



	<b>Experiment title:</b> MOM1 second crystal trial	<b>Experiment number:</b> TC-216
<b>Beamline:</b> ID23-1	<b>Date of experiment:</b> from: 03 November 2008 to: 04 November 2008	<b>Date of report:</b> 15 January 2009
<b>Shifts:</b> 1	<b>Local contact(s):</b> Dr. Juan Sanchez WEATHERBY ( <a href="mailto:weather@embl.fr">weather@embl.fr</a> )	<i>Received at ESRF:</i>

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**Report:**

**NOTE:**

**This Beam time was grouped with our proposal MX-832: "Human p53 DNA-binding domain in complex with DNA". We therefore did not have time enough to complete the studies for MOM1 during this visit.**

**This is an excerpt from the email that was sent to us from the ESRF:**

"Your rolling application MX-832 has been awarded one shift on ID23-1. We would also like to group this with your Test Crystal TC-216. "

**-Debby GOODHEW-DAVISON**

*Administrative Assistant,*

*Macromolecular Crystallography Group Office 18-01-05*

This experiment involves determining the structure of a 115 residue (1699-1814) conserved coiled-coil domain which is part of the large chromatin remodeling protein MORPHEUS' MOLECULE 1 (MOM1) in Arabidopsis. The crystals that were brought to the ESRF for this visit were relatively large, on the order of 300 to 500 microns in length, and were shown to contain the correct protein domain by analysing the crystals via SDS-PAGE and silver staining. However to date, we have only been able to capture the highest resolution of 3.5 angstroms.

We hope to return to the ESRF in the near future with more crystals to test, with the goal of finding crystals that diffract to a resolution of at least 2 angstroms. After we define the conditions giving higher resolution diffraction, through additive screening and different approaches to cryo-preservation, we will attempt to grow crystals that will enable us to collect a complete, high-resolution data set from this protein domain.

Figure 1: *MOM1* crystal growth over time in hanging-drop vapor diffusion

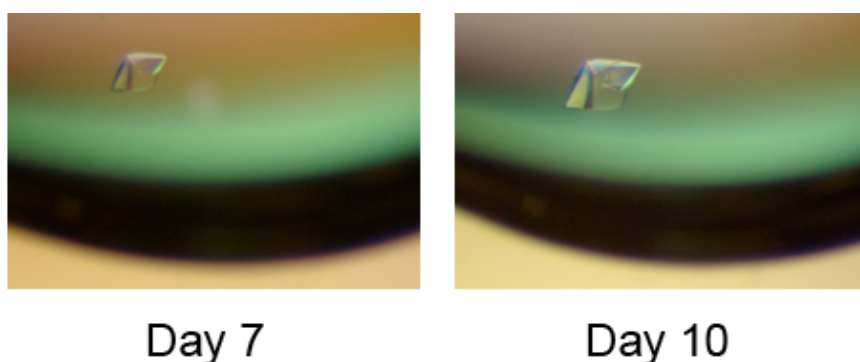


Figure 2: *MOM1* crystal growth over time in hanging-drop vapor diffusion

