

galectin-5 (R-19): sc-31801

BACKGROUND

Galectins are a family of soluble b-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. 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 β 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). Galectin-5, also known as RL-18, may function in erythrocyte differentiation.

REFERENCES

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3. Hirashima, M. 1999. Ecalectin as a T cell-derived eosinophil chemoattractant. *Int. Arch. Allergy Immunol.* 120: 7-10.
4. Suk, K., Hwang, D.Y. and Lee MS. 1999. Natural autoantibody to galectin-9 in normal human sera. *J. Clin. Immunol.* 19: 158-165.
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CHROMOSOMAL LOCATION

Genetic locus: Lgals5 (rat) mapping to 10q25.

SOURCE

galectin-5 (R-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of galectin-5 of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-31801 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

galectin-5 (R-19) is recommended for detection of galectin-5 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

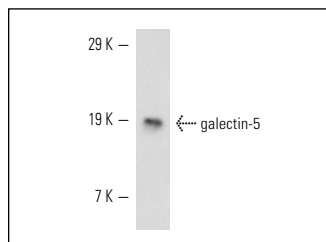
Molecular Weight of galectin-5: 18 kDa.

Positive Controls: rat liver extract: sc-2395 or rat PBL whole cell lysate.

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-5 (R-19): sc-31801. Western blot analysis of galectin-5 expression in rat PBL whole cell lysate.

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 or our catalog for detailed protocols and support products.



Try **galectin-5 (F-11): sc-48358**, our highly recommended monoclonal alternative to galectin-5 (R-19).