

galectin-2 (h2): 293T Lysate: sc-116773

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. Galectin-2, also known as LGALS2, Lactose-binding lectin 2 or HL14, is structurally closely related to galectin-1, but is expressed primarily in the gastrointestinal tract. Galectin-2 induces apoptosis in activated T cells and binds to the cytokine lymphotoxin- α (LTA) with possible implications in risk of myocardial infarction.

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. Hirabayashi, J., et al. 1989. Cloning and nucleotide sequence of a full-length cDNA for human 14 kDa β -galactoside-binding lectin. *Biochim. Biophys. Acta* 1008: 85-91.
3. Mehrabian, M., et al. 1993. Two members of the S-lac lectin gene family, LGALS1 and LGALS2, reside in close proximity on human chromosome 22q12-q13. *Genomics* 15: 418-420.
4. Cornillot, J.D., et al. 1998. Production and characterization of a monoclonal antibody able to discriminate galectin-1 from galectin-2 and galectin-3. *Glycobiology* 8: 425-432.
5. Oka, T., et al. 1999. Identification and cloning of rat galectin-2: expression is predominantly in epithelial cells of the stomach. *Arch. Biochem. Biophys.* 361: 195-201.
6. Abedin, M.J., et al. 2003. Potential roles of galectins in myeloid differentiation into three different lineages. *J. Leukoc. Biol.* 73: 650-656.
7. Sturm, A., et al. 2004. Human galectin-2: novel inducer of T cell apoptosis with distinct profile of caspase activation. *J. Immunol.* 173: 3825-3837.
8. Ozaki, K., et al. 2004. Functional variation in LGALS2 confers risk of myocardial infarction and regulates lymphotoxin- α secretion *in vitro*. *Nature* 429: 72-75.

CHROMOSOMAL LOCATION

Genetic locus: LGALS2 (human) mapping to 22q13.1.

PRODUCT

galectin-2 (h2): 293T Lysate represents a lysate of human galectin-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

PROTOCOLS

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

APPLICATIONS

galectin-2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive galectin-2 antibodies. Recommended use: 10-20 μ l per lane.

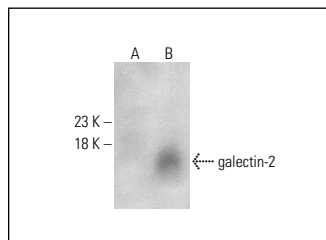
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

galectin-2 (C6): sc-517450 is recommended as a positive control antibody for Western Blot analysis of enhanced human galectin-2 expression in galectin-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



galectin-2 (C6): sc-517450. Western blot analysis of galectin-2 expression in non-transfected: sc-117752 (A) and human galectin-2 transfected: sc-116773 (B) 293T whole cell lysates.

RESEARCH USE

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