

Antibody	HRGP recognized	Epitope structure	Reference
JIM8	AGP	unknown	Pennell et al. (1991)
JIM13	AGP	(beta)GlcA1->3(alpha)GalA1->2Rha	Knox et al. (1991), Yates & Knox (1994), Yates et al. (1996)
JIM14	AGP	at least three consecutive b-1,6-linked Gal, third Gal toward the nonreducing terminus must not be arabinosylated	Knox et al. (1991), Yates & Knox (1994), Yates et al. (1996), Ruprecht et al. (2017)
JIM16	AGP	beta-1,3-linked galactan backbone when substituted with a single b-1,6-linked Gal residue	Knox et al. (1991), Yates & Knox (1994), Yates et al. (1996), Ruprecht et al. (2017)
LM2	AGP	beta glucuronic acid terminally attached to 1,6-linked galactan	Smallwood et al. (1996), Yates et al. (1996), Ruprecht et al. (2017)
LM14	AGP	unknown	Moller et al. (2008)
MAC207	AGP	(beta)GlcA1->3(alpha)GalA1->2Rha	Yates et al. (1996)
JIM11	Extensin	Probably include the third arabinose and/or following arabinose residues on the extensin glycan moiety	Smallwood et al. (1994), Yates & Knox (1994), Castilleux et al. (2020)
JIM12	Extensin	Probably comprise only the galactose on the serine residue and the two first arabinose residues on the hydroxyprolines	Smallwood et al. (1994), Castilleux et al. (2020)
JIM19	Extensin	unknown	Knox et al. (1995), Wang et al. (1995)
JIM20	Extensin	Probably include the third arabinose but not the following arabinose residues on the extensin glycan moiety	Smallwood et al. (1994), Pattathil et al. (2010), Castilleux et al. (2020), Beuder et al. (2020)
LM1	Extensin	Probably include the third arabinose and/or following arabinose residues on the extensin glycan moiety	Smallwood et al. (1995), Castilleux et al. (2020)

### Supplemental table 1: List of the monoclonal antibodies used in the study

- Beuder S, Dorchak A, Bhide A, Moeller SR, Petersen BL, MacAlister CA.** (2020) Exocyst mutants suppress pollen tube growth and cell wall structural defects of hydroxyproline O-arabinosyltransferase mutants. *Plant J.* 2020;103(4):1399-1419. doi:10.1111/tpj.14808
- Castilleux R, Plancot B, Gügi B, Attard A, Loutelier-Bourhis C, Lefranc B, Nguema-Ona E, Arkoun M, Yvin J-C, Driouich A.** 2020. Extensin arabinosylation is involved in root response to elicitors and limits oomycete colonization. *Annals of Botany* 125(5): 751-763.
- Knox JP, Linstead PJ, Peart J, Cooper C, Roberts K.** 1991. Developmentally Regulated Epitopes of Cell-Surface Arabinogalactan Proteins and Their Relation to Root-Tissue Pattern-Formation. *Plant Journal* 1(3): 317-326.
- Knox JP, Peart J, Neill SJ.** (1995) Identification of novel cell surface epitopes using a leaf epidermal-strip assay system. *Planta* 196:266-270.
- Moller I, Marcus SE, Haeger A, Verhertbruggen Y, Verhoeft R, Schols H, Ulvskov P, Mikkelsen JD, Knox JP, Willats W.** 2008. High-throughput screening of monoclonal antibodies against plant cell wall glycans by hierarchical clustering of their carbohydrate microarray binding profiles. *Glycoconjugate Journal* 25(1): 37-48.
- Pattathil S, Avci U, Baldwin D, Swennes AG, McGill JA, Popper Z, Booten T, Albert A, Davis RH, Chennareddy C, Dong R, O'Shea B, Rossi R, Leoff 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.
- Pennell RL, Janniche L, Kjellbom P, Scofield GN, Peart JM, Roberts K.** 1991. Developmental Regulation of a Plasma-Membrane Arabinogalactan Protein Epitope in Oilseed Rape Flowers. *Plant Cell* 3(12): 1317-1326.
- Ruprecht C, Bartetzko MP, Senf D, Dallabernadina P, Boos I, Andersen MCF, Kotake T, Knox JP, Hahn MG, Clausen MH, et al.** 2017. A Synthetic Glycan Microarray Enables Epitope Mapping of Plant Cell Wall Glycan-Directed Antibodies. *Plant Physiol* 175(3): 1094-1104.
- Smallwood M, Beven A, Donovan N, Neill SJ, Peart J, Roberts K, Knox JP.** 1994. Localization of Cell-Wall Proteins in Relation to the Developmental Anatomy of the Carrot Root Apex. *Plant Journal* 5(2): 237-246.
- Smallwood M, Yates EA, Willats WGT, Martin H, Knox JP.** 1996. Immunochemical comparison of membrane-associated and secreted arabinogalactan-proteins in rice and carrot. *Planta* 198(3): 452-459.
- Wang M, Heimovaara-Dijkstra S, van der Meulen RM, Knox JP, Neill SJ** (1995) The monoclonal antibody JIM19 modulates abscisic acid action in barley aleurone protoplasts. *Planta* 196:271-276
- Yates EA, Knox JP.** 1994. Investigations into the Occurrence of Plant-Cell Surface Epitopes in Exudate Gums. *Carbohydrate polymers* 24(4): 281-286.
- Yates EA, Valdor JF, Haslam SM, Morris HR, Dell A, Mackie W, Knox JP.** 1996. Characterization of carbohydrate structural features recognized by anti-arabinogalactan-protein monoclonal antibodies. *Glycobiology* 6(2): 131-139.