

# Experiment Report

**Date:** September 12th – 13th 2020

**Beamline:** ID23-1

**Proposal ID:** MX-2272 (Wohlwend)

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We aimed at acquiring high-resolution datasets of various variants of the subcomplex NuoEF of respiratory complex I bound to substrate or product in order to understand the impact of point mutations on the function of this enzyme, in particular as these mutations were linked to Leigh syndrome in previous studies. At ID23-1, we successfully collected more than 20 high-resolution datasets on these variants allowing the structural characterisation of three of the four aimed at variants. We particularly profited from the automated data collection at ID23-1 that yielded high-quality data with resolutions of up to 1.6 Å. These data allow us now to prepare the according manuscript for publication. The fourth variant remains to be solved in future experiments.