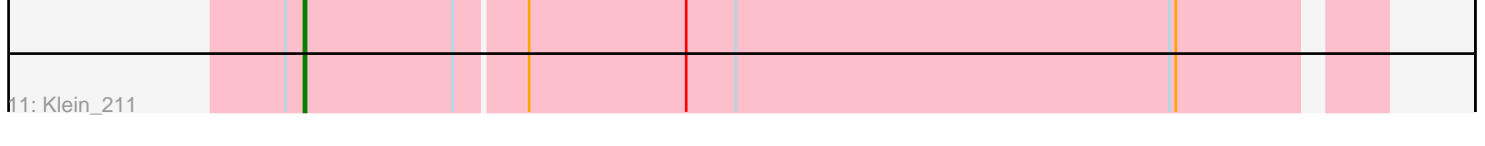
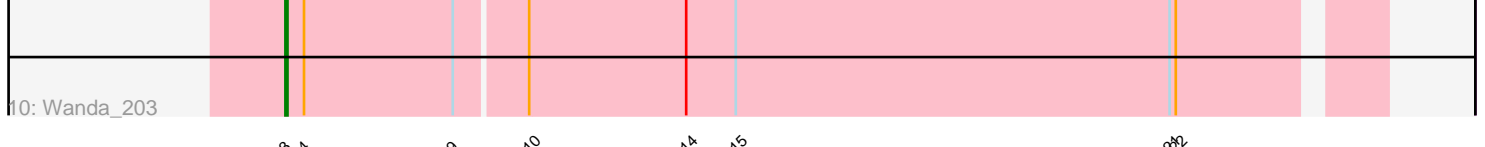
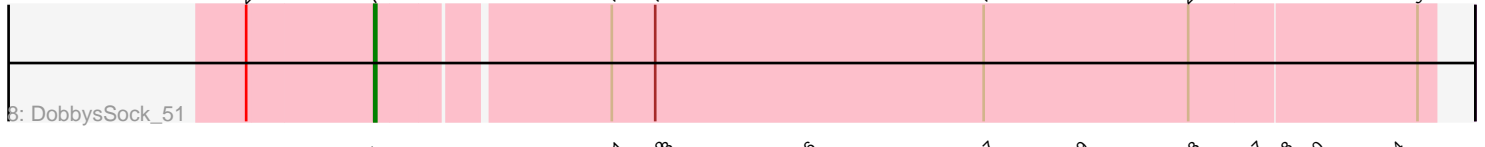
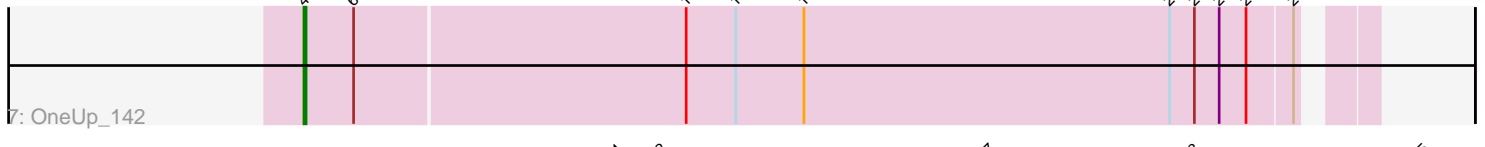
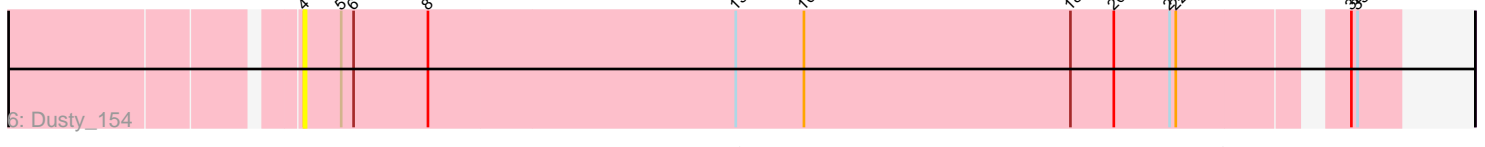
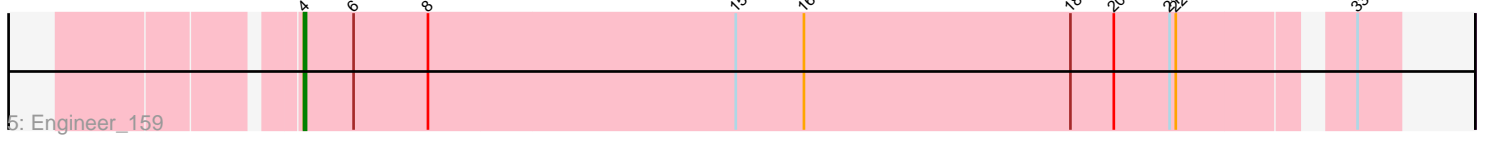
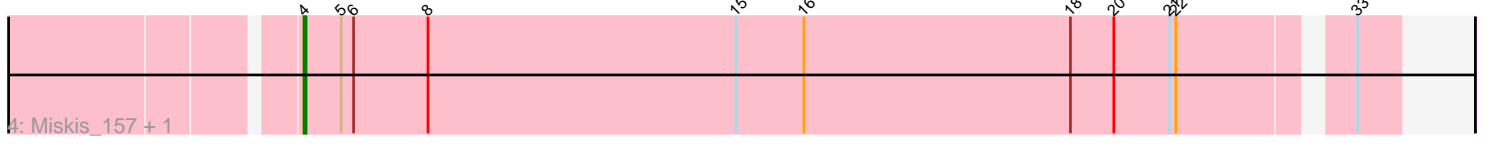
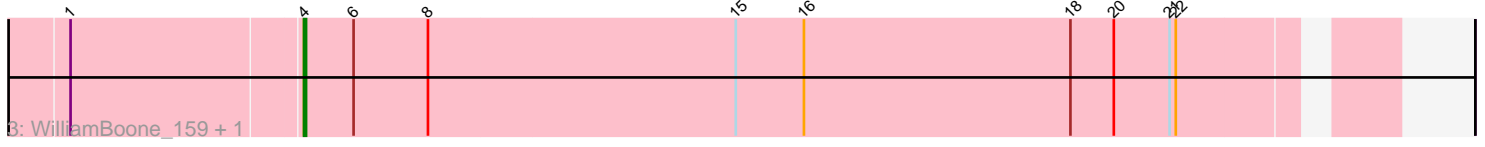
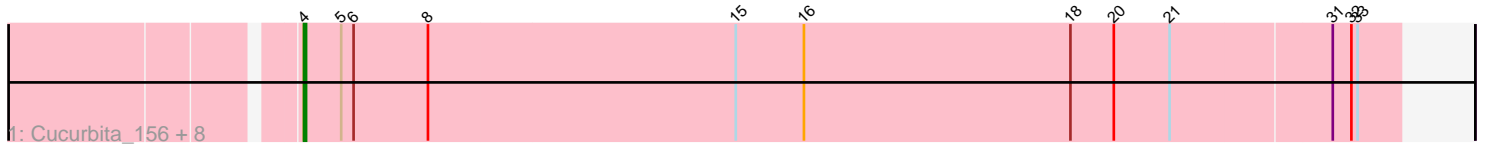


# Pham 194333



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 194333 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194333 has 21 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Cucurbita\_156, Abscondus\_156, Bachita\_160, Smoothie\_158, Lozinak\_157, PhinkBoden\_155, ClubL\_158, Norvs\_155, Toniann\_157
- Track 2 : Geeche\_157
- Track 3 : WilliamBoone\_159, Culver\_157
- Track 4 : Miskis\_157, Aphelion\_157
- Track 5 : Engineer\_159
- Track 6 : Dusty\_154
- Track 7 : OneUp\_142
- Track 8 : DobbysSock\_51
- Track 9 : Kuwabara\_75
- Track 10 : Wanda\_203
- Track 11 : Klein\_211

### ***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 14 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_156, Aphelion\_157, Bachita\_160, ClubL\_158, Cucurbita\_156, Culver\_157, Dusty\_154, Engineer\_159, Geeche\_157, Klein\_211, Lozinak\_157, Miskis\_157, Norvs\_155, OneUp\_142, PhinkBoden\_155, Smoothie\_158, Toniann\_157, WilliamBoone\_159,

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

- Wanda\_203,

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

- DobbysSock\_51, Kuwabara\_75,

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

Start 3:

- Found in 2 of 21 ( 9.5% ) of genes in pham

- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Wanda\_203 (J),

#### Start 4:

- Found in 19 of 21 ( 90.5% ) of genes in pham
- Manual Annotations of this start: 14 of 17
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Abscondus\_156 (CQ1), Aphelion\_157 (CQ1), Bachita\_160 (CQ1), ClubL\_158 (CQ1), Cucurbita\_156 (CQ1), Culver\_157 (CQ1), Dusty\_154 (CQ1), Engineer\_159 (CQ1), Geeche\_157 (CQ1), Klein\_211 (J), Lozinak\_157 (CQ1), Miskis\_157 (CQ1), Norvs\_155 (CQ1), OneUp\_142 (CQ2), PhinkBoden\_155 (CQ1), Smoothie\_158 (CQ1), Toniann\_157 (CQ1), WilliamBoone\_159 (CQ1),

#### Start 7:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DobbysSock\_51 (CZ4), Kuwabara\_75 (DN4),

### **Summary by clusters:**

There are 5 clusters represented in this pham: CQ2, CQ1, J, CZ4, DN4,

Info for manual annotations of cluster CQ1:

- Start number 4 was manually annotated 12 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 4 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CZ4:

- Start number 7 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN4:

- Start number 7 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 1 time for cluster J.
- Start number 4 was manually annotated 1 time for cluster J.

### **Gene Information:**

Gene: Abscondus\_156 Start: 83304, Stop: 82780, Start Num: 4

Candidate Starts for Abscondus\_156:

(Start: 4 @83304 has 14 MA's), (5, 83286), (6, 83280), (8, 83244), (15, 83097), (16, 83064), (18, 82935), (20, 82914), (21, 82887), (31, 82812), (32, 82803), (33, 82800),

Gene: Aphelion\_157 Start: 84453, Stop: 83941, Start Num: 4

Candidate Starts for Aphelion\_157:

(Start: 4 @84453 has 14 MA's), (5, 84435), (6, 84429), (8, 84393), (15, 84246), (16, 84213), (18, 84084), (20, 84063), (21, 84036), (22, 84033), (33, 83961),

Gene: Bachita\_160 Start: 84344, Stop: 83820, Start Num: 4

Candidate Starts for Bachita\_160:

(Start: 4 @84344 has 14 MA's), (5, 84326), (6, 84320), (8, 84284), (15, 84137), (16, 84104), (18, 83975), (20, 83954), (21, 83927), (31, 83852), (32, 83843), (33, 83840),

Gene: ClubL\_158 Start: 83596, Stop: 83072, Start Num: 4

Candidate Starts for ClubL\_158:

(Start: 4 @83596 has 14 MA's), (5, 83578), (6, 83572), (8, 83536), (15, 83389), (16, 83356), (18, 83227), (20, 83206), (21, 83179), (31, 83104), (32, 83095), (33, 83092),

Gene: Cucurbita\_156 Start: 84657, Stop: 84133, Start Num: 4

Candidate Starts for Cucurbita\_156:

(Start: 4 @84657 has 14 MA's), (5, 84639), (6, 84633), (8, 84597), (15, 84450), (16, 84417), (18, 84288), (20, 84267), (21, 84240), (31, 84165), (32, 84156), (33, 84153),

Gene: Culver\_157 Start: 82846, Stop: 82337, Start Num: 4

Candidate Starts for Culver\_157:

(1, 82954), (Start: 4 @82846 has 14 MA's), (6, 82822), (8, 82786), (15, 82639), (16, 82606), (18, 82477), (20, 82456), (21, 82429), (22, 82426),

Gene: DobbysSock\_51 Start: 37985, Stop: 38485, Start Num: 7

Candidate Starts for DobbysSock\_51:

(2, 37925), (Start: 7 @37985 has 2 MA's), (11, 38090), (12, 38111), (17, 38270), (23, 38369), (35, 38477),

Gene: Dusty\_154 Start: 83321, Stop: 82809, Start Num: 4

Candidate Starts for Dusty\_154:

(Start: 4 @83321 has 14 MA's), (5, 83303), (6, 83297), (8, 83261), (15, 83114), (16, 83081), (18, 82952), (20, 82931), (21, 82904), (22, 82901), (32, 82832), (33, 82829),

Gene: Engineer\_159 Start: 84171, Stop: 83659, Start Num: 4

Candidate Starts for Engineer\_159:

(Start: 4 @84171 has 14 MA's), (6, 84147), (8, 84111), (15, 83964), (16, 83931), (18, 83802), (20, 83781), (21, 83754), (22, 83751), (33, 83679),

Gene: Geeche\_157 Start: 83545, Stop: 83033, Start Num: 4

Candidate Starts for Geeche\_157:

(Start: 4 @83545 has 14 MA's), (5, 83527), (6, 83521), (8, 83485), (15, 83338), (18, 83176), (20, 83155), (21, 83128), (22, 83125), (26, 83092), (33, 83053),

Gene: Klein\_211 Start: 101652, Stop: 101146, Start Num: 4

Candidate Starts for Klein\_211:

(Start: 3 @101661 has 1 MA's), (Start: 4 @101652 has 14 MA's), (9, 101580), (10, 101547), (14, 101472), (15, 101448), (21, 101238), (22, 101235),

Gene: Kuwabara\_75 Start: 45173, Stop: 45688, Start Num: 7

Candidate Starts for Kuwabara\_75:

(Start: 7 @45173 has 2 MA's), (11, 45275), (12, 45296), (13, 45299), (16, 45368), (17, 45455), (19, 45500), (23, 45554), (27, 45584), (28, 45596), (30, 45611), (34, 45650),

Gene: Lozinak\_157 Start: 84185, Stop: 83661, Start Num: 4

Candidate Starts for Lozinak\_157:

(Start: 4 @84185 has 14 MA's), (5, 84167), (6, 84161), (8, 84125), (15, 83978), (16, 83945), (18, 83816), (20, 83795), (21, 83768), (31, 83693), (32, 83684), (33, 83681),

Gene: Miskis\_157 Start: 83202, Stop: 82690, Start Num: 4

Candidate Starts for Miskis\_157:

(Start: 4 @83202 has 14 MA's), (5, 83184), (6, 83178), (8, 83142), (15, 82995), (16, 82962), (18, 82833), (20, 82812), (21, 82785), (22, 82782), (33, 82710),

Gene: Norvs\_155 Start: 83376, Stop: 82852, Start Num: 4

Candidate Starts for Norvs\_155:

(Start: 4 @83376 has 14 MA's), (5, 83358), (6, 83352), (8, 83316), (15, 83169), (16, 83136), (18, 83007), (20, 82986), (21, 82959), (31, 82884), (32, 82875), (33, 82872),

Gene: OneUp\_142 Start: 83012, Stop: 82515, Start Num: 4

Candidate Starts for OneUp\_142:

(Start: 4 @83012 has 14 MA's), (6, 82988), (14, 82832), (15, 82808), (16, 82775), (21, 82598), (24, 82586), (25, 82574), (26, 82562), (29, 82541),

Gene: PhinkBoden\_155 Start: 83774, Stop: 83250, Start Num: 4

Candidate Starts for PhinkBoden\_155:

(Start: 4 @83774 has 14 MA's), (5, 83756), (6, 83750), (8, 83714), (15, 83567), (16, 83534), (18, 83405), (20, 83384), (21, 83357), (31, 83282), (32, 83273), (33, 83270),

Gene: Smoothie\_158 Start: 83875, Stop: 83351, Start Num: 4

Candidate Starts for Smoothie\_158:

(Start: 4 @83875 has 14 MA's), (5, 83857), (6, 83851), (8, 83815), (15, 83668), (16, 83635), (18, 83506), (20, 83485), (21, 83458), (31, 83383), (32, 83374), (33, 83371),

Gene: Toniann\_157 Start: 83517, Stop: 82993, Start Num: 4

Candidate Starts for Toniann\_157:

(Start: 4 @83517 has 14 MA's), (5, 83499), (6, 83493), (8, 83457), (15, 83310), (16, 83277), (18, 83148), (20, 83127), (21, 83100), (31, 83025), (32, 83016), (33, 83013),

Gene: Wanda\_203 Start: 99291, Stop: 98776, Start Num: 3

Candidate Starts for Wanda\_203:

(Start: 3 @99291 has 1 MA's), (Start: 4 @99282 has 14 MA's), (9, 99210), (10, 99177), (14, 99102), (15, 99078), (21, 98868), (22, 98865),

Gene: WilliamBoone\_159 Start: 81962, Stop: 81453, Start Num: 4

Candidate Starts for WilliamBoone\_159:

(1, 82070), (Start: 4 @81962 has 14 MA's), (6, 81938), (8, 81902), (15, 81755), (16, 81722), (18, 81593), (20, 81572), (21, 81545), (22, 81542),