

Crystallization and preliminary X-ray crystallographic analysis of highly thermostable L2 lipase from the newly isolated Bacillus sp. L2

ABSTRACT

Purified thermostable recombinant L2 lipase from *Bacillus sp. L2* was crystallized by the counter-diffusion method using 20% PEG 6000, 50 mM MES pH 6.5 and 50 mM NaCl as precipitant. X-ray diffraction data were collected to 2.7 Å resolution using an in-house Bruker X8 PROTEUM single-crystal diffractometer system. The crystal belonged to the primitive orthorhombic space group P212121, with unit-cell parameters $a = 87.44$, $b = 94.90$, $c = 126.46$ Å. The asymmetric unit contained one single molecule of protein, with a Matthews coefficient (V_M) of $2.85 \text{ \AA}^3 \text{ Da}^{-1}$ and a solvent content of 57%.

Keyword: Lipases; L2 lipase; *Bacillus sp. L2*; Thermostable lipase; Counter-diffusion method