

Galectin-3/LGALS3 Antibody

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	28	Rabbit	#P17931	3958

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Galectin-3/LGALS3 antibody recognizes endogenous levels of total galectin-3/LGALS3 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human galectin-3/LGALS3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Galectins are a family of β -galactose binding proteins that are characterized by an affinity for poly-N-acetyllactosamine-enriched glycoconjugates and a carbohydrate-binding site (1,2). Members of the galectin family have been implicated in a variety of biological functions, including cell adhesion (3), growth regulation (4), cytokine production (5), T cell apoptosis (6), and immune responses (7).

Galectin-3/LGALS3 is involved in several diverse biological functions. Galectin-3/LGALS3 binds IgE (8). Galectin-3/LGALS3 is an unusual protein in that it can be found both extracellularly and intracellularly. Intracellularly, Galectin-3/LGALS3 can localize to the cytoplasm, nucleus, or both, depending on cell type and experimental conditions. Nuclear Galectin-3/LGALS3 has been identified as a pre-mRNA splicing factor (9). Galectin-3/LGALS3 production has been shown to increase during inflammation and in obesity, and the protein itself can have an inflammatory effect under certain conditions (10). Galectin-3/LGALS3 forms a complex with α 3, β 1 integrin to act as a surface receptor on endothelial cells for the NG2 proteoglycan, which triggers cell motility and angiogenesis (11). In addition to these functions, Galectin-3/LGALS3 is also a required factor for the terminal differentiation of epithelial cells (12).

Background References

1. Barondes, S.H. et al. (1994) *Cell* 76, 597-8.
2. Barondes, S.H. et al. (1994) *J Biol Chem* 269, 20807-10.
3. Offner, H. et al. (1990) *J Neuroimmunol* 28, 177-84.
4. Wells, V. and Mallucci, L. (1991) *Cell* 64, 91-7.
5. Filer, A. et al. (2009) *Arthritis Rheum* 60, 1604-14.
6. Perillo, N.L. et al. (1995) *Nature* 378, 736-9.
7. Cooper, D.N. et al. (1991) *J Cell Biol* 115, 1437-48.
8. Platzer, B. et al. (2011) *Immunol Lett* 141, 36-44.
9. Haudek, K.C. et al. (2010) *Biochim Biophys Acta* 1800, 181-9.
10. Pang, J. et al. (2013) *PLoS One* 8, e57915.
11. Fukushi, J. et al. (2004) *Mol Biol Cell* 15, 3580-90.
12. Hikita, C. et al. (2000) *J Cell Biol* 151, 1235-46.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.