



Experiment title: Data collection on reaction center from *R. sphaeroides*
Tests of membrane protein crystals
Data collection on PBPs

Experiment number:
LS1506

Beamline:
ID14 2

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3

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LCM/IBS

Report: 1) We used the time for testing crystals of new membrane proteins grown in lipidic cubic phases at IBS and for collecting high resolution data on crystals of reaction center from *R. sphaeroides* grown in lipidic cubic phases.

- The new systems tested did not show any diffraction.
- The crystals of the reaction center from *R. sphaeroides* diffracted to 2.7 Å resolution on ID14-EH2, a complete data set could be collected to 2.7 Å, with following statistics :

Space group : P4(2)2(1)2, a=b=100.55 Å, c=240.14 Å, R_{sym}=6.5% (22.2% in the highest resolution shell) completeness= 85% and redundancy=3.7 The structure was solved by molecular replacement and the refinement is almost finished.

2) Data collection on PBPs from *S. pneumoniae*

Various crystals forms of several different PBPs were tested. Success was moderate due to problem finding and greazing suitable crystals. Data for a complex of PBP2x with a novel antibiotic were collected to 2.6Å.