Pham 158338


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 158338 Report

This analysis was run 04/13/24 on database version 558.
Pham number 158338 has 11 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Cuke_123
- Track 2 : Norvs_131, Culver_132, PhinkBoden_132
- Track 3 : WilliamBoone_131
- Track 4 : ODay_107
- Track 5 : Ewald 55
- Track 6 : Nyceirae_60
- Track 7 : Vordorf_57, Phishy_58
- Track 8 : Dogfish_55


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

The start number called the most often in the published annotations is 7, it was called in 5 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Dogfish_55, Ewald_55, Nyceirae_60, ODay_107, Phishy_58, Vordorf_57,

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

- Cuke_123,

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

- Culver_132, Norvs_131, PhinkBoden_132, WilliamBoone_131,


## Summary by start number:

Start 5:

- Found in 1 of 11 ( $9.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Cuke_123 (AC),

Start 6:

- Found in 4 of 11 ( $36.4 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 10
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Culver_132 (CQ1), Norvs_131 (CQ),

PhinkBoden_132 (CQ1), WilliamBoone_131 (CQ1),
Start 7:

- Found in 7 of 11 ( $63.6 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called $85.7 \%$ of time when present
- Phage (with cluster) where this start called: Dogfish_55 (DT), Ewald_55 (DT), Nyceirae_60 (DT), ODay_107 (DN), Phishy_58 (DT), Vordorf_57 (DT),


## Summary by clusters:

There are 5 clusters represented in this pham: DN, CQ, AC, CQ1, DT,
Info for manual annotations of cluster AC:

- Start number 5 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster CQ:

- Start number 6 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 6 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster DN:
-Start number 7 was manually annotated 1 time for cluster DN.
Info for manual annotations of cluster DT:

- Start number 7 was manually annotated 4 times for cluster DT.


## Gene Information:

Gene: Cuke_123 Start: 65988, Stop: 66431, Start Num: 5
Candidate Starts for Cuke_123:
(Start: 5 @65988 has 1 MĀ's), (Start: 7 @66000 has 5 MA's), (10, 66081), (16, 66171), (17, 66225), $(23,66303),(26,66327),(27,66330),(32,66399),(34,66420)$,

Gene: Culver_132 Start: 72567, Stop: 73013, Start Num: 6
Candidate Starts for Culver_132:
(Start: 6 @72567 has 4 MA's), (11, 72660), (13, 72678), (14, 72687), (15, 72699), (17, 72795), (20, 72846), (21, 72858), (22, 72867), (25, 72900),

Gene: Dogfish_55 Start: 40918, Stop: 41358, Start Num: 7
Candidate Starts for Dogfish_55:
(1, 40456), (2, 40498), (4, 40882), (Start: 7 @40918 has 5 MA's), (9, 40978), (11, 41005), (12, 41008), (14, 41032), (17, 41140), (18, 41179), (20, 41194), (24, 41233), (29, 41284), (31, 41302),

Gene: Ewald_55 Start: 40465, Stop: 40905, Start Num: 7
Candidate Starts for Ewald_55:
(4, 40429), (Start: 7 @40465 has 5 MA's), (8, 40516), (9, 40525), (11, 40552), (14, 40579), (17, 40687), (18, 40726), (20, 40741), (24, 40780), (29, 40831), (31, 40849),

Gene: Norvs_131 Start: 73289, Stop: 73735, Start Num: 6
Candidate Starts for Norvs_131:
(Start: 6 @73289 has 4 MA's), (11, 73382), (13, 73400), (14, 73409), (15, 73421), (17, 73517), (20, $73568),(21,73580),(22,73589),(25,73622)$,

Gene: Nyceirae_60 Start: 40868, Stop: 41308, Start Num: 7
Candidate Starts for Nyceirae_60:
(4, 40832), (Start: 7 @40868 has 5 MA's), (8, 40919), (9, 40928), (11, 40955), (12, 40958), (14, 40982), (17, 41090), (18, 41129), (19, 41132), (20, 41144), (21, 41156), (24, 41183), (29, 41234), (31, 41252),

Gene: ODay_107 Start: 55037, Stop: 55477, Start Num: 7
Candidate Starts for ODay_107:
(3, 54971), (4, 55004), (Start: 7 @55037 has 5 MA's), (14, 55148), (15, 55160), (17, 55256), (28, $55394),(30,55409),(33,55451),(35,55469)$,

Gene: PhinkBoden_132 Start: 74154, Stop: 74600, Start Num: 6
Candidate Starts for PhinkBoden_132:
(Start: 6 @74154 has 4 MA's), (11, 74247), (13, 74265), (14, 74274), (15, 74286), (17, 74382), (20, 74433), (21, 74445), (22, 74454), (25, 74487),

Gene: Phishy_58 Start: 42072, Stop: 42512, Start Num: 7
Candidate Starts for Phishy_58:
(4, 42036), (Start: 7 @42072 has 5 MA's), (9, 42132), (11, 42159), (12, 42162), (14, 42186), (17, 42294), (18, 42333), (20, 42348), (29, 42438), (31, 42456),

Gene: Vordorf_57 Start: 40657, Stop: 41097, Start Num: 7
Candidate Starts for Vordorf_57:
(4, 40621), (Start: 7 @40657 has 5 MA's), (9, 40717), (11, 40744), (12, 40747), (14, 40771), (17, 40879), (18, 40918), (20, 40933), (29, 41023), (31, 41041),

Gene: WilliamBoone_131 Start: 71084, Stop: 71533, Start Num: 6
Candidate Starts for WilliamBoone_131:
(Start: 6 @71084 has 4 MA's), (14, 71207), (15, 71219), (17, 71315), (20, 71366), (22, 71387), (25, 71420),

