ESRF	Test measurements on crystals of Sm proteins D1, D2, E, F, G in complex with pICln and crystals of the complex between SMN, Gemin2, Sm proteins D1, D2, E, F, and pICln	**Experiment number**: TC-209
Beamline: ID23-2	**Date of experiment**: from: 13/03/2008 to: 13/03/2008	**Date of report**: 01/04/2008
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Report:

Two trans-acting macromolecular protein complexes assist the formation of spliceosomal U-rich small ribonucleoprotein particles (U snRNPs) *in vivo*. One of them, the so-called SMN-complex, promotes RNP formation by catalyzing the joining of U snRNP-proteins (termed Sm proteins) with U snRNA. The PRMT5-complex, as the second entity, functionally regulates the assembly reaction. This factor methylates a subgroup of Sm proteins and appears to regulate their loading onto the SMN-complex.
We have crystallized two subcomplexes from this pathway, one comprising Sm proteins D1, D2, E, F, G and pICln (6S complex), the other one comprising SMN, Gemin2, Sm proteins D1, D2, E, F, and pICln (8S).
Crystals from the 6S complex have been obtained with sodium citrate as precipitant. Diffraction to 3.7A could be observed and two datasets have been collected (see table 1 for details).
Crystals from the 8S complex grown in polyvinyl pyrrolidone diffracted to around 8A resolution and are currently being improved.

Dmin(Å)	Rsym	I/sigma(I)	completeness	multiplicity
11.0	0.039	14.6	83.0	4.4
7.83	0.055	8.4	86.9	4.7
6.39	0.094	6.6	87.9	4.7
5.53	0.171	3.6	88.2	4.8
4.95	0.170	3.4	89.0	4.8
4.52	0.166	3.6	89.7	4.8
4.18	0.254	2.3	90.5	4.8
3.91	0.425	1.6	90.0	4.8
3.70	0.591	1.2	90.9	4.8
Overall	**0.169**	**3.5**	**89.5**	**4.8**
Space group	**P321**			
Cell constants	**a=b=77.4 Å, c=141.6 Å**			

Table 1: Dataset statistics for a crystal obtained from 6S particle.