

# LM6 [Anti-1,5-α-L-Arabinan] Antibody (Lot 190302a)

AB-LM6 04/19

### I. DESCRIPTION:

The LM6, rat, monoclonal antibody was generated using a neoglycoprotein (arabinoheptaose-BSA) and is a high affinity antibody to (1,5)- $\alpha$ -L-arabinosyl residues found in the arabinan components of certain pectic polymers such as rhamnogalacturonan-I. The LM6 arabinan epitope is widely found in the cell walls of many plants and can also be present in isolated pectin preparations used for commercial purposes. LM6 antibody recognises a linear pentasaccharide in (1,5)- $\alpha$ -L-arabinans and can recognise pectic polysaccharides in several species. It has no cross-reactivity with gum arabic but may recognise arabinogalactan-proteins (AGPs) in some species. In competitive inhibition ELISAs, LM6 antibody binding to (1,5)- $\alpha$ -L-arabinan was inhibited (50%) by 40 ng/mL (1,5)- $\alpha$ -L-arabinopentaose and 19 ng/mL (1,5)- $\alpha$ -L-arabino-hexaose.

From the laboratory of Paul Knox, PhD, University of Leeds.

This product does not contain fetal bovine serum.

### 2. SPECIFICATIONS:

Antibody Name	LM6
Antigen	Pectic polysaccahride / α-1,5-arabinan
Epitope	Linear α-1,5-Arabinan
Conjugate	Unconjugated
Buffer	Serum-free cell culture supernatant, 0.02% sodium azide
Tested Application	Immunofluorescence (1:10); ELISA (1:10)
Positive Control	Arabinan (Sugar Beet) ( <b>P-ARAB</b> )
Clonality	Monoclonal
Isotype	IgG
Host Species	Rat

## 3. PROPERTIES:

Form	Liquid
Shipping	Shipped at ambient temperature
Storage	Short term stability: 2-8°C Long term stability: Below -10°C (Avoid freeze/thaw cycles)

#### 4. REFERENCES:

Willats, W. G., Marcus, S. E. & Knox, J. P. (1998). Generation of monoclonal antibody specific to (1-->5)-alpha-L-arabinan. *Carbohydr. Res.*, **308(1-2)**, 149-52.

Verhertbruggen, Y., Marcus, S. E., Haeger, A., Verhoef, R., Schols, H. A., McCleary, B.V., McKee, L., Gilbert, H. J. & Knox, J. P. (2009). Developmental complexity of arabinan polysaccharides and their processing in plant cell walls. *Plant J.*, **59(3)**, 413-25.