

EPN BAG report
BmrA sample
24-26 October 2023

1 sample collected in 2 conditions

BmrA belongs to the ABC transporter superfamily, it hydrolyses and uses the energy of ATP to expel drugs out of the cell, thereby protecting *Bacillus subtilis* against cytotoxic molecules. BmrA is able to transport a wide range of substrates, making it a multidrug transporter. The current two datasets are part of our efforts to structurally characterize the transition of BmrA from the inward facing (IF) to the outward facing (OF) conformations in the presence or absence of substrate and either as a function of ATP concentration (10 datasets in total including dataset 1 of this session) or as a function of time (5 datasets in total including dataset 2 of this session).

Both datasets gave excellent high or near atomic resolution reconstructions, while the percentage of the particles that were classified on each conformation matches the expected ratio predicted by biochemical data for each pre-defined experimental condition. These datasets make part of a large assembly of cryo-EM data (most coming from CM01) that are divided into two manuscripts, currently under preparation.



