



	Experiment title: Cellobiose dehydrogenases. BAG: Uppsala (II)	Experiment number: LS-1804
Beamline: ID14-1	Date of experiment: from: 04 Nov 2000 to: 06 Nov 2000	Date of report: 29 Aug 2001
Shifts: 1	Local contact(s): Dr. Sigrid STUHRMANN (e-mail: stuhrman@esrf.fr)	<i>Received at ESRF:</i>
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Report:

Protein Name Cel45A (EG5): Catalytic module of Endoglucanase 5 from *T. reesei*

Brief background and outline of project

Trichoderma reesei is a soft-rot fungus capable of degrading cellulosic material. This fungus produce two kind of cellulases, cellobiohydrolases (CBH) and endoglucanases (EG) which role is to break up the cellulose microfibrils. Two CBH's (CBH 1 and CBH 2) and five EG's (EG 1, EG 2, EG 3, EG 4 and EG 5) have been so far reported. The structures of CBH 1, CBH 2, EG 1 and EG 3 are already solved. Cel45A, (GH family 45), is a minor component and it is interesting however, because it has one of the smallest cellulase catalytic modules (~160aa) found in a bi-modular cellulase (i.e. with CBD and linker attached to the catalytic module).

Datasets collected on ID14:EH1

Small native and heavy atoms derivative crystals (<100um) of the catalytic module of EG5 were used at ID 14-4, but only a single native dataset to 2.4 Å has been collected. The crystals soaked on heavy atoms derivatives were tried for MAD experiments without any successful result.

Data statistics for the dataset:

Ligand: No
Heavy Atom: No
Resolution: 30-2.4 Å
Space group: P1
Cell: a: 37.516, b: 45.217, c: 48.143, β : 75.095, γ : 71.118, δ : 86.418
Completeness: 96%