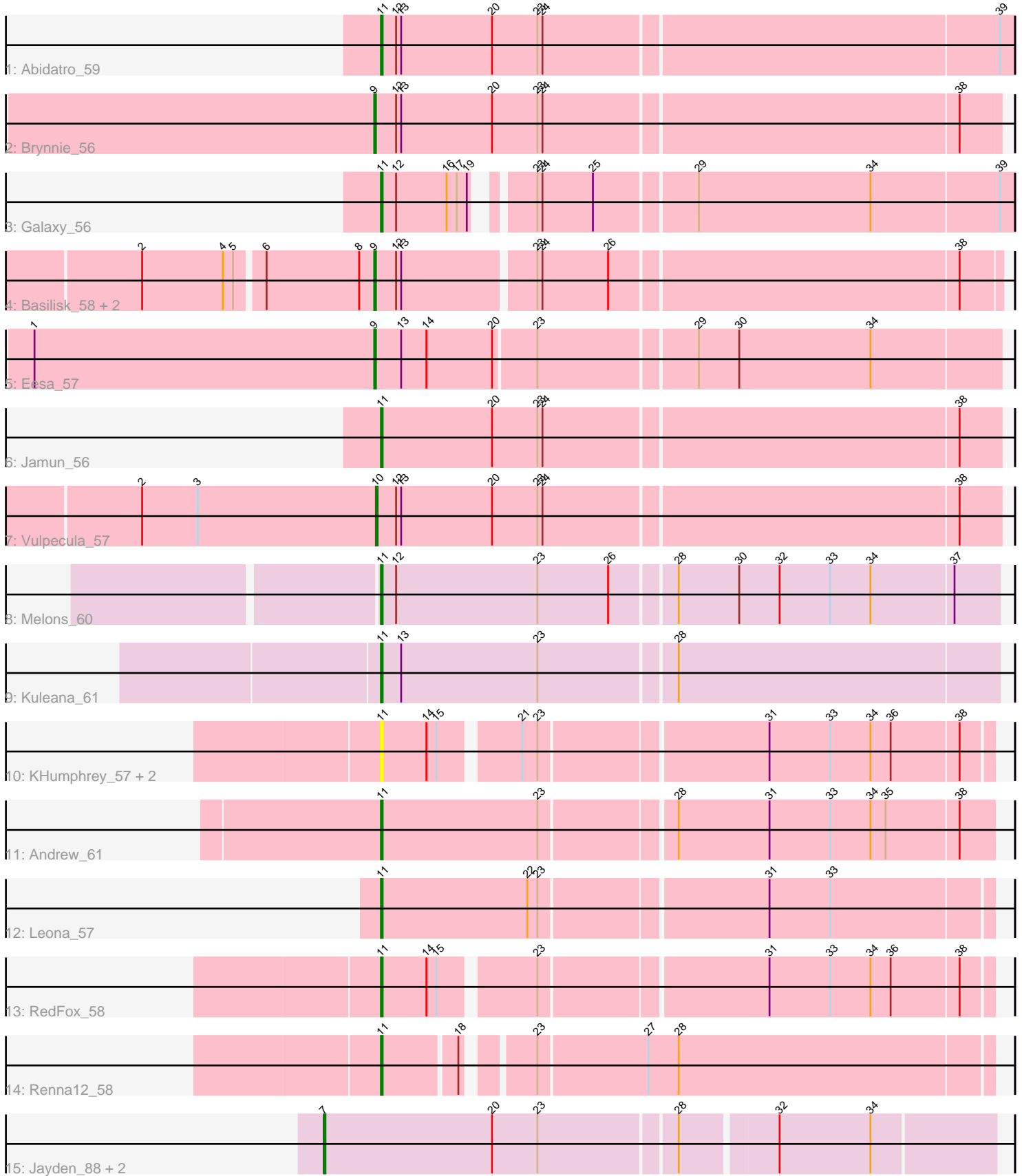


Pham 158178



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 158178 Report

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

Pham number 158178 has 21 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Abidatro\_59
- Track 2 : Brynnie\_56
- Track 3 : Galaxy\_56
- Track 4 : Basilisk\_58, Chickaboom\_63, Ruchi\_57
- Track 5 : Eesa\_57
- Track 6 : Jamun\_56
- Track 7 : Vulpecula\_57
- Track 8 : Melons\_60
- Track 9 : Kuleana\_61
- Track 10 : KHumphrey\_57, Juno112\_58, PhluffyCoco\_58
- Track 11 : Andrew\_61
- Track 12 : Leona\_57
- Track 13 : RedFox\_58
- Track 14 : Renna12\_58
- Track 15 : Jayden\_88, Gina\_93, Teamocil\_93

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

The start number called the most often in the published annotations is 11, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_59, Andrew\_61, Galaxy\_56, Jamun\_56, Juno112\_58, KHumphrey\_57, Kuleana\_61, Leona\_57, Melons\_60, PhluffyCoco\_58, RedFox\_58, Renna12\_58,

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

- 

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

- Basilisk\_58, Brynnie\_56, Chickaboom\_63, Eesa\_57, Gina\_93, Jayden\_88, Ruchi\_57, Teamocil\_93, Vulpecula\_57,

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

Start 7:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gina\_93 (EC), Jayden\_88 (EC), Teamocil\_93 (EC),

Start 9:

- Found in 5 of 21 ( 23.8% ) of genes in pham
- Manual Annotations of this start: 4 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Basilisk\_58 (AS1), Brynnie\_56 (AS1), Chickaboom\_63 (AS1), Eesa\_57 (AS1), Ruchi\_57 (AS1),

Start 10:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vulpecula\_57 (AS1),

Start 11:

- Found in 12 of 21 ( 57.1% ) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_59 (AS1), Andrew\_61 (AS3), Galaxy\_56 (AS1), Jamun\_56 (AS1), Juno112\_58 (AS3), KHumphrey\_57 (AS3), Kuleana\_61 (AS2), Leona\_57 (AS3), Melons\_60 (AS2), PhluffyCoco\_58 (AS3), RedFox\_58 (AS3), Renna12\_58 (AS3),

**Summary by clusters:**

There are 4 clusters represented in this pham: AS3, AS2, AS1, EC,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 4 times for cluster AS1.
- Start number 10 was manually annotated 1 time for cluster AS1.
- Start number 11 was manually annotated 3 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 11 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 11 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster EC:

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

**Gene Information:**

Gene: Abidatro\_59 Start: 36616, Stop: 36984, Start Num: 11

Candidate Starts for Abidatro\_59:

(Start: 11 @36616 has 9 MA's), (12, 36625), (13, 36628), (20, 36682), (23, 36709), (24, 36712), (39, 36976),

Gene: Andrew\_61 Start: 35776, Stop: 36129, Start Num: 11

Candidate Starts for Andrew\_61:

(Start: 11 @35776 has 9 MA's), (23, 35869), (28, 35944), (31, 35998), (33, 36034), (34, 36058), (35, 36067), (38, 36109),

Gene: Basilisk\_58 Start: 35995, Stop: 36351, Start Num: 9

Candidate Starts for Basilisk\_58:

(2, 35863), (4, 35911), (5, 35917), (6, 35932), (8, 35986), (Start: 9 @35995 has 4 MA's), (12, 36007), (13, 36010), (23, 36085), (24, 36088), (26, 36127), (38, 36328),

Gene: Brynnie\_56 Start: 35747, Stop: 36109, Start Num: 9

Candidate Starts for Brynnie\_56:

(Start: 9 @35747 has 4 MA's), (12, 35759), (13, 35762), (20, 35816), (23, 35843), (24, 35846), (38, 36086),

Gene: Chickaboom\_63 Start: 36331, Stop: 36687, Start Num: 9

Candidate Starts for Chickaboom\_63:

(2, 36199), (4, 36247), (5, 36253), (6, 36268), (8, 36322), (Start: 9 @36331 has 4 MA's), (12, 36343), (13, 36346), (23, 36421), (24, 36424), (26, 36463), (38, 36664),

Gene: Eesa\_57 Start: 36964, Stop: 37323, Start Num: 9

Candidate Starts for Eesa\_57:

(1, 36763), (Start: 9 @36964 has 4 MA's), (13, 36979), (14, 36994), (20, 37033), (23, 37057), (29, 37147), (30, 37171), (34, 37249),

Gene: Galaxy\_56 Start: 35033, Stop: 35383, Start Num: 11

Candidate Starts for Galaxy\_56:

(Start: 11 @35033 has 9 MA's), (12, 35042), (16, 35072), (17, 35078), (19, 35084), (23, 35108), (24, 35111), (25, 35141), (29, 35198), (34, 35300), (39, 35375),

Gene: Gina\_93 Start: 52064, Stop: 52447, Start Num: 7

Candidate Starts for Gina\_93:

(Start: 7 @52064 has 3 MA's), (20, 52163), (23, 52190), (28, 52268), (32, 52322), (34, 52376),

Gene: Jamun\_56 Start: 36265, Stop: 36624, Start Num: 11

Candidate Starts for Jamun\_56:

(Start: 11 @36265 has 9 MA's), (20, 36331), (23, 36358), (24, 36361), (38, 36601),

Gene: Jayden\_88 Start: 51672, Stop: 52055, Start Num: 7

Candidate Starts for Jayden\_88:

(Start: 7 @51672 has 3 MA's), (20, 51771), (23, 51798), (28, 51876), (32, 51930), (34, 51984),

Gene: Juno112\_58 Start: 35262, Stop: 35603, Start Num: 11

Candidate Starts for Juno112\_58:

(Start: 11 @35262 has 9 MA's), (14, 35289), (15, 35295), (21, 35337), (23, 35346), (31, 35475), (33, 35511), (34, 35535), (36, 35547), (38, 35586),

Gene: KHumphrey\_57 Start: 35150, Stop: 35491, Start Num: 11

Candidate Starts for KHumphrey\_57:

(Start: 11 @35150 has 9 MA's), (14, 35177), (15, 35183), (21, 35225), (23, 35234), (31, 35363), (33, 35399), (34, 35423), (36, 35435), (38, 35474),

Gene: Kuleana\_61 Start: 35255, Stop: 35614, Start Num: 11

Candidate Starts for Kuleana\_61:

(Start: 11 @35255 has 9 MA's), (13, 35267), (23, 35348), (28, 35426),

Gene: Leona\_57 Start: 35345, Stop: 35695, Start Num: 11

Candidate Starts for Leona\_57:

(Start: 11 @35345 has 9 MA's), (22, 35432), (23, 35438), (31, 35567), (33, 35603),

Gene: Melons\_60 Start: 34532, Stop: 34891, Start Num: 11

Candidate Starts for Melons\_60:

(Start: 11 @34532 has 9 MA's), (12, 34541), (23, 34625), (26, 34667), (28, 34703), (30, 34739), (32, 34763), (33, 34793), (34, 34817), (37, 34865),

Gene: PhluffyCoco\_58 Start: 35361, Stop: 35702, Start Num: 11

Candidate Starts for PhluffyCoco\_58:

(Start: 11 @35361 has 9 MA's), (14, 35388), (15, 35394), (21, 35436), (23, 35445), (31, 35574), (33, 35610), (34, 35634), (36, 35646), (38, 35685),

Gene: RedFox\_58 Start: 35359, Stop: 35700, Start Num: 11

Candidate Starts for RedFox\_58:

(Start: 11 @35359 has 9 MA's), (14, 35386), (15, 35392), (23, 35443), (31, 35572), (33, 35608), (34, 35632), (36, 35644), (38, 35683),

Gene: Renna12\_58 Start: 35475, Stop: 35813, Start Num: 11

Candidate Starts for Renna12\_58:

(Start: 11 @35475 has 9 MA's), (18, 35517), (23, 35550), (27, 35613), (28, 35631),

Gene: Ruchi\_57 Start: 35917, Stop: 36273, Start Num: 9

Candidate Starts for Ruchi\_57:

(2, 35785), (4, 35833), (5, 35839), (6, 35854), (8, 35908), (Start: 9 @35917 has 4 MA's), (12, 35929), (13, 35932), (23, 36007), (24, 36010), (26, 36049), (38, 36250),

Gene: Teamocil\_93 Start: 52157, Stop: 52540, Start Num: 7

Candidate Starts for Teamocil\_93:

(Start: 7 @52157 has 3 MA's), (20, 52256), (23, 52283), (28, 52361), (32, 52415), (34, 52469),

Gene: Vulpecula\_57 Start: 35583, Stop: 35945, Start Num: 10

Candidate Starts for Vulpecula\_57:

(2, 35445), (3, 35478), (Start: 10 @35583 has 1 MA's), (12, 35595), (13, 35598), (20, 35652), (23, 35679), (24, 35682), (38, 35922),