



Experiment title: Structural studies of <i>E. coli</i> ribokinase.	Experiment number:	
Beamline: ID14-3	Date of experiment: from: 4 September 1999 to: 6 September 1999	Date of report: 23 August 2000 <i>Received at ESRF:</i>
Shifts: 6	Local contact(s): Wim Burmeister	

Names and affiliations of applicants (* indicates experimentalists):

*Evalena Andersson, Uppsala University, evalena@alpha2.bmc.uu.se
Sherry Mowbray, Swedish University of Agricultural Sciences, mowbray@xray.bmc.uu.se

Report:

Ribokinase is the only known enzyme which phosphorylates ribose at O5 using ATP as the phosphate group donor. It is found in all prokaryotic and eukaryotic species tested so far.

The crystals were too small to be tested on our local rotating anode x-ray source prior on going to ESRF. Around 20 frozen crystals with substrate, product and metal ions were tested. Two datasets were collected; a 2.2 Å dataset with substrates and metal ions bound and a 2.6 Å dataset with product and metal ions bound, but both were later found too disordered to be useful.