



PLANT CELL WALL MONOCLONAL ANTIBODIES

>50 rat antibody hybridoma cell lines

Prof. Paul Knox

Centre for Plant Sciences, Faculty of Biological Sciences

University of Leeds, Leeds LS2 9JT, UK

Email: j.p.knox@leeds.ac.uk

www.plantcellwalls.net

Pectic polysaccharides

Homogalacturonan (HG) / related

- LM18** partially Me-HG / no ester (34)
- LM19** partially Me-HG / no ester (34)
- LM20** partially Me-HG (34)
- JIM5** partially Me-HG / no ester (1,6,22,26)
- JIM7** partially Me-HG (6,22,26)
- LM7** partially Me-HG / non-blockwise, (24,26)
- PAM1** blockwise de-esterified HG (17,22,23,30)
- LM8** xylogalacturonan (27)

Rhamnogalacturonan-I

- LM5 NRE** (1→4)-β-D-galactan (15,18-20,42)
- LM6⁺** (1→5)-α-L-arabinan (16,18-20,23,31,34)
- LM13** linearised (1→5)-α-L-arabinan (33,35)
- LM16** processed arabinan/put. galactan stub (35)
- LM9** feruloylated (1→4)-β-D-galactan (28)
- LM12[‡]** ferulic acid, feruloylated pectin (38)
- LM26** branched (1,6-Gal) (1→4)-β-D-galactan (45)

⁺May also bind to AGPs

[‡]Can also bind to feruloylated heteroxylan

Non-cellulosic, non-pectic polysaccharides

Xyloglucan

- LM15** XXXG motif of xyloglucan (32,44)
- LM24** galactosylated xyloglucan (38)
- LM25** XXXG/galactosylated xyloglucan (38)

Heteromannan

- LM21** heteromannan (36)
- LM22** heteromannan (36)

Heteroxylan

- LM10 NRE** (1→4)-β-D-xylan (29,44)
- LM11** (1→4)-β-D-xylan / arabinoxylan (29)
- LM12[‡]** ferulic acid, feruloylated xylan (38)
- LM27** unknown epitope assoc. grass xylan (40)
- LM28** glucuronoxylan (40)

[‡]Can also bind to feruloylated pectin

Plant cell wall proteoglycans/glycoproteins

Arabinogalactan-protein (AGP) glycan

- LM14** GlcA in AGP glycan (33,38)
- LM2** β-linked-GlcA in AGP glycan (13,14)
- LM30** AGP glycan (43)
- JIM4** AGP glycan (3,5,13)
- JIM13** AGP glycan (7,13)
- JIM14** AGP glycan (7,13,44)
- JIM15** AGP glycan (7,13)
- JIM16** AGP glycan (7,13,44)
- MAC207** AGP glycan (2,3,13)

Extensin

- LM1** extensin (11)
- JIM11** extensin (8)
- JIM12** extensin (8)
- JIM19** extensin (8,9,10)
- JIM20** extensin (8,9)

NRE = epitope at non-reducing end of glycan

See over for more MABs & references

Other cell wall related MAbs

- LM23** non-acetylated xylosyl in xylogalacturonan, xylan, fucoidan preps (37,38, 39)
LM4 pea amine oxidase, cell walls (21,25)
JIM18 glyco-phospholipid, membranes (9,12)
JIM1 β -linked-galactosyl, plasma membrane (4)

Brown algal cell wall polysaccharides

Fucoidan

- BAM1** un-sulfated epitope present in sulfated fucan/fucoidan preparations (39)
BAM2 sulfated epitope present in sulfated fucan/fucoidan preparations (39)
BAM3 possibly sulfated epitope present in sulfated fucan/fucoidan preparations (39)
BAM4 sulfated epitope present in sulfated fucan/fucoidan preparations (39)

Alginate

- BAM6** mannuronate-rich epitope (41)
BAM7 mannuronate-guluronate (41)
BAM8 mannuronate-guluronate (41)
BAM9 mannuronate-guluronate (41)
BAM10 mannuronate-guluronate epitope resistant to alginate lyase (41)
BAM11 ~7 guluronate residues (41)

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