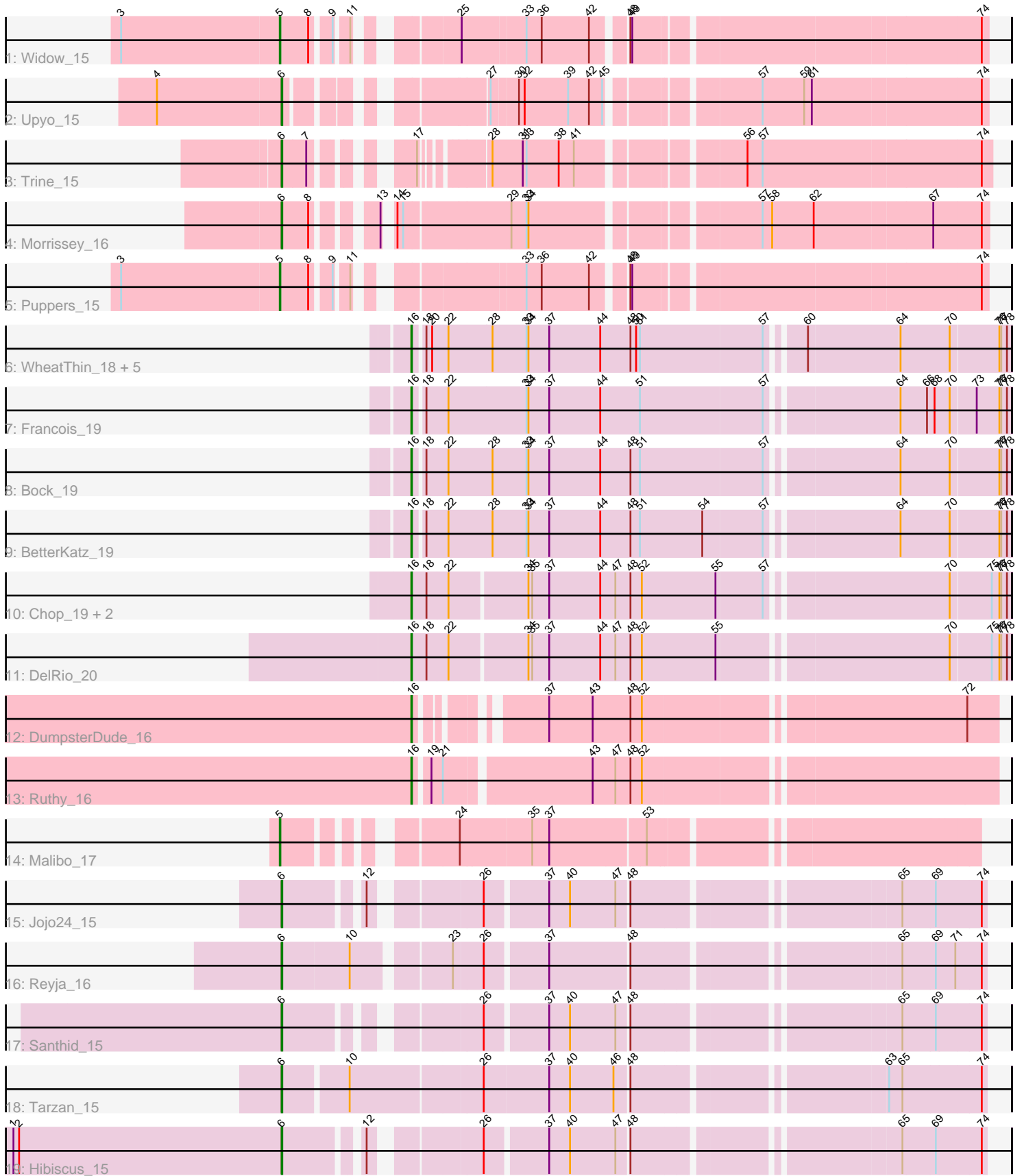


# Pham 158126



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 158126 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158126 has 26 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Widow\_15
- Track 2 : Upyo\_15
- Track 3 : Trine\_15
- Track 4 : Morrissey\_16
- Track 5 : Puppies\_15
- Track 6 : WheatThin\_18, Nadeem\_19, Parada\_19, Brylie\_19, Mulch\_19, NancyRae\_19
- Track 7 : Francois\_19
- Track 8 : Bock\_19
- Track 9 : BetterKatz\_19
- Track 10 : Chop\_19, GrandSlam\_19, Ayotoya\_19
- Track 11 : DelRio\_20
- Track 12 : DumpsterDude\_16
- Track 13 : Ruthy\_16
- Track 14 : Malibo\_17
- Track 15 : Jojo24\_15
- Track 16 : Reyja\_16
- Track 17 : Santhid\_15
- Track 18 : Tarzan\_15
- Track 19 : Hibiscus\_15

### ***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 15 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayotoya\_19, BetterKatz\_19, Bock\_19, Brylie\_19, Chop\_19, DelRio\_20, DumpsterDude\_16, Francois\_19, GrandSlam\_19, Mulch\_19, Nadeem\_19, NancyRae\_19, Parada\_19, Ruthy\_16, WheatThin\_18,

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

-

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

- Hibiscus\_15, Jojo24\_15, Malibo\_17, Morrissey\_16, Puppies\_15, Reyja\_16, Santhid\_15, Tarzan\_15, Trine\_15, Upyo\_15, Widow\_15,

### Summary by start number:

Start 5:

- Found in 3 of 26 ( 11.5% ) 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: Malibo\_17 (DW), Puppies\_15 (CD), Widow\_15 (CD),

Start 6:

- Found in 8 of 26 ( 30.8% ) of genes in pham
- Manual Annotations of this start: 8 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hibiscus\_15 (DY), Jojo24\_15 (DY), Morrissey\_16 (CD), Reyja\_16 (DY), Santhid\_15 (DY), Tarzan\_15 (DY), Trine\_15 (CD), Upyo\_15 (CD),

Start 16:

- Found in 15 of 26 ( 57.7% ) of genes in pham
- Manual Annotations of this start: 15 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya\_19 (DI), BetterKatz\_19 (DI), Bock\_19 (DI), Brylie\_19 (DI), Chop\_19 (DI), DelRio\_20 (DI), DumpsterDude\_16 (DW), Francois\_19 (DI), GrandSlam\_19 (DI), Mulch\_19 (DI), Nadeem\_19 (DI), NancyRae\_19 (DI), Parada\_19 (DI), Ruthy\_16 (DW), WheatThin\_18 (DI),

### Summary by clusters:

There are 4 clusters represented in this pham: DW, CD, DI, DY,

Info for manual annotations of cluster CD:

- Start number 5 was manually annotated 2 times for cluster CD.
- Start number 6 was manually annotated 3 times for cluster CD.

Info for manual annotations of cluster DI:

- Start number 16 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DW:

- Start number 5 was manually annotated 1 time for cluster DW.
- Start number 16 was manually annotated 2 times for cluster DW.

Info for manual annotations of cluster DY:

- Start number 6 was manually annotated 5 times for cluster DY.

### Gene Information:

Gene: Ayotoya\_19 Start: 10919, Stop: 11826, Start Num: 16

Candidate Starts for Ayotoya\_19:

(Start: 16 @10919 has 15 MA's), (18, 10943), (22, 10976), (34, 11093), (35, 11099), (37, 11126), (44, 11207), (47, 11231), (48, 11255), (52, 11273), (55, 11390), (57, 11462), (70, 11732), (75, 11795), (76, 11807), (77, 11810), (78, 11819),

Gene: BetterKatz\_19 Start: 10860, Stop: 11764, Start Num: 16

Candidate Starts for BetterKatz\_19:

(Start: 16 @10860 has 15 MA's), (18, 10875), (22, 10908), (28, 10977), (33, 11031), (34, 11034), (37, 11067), (44, 11148), (48, 11196), (51, 11211), (54, 11310), (57, 11403), (64, 11592), (70, 11670), (76, 11745), (77, 11748), (78, 11757),

Gene: Bock\_19 Start: 10610, Stop: 11514, Start Num: 16

Candidate Starts for Bock\_19:

(Start: 16 @10610 has 15 MA's), (18, 10625), (22, 10658), (28, 10727), (33, 10781), (34, 10784), (37, 10817), (44, 10898), (48, 10946), (51, 10961), (57, 11153), (64, 11342), (70, 11420), (76, 11495), (77, 11498), (78, 11507),

Gene: Brylie\_19 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for Brylie\_19:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: Chop\_19 Start: 10667, Stop: 11574, Start Num: 16

Candidate Starts for Chop\_19:

(Start: 16 @10667 has 15 MA's), (18, 10691), (22, 10724), (34, 10841), (35, 10847), (37, 10874), (44, 10955), (47, 10979), (48, 11003), (52, 11021), (55, 11138), (57, 11210), (70, 11480), (75, 11543), (76, 11555), (77, 11558), (78, 11567),

Gene: DelRio\_20 Start: 11141, Stop: 12048, Start Num: 16

Candidate Starts for DelRio\_20:

(Start: 16 @11141 has 15 MA's), (18, 11165), (22, 11198), (34, 11315), (35, 11321), (37, 11348), (44, 11429), (47, 11453), (48, 11477), (52, 11495), (55, 11612), (70, 11954), (75, 12017), (76, 12029), (77, 12032), (78, 12041),

Gene: DumpsterDude\_16 Start: 9345, Stop: 10174, Start Num: 16

Candidate Starts for DumpsterDude\_16:

(Start: 16 @9345 has 15 MA's), (37, 9495), (43, 9564), (48, 9624), (52, 9642), (72, 10125),

Gene: Francois\_19 Start: 10624, Stop: 11528, Start Num: 16

Candidate Starts for Francois\_19:

(Start: 16 @10624 has 15 MA's), (18, 10639), (22, 10672), (33, 10795), (34, 10798), (37, 10831), (44, 10912), (51, 10975), (57, 11167), (64, 11356), (66, 11398), (68, 11410), (70, 11434), (73, 11473), (76, 11509), (77, 11512), (78, 11521),

Gene: GrandSlam\_19 Start: 10667, Stop: 11574, Start Num: 16

Candidate Starts for GrandSlam\_19:

(Start: 16 @10667 has 15 MA's), (18, 10691), (22, 10724), (34, 10841), (35, 10847), (37, 10874), (44, 10955), (47, 10979), (48, 11003), (52, 11021), (55, 11138), (57, 11210), (70, 11480), (75, 11543), (76, 11555), (77, 11558), (78, 11567),

Gene: Hibiscus\_15 Start: 8943, Stop: 9913, Start Num: 6

Candidate Starts for Hibiscus\_15:

(1, 8517), (2, 8526), (Start: 6 @8943 has 8 MA's), (12, 9048), (26, 9192), (37, 9282), (40, 9315), (47, 9387), (48, 9405), (65, 9786), (69, 9837), (74, 9906),

Gene: Jojo24\_15 Start: 8937, Stop: 9907, Start Num: 6

Candidate Starts for Jojo24\_15:

(Start: 6 @8937 has 8 MA's), (12, 9042), (26, 9186), (37, 9276), (40, 9309), (47, 9381), (48, 9399), (65, 9780), (69, 9831), (74, 9900),

Gene: Malibo\_17 Start: 9627, Stop: 10582, Start Num: 5

Candidate Starts for Malibo\_17:

(Start: 5 @9627 has 3 MA's), (24, 9828), (35, 9936), (37, 9963), (53, 10107),

Gene: Morrissey\_16 Start: 9186, Stop: 10171, Start Num: 6

Candidate Starts for Morrissey\_16:

(Start: 6 @9186 has 8 MA's), (8, 9228), (13, 9300), (14, 9306), (15, 9315), (29, 9471), (33, 9495), (34, 9498), (57, 9822), (58, 9837), (62, 9903), (67, 10086), (74, 10161),

Gene: Mulch\_19 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for Mulch\_19:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: Nadeem\_19 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for Nadeem\_19:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: NancyRae\_19 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for NancyRae\_19:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: Parada\_19 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for Parada\_19:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: Puppies\_15 Start: 8726, Stop: 9696, Start Num: 5

Candidate Starts for Puppies\_15:

(3, 8477), (Start: 5 @8726 has 3 MA's), (8, 8768), (9, 8795), (11, 8813), (33, 9023), (36, 9047), (42, 9122), (48, 9167), (49, 9170), (74, 9686),

Gene: Reyja\_16 Start: 9079, Stop: 10085, Start Num: 6

Candidate Starts for Reyja\_16:

(Start: 6 @9079 has 8 MA's), (10, 9184), (23, 9319), (26, 9364), (37, 9454), (48, 9577), (65, 9958), (69, 10009), (71, 10039), (74, 10078),

Gene: Ruthy\_16 Start: 9419, Stop: 10284, Start Num: 16

Candidate Starts for Ruthy\_16:

(Start: 16 @9419 has 15 MA's), (19, 9440), (21, 9458), (43, 9674), (47, 9710), (48, 9734), (52, 9752),

Gene: Santhid\_15 Start: 8945, Stop: 9915, Start Num: 6

Candidate Starts for Santhid\_15:

(Start: 6 @8945 has 8 MA's), (26, 9194), (37, 9284), (40, 9317), (47, 9389), (48, 9407), (65, 9788), (69, 9839), (74, 9908),

Gene: Tarzan\_15 Start: 8933, Stop: 9960, Start Num: 6

Candidate Starts for Tarzan\_15:

(Start: 6 @8933 has 8 MA's), (10, 9029), (26, 9230), (37, 9329), (40, 9362), (46, 9431), (48, 9452), (63, 9812), (65, 9833), (74, 9953),

Gene: Trine\_15 Start: 8732, Stop: 9684, Start Num: 6

Candidate Starts for Trine\_15:

(Start: 6 @8732 has 8 MA's), (7, 8768), (17, 8867), (28, 8948), (31, 8996), (33, 9002), (38, 9053), (41, 9077), (56, 9305), (57, 9329), (74, 9668),

Gene: Upyo\_15 Start: 8842, Stop: 9809, Start Num: 6

Candidate Starts for Upyo\_15:

(4, 8647), (Start: 6 @8842 has 8 MA's), (27, 9082), (30, 9121), (32, 9130), (39, 9199), (42, 9232), (45, 9253), (57, 9460), (59, 9526), (61, 9538), (74, 9799),

Gene: WheatThin\_18 Start: 10607, Stop: 11511, Start Num: 16

Candidate Starts for WheatThin\_18:

(Start: 16 @10607 has 15 MA's), (18, 10622), (20, 10631), (22, 10655), (28, 10724), (33, 10778), (34, 10781), (37, 10814), (44, 10895), (48, 10943), (50, 10952), (51, 10958), (57, 11150), (60, 11198), (64, 11339), (70, 11417), (76, 11492), (77, 11495), (78, 11504),

Gene: Widow\_15 Start: 8717, Stop: 9687, Start Num: 5

Candidate Starts for Widow\_15:

(3, 8468), (Start: 5 @8717 has 3 MA's), (8, 8759), (9, 8786), (11, 8804), (25, 8918), (33, 9014), (36, 9038), (42, 9113), (48, 9158), (49, 9161), (74, 9677),