

Biochemical characterization of an arabinoside monophosphate specific 5'-nucleotidase-like enzyme from *Streptomyces antibioticus*

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Table S1. The primers used in this study.

Oligonucleotide	Sequence (5' to 3')
R140A-F	CGTTGGCGCAGCGTTCGCGTTCGGCGGCCTG
R140A-R	GCGAACGCTGCGCCAACGCCAACCGCGCCCAT
F144A-F	GTTCGCGGCAGGCGGCCTGCTGGGTGAACC
F144A-R	GCCGCCTGCCGCGAACGCACGGCCAACGC
H174A-F	CTGGCGGCACTGTACGAAAACTGGTTCACCTG
H174A-R	TCGTACAGTGCCGCCAGCACGGAGGAGGTTT
K178A-F	CTGTACGAAGCCCTGGTTCACCTGGAAAAAGACATGC
K178A-R	GGTGAACCAGGGCTTCGTACAGGTGCGCCAGCAC

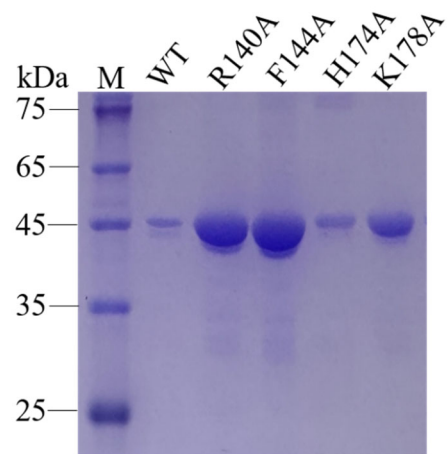


Figure S1. Analysis of purified of PenF and mutants by denaturing polyacrylamide gel electrophoresis.

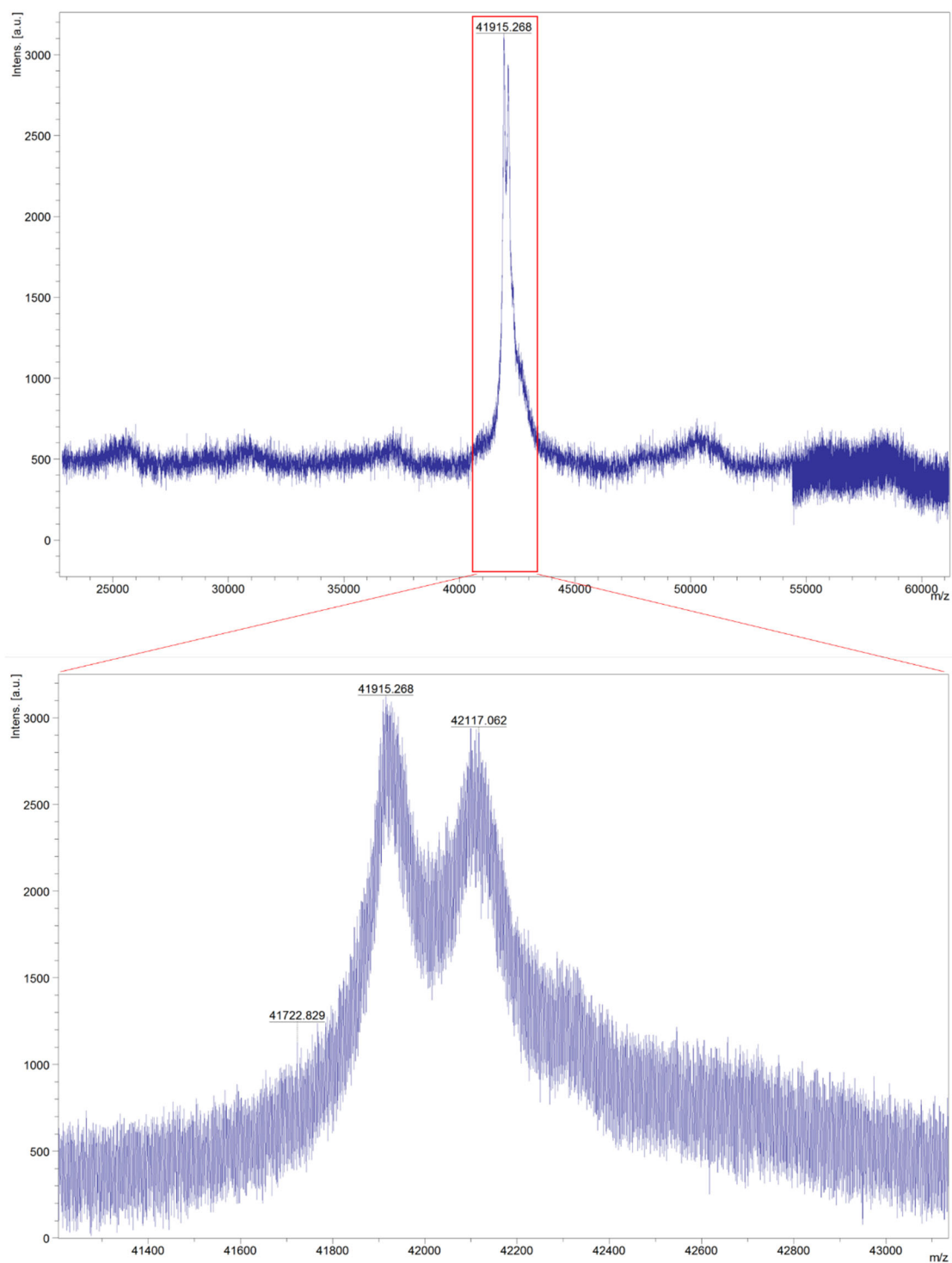


Figure S2. The matrix-assisted laser desorption ionization time-of-flightmass analysis of purified PenF.

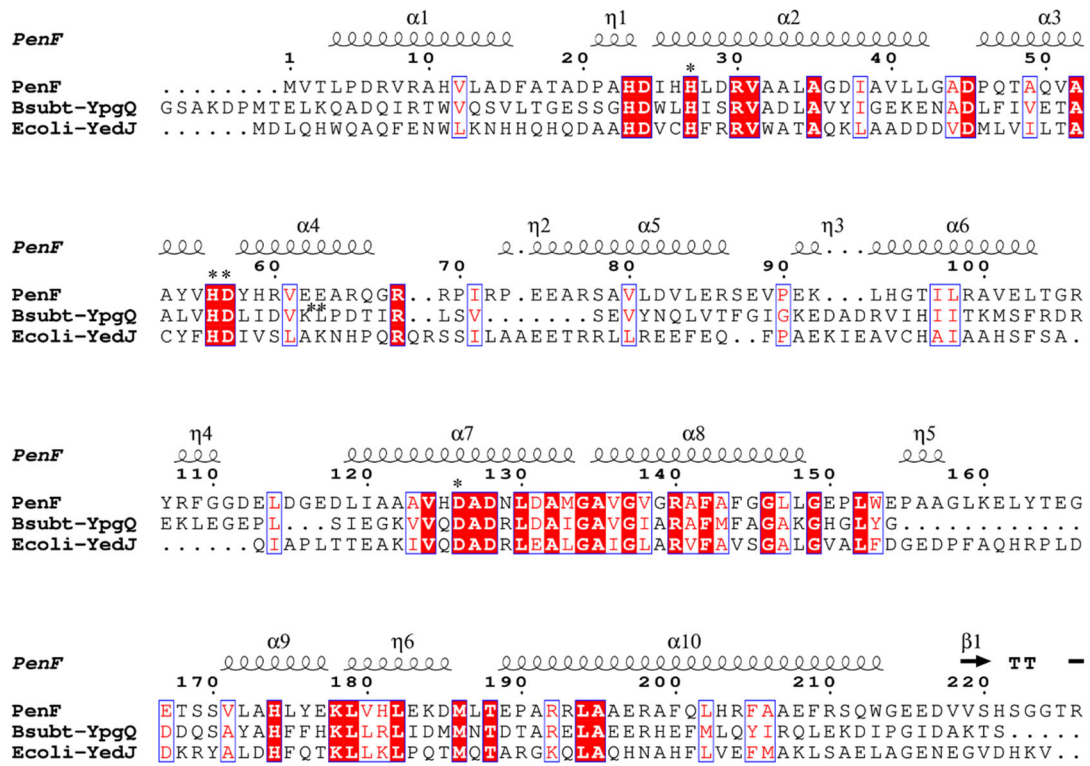


Figure S3. Multiple sequence alignment and secondary structure prediction of PenF with characterized HD-Domain phosphohydrolases. Bsubt-YpgQ, YpgQ from *Bacillus subtilis*; Ecoli-YedJ, YedJ from *E. coli*.

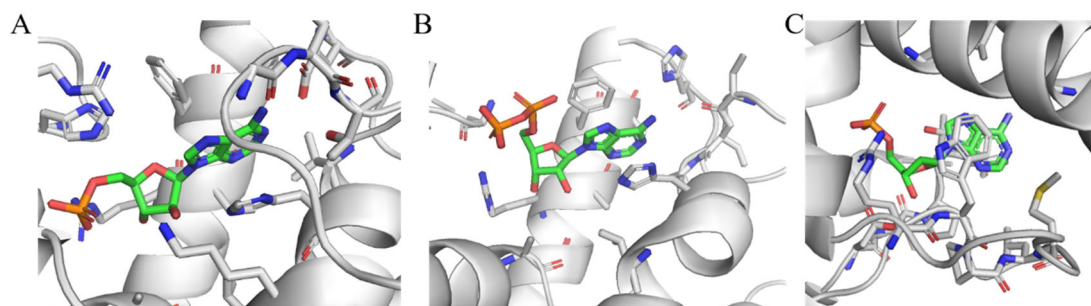


Figure S4. Close-up view of the ribose binding site of phosphohydrolases. (A) PenF in complex with Ara-AMP; (B) YpgQ in complex with ADP; (C) *E. coli* 5'-deoxynucleotidase YfbR in complex with dAMP.