	b.	4	o 6	
1: Appa_51 + 3				
	a.	ç	,	1
2): Dioklop42, 50 + 2				
2: Pickles13_50 + 3	Ď.	ę))	1
fi: Dropshot_51				

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 8491 Report

This analysis was run 04/28/24 on database version 559.

Pham number 8491 has 9 members, 2 are drafts.

Phages represented in each track:

Track 1 : Appa_51, Bush_54, MenE_56, Antuna_53

Track 2: Pickles13_50, Blett_51, Warren_51, Phonegingi_51

Track 3 : Dropshot_51

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 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Antuna_53, Appa_51, Blett_51, Bush_54, MenE_56, Phonegingi_51, Pickles13_50, Warren_51,

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

Dropshot_51,

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

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Summary by start number:

Start 2:

- Found in 5 of 9 (55.6%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Dropshot_51 (GA),

Start 3:

- Found in 9 of 9 (100.0%) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Antuna_53 (GA), Appa_51 (GA), Blett_51 (GA), Bush_54 (GA), MenE_56 (GA), Phonegingi_51 (GA), Pickles13_50 (GA), Warren_51 (GA),

Summary by clusters:

There is one cluster represented in this pham: GA

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.

Gene Information:

Gene: Antuna_53 Start: 32254, Stop: 32631, Start Num: 3

Candidate Starts for Antuna_53:

(1, 32068), (Start: 2 @32149 has 1 MA's), (Start: 3 @32254 has 6 MA's), (4, 32296), (5, 32473), (6, 32578), (7, 32590),

Gene: Appa_51 Start: 32019, Stop: 32396, Start Num: 3

Candidate Starts for Appa_51:

(1, 31833), (Start: 2 @31914 has 1 MA's), (Start: 3 @32019 has 6 MA's), (4, 32061), (5, 32238), (6, 32343), (7, 32355),

Gene: Blett_51 Start: 32204, Stop: 32581, Start Num: 3

Candidate Starts for Blett_51:

(Start: 3 @ 32204 has 6 MA's), (4, 32246), (5, 32423), (6, 32528), (7, 32540),

Gene: Bush_54 Start: 32153, Stop: 32530, Start Num: 3

Candidate Starts for Bush_54:

(1, 31967), (Start: 2 @32048 has 1 MA's), (Start: 3 @32153 has 6 MA's), (4, 32195), (5, 32372), (6, 32477), (7, 32489),

Gene: Dropshot 51 Start: 31749, Stop: 32231, Start Num: 2

Candidate Starts for Dropshot 51:

(1, 31668), (Start: 2 @31749 has 1 MA's), (Start: 3 @31854 has 6 MA's), (4, 31896), (5, 32073), (6, 32178), (7, 32190),

Gene: MenE_56 Start: 32276, Stop: 32653, Start Num: 3

Candidate Starts for MenE 56:

(1, 32090), (Start: 2 @32171 has 1 MA's), (Start: 3 @32276 has 6 MA's), (4, 32318), (5, 32495), (6, 32600), (7, 32612),

Gene: Phonegingi 51 Start: 32058, Stop: 32435, Start Num: 3

Candidate Starts for Phonegingi_51:

(Start: 3 @32058 has 6 MA's), (4, 32100), (5, 32277), (6, 32382), (7, 32394),

Gene: Pickles13_50 Start: 32334, Stop: 32711, Start Num: 3

Candidate Starts for Pickles13 50:

(Start: 3 @ 32334 has 6 MA's), (4, 32376), (5, 32553), (6, 32658), (7, 32670),

Gene: Warren 51 Start: 32073, Stop: 32450, Start Num: 3

Candidate Starts for Warren 51:

(Start: 3 @32073 has 6 MA's), (4, 32115), (5, 32292), (6, 32397), (7, 32409),