



PROPOSAL: MX-2351
BEAMLINE: ID30B
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EXPERIMENT REPORT

At beamline ID30B we tested >121 crystals of the PMM2 enzyme from mouse. The crystals, which had not been tested before, diffracted poorly despite their size and nice appearance. The diffraction pattern perhaps suggests problems with the cryogenic conditions. Nonetheless, we collected two datasets at 3.1 Å resolution that allowed us to determine the structure. Crystallographic phases were determined automatically during data processing using the AlphaFold solution. The structure is of interest to compare with the human homologue that was also determined at ESRF and was recently published:

Briso-Montiano A, Del Caño-Ochoa F, Vilas A, Velázquez-Campoy A, Rubio V, Pérez B, Ramón-Maiques S. Insight on molecular pathogenesis and pharmacochaperoning potential in phosphomannomutase 2 deficiency, provided by novel human phosphomannomutase 2 structures. *J Inherit Metab Dis.* (2021) doi: 10.1002/jimd.12461.

We expect that the novel features of mouse PMM2 will be the subject of a new article expected for 2022.

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