



	Experiment title: C-terminal Binding Protein 3/Brefeldin A-ADP ribosylated substrate (CtBP3/BARS)	Experiment number: MX394
Beamline: ID23-1	Date of experiment: from: 20/04/05 to: 21/04/05	Date of report: 26/07/05 <i>Received at ESRF:</i>
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Report:

CtBP3/BARS plays key roles in development and oncogenesis as a transcription co-repressor, and in intracellular traffic as a promoter of Golgi membrane fission. Co-repressor activity is regulated by NAD(H) binding to CtBP3/BARS, while membrane fission is associated to its acyl-CoA-dependent acyl-transferase activity. Here, we report the data collection on the crystals of full-length rat CtBP3/BARS. Crystals diffracted up to 3.5 Å resolution, with space group and cell parameters isomorphous to those of the truncated form of CtBP3/BARS (t-CtBP3/BARS: devoid of 80 C-terminal residues). The structure was solved by molecular replacement using t-CtBP3/BARS as a model. No interpretable electron density map is present for the C-terminal segment. A possible explanation for this behavior is a high mobility or disorder of the C-terminal part of the protein, which may maintain an unfolded conformation relative to the core t-CtBP3/BARS structure, or the absence of the C-terminal domain in the “full-length” crystals due to proteolysis at the region connecting the C-terminal segment to the rest of the protein. Further experiments on the full-length protein are planned for the near future.