



	Experiment title: BAG report	Experiment number: MX-336
Beamline: ID14-3	Date of experiment: from: 7.11.2004 to: 8.11.2004	Date of report: 18-FEB-2005
Shifts: 2	Local contact(s): Dr. Celia ROMAO	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Prof. Hartmut Michel Dr. Vasundara Srinivasan * Max-Planck-Institute of Biophysics, Department of Molecular Membrane Biology, Max-von-Laue-Str. 3, D-60438 Frankfurt am Main Germany		

Report:

Fe-S cluster assembly mostly takes place in mitochondria. CIA1 (Cytosolic Iron-sulfur protein assembly) is a novel member of a family of proteins that contain WD40 or β -transducin repeats. It has been recently found to be required for Fe-S protein assembly in yeast, *Saccharomyces cerevisiae*. The human homolg has been identified to interact with a tumor suppressor protein and regulate the transactivation activity of various cellular genes in tumor cell growth and differentiation. The protein has been overexpressed in E.coli, purified and crystallized.

The crystals have been tested at the beamline **ID14-3**. They diffract to a resolution of 1.45 Å and belong to the space group P212121 with cell dimensions of a=34.711, b=68.914, c=129.40, $\alpha = \beta = \gamma = 90.0$ degrees. The data has been processed to a overall Rsym of 8.0 % and a completeness of 97.1%.

An isomorphous 'Pt' derivative data set has been collected on **ID14-3** to a resolution of 2.5 Å but unfortunately was not enough for phasing and structure solution. A selenomethionine derivative data set has been collected at DESY, Hamburg and the structure is solved by the MIRAS method with phasing information from both the 'Pt' and selenomethionine derivatives. Model building and refinement of the structure is in progress.