X	**Experiment title:** **Crystal structure of Ndel, an interaction partner of the lissencephaly-causing gene product LIS1**	**Experiment number**: MX-267 MX-394
Beamline: ID14-4 ID14-3 ID23 ID14-2	**Date of experiment:** from: 25/11/2004 to: 26/11/2004 from: 15/12/2004 to: 17/12/2004 from: 27/02/2005 to: 28/02/2005 from: 21/07/2005 to: 22/07/2005	**Date of report**: 24/07/2005
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Report:

Cytoplasmid Dynein is a complex, multisubunit microtubule motor that mediates movement of different cargoes towards the minus end of microtubules, polymers made of α- and β-tubulin. We have been interested in a set of proteins that are responsible for loading the Dynein motot to the plus end of microtubules, from which Dynein starts its journey towards the minus end. Among these, we count the LIS1 gene product, which is mutated in the lissencephaly, a human neuronal migration disorder, and Ndel, a LIS1 binding partner. Last year, we reported the crystal structure of LIS1 in a complex with another LIS1 partner known as PAF-AH. We have now managed to raise crystals of Ndel, a coiled-coil protein. Two crystal forms were identified. The triclinic form with unit cell dimensions a = 44.1798, b = 52.0324, c = 132.2482, α = 82.4805, β = 85.5347, γ = 68.8755. The monoclinic form has unit cell dimensions a = 46.4310, b = 73.2211, c = 69.0264, α = 90.0000, β = 105.3989, γ = 90.0000. We have been able to raise crystals derivatized with selenomethionine and are now in the process of analyzing MAD data collected from such crystals to assess their suitability towards structure determination.