



	Experiment title: Block Allocation Group Italy (BAG)	Experiment number: LS-1933
Beamline: ID14-2	Date of experiment: from: 25/1/2002 to: 26/1/2002	Date of report: 4/9/2002
Shifts: 3	Local contact(s): Dr Joanne MCCARTHY (e-mail: mccarthy@esrf.fr)	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Kristina Djinovic Carugo* Imre Toeroe* Structural Biology Laboratory ELETTRA - Sincrotrone Trieste in Area Science Park S.S. 14 Km 163,5 loc. Basovizza 34012 Trieste Italy		

Report:

FAP52 is a recently described focal adhesion-associated protein. It is a member of an emerging PCH (*pombe Cdc15* homology) family of proteins characterized by a common domain organization and involvement in actin cytoskeleton organization, cytokinesis, and vesicular trafficking. More recently, two homologues of FAP52, PASCIN2 and syndapin II, were identified. They all share a modular structure typified by a well conserved FER-CIP4 homology domain in the very N terminus, followed by a highly alpha-helical region, and a C-terminal Src homology 3 (SH3) domain.

During this experimental session we collected one dataset on native crystals and several heavy – atom derivative soaks, and one dataset on Xe-pressurised crystals.

Table 1.: Summary of data collection statistics on FAP52 (25/1/2001, beamline ID14-2)

Native

Space group	C2
Unit cell (Å)	a=162.8 b=101.7 c= 106.9 beta=130.6
Resolution (Å)	2.2
No. observed reflections	200562
No. unique	63866
Completeness (%)	94.7
Mosaicity (deg)	0.8
Rsym (%)	6.4

KAu(CN)₂ soak

Space group	P2 ₁ 2 ₁ 2 ₁
Unit cell (Å)	a=99.7 b=105.3 c=127.2
Resolution (Å)	3.9
No. observed reflections	80091
No. unique	39482 (Fiedel's law FALSE!)
Completeness (%)	92.7
Mosaicity (deg)	0.9
Rsym (%)	8.9

EMP soak

Space group	P2 ₁ 2 ₁ 2 ₁
Unit cell (Å)	a=102.8 b=105.1 c=125.4
Resolution (Å)	2.8
No. observed reflections	132633
No. unique	57129 (Fiedel's law FALSE!)
Completeness (%)	89
Mosaicity (deg)	0.9
Rsym (%)	8.8

MMA soak

Space group	P2 ₁ 2 ₁ 2 ₁
Unit cell (Å)	a=102.3 b=105.4 c=125.8
Resolution (Å)	2.8
No. observed reflections	108303
No. unique	59007 (Fiedel's law FALSE!)
Completeness (%)	92.9
Mosaicity (deg)	0.55
Rsym (%)	6.1

K₂Pt(CN)₄ soak

Space group	P2 ₁ 2 ₁ 2 ₁
Unit cell (Å)	a=100.1 b=104.8 c=125.8
Resolution (Å)	2.8
No. observed reflections	154374
No. unique	61200 (Fiedel's law FALSE!)
Completeness (%)	96.6
Mosaicity (deg)	1.1
Rsym (%)	8.1

Xe pressurized crystals

Space group	P2 ₁ 2 ₁ 2 ₁
Unit cell (Å)	a=101.3 b=105.6 c=125.6
Resolution (Å)	2.8
No. observed reflections	109566
No. unique	56918 (Fiedel's law FALSE!)
Completeness (%)	90.0
Mosaicity (deg)	0.35
Rsym (%)	5.9