SANTA CRUZ BIOTECHNOLOGY, INC.

galectin-9 (m): 293T Lysate: sc-125369

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Galectins are a family of soluble β-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, pancreatic islets, lung, tonsil and some colorectal carcinoma, and in the cell lines HUVEC, U-937, HL60, HeLa and Jurkat. Introduction of IL-1β 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

1. Couraud, P.O., et al. 1989. Molecular cloning, characterization, and expression of a human 14 kDa lectin. J. Biol. Chem. 264: 1310-1316.
2. 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.
3. Hirashima, M., 1999. Ecalectin as a T cell-derived eosinophil chemoattractant. Int. Arch. Allergy Immunol. 120: 7-10.
4. Suk, K., et al. 1999. Natural autoantibody to galectin-9 in normal human sera. J. Clin. Immunol. 19: 158-165.
5. Matsushita, N., et al. 2000. Requirement of divalent galactoside-binding activity of ecalectin/galectin-9 for eosinophil chemoattraction. J. Biol. Chem. 275: 8355-8360.
6. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 601879. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Shimonishi, T., et al. 2001. Expression of endogenous galectin-1 and galectin-3 in intrahepatic cholangiocarcinoma. Hum. Pathol. 32: 302-310.

CHROMOSOMAL LOCATION

Genetic locus: LGALS9 (human) mapping to 17q11.2.

PRODUCT

galectin-9 (m): 293T Lysate represents a lysate of mouse galectin-9 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

galectin-9 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive galectin-9 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.