

# galectin-7 (H-60): sc-28253

## BACKGROUND

Galectins are a family of soluble  $\beta$ -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  $\beta$ -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; Lgals7 (mouse) mapping to 7 A3.

## SOURCE

galectin-7 (H-60) is a rabbit polyclonal antibody raised against amino acids 77-136 mapping at the C-terminus of galectin-7 of human origin.

## PRODUCT

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

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

galectin-7 (H-60) is recommended for detection of galectin-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for galectin-7 siRNA (h): sc-44534, galectin-7 siRNA (m): sc-44535, galectin-7 shRNA Plasmid (h): sc-44534-SH, galectin-7 shRNA Plasmid (m): sc-44535-SH, galectin-7 shRNA (h) Lentiviral Particles: sc-44534-V and galectin-7 shRNA (m) Lentiviral Particles: sc-44535-V.

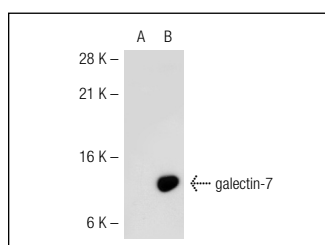
Molecular Weight of galectin-7: 14 kDa.

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

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



galectin-7 (H-60): sc-28253. 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.

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Try **galectin-7 (G-3): sc-137085** or **galectin-7 (H-8): sc-166222**, our highly recommended monoclonal alternatives to galectin-7 (H-60).