ES	RF

ESRF	Experiment title: Ribonucleotide reductase from Thermotoga maritima		Experiment number:
Beamline:	Date of experiment:		Date of report:
ID 14 - 2	from: 19.07.99 7:00	to: 19.07.99 15:00	19.08.99
	20.07.99 1:00	20.07.99 07:00	
Shifts:	Local contact(s):		Received at ESRF:

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Report:

Crystals of a truncated but enzymatically fully active form of the ribonucleotide reductase from Thermotoga maritima have been used for performing test measurements at ESRF beamline ID 14 - 2. The crystals had been grown in 8 % PEG 6000, 0.1 M sodium chloride and 0.1 M sodium acetate pH 4.6 using the sitting drop vapour diffusion method at 20 C. The crystals had an average size of around 0.6 x 0.4 x 0.2 mm, but were usually twinned. Prior to the measurements the crystals were transferred to a cryoprotecting buffer containing 30 % Glycerol, 8 % PEG 6000, 0.1 M sodium chloride and 0.1 M sodium acetate pH 4.6. Large twinned crystals were dissected manually in smaller fragments that are no longer twinned. During the test experiment around 10-15 crystal fragments were screened, of four of them data have been collected. From a small (0.1 mm) compact crystal fragment an incomplete (75 % completeness) native dataset of good quality with a resolution of 3 Å was obtained. The test experiments showed that in combination with synchrotron radiation small crystal fragments of ribonucleotide reductase from Thermotoga maritima can be used to collect data sucessfully.