



Experiment title: Structural studies of <i>E. coli</i> ribokinase.	Experiment number: LS-1935	
Beamline: ID29	Date of experiment: from: 29 March 2001 to 30 March 2001	Date of report: 28 August 2001 <i>Received at ESRF:</i>
Shifts: <1 out of 6	Local contact(s): Dr. Bill SHEPARD	

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Report:

Ribokinase is the only known enzyme capable of phosphorylating ribose at O5 using ATP as the phosphate group donor. It is found in all procaryotic and eucaryotic species tested so far. We have, in the past, looked at conformational changes associated with substrate-binding, and the site of an activating monovalent cation. We are currently trying to get a structure of ribokinase in the absence of all metal ions.

Three crystals were tested, all of which had lovely spots at 7 Å resolution. Back to the crystallization, which has obvious ways it can be optimized.

A general comment on the beam: it is very, very strong, which makes it hard to be sure what the actual resolution limit is.