



Mouse Anti-Xyloglucan monoclonal antibody, clone CCRC-M88 (CABT-B289)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Recognizes the glycan group of Non-Fucosylated Xyloglucan-2 of several plants.
Target	Xyloglucan
Immunogen	Xyloglucan:BSA (covalent)
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Tamarind, tomato, Sycamore, Linseed
Clone	CCRC-M88
Conjugate	Unconjugated
Applications	ELISA, IL, IF
Format	Liquid
Size	Supernatant/5 ml
Buffer	Cell culture supernatant, Use undiluted or at 1:10 dilution
Preservative	None
Storage	1 month at -80°C
Ship	Dry Ice

BACKGROUND

Introduction

Xyloglucan is a hemicellulose or polysaccharide that is found in the primary cell wall of all vascular plants. Xyloglucan binds to the surface of cellulose microfibrils and may link them together.

Keywords

Xyloglucan;Sycamore maple;Xyloglucan Tomato;Tamarindus indicus;Lycopersicon esculentum

GENE INFORMATION

References

- DeMartini, JD, Pattathil, S, Avci, U, Szekalski, K, Mazumder, K, Hahn, M.G., Wyman, CE: Application of monoclonal antibodies to investigate plant cell wall deconstruction for biofuels production. *Energy Environ. Sci.*, 2011, 4, 4332-4339.
- Pattathil S, Avci U, Miller JS, Hahn MG. 2012. Immunological approaches to plant cell wall and biomass characterization: Glycome profiling. In: Himmel M (ed) *Biomass Conversion: Methods and Protocols*. Springer Science + Business Media, LLC, New York, NY, pp 61-72.
- Puhlmann, E. Bucheli, M. J. Swain, N. Dunning, P. Albersheim, A. G. Darvill, and M. G. Hahn. (1994) Generation of monoclonal antibodies against plant cell wall polysaccharides. I. Characterization of a monoclonal antibody to a terminal alpha-(1,2)-linked fucosyl-containing epitope. *Plant Physiol.* 104:699-710.
- G. Freshour, R. P. Clay, M. S. Fuller, P. Albersheim, A. G. Darvill, and M. G. Hahn. (1996) Developmental and tissue-specific structural alterations of the cell-wall polysaccharides of *Arabidopsis thaliana* roots. *Plant Physiol.* 110:1413-1429.
- G. Freshour, C. P. Bonin, W.-D. Reiter, P. Albersheim, A. G. Darvill, and M. G. Hahn. (2003) Distribution of fucose-containing xyloglucans in cell walls of the mur1 mutant of *Arabidopsis thaliana*. *Plant Physiol.* 131:1602-1612.
- Pattathil S, Avci U, Baldwin D, Swennes AG, McGill JA, Popper Z, Bootten T, Albert A, Davis RH, Chennareddy C, Dong R, O'Shea B, Rossi R, Loeff C, Freshour G, Narra R, O'Neil M, York WS, Hahn MG. (2010) A Comprehensive Toolkit of Plant Cell Wall Glycan-Directed Monoclonal Antibodies. *Plant Physiol.* 153:514-525.
- Pattathil S, Avci U, Miller JS, Hahn MG. 2012. Immunological approaches to plant cell wall and biomass characterization: Glycome profiling. In: Himmel M (ed) *Biomass Conversion: Methods and Protocols*. Springer Science + Business Media, LLC, New York, NY, pp 61-72.
- A.P. de Souza, D.C.C. Leite, S. Pattahil, M.G. Hahn, M.S. Buckeridge. 2013. Composition and structure of sugarcane cell wall polysaccharides: Implications for second generation bioethanol production. *Bioenergy Research* 6: 564-579.
- Pattathil S, Avci U, Baldwin D, et al. 2010. A comprehensive toolkit of plant cell wall glycan-directed monoclonal antibodies. *Plant Physiology* 153, 514-525.
- Robin E. Young, Heather E. McFarlane, Michael G. Hahn, Tamara L. Western, George W. Haughn and A. Lacey Samuels. 2008. Analysis of the Golgi Apparatus in *Arabidopsis* Seed Coat Cells during Polarized Secretion of Pectin-Rich Mucilage. *The Plant Cell* June 2008 vol. 20 no. 6 1623-1638 .
- Pattathil S, Hahn MG, Dale BE, Chundawat SP. Insights into plant cell wall structure, architecture, and integrity using glycome profiling of native and AFEXTM-pre-treated biomass. *J Exp Bot.* 2015 Jul;66(14):4279-94.