	Experiment title: **TB Peptidyl-prolyl cis-trans isomerase A**	**Experiment number**: MX-133
Beamline: ID-29	**Date of experiment**: From: 07 November 2003 to: 08 November 2003	**Date of report**: 30 August 2004
Shifts: 3	**Local contact(s)**: Dr. Andrew MCCARTHY	

Names and affiliations of applicants (* indicates experimentalists):

T. Alwyn Jones, Uppsala University, alwyn@xray.bmc.uu.se
*Patrik Johansson, Uppsala University, patrik@xray.bmc.uu.se
*Annette Roos, Uppsala University, annette@xray.bmc.uu.se

Report:

Peptidyl-prolyl cis-trans isomerases (Ppis) catalyze the inter-conversion of cis and trans peptide bonds and are therefore considered to be important for protein folding. Ppis are found in many diverse organisms such as bacteria, plants, and mammals, sometimes as single domain proteins and sometimes as components in a larger complex. Multiple Ppis within a single organism are common. Their activity can accelerate protein folding both *in vitro* and *in vivo*; in some cases a chaperone function has been demonstrated to be independent of the catalytic action. Ppis are also suggested to take part in other biological functions such as cell surface recognition and heat-shock response.

A single wavelength data set was collected at ID-29. The structure was solved with molecular replacement, and the data, which expanded to 2.8Å, was used for additional refinement.