

The Calcium Sensor SOS3

The *Arabidopsis thaliana* SOS3 gene encodes a calcium sensor that is required for plant salt tolerance. The SOS3 protein binds to and activates the self-inhibited SOS2 protein kinase, which mediates the expression and activities of various transporters important for ion homeostasis under salt stress. Crystals corresponding to the SOS3 Ca²⁺ complex and to the SOS3 Ca²⁺ Mn²⁺ complex were grown and soaked with cryoprotectant solution containing 0.2M I Na X-ray diffraction data were collected in the BM16 beam-line at wavelengths 0.92 and 1.7 Å to phase with the iodine atoms and to distinguish between Ca²⁺ and Mn²⁺

We collect four highly redundant data sets up to 3.2 Å resolution. Crystals belong to I41 space group with unit cell constants of a=b=91.6 and c=85.4.

Remarks: all the experiments together with the treatment of the data were done with no problems. The assistance of the local contact was perfect