

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0046
LOT:	2008-0046
Activity:	CtCBM6
Synonyms:	-
Nomenclature:	CtCBM6 is a family 6 xylan-binding module
Source organism:	<i>Clostridium thermocellum</i> F1/YS
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]:	0.3 mg/mL
Sequence length:	130 amino acids (view sequence)
Accession No.	AAC04579
Molecular weight:	14855.2 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
Biological function:	Binds to xylan
Potential application(s):	Carbohydrate research
Comments:	CtCBM6 binds to both decorated (wheat arabinoxylan K_a $42.6 \times 10^{-3} \text{ M}^{-1}$ and rye arabinoxylan K_a $70.5 \times 10^{-3} \text{ M}^{-1}$) and less decorated (oat spelt xylan K_a $58.7 \times 10^{-3} \text{ M}^{-1}$ and birchwood xylan K_a $102 \times 10^{-3} \text{ M}^{-1}$)
Usage:	Agitate bottle sufficiently to fully homogenise enzyme precipitate before use

Assay:

To recover maximal CtCBM6 activity, centrifuge a required volume of the precipitated protein suspension provided (13000 xg 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:

MKIESEEEYNSLKSSTIQTIGTSDGGSGIGYIESGDYLVFNKINFGNGANSFKARVASGADTPTNIQLR
LGSPGTTLIGTLTVASTGGWNNYEEKSCSITNTTGQHDLYLVFSGPVNIDYFIFDSNGVNPT

Literature:

1. Czjzek *et al.* (2001) *J. Biol. Chem.* **276**, 48580-48587