



	Experiment title: A Number of Proteins from Bacteria to Eukarya and from Antarctic to Volcanic Areas	Experiment number: MX-71
Beamline: ID 13	Date of experiment: from: 9 DEC. 2002 to: 10 DEC. 2002	Date of report: 27/02/03
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Report:

We used the shifts allocated to test the diffractive properties of two membrane protein crystals, bovine myelin basic protein and P2 myelin protein in the lipid bound form. The crystals were successfully cryocooled and centered using the microdiffractometer. The MBP crystals diffracted to $\sim 7\text{\AA}$ and displayed high mosaicity. Three different crystals were tested and no improvement was noticed. The P2 myelin protein crystals did not produce a crystalline diffraction pattern, rather they showed maxima consistent with the presence of extensive beta structure. Finally, we collected data on a microcrystal of AMP nucleosidase from *E. coli*, in complex with the activator ATP and the competitive inhibitor FMP. The crystal diffracted to 3.0\AA , but the radiation damage quickly reduced the maximum resolution to $\sim 4.0\text{\AA}$. The same behaviour was observed on three different crystals of the same protein. We are currently attempting to merge the collected data with datasets collected at ID29, in order to compensate for the radiation damage by selecting the initial frames of each data collection.