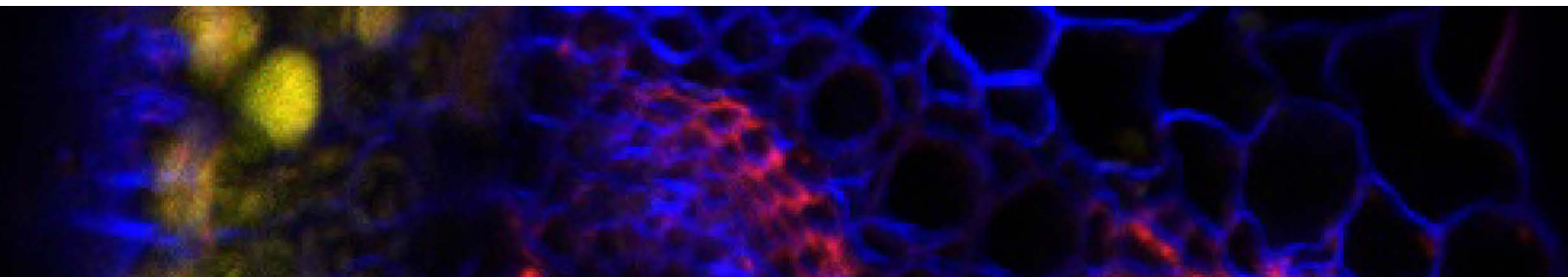


## Cell Wall Antibodies

This antibody collection contains various antibodies that will allow immunolocalization of components of plant cell walls and enzymes responsible for cell wall biosynthesis.



### Agrisera collection

Product name	Product number
CesA4 (IRX5)   Cellulose synthase A catalytic subunit 4 [UDP-forming]	AS12 2582
CesA7 (IRX3)   Cellulose synthase A catalytic subunit 7 [UDP-forming]	AS12 2581
CesA8 (IRX1)   Cellulose synthase A catalytic subunit 8 [UDP-forming]	AS12 2580
Hardwood lignin (birch)	AS16 3975
RHD3   Protein Root Hair Defective 3 (N-terminal)	AS20 4417
Softwood lignin (spruce)	AS16 3974
XTH-Xet   XET5 Xyloglucan xyloglucosyl transferase	AS08 319

### Dr. Knox collection, University of Leeds

These monoclonal antibodies were developed by the laboratory of Prof. Paul Knox, University of Leeds, United Kingdom.

Product name	Product number
Arabinogalactan-protein, AGP (monoclonal, clone LM2)	AS18 4211-1ml
Extensin glycoprotein (monoclonal, clone LM1)	AS18 4210-1ml
Ferulated polysaccharides (monoclonal, clone LM12)	AS18 4212-1ml
Glucuronoxylan (monoclonal, clone LM28)	AS18 4208-1ml
Heteromannan (monoclonal, clone LM21)	AS18 4209-1ml
Heteroxylan (monoclonal, clone LM10)	AS18 4206-1ml
Heteroxylan (monoclonal, clone LM11)	AS18 4207-1ml
Pectic polysaccharide, alpha-1,5-arabinan (monoclonal, clone LM13)	AS18 4200-1ml
Pectic polysaccharide, alpha-1,5-arabinan (monoclonal, clone LM6)	AS18 4198-1ml
Pectic polysaccharide, alpha-1,5-arabinan (monoclonal, clone LM6-M)\$\$	AS18 4199-1ml
Pectic polysaccharide, beta-1,4-galactan (monoclonal, clone LM5)	AS18 4197-1ml
Pectic polysaccharide, homogalacturonan (monoclonal, clone JIM7)	AS18 4195-1ml
Pectic polysaccharide, homogalacturonan (monoclonal, clone LM18)	AS18 4192-1ml
Pectic polysaccharide, homogalacturonan (monoclonal, clone LM19)	AS18 4191-1ml
Pectic polysaccharide, homogalacturonan (monoclonal, clone LM7)	AS18 4196-1ml
Pectic polysaccharide, Rhamnogalacturonan (monoclonal, clone LM16)	AS18 4201-1ml
Pectic polysaccharide, Xylogalacturonan (monoclonal, clone LM8)	AS18 4202-1ml
Xyloglucan (monoclonal, clone LM15)	AS18 4203-1ml
Xyloglucan (monoclonal, clone LM24)	AS18 4204-1ml
Xyloglucan (monoclonal, clone LM25)	AS18 4205-1ml
Cell wall set   3 antibodies	AS20 4518
Cell wall set   5 antibodies	AS20 4516

## Dr. Hahn collection, University of Georgia

These monoclonal antibodies were developed under the sponsorship of the US National Science Foundation, through award number DBI-0421683. Their use in biomass characterization, study of biomass deconstruction and quantitation was developed under the sponsorship of the US Department of Energy through awards DE-PS02-06ER64304 and DE-AC05-00OR22725 (BioEnergy Science Center).

Product name.....	Product number
Acetylated glucomannan (clone CCRC-M170).....	AS16 3226-1m1
Acetylated Mannan (clone CCRC-M169).....	AS20 4493-1m1
Arabinogalactan-2 (clone CCRC-M133).....	AS16 3115-1m1
Arabinogalactan-3 (clone CCRC-M85).....	AS16 3133-1m1
Arabinogalactan-4 (clone CCRC-M78).....	AS16 3231-1m1
Fucosylated xyloglucan (clone CCRC-M1).....	AS16 3136-1m1
Galactomannan-1 (clone CCRC-M70).....	AS16 3116-1m1
Galactomannan-2 (clone CCRC-M166).....	AS20 4494-1m1
Galactomannan-2 (clone CCRC-M168).....	AS20 4495-1m1
Galactomannan-2 (clone CCRC-M174).....	AS16 3232-1m1
Homogalacturonan-1 (clone CCRC-M38).....	AS16 3117-1m1
Non-fucosylated xyloglucan- (clone CCRC-M58).....	AS16 3235-1m1
Non-fucosylated xyloglucan-1 (clone CCRC-M101).....	AS16 3230-1m1
Non-fucosylated xyloglucan-2 (clone CCRC-M88).....	AS16 3233-1m1
Non-fucosylated xyloglucan-3 (clone CCRC-M100).....	AS16 3234-1m1
Non-fucosylated xyloglucan-5 (clone CCRC-M48).....	AS16 3221-1m1
Rhamnogalacturonan-I / Arabinogalactan (clone CCRC-M7).....	AS16 3225-1m1
Rhamnogalacturonan-Ia (clone CCRC-M2).....	AS16 3134-1m1
Rhamnogalacturonan-Ib (clone CCRC-M61).....	AS16 3237-1m1
Rhamnogalacturonan-Ic (clone CCRC-M23).....	AS16 3236-1m1
Xylan-1 / Xyloglucan (clone CCRC-M108).....	AS16 3135-1m1
Xylan-3 (clone CCRC-M114).....	AS16 3227-1m1
Xylan-4 (clone CCRC-M154).....	AS16 3238-1m1
Xylan-5 (clone CCRC-M144).....	AS16 3239-1m1
Xylan-6 (clone CCRC-M138).....	AS16 3229-1m1
Xylan-7 (clone CCRC-M149).....	AS16 3228-1m1
Xyloglucan (clone CCRC-M96).....	AS20 4492-1m1

## Application example

Product #: AS18 4191-1m1

**Immunofluorescence method described in:**  
**An extended set of monoclonal antibodies to pectic homogalacturonan.** Yves Verhertbruggen, Susan E. Marcus, Ash Haeger, José J. Ordaz-Ortiz, J. Paul Knox, *Carbohydrate research* 344 (2009) 1858-1862.

