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Experiment title: Weizmann Institute of Science
Structural Biology (WIS-SB, BAG)

Experiment number:

LS-1818

Beamline:	Date of experiment:	Date of report:
ID-14-2	from: Nov 13, 2000 to: Nov 14, 2000	Aug. 28 2001
Shifts:	Local contact(s): Ed Mitchell	Received at ESRF:

Names and affiliations of applicants (* indicates experimentalists):

Prof Joel L. Sussman, Weizmann Institute of Science (WIS)

*Dr. H. M. Greenblatt (WIS)

The following were experimentalists

*Dr. Anne Nicolas (WIS)

*Mr. David Shaya (WIS)

Report:

Data collection went smoothly without problems.

Data were successfully collected on 8 inhibitors soaked into crystals of *Torpedo californica* acetylcholinesterase, all of which are in various stages of refinement (some completed). These inhibitors include possible anti-Alzhiemer's drugs, and potential insecticides. Manuscripts on preparation for those complexed whose refinement process in finished.

Two new crystal forms of *Torpedo californica* acetylcholinesterase, grown in the presence of Ca^{++} and Mg^{++} were collected to high resolution (1.8Å). These forms were important since these cations enhance the thermostability of the enzyme, and so the location of the binding sites was of interest. Manuscript in preparation.