

Anti-(1-4)- β -D-galactan [LM5] Bulk Size Ab02543-9.4-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

Isotype and Format: Rat IgG2c, [Fc Silent™](#), Kappa

Clone Number: LM5

Alternative Name(s) of Target:

UniProt Accession Number of Target Protein:

Published Application(s): functional assay, WB, ELISA

Published Species Reactivity: Species independent

Immunogen: The rat version of this antibody was raised by immunizing a wister rat with a polysaccharide.

Specificity: This antibody is specific for beta-1,4-galactan. It specifically recognized more than 3 contiguous units of beta-1,4-galactan. Beta-1,4-galactan is expressed predominantly in the cell wall.

Application Notes: To characterize this antibody, a competitive ELISA was performed on saccharides using the original rat version of this antibody. Furthermore, an immunoblot was performed on citrus pectin, apple pectin, TG1, TG2a, TG2b, GALCOSA, BSA, lupin galactan, gum arabic, polygalacturonic acid, larchwood arabinogalactan, and locust bean gum using this antibody. Finally, tomato pericarp was immunogold labelled using this antibody (Jones et al, 1997; PMID:12223681). To map the epitope of this antibody, an ELISA was performed on different lengths of beta-1,4-galactan and beta-1,4-galactan with different side groups. It showed the greatest binding efficiency to 4 units of beta-1,4-galactan (Andersen et al, 2016; PMID:27855335). While creating and characterizing an antibody against (1 \rightarrow 5)- α -l-arabinan, the rat version of this antibody was used as a control in an ELISA. Furthermore, an immunoblot was performed on surfaces of lemons using this antibody (Willats et al, 1998, PMID:9675359). Pea cotyledons were stained for immunofluorescence using the rat version of this antibody to study plant cell wall architecture. Furthermore, immunogold assay was performed on pea cotyledons using this antibody (McCartney et al, 2000; PMID:10792826).

Antibody First Published in: Jones et al. Localization of Pectic Galactan in Tomato Cell Walls Using a Monoclonal Antibody Specific to (1 \rightarrow 4)-[β]-D-Galactan Plant Physiol. 1997 Apr;113(4):1405-1412.

[PMID:12223681](#)

Note on publication: Antibodies against saccharides were created and characterized.

Product Form

Size:

1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.