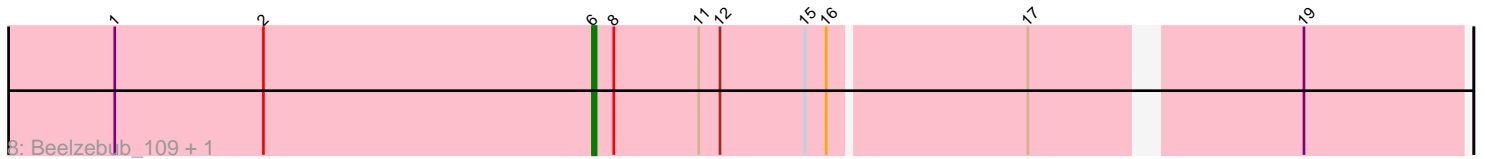
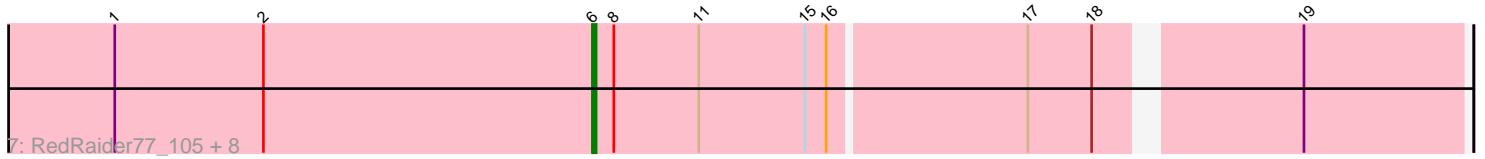
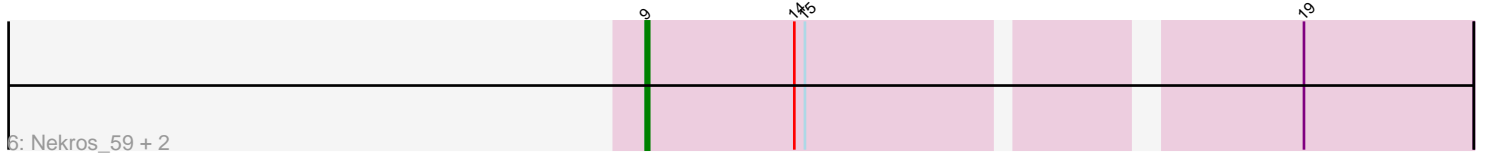
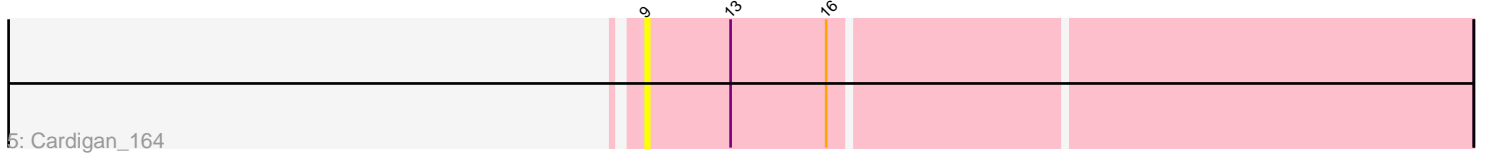
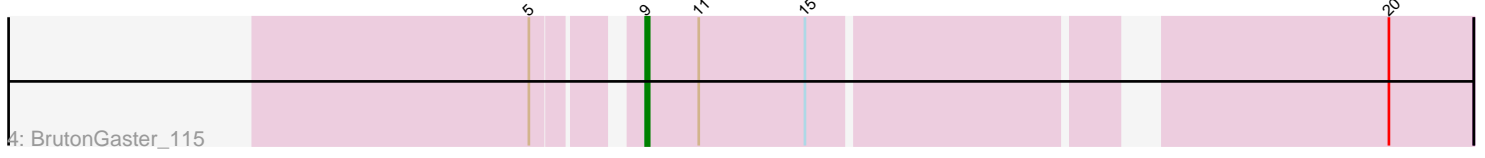
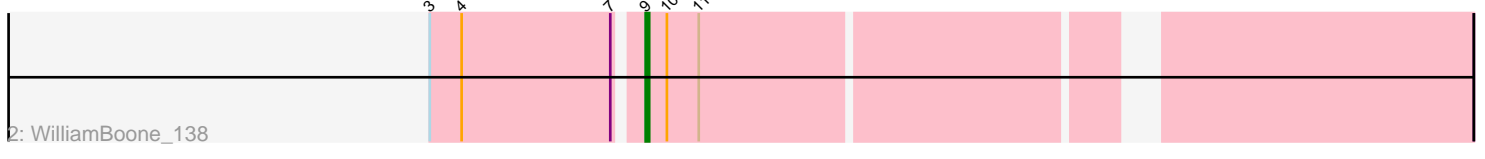
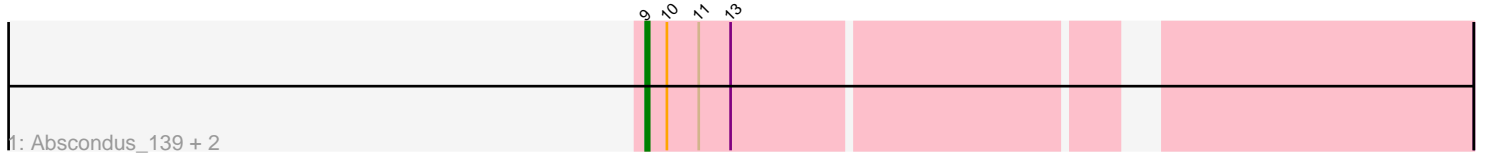


Pham 303662



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 303662 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303662 has 23 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Abscondus\_139, Dusty\_138, Geeche\_140
- Track 2 : WilliamBoone\_138
- Track 3 : OneUp\_125
- Track 4 : BrutonGaster\_115
- Track 5 : Cardigan\_164
- Track 6 : Nekros\_59, Thibault\_54, Rearden\_56
- Track 7 : RedRaider77\_105, JoieB\_106, Blackbeetle\_106, Gattaca\_104, GoongGoong\_105, Raela\_107, Poise\_106, Tesla\_101, MosMoris\_101
- Track 8 : Beelzebub\_109, Pringar\_101
- Track 9 : VasuNzinga\_103
- Track 10 : Marvin\_99

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

The start number called the most often in the published annotations is 6, it was called in 11 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_109, Blackbeetle\_106, Gattaca\_104, GoongGoong\_105, JoieB\_106, MosMoris\_101, Poise\_106, Pringar\_101, Raela\_107, RedRaider77\_105, Tesla\_101,

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

- Marvin\_99, VasuNzinga\_103,

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

- Abscondus\_139, BrutonGaster\_115, Cardigan\_164, Dusty\_138, Geeche\_140, Nekros\_59, OneUp\_125, Rearden\_56, Thibault\_54, WilliamBoone\_138,

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

Start 6:

- Found in 13 of 23 ( 56.5% ) of genes in pham
- Manual Annotations of this start: 11 of 19
- Called 84.6% of time when present

- Phage (with cluster) where this start called: Beelzebub\_109 (S), Blackbeetle\_106 (S), Gattaca\_104 (S), GoongGoong\_105 (S), JoieB\_106 (S), MosMoris\_101 (S), Poise\_106 (S), Pringar\_101 (S), Raela\_107 (S), RedRaider77\_105 (S), Tesla\_101 (S),

Start 8:

- Found in 13 of 23 ( 56.5% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Marvin\_99 (S), VasuNzinga\_103 (S),

Start 9:

- Found in 10 of 23 ( 43.5% ) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_139 (CQ1), BrutonGaster\_115 (CQ2), Cardigan\_164 (DD), Dusty\_138 (CQ1), Geeche\_140 (CQ1), Nekros\_59 (J), OneUp\_125 (CQ2), Rearden\_56 (J), Thibault\_54 (J), WilliamBoone\_138 (CQ1),

### **Summary by clusters:**

There are 5 clusters represented in this pham: CQ2, S, J, CQ1, DD,

Info for manual annotations of cluster CQ1:

- Start number 9 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 9 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster J:

- Start number 9 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster S:

- Start number 6 was manually annotated 11 times for cluster S.
- Start number 8 was manually annotated 2 times for cluster S.

### **Gene Information:**

Gene: Abscondus\_139 Start: 76350, Stop: 76565, Start Num: 9

Candidate Starts for Abscondus\_139:

(Start: 9 @76350 has 6 MA's), (10, 76356), (11, 76365), (13, 76374),

Gene: Beelzebub\_109 Start: 59235, Stop: 59002, Start Num: 6

Candidate Starts for Beelzebub\_109:

(1, 59370), (2, 59328), (Start: 6 @59235 has 11 MA's), (Start: 8 @59229 has 2 MA's), (11, 59205), (12, 59199), (15, 59175), (16, 59169), (17, 59115), (19, 59046),

Gene: Blackbeetle\_106 Start: 58732, Stop: 58499, Start Num: 6

Candidate Starts for Blackbeetle\_106:

(1, 58867), (2, 58825), (Start: 6 @58732 has 11 MA's), (Start: 8 @58726 has 2 MA's), (11, 58702), (15, 58672), (16, 58666), (17, 58612), (18, 58594), (19, 58543),

Gene: BrutonGaster\_115 Start: 71154, Stop: 71369, Start Num: 9  
Candidate Starts for BrutonGaster\_115:  
(5, 71130), (Start: 9 @71154 has 6 MA's), (11, 71169), (15, 71199), (20, 71346),

Gene: Cardigan\_164 Start: 86618, Stop: 86845, Start Num: 9  
Candidate Starts for Cardigan\_164:  
(Start: 9 @86618 has 6 MA's), (13, 86642), (16, 86669),

Gene: Dusty\_138 Start: 76177, Stop: 76392, Start Num: 9  
Candidate Starts for Dusty\_138:  
(Start: 9 @76177 has 6 MA's), (10, 76183), (11, 76192), (13, 76201),

Gene: Gattaca\_104 Start: 59145, Stop: 58912, Start Num: 6  
Candidate Starts for Gattaca\_104:  
(1, 59280), (2, 59238), (Start: 6 @59145 has 11 MA's), (Start: 8 @59139 has 2 MA's), (11, 59115), (15, 59085), (16, 59079), (17, 59025), (18, 59007), (19, 58956),

Gene: Geeche\_140 Start: 76400, Stop: 76615, Start Num: 9  
Candidate Starts for Geeche\_140:  
(Start: 9 @76400 has 6 MA's), (10, 76406), (11, 76415), (13, 76424),

Gene: GoongGoong\_105 Start: 58950, Stop: 58717, Start Num: 6  
Candidate Starts for GoongGoong\_105:  
(1, 59085), (2, 59043), (Start: 6 @58950 has 11 MA's), (Start: 8 @58944 has 2 MA's), (11, 58920), (15, 58890), (16, 58884), (17, 58830), (18, 58812), (19, 58761),

Gene: JoieB\_106 Start: 59319, Stop: 59086, Start Num: 6  
Candidate Starts for JoieB\_106:  
(1, 59454), (2, 59412), (Start: 6 @59319 has 11 MA's), (Start: 8 @59313 has 2 MA's), (11, 59289), (15, 59259), (16, 59253), (17, 59199), (18, 59181), (19, 59130),

Gene: Marvin\_99 Start: 58798, Stop: 58571, Start Num: 8  
Candidate Starts for Marvin\_99:  
(1, 58939), (2, 58897), (Start: 6 @58804 has 11 MA's), (Start: 8 @58798 has 2 MA's), (11, 58774), (15, 58744), (16, 58738), (17, 58684), (18, 58666), (19, 58615),

Gene: MosMoris\_101 Start: 59151, Stop: 58918, Start Num: 6  
Candidate Starts for MosMoris\_101:  
(1, 59286), (2, 59244), (Start: 6 @59151 has 11 MA's), (Start: 8 @59145 has 2 MA's), (11, 59121), (15, 59091), (16, 59085), (17, 59031), (18, 59013), (19, 58962),

Gene: Nekros\_59 Start: 45877, Stop: 45659, Start Num: 9  
Candidate Starts for Nekros\_59:  
(Start: 9 @45877 has 6 MA's), (14, 45835), (15, 45832), (19, 45706),

Gene: OneUp\_125 Start: 75136, Stop: 75351, Start Num: 9  
Candidate Starts for OneUp\_125:  
(5, 75103), (Start: 9 @75136 has 6 MA's), (15, 75181), (20, 75328),

Gene: Poise\_106 Start: 58732, Stop: 58499, Start Num: 6

Candidate Starts for Poise\_106:

(1, 58867), (2, 58825), (Start: 6 @58732 has 11 MA's), (Start: 8 @58726 has 2 MA's), (11, 58702), (15, 58672), (16, 58666), (17, 58612), (18, 58594), (19, 58543),

Gene: Pringar\_101 Start: 58522, Stop: 58289, Start Num: 6

Candidate Starts for Pringar\_101:

(1, 58657), (2, 58615), (Start: 6 @58522 has 11 MA's), (Start: 8 @58516 has 2 MA's), (11, 58492), (12, 58486), (15, 58462), (16, 58456), (17, 58402), (19, 58333),

Gene: Raela\_107 Start: 59287, Stop: 59054, Start Num: 6

Candidate Starts for Raela\_107:

(1, 59422), (2, 59380), (Start: 6 @59287 has 11 MA's), (Start: 8 @59281 has 2 MA's), (11, 59257), (15, 59227), (16, 59221), (17, 59167), (18, 59149), (19, 59098),

Gene: Rearden\_56 Start: 43382, Stop: 43164, Start Num: 9

Candidate Starts for Rearden\_56:

(Start: 9 @43382 has 6 MA's), (14, 43340), (15, 43337), (19, 43211),

Gene: RedRaider77\_105 Start: 58680, Stop: 58447, Start Num: 6

Candidate Starts for RedRaider77\_105:

(1, 58815), (2, 58773), (Start: 6 @58680 has 11 MA's), (Start: 8 @58674 has 2 MA's), (11, 58650), (15, 58620), (16, 58614), (17, 58560), (18, 58542), (19, 58491),

Gene: Tesla\_101 Start: 58527, Stop: 58294, Start Num: 6

Candidate Starts for Tesla\_101:

(1, 58662), (2, 58620), (Start: 6 @58527 has 11 MA's), (Start: 8 @58521 has 2 MA's), (11, 58497), (15, 58467), (16, 58461), (17, 58407), (18, 58389), (19, 58338),

Gene: Thibault\_54 Start: 44229, Stop: 44011, Start Num: 9

Candidate Starts for Thibault\_54:

(Start: 9 @44229 has 6 MA's), (14, 44187), (15, 44184), (19, 44058),

Gene: VasuNzinga\_103 Start: 58610, Stop: 58383, Start Num: 8

Candidate Starts for VasuNzinga\_103:

(1, 58751), (2, 58709), (Start: 6 @58616 has 11 MA's), (Start: 8 @58610 has 2 MA's), (11, 58586), (15, 58556), (16, 58550), (17, 58496), (19, 58427),

Gene: WilliamBoone\_138 Start: 74263, Stop: 74478, Start Num: 9

Candidate Starts for WilliamBoone\_138:

(3, 74206), (4, 74215), (7, 74257), (Start: 9 @74263 has 6 MA's), (10, 74269), (11, 74278),