Crystal Structure of PilF from *Pseudomonas Aeruginosa*

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The tetratrico peptide repeat (TPR) is a structural motif present in a wide range of proteins. It mediates protein-protein interactions and the assembly of multiprotein complexes. TPR motifs have been identified in various different organisms, ranging from bacteria to humans. Proteins containing TPRs are involved in a variety of biological processes, such as cell cycle regulation, transcriptional control, mitochondrial and peroxisomal protein transport, neurogenesis and protein folding. Type IV pilus biogenesis protein, PilF of *Pseudomonas aeruginosa* consists of 253 amino acids and makes up 3 tandem TPR motifs. It is known to require for correct fimbrial biogenesis. We could express the PilF of *Pseudomonas aeruginosa* in an *E.coli* expression system and produced selenomethionie-substituted crystal, which diffract to 2.5 Å. It belongs to P222 space group and unit cell is 68.4, 70.0, 138.1 Å. This structure of the full sized TPR protein will lead to the first step in study of TPR interaction.

[1] Stover C.K., Pham X.Q., *Nature*, 2000, **406**, 31. [2] Watson A.A., Alm R.A., *Gene*, 1996, **180**, 49.

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