ESRF	Experiment title: Crystal structure of bacterial TMP kinase complexed with different substrates and inhibitors	Experiment number: LS-1444
Beamline:	Date of experiment:	Date of report:
ID14-2	from: 06-Nov-1999 to: 07-Nov-1999	25-Fev-2000
Shifts:	Local contact(s): J. Lescar	Received at ESRF:
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## Report:

During these three shifts, data were collected for a complex between TMP kinase and AZTMP, at 1.9 Å resolution.

Another crystal form, which was grown in the absence of Ammonium sulfate, was also collected at the same resolution.

Indeed, it was found earlier that there is a sulfate ion sitting in the active site, at exactly where the beta phosphate of ATP is expected. Our aim then is to find a way to displace this sulfate ion.

Several crystals soaked with different non hydrolysable anlogues of ATP were tried, but their diffraction pattern was found to be dramatically altered.

More experiments are planned using mother liquor exchange and soaking in different concentrations of non-hydrolysable analogues of ATP.

## **Publication**

Crystallization and preliminary X-Ray analysis of thymidylate kinase from *Mycobacterium tuberculosis*. Acta Cryst. D (2000) D56, 226-228.

I. Li de la Sierra, H. Mun ier-Lehmann, A.M. Gilles, O. Barzu & M. Delarue.