	5 6	0 /	\	9
1: Dropshot_13 + 5				
ii. Diopsilot_15 + 5				
	b		8	9
⊉: Warren_14				
	5 6	ō 4	. &	9
B: Bush_14				
B: Bugn_14				
	b	ō ^		9
4: Pickles13_13				

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 8234 Report

This analysis was run 07/09/24 on database version 566.

Pham number 8234 has 9 members, 1 are drafts.

Phages represented in each track:

Track 1: Dropshot_13, Antuna_14, Appa_13, Blett_14, Phonegingi_13, MenE_17

Track 2 : Warren_14Track 3 : Bush_14Track 4 : Pickles13 13

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

The start number called the most often in the published annotations is 3, it was called in 6 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Antuna_14, Appa_13, Blett_14, Bush_14, Dropshot_13, MenE_17, Phonegingi_13,

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

•

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

Pickles13_13, Warren_14,

Summary by start number:

Start 2:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Warren_14 (GA),

Start 3:

- Found in 7 of 9 (77.8%) of genes in pham
- Manual Annotations of this start: 6 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_14 (GA), Appa_13 (GA), Blett_14 (GA), Bush_14 (GA), Dropshot_13 (GA), MenE_17 (GA), Phonegingi_13 (GA).

Start 4:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pickles13_13 (GA),

Summary by clusters:

There is one cluster represented in this pham: GA

Gene: Warren_14 Start: 8003, Stop: 8479, Start Num: 2

Info for manual annotations of cluster GA:

- •Start number 2 was manually annotated 1 time for cluster GA.
- •Start number 3 was manually annotated 6 times for cluster GA.
- •Start number 4 was manually annotated 1 time for cluster GA.

Gene Information:

```
Gene: Antuna 14 Start: 7951, Stop: 8421, Start Num: 3
Candidate Starts for Antuna 14:
(Start: 3 @7951 has 6 MA's), (5, 8005), (6, 8071), (7, 8167), (8, 8200), (9, 8215),
Gene: Appa_13 Start: 7813, Stop: 8283, Start Num: 3
Candidate Starts for Appa 13:
(Start: 3 @ 7813 has 6 MA's), (5, 7867), (6, 7933), (7, 8029), (8, 8062), (9, 8077),
Gene: Blett 14 Start: 7965, Stop: 8435, Start Num: 3
Candidate Starts for Blett 14:
(Start: 3 @ 7965 has 6 MA's), (5, 8019), (6, 8085), (7, 8181), (8, 8214), (9, 8229),
Gene: Bush 14 Start: 7947, Stop: 8417, Start Num: 3
Candidate Starts for Bush 14:
(1, 7536), (Start: 3 @7947 has 6 MA's), (5, 8001), (6, 8067), (7, 8163), (8, 8196), (9, 8211),
Gene: Dropshot 13 Start: 7813, Stop: 8283, Start Num: 3
Candidate Starts for Dropshot 13:
(Start: 3 @7813 has 6 MA's), (5, 7867), (6, 7933), (7, 8029), (8, 8062), (9, 8077),
Gene: MenE_17 Start: 8081, Stop: 8551, Start Num: 3
Candidate Starts for MenE 17:
(Start: 3 @8081 has 6 MA's), (5, 8135), (6, 8201), (7, 8297), (8, 8330), (9, 8345),
Gene: Phonegingi 13 Start: 7807, Stop: 8277, Start Num: 3
Candidate Starts for Phonegingi 13:
(Start: 3 @ 7807 has 6 MA's), (5, 7861), (6, 7927), (7, 8023), (8, 8056), (9, 8071),
Gene: Pickles13 13 Start: 7976, Stop: 8449, Start Num: 4
Candidate Starts for Pickles13 13:
(1, 7538), (Start: 4 @7976 has 1 MA's), (6, 8096), (7, 8192), (8, 8225), (9, 8240),
```

Candidate Starts for Warren_14: (Start: 2 @8003 has 1 MA's), (Start: 4 @8009 has 1 MA's), (7, 8225), (8, 8258), (9, 8273),