

Crystal Structure of Human Gamma-Glutamyl Hydrolase

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Beamline(s): **X25/X12C**

Introduction: Gamma-glutamyl hydrolase (GH) removes the poly-gamma-glutamyl tail of antifolate poly-gamma-glutamates and controls intracellular retention of antifolates.

Methods and Materials: GH crystallizes in space group $P2_12_12_1$ with cell parameters $a = 58.24 \text{ \AA}$, $b = 155.73 \text{ \AA}$, $c = 160.71 \text{ \AA}$. We anticipate four molecules of the 33 kDa protein per asymmetric unit. Three wavelength MAD phasing data were measured for two different mercury derivatives of gamma-glutamyl hydrolase to 2.4 \AA resolution. The data sets are about 95 complete with R_{sym} of 0.06. At this time, phasing calculations are complete and model building and refinement are in progress.