

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0037
LOT:	2008-0037
Activity:	CmCBM6-2
Synonyms:	Carbohydrate binding module; carbohydrate binding domain
Nomenclature:	CmCBM6-2 is a family 6 β -1,3-1,4-glucan-binding module
Source organism:	<i>Cellvibrio mixtus</i>
Enzyme Commission No.:	-
Activity:	} See comments below
Specific activity:	
Purity:	>95% as judged by SDS-PAGE
Form and storage:	Supplied in 3.2 M ammonium sulphate, store at 4°C (shipped at room temperature)
pH optimum:	-
Temperature optimum:	-
[Protein]:	2 mg/mL
Sequence length:	131 amino acids (view sequence)
Accession No.	AAB61462
Molecular weight:	15920.3 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Binds to β -1,3-1,4-glucans
Potential application(s):	Carbohydrate research
Comments:	CmCBM6-2 binds to β -glucan (K_a $8.6 \times 10^{-3} \text{ M}^{-1}$), lichenan (K_a $7.8 \times 10^{-3} \text{ M}^{-1}$), cellohexaose (K_a $6.8 \times 10^{-3} \text{ M}^{-1}$), laminarin (K_a $8.0 \times 10^{-3} \text{ M}^{-1}$) and laminohexaose (K_a $5.1 \times 10^{-3} \text{ M}^{-1}$). PDB: 1uxz
Usage:	Agitate bottle sufficiently to fully homogenise enzyme precipitate before use
Assay:	To recover maximal CmCBM6-2 activity, centrifuge a required volume of the precipitated protein suspension provided (13000 \times g for

2 min), remove the supernatant and resuspend the resulting pellet in the same volume of 20 mM Tris-HCl, pH 7.5, 20 mM NaCl, 5 mM CaCl₂. Proceed with the assay as required

Primary sequence:

MVIATIQAEDHSQQSGTQQETTTDTGGGKNVGYIDAGDWLSYAGTPVNI PSSGSYLIEYRVASQNGGG
SLTFEEAGGAPVHGTTI AIPATGGWQTWTTIQHTVNL SAGSHQFGIKANAGGWNLNWIRINKTH

Literature:

1. Pires *et al.* (2004) *J. Biol. Chem.* **279**, 21560-21568
2. Henshaw *et al.* (2004) *J. Biol. Chem.* **279**, 21552-21559