

Experiment title:

Experiment number: MX-934

Beamline: ID23-eh1

Date of experiment: 23/07/2010 from: 9h30 to: 17h30

Date of report: 24/01/2011

Shifts: 1

Local contact(s): Alexander (Sasha) POPOV

Received at ESRF: Samira Zouhir (CNRS, University Paris-sud 11; PhD student)

Report:

1) Project 1: T3SS effector SlrP

Structure of a truncated form of SlrP in complex with human Thioredoxine

I tested 25 crystals and I collected 3 complete data sets.

Crystals diffracted in space group $P2_12_12_1$ ($a=107.83\text{\AA}$, $b=133.44\text{\AA}$, $c=155.49\text{\AA}$).

	Resolution (\AA)	Completeness (%)	I/sig(I) (last shell)	Rmeas (%)
Crystal 1	3.5	99	16.42 (3.62)	11.2
Crystal 2	3.5	99.6	16.87 (3.42)	13.7
Crystal 3	3.5	98.2	4.16 (2.28)	20.8

The data sets were of poor quality and did not allow us to solve the structure by molecular replacement using the available structures of two homologous T3SS effectors.

2) Project 2: Quorum sensing effector NprR

Apo-form of full length NprR

The first crystals tested on ID23-2 (06/21/2010) only diffracted up to 10\AA resolution. We used the additive screen to improve their diffraction quality.

I tested around 25 crystals. They diffracted up to 7\AA in space group $P222$ ($a=116\text{\AA}$, $b=142\text{\AA}$, $c=316\text{\AA}$).

The diffraction was anisotropic and the effect of the additive screen on the quality of the diffraction was not sufficient to collect any complete data set on this project.