# Anti-(1-5)-a-L-arabinan [LM6-M]

**Catalogue number:** 157929
**Sub-type:**
**Images:**

## Contributor

**Inventor:** Paul Knox
**Institute:** University of Leeds
**Images:**

## Tool details

***FOR RESEARCH USE ONLY**

**Name:** Anti-(1-5)-a-L-arabinan [LM6-M]

**Alternate name:**



**Class:** Monoclonal
**Conjugate:** Unconjugated
**Description:** Plant cell walls are highly complex structures composed of load-bearing cellulose microfibrils and interspersed sets of matrix polysaccharides. Pectins, a major component of cell wall matrices, are galacturonic acid-rich polysaccharides and include homogalacturonan and rhamnogalacturonan domains (Caffall and Mohnen, 2009). Pectic rhamnogalacturonan-I (RG-I) is a highly heterogeneous and variable domain of pectin with a rhamnogalacturonan backbone and diverse side chains that are mostly neutral sugars and the major components of which are 1,4-galactosyl and 1,5-arabinosyl residues (Willats et al., 2001; Caffall and Mohnen, 2009). RG-I molecules are known to be structurally highly heterogeneous in cell and developmental contexts and are strongly implicated in influencing the mechanical properties of cell walls and plant materials (Lee et al., 2012; Paniagua et al., 2016; Mikshina et al., 2017) but precise modes of action are not known. This probe, LM6-M, has similar specificity to LM6. However, LM6-M is of a different immunoglobulin isotype and has a higher avidity making it a highly effective mAb for pectic arabinan in in-situ and in-vitro analyses.
**Purpose:**
**Parental cell:**
**Organism:**
**Tissue:**
**Model:**
**Gender:**
**Isotype:**
**Reactivity:**
**Selectivity:**
**Host:**

Rat
**Immunogen:** Sugar beet RG-I oligosaccharides coupled to Bovine Serum Albumin (BSA).
**Immunogen UNIPROT ID:**
**Sequence:**
**Growth properties:**
**Production details:**
**Formulation:**
**Recommended controls:** IgM
**Bacterial resistance:**
**Selectable markers:**
**Additional notes:**

## Target details

**Target:** (1-5)-a-L-arabinan

**Target alternate names:**

**Target background:** Plant cell walls are highly complex structures composed of load-bearing cellulose microfibrils and interspersed sets of matrix polysaccharides. Pectins, a major component of cell wall matrices, are galacturonic acid-rich polysaccharides and include homogalacturonan and rhamnogalacturonan domains (Caffall and Mohnen, 2009). Pectic rhamnogalacturonan-I (RG-I) is a highly heterogeneous and variable domain of pectin with a rhamnogalacturonan backbone and diverse side chains that are mostly neutral sugars and the major components of which are 1,4-galactosyl and 1,5-arabinosyl residues (Willats et al., 2001; Caffall and Mohnen, 2009). RG-I molecules are known to be structurally highly heterogeneous in cell and developmental contexts and are strongly implicated in influencing the mechanical properties of cell walls and plant materials (Lee et al., 2012; Paniagua et al., 2016; Mikshina et al., 2017) but precise modes of action are not known. This probe, LM6-M, has similar specificity to LM6. However, LM6-M is of a different immunoglobulin isotype and has a higher avidity making it a highly effective mAb for pectic arabinan in in-situ and in-vitro analyses.



**Molecular weight:**

**Ic50:**

## Applications

**Application:**
**Application notes:**

## Handling

**Format:** Liquid
**Concentration:**
**Passage number:**
**Growth medium:**

**Temperature:**
**Atmosphere:**
**Volume:**
**Storage medium:**
**Storage buffer:**
**Storage conditions:**
**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:**

## References

**References:** Clausen et al. 2004. Planta. 219(6):1036-41. PMID: 15221383.