



Experiment title:

Human O6alkylguanine-DNA alkyltransferase

LS 1540

Beamline:

Date of experiment:

from: 4 July 1999

to: 4 July 1999

27 Aug 1999

Shifts:

Local contact(s):

Dr Gordon Leonard

Received at ESRF:

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1 SEP 1999

Names and affiliations of applicants (* indicates experimentalists):

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Report: (BRIEF INTERIM REPORT)

Using SeMet crystals, 3- wavelength MAD data collection at ESRF, and phasing by SOLVE allowed most of the main and side chain atoms to be placed in a 2.3Å map. Subsequent refinement and re-builds using 1.6Å native data collected as a test on the microfocus beam line at ESRF (Contact Dr A Perrakis) has so far given a structure with $R=23\%$ and $R_{\text{free}}=25\%$. (177 out of 188 residues, 162 waters found) Previous attempts at phasing using data collected on SRS 9.5 (over 96 hours) had only been able to show the Se sites, with a phasing power of 0.3. The ESRF data gave a phasing power of 0.7 directly from SOLVE.

The refinement is being completed and a manuscript written (although we are attempting to get a get a complex structure to improve the paper).

