

# galectin-7 (H-8): sc-166222

## 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 19.

## 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  $\beta$ -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.

## CHROMOSOMAL LOCATION

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

## SOURCE

galectin-7 (H-8) is a mouse monoclonal 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<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

galectin-7 (H-8) is recommended for detection of galectin-7 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 shRNA Plasmid (h): sc-44534-SH and galectin-7 shRNA (h) Lentiviral Particles: sc-44534-V.

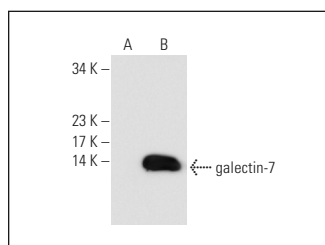
Molecular Weight of galectin-7: 14 kDa.

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

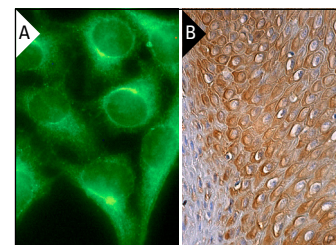
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



galectin-7 (H-8): sc-166222. 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 (H-8): sc-166222. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of squamous epithelial cells (B).

## SELECT PRODUCT CITATIONS

1. Croci, D.O., et al. 2014. Glycosylation-dependent lectin-receptor interactions preserve angiogenesis in anti-VEGF refractory tumors. *Cell* 156: 744-758.
2. Brito, L.N.S., et al. 2018. Immunohistochemical analysis of galectins-1, -3, and -7 in periapical granulomas, radicular cysts, and residual radicular cysts. *J. Endod.* 44: 728-733.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.