



galectin-1 (h2): 293T Lysate: sc-128680

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. Specifically, galectin-1 is an autocrine regulator of cell proliferation that plays a role in the maintenance of G_0 and in the control of G_2 traverse. Galectin-1, also known as LGALS1, is the protein product of a single gene linked to human chromosome 22q13.1. The galectin-1 protein contains 135 amino acids, a single internal EcoRI site and a polyadenylation signal. Galectin-1 can localize to both intracellular and extracellular space. Galectin-1 is expressed in human placenta, human lung, HL-6, Hep G2 and CEM cells.

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. Abbott, W.M., et al. 1989. Evidence that the 14 kDa soluble β -galactoside-binding lectin in man is encoded by a single gene. *Biochem. J.* 259: 291-294.
4. Goldstone, S.D., et al. 1991. Isolation of a cDNA clone, encoding a human β -galactoside binding protein, overexpressed during glucocorticoid-induced cell death. *Biochem. Biophys. Res. Commun.* 178: 746-750.
5. Baldini, A., et al. 1993. Mapping on human and mouse chromosomes of the gene for the β -galactoside-binding protein, an autocrine-negative growth factor. *Genomics* 15: 216-218.
6. 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.
7. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 150570. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
8. 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: LGALS1 (human) mapping to 22q13.1.

PRODUCT

galectin-1 (h2): 293T Lysate represents a lysate of human galectin-1 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.

APPLICATIONS

galectin-1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive galectin-1 antibodies. Recommended use: 10-20 μ l per lane.

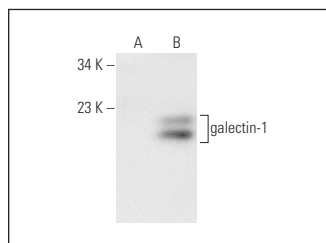
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

galectin-1 (E-2): sc-166619 is recommended as a positive control antibody for Western Blot analysis of enhanced human galectin-1 expression in galectin-1 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-1 (E-2): sc-166619. Western blot analysis of galectin-1 expression in non-transfected: sc-117752 (A) and human galectin-1 transfected: sc-128680 (B) 293T whole cell lysates.

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.