

galectin-7 (h): 293T Lysate: sc-117240

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-7, expressed mainly in stratified squamous epithelium, is activated by p53 and repressed by retinoic acid. It is a pro-apoptotic protein that functions intracellularly upstream of JNK activation and cytochrome c release. The galectin-7 gene maps to chromosome 19q13.2.

REFERENCES

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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. Madsen, P., et al. 1995. Cloning, expression, and chromosome mapping of human galectin-7. *J. Biol. Chem.* 270: 5823-5829.
4. Magnaldo, T., et al. 1995. Galectin-7, a human 14-kDa S-lectin, specifically expressed in keratinocytes and sensitive to retinoic acid. *Dev. Biol.* 168: 259-271.
5. Magnaldo, T., et al. 1998. Galectin-7, a marker of all types of stratified epithelia. *Differentiation* 63: 159-168.
6. Leonidas, D.D., et al. 1998. Structural basis for the recognition of carbohydrates by human galectin-7. *Biochemistry* 37: 13930-13940.
7. Bernerd, F., et al. 1999. Galectin-7 overexpression is associated with the apoptotic process in UVB-induced sunburn keratinocytes. *Proc. Natl. Acad. Sci. USA* 96: 11329-11334.
8. Kuwabara, I., et al. 2002. Galectin-7 (PIG1) exhibits pro-apoptotic function through JNK activation and mitochondrial cytochrome c release. *J. Biol. Chem.* 277: 3487-3497.
9. Cao, Z., et al. 2002. Galectins-3 and -7, but not galectin-1, play a role in re-epithelialization of wounds. *J. Biol. Chem.* 277: 42299-42305.

CHROMOSOMAL LOCATION

Genetic locus: LGALS7 (human) mapping to 19q13.2.

PRODUCT

galectin-7 (h): 293T Lysate represents a lysate of human galectin-7 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-7 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive galectin-7 antibodies. Recommended use: 10-20 μ l per lane.

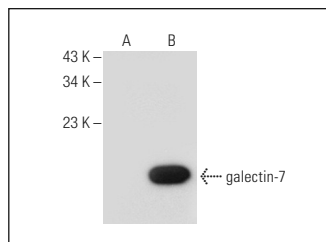
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

galectin-7 (D-5): sc-137086 is recommended as a positive control antibody for Western Blot analysis of enhanced human galectin-7 expression in galectin-7 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

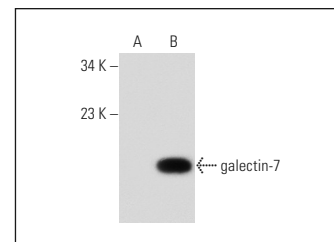
RECOMMENDED SUPPORT REAGENTS

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-7 (D-5): sc-137086. Western blot analysis of galectin-7 expression in non-transfected: sc-117752 (A) and human galectin-7 transfected: sc-117240 (B) 293T whole cell lysates.



galectin-7 (F-3): sc-271472. Western blot analysis of galectin-7 expression in non-transfected: sc-117752 (A) and human galectin-7 transfected: sc-117240 (B) 293T whole cell lysates.

RESEARCH USE

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