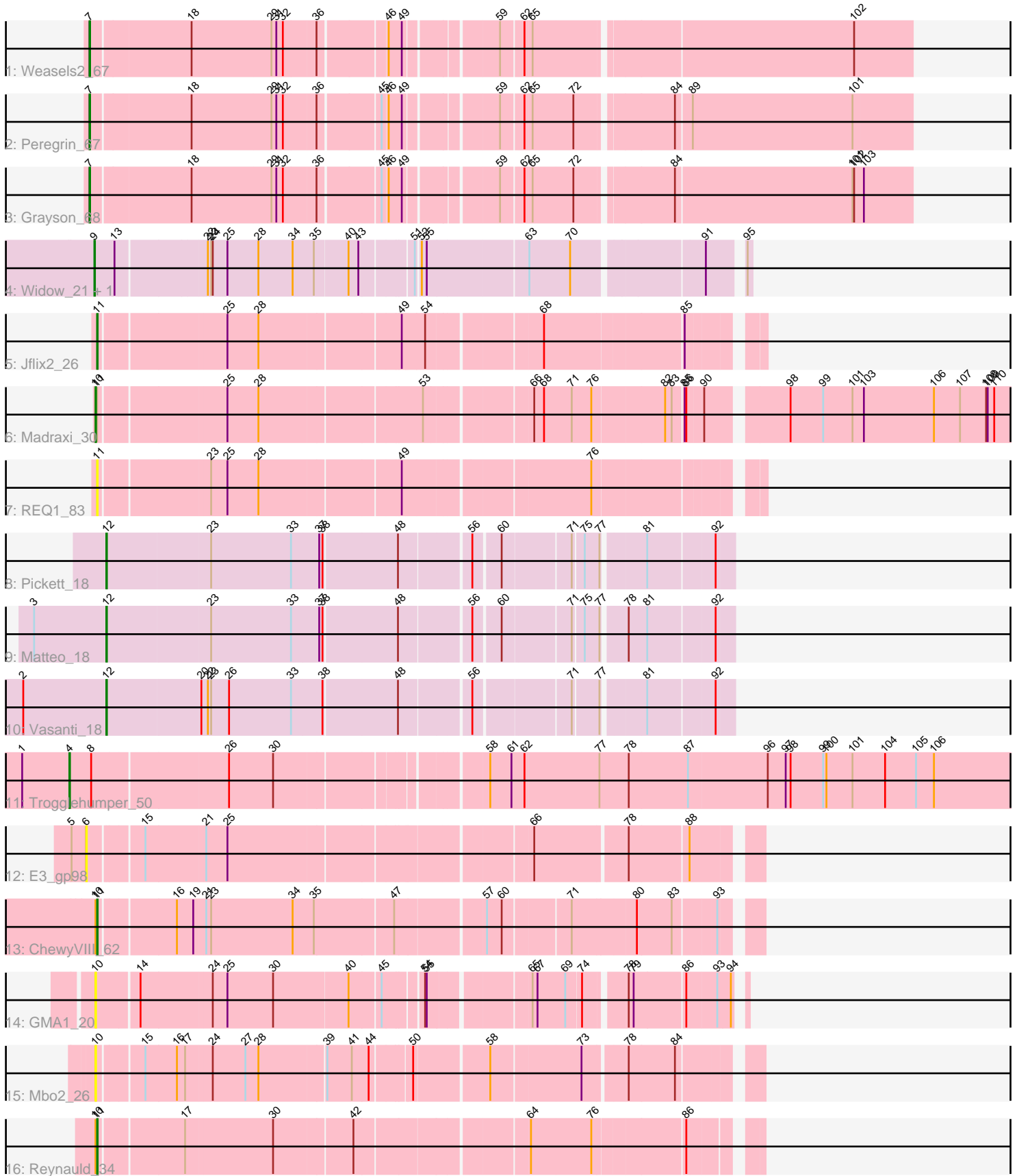


Pham 171838



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 171838 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171838 has 17 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Weasels2\_67
- Track 2 : Peregrin\_67
- Track 3 : Grayson\_68
- Track 4 : Widow\_21, Puppies\_21
- Track 5 : Jflix2\_26
- Track 6 : Madraxi\_30
- Track 7 : REQ1\_83
- Track 8 : Pickett\_18
- Track 9 : Matteo\_18
- Track 10 : Vasanti\_18
- Track 11 : Trogglehumper\_50
- Track 12 : E3\_gp98
- Track 13 : ChewyVIII\_62
- Track 14 : GMA1\_20
- Track 15 : Mbo2\_26
- Track 16 : Reynauld\_34

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

The start number called the most often in the published annotations is 12, it was called in 3 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Matteo\_18, Pickett\_18, Vasanti\_18,

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

- 

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

- ChewyVIII\_62, E3\_gp98, GMA1\_20, Grayson\_68, Jflix2\_26, Madraxi\_30, Mbo2\_26, Peregrin\_67, Puppies\_21, REQ1\_83, Reynauld\_34, Trogglehumper\_50, Weasels2\_67, Widow\_21,

**Summary by start number:**

Start 4:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trogglehumper\_50 (singleton),

Start 6:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp98 (singleton),

Start 7:

- Found in 3 of 17 ( 17.6% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_68 (CB), Peregrin\_67 (CB), Weasels2\_67 (CB),

Start 9:

- Found in 2 of 17 ( 11.8% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppies\_21 (CD), Widow\_21 (CD),

Start 10:

- Found in 5 of 17 ( 29.4% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 60.0% of time when present
- Phage (with cluster) where this start called: GMA1\_20 (singleton), Madraxi\_30 (CF), Mbo2\_26 (singleton),

Start 11:

- Found in 5 of 17 ( 29.4% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 80.0% of time when present
- Phage (with cluster) where this start called: ChewyVIII\_62 (singleton), JfliX2\_26 (CF), REQ1\_83 (CF), Reynauld\_34 (singleton),

Start 12:

- Found in 3 of 17 ( 17.6% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Matteo\_18 (CZ2), Pickett\_18 (CZ2), Vasanti\_18 (CZ2),

**Summary by clusters:**

There are 5 clusters represented in this pham: CZ2, CB, singleton, CF, CD,

Info for manual annotations of cluster CB:

- Start number 7 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster CD:

- Start number 9 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CF:

- Start number 10 was manually annotated 1 time for cluster CF.
- Start number 11 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CZ2:

- Start number 12 was manually annotated 3 times for cluster CZ2.

### **Gene Information:**

Gene: ChewyVIII\_62 Start: 43758, Stop: 44864, Start Num: 11

Candidate Starts for ChewyVIII\_62:

(Start: 10 @43755 has 1 MA's), (Start: 11 @43758 has 3 MA's), (16, 43887), (19, 43917), (21, 43935), (23, 43944), (34, 44094), (35, 44133), (47, 44271), (57, 44424), (60, 44448), (71, 44559), (80, 44670), (83, 44733), (93, 44805),

Gene: E3\_gp98 Start: 56068, Stop: 57180, Start Num: 6

Candidate Starts for E3\_gp98:

(5, 56041), (6, 56068), (15, 56158), (21, 56263), (25, 56302), (66, 56809), (78, 56965), (88, 57070),

Gene: GMA1\_20 Start: 17561, Stop: 18616, Start Num: 10

Candidate Starts for GMA1\_20:

(Start: 10 @17561 has 1 MA's), (14, 17633), (24, 17759), (25, 17786), (30, 17870), (40, 18005), (45, 18059), (54, 18122), (55, 18125), (65, 18287), (67, 18296), (69, 18344), (74, 18371), (78, 18434), (79, 18443), (86, 18533), (93, 18584), (94, 18605),

Gene: Grayson\_68 Start: 28644, Stop: 30044, Start Num: 7

Candidate Starts for Grayson\_68:

(Start: 7 @28644 has 3 MA's), (18, 28821), (29, 28965), (31, 28974), (32, 28986), (36, 29043), (45, 29148), (46, 29157), (49, 29181), (59, 29331), (62, 29367), (65, 29379), (72, 29451), (84, 29613), (101, 29934), (102, 29937), (103, 29955),

Gene: Jflix2\_26 Start: 25867, Stop: 26955, Start Num: 11

Candidate Starts for Jflix2\_26:

(Start: 11 @25867 has 3 MA's), (25, 26083), (28, 26140), (49, 26383), (54, 26422), (68, 26608), (85, 26845),

Gene: Madraxi\_30 Start: 28062, Stop: 29615, Start Num: 10

Candidate Starts for Madraxi\_30:

(Start: 10 @28062 has 1 MA's), (Start: 11 @28065 has 3 MA's), (25, 28281), (28, 28338), (53, 28620), (66, 28791), (68, 28809), (71, 28857), (76, 28893), (82, 29019), (83, 29031), (85, 29049), (86, 29052), (90, 29076), (98, 29208), (99, 29268), (101, 29322), (103, 29343), (106, 29472), (107, 29520), (108, 29568), (109, 29571), (110, 29583),

Gene: Matteo\_18 Start: 16486, Stop: 17544, Start Num: 12

Candidate Starts for Matteo\_18:

(3, 16354), (Start: 12 @16486 has 3 MA's), (23, 16669), (33, 16813), (37, 16864), (38, 16870), (48, 17002), (56, 17119), (60, 17164), (71, 17281), (75, 17299), (77, 17326), (78, 17362), (81, 17395), (92,

17512),

Gene: Mbo2\_26 Start: 27781, Stop: 28878, Start Num: 10

Candidate Starts for Mbo2\_26:

(Start: 10 @27781 has 1 MA's), (15, 27856), (16, 27913), (17, 27928), (24, 27973), (27, 28033), (28, 28057), (39, 28174), (41, 28219), (44, 28249), (50, 28315), (58, 28444), (73, 28597), (78, 28666), (84, 28750),

Gene: Peregrin\_67 Start: 28158, Stop: 29555, Start Num: 7

Candidate Starts for Peregrin\_67:

(Start: 7 @28158 has 3 MA's), (18, 28335), (29, 28479), (31, 28488), (32, 28500), (36, 28557), (45, 28662), (46, 28671), (49, 28695), (59, 28845), (62, 28881), (65, 28893), (72, 28965), (84, 29127), (89, 29154), (101, 29448),

Gene: Pickett\_18 Start: 16479, Stop: 17537, Start Num: 12

Candidate Starts for Pickett\_18:

(Start: 12 @16479 has 3 MA's), (23, 16662), (33, 16806), (37, 16857), (38, 16863), (48, 16995), (56, 17112), (60, 17157), (71, 17274), (75, 17292), (77, 17319), (81, 17388), (92, 17505),

Gene: Puppies\_21 Start: 17502, Stop: 18587, Start Num: 9

Candidate Starts for Puppies\_21:

(Start: 9 @17502 has 2 MA's), (13, 17538), (22, 17691), (23, 17697), (24, 17700), (25, 17727), (28, 17784), (34, 17847), (35, 17883), (40, 17943), (43, 17961), (51, 18048), (52, 18054), (55, 18063), (63, 18234), (70, 18309), (91, 18525), (95, 18579),

Gene: REQ1\_83 Start: 49534, Stop: 50622, Start Num: 11

Candidate Starts for REQ1\_83:

(Start: 11 @49534 has 3 MA's), (23, 49720), (25, 49750), (28, 49807), (49, 50050), (76, 50356),

Gene: Reynauld\_34 Start: 35895, Stop: 36983, Start Num: 11

Candidate Starts for Reynauld\_34:

(Start: 10 @35892 has 1 MA's), (Start: 11 @35895 has 3 MA's), (17, 36039), (30, 36195), (42, 36333), (64, 36615), (76, 36723), (86, 36879),

Gene: Trogglehumper\_50 Start: 44419, Stop: 46098, Start Num: 4

Candidate Starts for Trogglehumper\_50:

(1, 44332), (Start: 4 @44419 has 1 MA's), (8, 44458), (26, 44698), (30, 44779), (58, 45124), (61, 45163), (62, 45187), (77, 45319), (78, 45373), (87, 45481), (96, 45625), (97, 45658), (98, 45667), (99, 45727), (100, 45733), (101, 45781), (104, 45841), (105, 45898), (106, 45931),

Gene: Vasanti\_18 Start: 16494, Stop: 17552, Start Num: 12

Candidate Starts for Vasanti\_18:

(2, 16344), (Start: 12 @16494 has 3 MA's), (20, 16662), (22, 16671), (23, 16677), (26, 16710), (33, 16821), (38, 16878), (48, 17010), (56, 17127), (71, 17289), (77, 17334), (81, 17403), (92, 17520),

Gene: Weasels2\_67 Start: 28157, Stop: 29557, Start Num: 7

Candidate Starts for Weasels2\_67:

(Start: 7 @28157 has 3 MA's), (18, 28334), (29, 28478), (31, 28487), (32, 28499), (36, 28556), (46, 28670), (49, 28694), (59, 28844), (62, 28880), (65, 28892), (102, 29450),

Gene: Widow\_21 Start: 17493, Stop: 18578, Start Num: 9

Candidate Starts for Widow\_21:

(Start: 9 @17493 has 2 MA's), (13, 17529), (22, 17682), (23, 17688), (24, 17691), (25, 17718), (28, 17775), (34, 17838), (35, 17874), (40, 17934), (43, 17952), (51, 18039), (52, 18045), (55, 18054), (63, 18225), (70, 18300), (91, 18516), (95, 18570),