

Supplemental Table S1: Listing of plant cell wall glycan-directed monoclonal antibodies (mAbs) used for glycome profiling analyses (Figures 3, 4, 5). The groupings of antibodies are based on a hierarchical clustering of ELISA data generated from a screen of all mAbs against a panel of plant polysaccharide preparations<sup>1,2</sup> that groups the mAbs according to the predominant polysaccharides that they recognize. The majority of listings link to the WallMabDB plant cell wall monoclonal antibody database (<http://www.wallmabdb.net>) that provides detailed descriptions of each mAb, including immunogen, antibody isotype, epitope structure (to the extent known), supplier information, and related literature citations.

**Glycan Group Recognized    mAb Names**

Non-Fucosylated Xyloglucan-1	<a href="#">CCRC-M95</a>
	<a href="#">CCRC-M101</a>
Non-Fucosylated Xyloglucan-2	<a href="#">CCRC-M104</a>
	<a href="#">CCRC-M89</a>
	<a href="#">CCRC-M93</a>
	<a href="#">CCRC-M87</a>
	<a href="#">CCRC-M88</a>
Non-Fucosylated Xyloglucan-3	<a href="#">CCRC-M100</a>
	<a href="#">CCRC-M103</a>
Non-Fucosylated Xyloglucan-4	<a href="#">CCRC-M58</a>
	<a href="#">CCRC-M86</a>
	<a href="#">CCRC-M55</a>
	<a href="#">CCRC-M52</a>
	<a href="#">CCRC-M99</a>
Non-Fucosylated Xyloglucan-5	<a href="#">CCRC-M54</a>
	<a href="#">CCRC-M48</a>
	<a href="#">CCRC-M49</a>
	<a href="#">CCRC-M96</a>
	<a href="#">CCRC-M50</a>
	<a href="#">CCRC-M51</a>
	<a href="#">CCRC-M53</a>
Non-Fucosylated Xyloglucan-6	<a href="#">CCRC-M57</a>
Fucosylated Xyloglucan	<a href="#">CCRC-M102</a>
	<a href="#">CCRC-M39</a>
	<a href="#">CCRC-M106</a>
	<a href="#">CCRC-M84</a>
	<a href="#">CCRC-M1</a>

Xylan-1/XG	CCRC-M111 CCRC-M108 CCRC-M109
Xylan-2	CCRC-M119 CCRC-M115 CCRC-M110 CCRC-M105
Xylan-3	<u>CCRC-M117</u> <u>CCRC-M113</u> <u>CCRC-M120</u> <u>CCRC-M118</u> <u>CCRC-M116</u> <u>CCRC-M114</u>
Xylan-4	CCRC-M154 CCRC-M150
Xylan-5	CCRC-M144 CCRC-M146 CCRC-M145 CCRC-M155
Xylan-6	CCRC-M153 CCRC-M151 CCRC-M148 CCRC-M140 CCRC-M139 CCRC-M138
Xylan-7	CCRC-M160 <u>CCRC-M137</u> CCRC-M152 CCRC-M149
Galactomannan-1	CCRC-M75 CCRC-M70 CCRC-M74
Galactomannan-2	CCRC-M166 CCRC-M168

	CCRC-M174 CCRC-M175
Acetylated Mannan	CCRC-M169 CCRC-M170
$\beta$ -Glucan	LAMP BG1
HG Backbone-1	CCRC-M131 CCRC-M38 JIM5
HG Backbone-2	JIM136 JIM7
RG-I Backbone	CCRC-M69 CCRC-M35 CCRC-M36 CCRC-M14 CCRC-M129 CCRC-M72
Linseed Mucilage RG-I	JIM3 CCRC-M40 CCRC-M161 CCRC-M164
Physcomitrella Pectin	CCRC-M98 CCRC-M94
RG-Ia	CCRC-M5 CCRC-M2
RG-Ib	JIM137 JIM101 CCRC-M61 CCRC-M30
RG-Ic	CCRC-M23 CCRC-M17 CCRC-M19 CCRC-M18 CCRC-M56 CCRC-M16

RG-I/Arabinogalactan

- CCRC-M60
- CCRC-M41
- CCRC-M80
- CCRC-M79
- CCRC-M44
- CCRC-M33
- CCRC-M32
- CCRC-M13
- CCRC-M42
- CCRC-M24
- CCRC-M12
- CCRC-M7
- CCRC-M77
- CCRC-M25
- CCRC-M9
- CCRC-M128
- CCRC-M126
- CCRC-M134
- CCRC-M125
- CCRC-M123
- CCRC-M122
- CCRC-M121
- CCRC-M112
- CCRC-M21
- JIM131
- CCRC-M22
- JIM132
- JIM1
- CCRC-M15
- CCRC-M8
- JIM16

Arabinogalactan-1

- JIM93
- JIM94
- JIM11
- MAC204
- JIM20

Arabinogalactan-2

- JIM14
- JIM19

	JIM12 CCRC-M133 CCRC-M107
Arabinogalactan-3	JIM4 CCRC-M31 JIM17 CCRC-M26 JIM15 JIM8 CCRC-M85 CCRC-M81 MAC266 PN 16.4B4
Arabinogalactan-4	MAC207 JIM133 JIM13 CCRC-M92 CCRC-M91 CCRC-M78
	MAC265 CCRC-M97

References:

1. Pattathil S, Avci U, Baldwin D et al. A comprehensive toolkit of plant cell wall glycan-directed monoclonal antibodies. *Plant Physiol* 2010; 153:514-525.
2. Pattathil S, Avci U, Hahn MG Immunological approaches to plant cell wall and biomass characterization: glycome profiling. *Methods Mol Biol* 2012, 908: 61-72.