



ESRF

Experiment title:

GroEL

Experiment

number:

LS-1507

Beamline:

ID14 eh3

Date of experiment:

from: 22/1/2000 to: 23/1/2000 and
4/2/2000

Date of report:

March 8, 2000

Shifts:

3+ 2 h.

Local contact(s):

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Report:

Experiment number: **LS1507**. Three crystals were tested of mercury derivatives of a complex of GroEL with a misfolded mutated C-terminal domain of human collagen X. The aim of the experiment was to locate heavy atom sites, both for experimental phasing and for obtaining evidence on the binding mode of the protein substrate within the GroEL 14-mer. However, the two best crystals gave diffraction to only about 7 Å resolution. This was considered insufficient for further data collection. One of these crystals was checked later on ID14-2 (see below).

A complete data set was collected of a HgCl₂ derivative of a complex of GroEL with a misfolded mutated C-terminal domain of human collagen X (see above). The useful resolution is about 4.5 Å, which should be sufficient to locate bound Hg atoms. Data reduction and refinement are in progress.