

	Experiment title: Structural study of MaleE31, a mutant of MaleE from <i>E. coli</i> .	Experiment number: LS-1685
Beamline: ID14-3	Date of experiment: 19.6.2000	Date of report: 29.8.2000
Shifts: 1	Local contact(s): S. Monaco	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): G.A. Bentley, F.A. Saul Institut Pasteur, Paris		

Report:

MaleE31, a folding-defective mutant of the maltodextrin-binding protein MaleE, carries two mutations: Gly32->Asp and Ile33->Pro.

Diffraction data from crystals of MaleE31 were measured between the resolution limits of 26.0 - 1.85 Å on ID14-3. The crystals belong to the space group P2₁ with a=42.04 Å, b=89.11 Å, c=95.97 Å, β=89.98°, Z=4. The R_{merge} was 0.058, with 99.8% completeness and a redundancy of 7.5 in the total number of reflections measured.

The structure was refined using the programme REFMAC and ARP with non-crystallographic symmetry restraints applied to the two independent molecules in the asymmetric unit. The final model includes all 370 residues of MaleE31 and 807 solvent molecules. The R and R_{free} values are 0.171 and 0.228, respectively.