



# galectin-9 (C-20): sc-19292

The Research Galactin

## BACKGROUND

Galectins are a family of soluble  $\beta$ -galactoside-binding animal lectins that modulate cell-to-cell adhesion and cell-to-extracellular matrix (ECM) interactions and play a role in tumor progression, pre-mRNA splicing and apoptosis. One member of this family, Galectin-9, also known as Ecalectin, Gal-9, hUAT2, HOM-HD-21 or LGALS9, maps to human chromosome 17 and encodes a 36 kDa protein. Galectin-9 is an integral membrane protein that exists as two isoforms, a long form and a short form, which differ by an internal stretch of 32 amino acids. Galectin-9 is an eosinophile chemoattractant produced by activated T lymphocytes that is expressed in organs of the gastrointestinal tract, aorta, liver, kidney, liver, pancreatic islets, lung, tonsil and some colorectal carcinoma, and in the cell lines HUVEC, U-937, HL60, HeLa and Jurkat. Introduction of IL-1 $\beta$  enhances Galectin-9 expression. Increased expression of Galectin-9 induces apoptosis in thymocytes and CD8 $^{+}$  cells. Galectin-9 is involved in immuno/inflammation processes in potential-sensitive uric acid translocation and contributes to inflammatory reactions in the central nervous system (CNS).

## REFERENCES

- Couraud, P.O., et al. 1989. Molecular cloning, characterization, and expression of a human 14-kDa lectin. *J. Biol. Chem.* 264: 1310-1316.
- Tureci, O., et al. 1997. Molecular definition of a novel human galectin which is immunogenic in patients with Hodgkin's disease. *J. Biol. Chem.* 272: 6416-6422.
- Hirashima, M., 1999. Ecalectin as a T cell-derived eosinophil chemoattractant. *Int. Arch. Allergy Immunol.* 120: 7-10.
- Suk, K., et al. 1999. Natural autoantibody to galectin-9 in normal human sera. *J. Clin. Immunol.* 19: 158-165.
- Online Mendelian Inheritance in Man, OMIM (TM). Johns Hopkins University, Baltimore, MD. MIM Number: 601879: 6/26/2000. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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## SOURCE

galectin-9 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of galectin-9 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19292 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

galectin-9 (C-20) is recommended for detection of galectin-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); also recommended for detection of LGALS9B and LGALS9C.

Suitable for use as control antibody for galectin-9 siRNA (h): sc-35444 and galectin-9 siRNA (m): sc-35445.

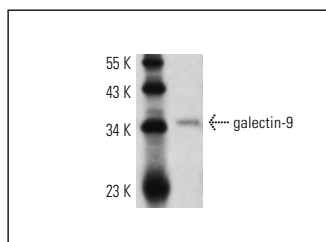
Molecular Weight of galectin-9: 36 kDa.

Positive Controls: mouse spleen extract: sc-2391.

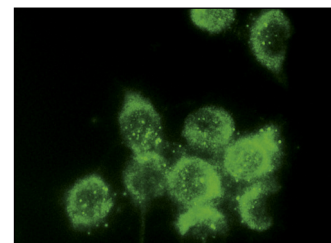
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



galectin-9 (C-20): sc-19292. Western blot analysis of galectin-9 expression in mouse spleen tissue extract.



galectin-9 (C-20): sc-19292. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing cytoplasmic localization.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.