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PRELIMINARY X-Ray DIFFRACTION STUDY OF Pseudomonas sp. DJ77 GLUTATHIONE S-TRANSFERASE

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Crystals of a bacterial glutathione S-transferase(pGST) from pseudomonas sp. DJ 77 have been grown by hanging drop method of vapour diffusion from ammonium sulfate solution. The low concentration of polyethylene glycol 400 as additive were found to be essential for the reproducible growth of large single crystal of pGST. The crystal diffracts to about 2.3Å with x-ray from a rotating anode source. The crystal belongs to the orthorhombic space group, $P2_12_12_1$, with unit cell parameters of a=97.4 Å, b=100.3 Å, c=46.0 Å, and $\alpha=\beta=\gamma=90^\circ$. The unit cell contains four dimeric molecules of pGST with a corresponding crystal volume per protein mass(V_M) of 2.34 Å 3 /Da and a solvent content of 47.4% of the unit cell volume. The final merged native data set consisted of 20,362 measurements of 16,380 independent reflections with an R_{merge} of 5.64%.