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Crystal Structure of *Salmonella typhimurium* NP460328, a Conserved Cytoplasmic Protein. Hui Li, M.E. Cuff, Frank Collart, Shiu Moy, Andrzej Joachimiak^a, Midwest Center for Structural Genomics and Structural Biology Center, Bioscience Div., Argonne National Laboratory, Argonne, IL 60439.

NP460328 from *S. typhimurium* is a small (119 amino acids), uncharacterized protein of unknown function found in diverse set of organisms. The protein was purified using automated procedures and selenomethionine labeled protein was crystallized by the sitting-drop vapor-diffusion method. The crystal belongs to $C222_1$ space group, with unit-cell parameters: $a = 85.60 \text{ \AA}$, $b = 90.26 \text{ \AA}$, $c = 78.67 \text{ \AA}$, $\alpha = \beta = \gamma = 90^\circ$. There were two 119-residue subunits per asymmetric unit. The two-wavelength inverse-beam MAD data set at 1.9 \AA was collected at the Structural Biology Center 19ID beamline at the Advanced Photon Source. The structure was determined using semi-automated approach and refined to 1.9 \AA . The structural analysis suggests that structure of NP460328 represents a new protein fold. In this report, the methodology used in protein and crystal production and the initial characterization of the protein crystals will be described and discussed.

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