

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 214949 Report

This analysis was run 02/22/25 on database version 588.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 214949 has 7 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Wolfstar 94

• Track 2 : Roman_91, Lupine_89

Track 3: DejaVu 90, PhillyPhilly 87, Hubbs 88

Track 4 : Pavlo_89

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

The start number called the most often in the published annotations is 2, it was called in 7 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• DejaVu_90, Hubbs_88, Lupine_89, Pavlo_89, PhillyPhilly_87, Roman_91, Wolfstar 94,

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

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

Summary by start number:

Start 2:

- Found in 7 of 7 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DejaVu_90 (ED1), Hubbs_88 (ED1), Lupine_89 (ED1), Pavlo_89 (ED1), PhillyPhilly_87 (ED1), Roman_91 (ED1), Wolfstar_94 (ED),

Summary by clusters:

There are 2 clusters represented in this pham: ED, ED1,

Info for manual annotations of cluster ED:

•Start number 2 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

•Start number 2 was manually annotated 6 times for cluster ED1.

Gene Information:

Gene: DejaVu_90 Start: 51927, Stop: 51358, Start Num: 2

Candidate Starts for DejaVu 90:

(Start: 2 @51927 has 7 MA's), (4, 51879), (6, 51867), (10, 51813), (17, 51717), (18, 51711), (19, 51687), (20, 51654), (22, 51618), (23, 51606), (24, 51582), (25, 51573), (29, 51516), (34, 51480), (38, 51441), (39, 51417), (41, 51381),

Gene: Hubbs_88 Start: 51976, Stop: 51407, Start Num: 2

Candidate Starts for Hubbs 88:

(Start: 2 @51976 has 7 MA's), (4, 51928), (6, 51916), (10, 51862), (17, 51766), (18, 51760), (19, 51736), (20, 51703), (22, 51667), (23, 51655), (24, 51631), (25, 51622), (29, 51565), (34, 51529), (38, 51490), (39, 51466), (41, 51430),

Gene: Lupine_89 Start: 51986, Stop: 51471, Start Num: 2

Candidate Starts for Lupine_89:

(Start: 2 @51986 has 7 MA's), (5, 51941), (8, 51908), (18, 51824), (19, 51800), (20, 51767), (22, 51731), (23, 51719), (24, 51695), (25, 51686), (29, 51629), (34, 51593), (38, 51554), (39, 51530), (40, 51515),

Gene: Pavlo 89 Start: 52071, Stop: 51430, Start Num: 2

Candidate Starts for Pavlo 89:

(Start: 2 @52071 has 7 MA's), (4, 52023), (6, 52011), (10, 51957), (17, 51861), (18, 51855), (19, 51831), (20, 51798), (22, 51762), (23, 51750), (25, 51717), (31, 51627), (32, 51621), (33, 51618), (34, 51594), (35, 51585), (36, 51558), (37, 51555), (38, 51513), (39, 51489), (41, 51453),

Gene: PhillyPhilly 87 Start: 51536, Stop: 50967, Start Num: 2

Candidate Starts for PhillyPhilly 87:

(Start: 2 @51536 has 7 MA's), (4, 51488), (6, 51476), (10, 51422), (17, 51326), (18, 51320), (19, 51296), (20, 51263), (22, 51227), (23, 51215), (24, 51191), (25, 51182), (29, 51125), (34, 51089), (38, 51050), (39, 51026), (41, 50990),

Gene: Roman_91 Start: 52587, Stop: 52072, Start Num: 2

Candidate Starts for Roman_91:

(Start: 2 @52587 has 7 MA's), (5, 52542), (8, 52509), (18, 52425), (19, 52401), (20, 52368), (22, 52332), (23, 52320), (24, 52296), (25, 52287), (29, 52230), (34, 52194), (38, 52155), (39, 52131), (40, 52116),

Gene: Wolfstar 94 Start: 53968, Stop: 53285, Start Num: 2

Candidate Starts for Wolfstar 94:

 $\begin{array}{l} (1,\,53977),\,(Start:\,2\,\,@\,53968\,\,has\,\,7\,\,MA's),\,(3,\,53953),\,(7,\,53905),\,(9,\,53869),\,(11,\,53836),\,(12,\,53827),\\ (13,\,53803),\,(14,\,53791),\,(15,\,53785),\,(16,\,53773),\,(21,\,53692),\,(26,\,53611),\,(27,\,53587),\,(28,\,53572),\\ (30,\,53554), \end{array}$