

galectin-1 (N-16): sc-19276

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, HepG2 and CEM cells.

CHROMOSOMAL LOCATION

Genetic locus: LGALS1 (human) mapping to 22q13.1; Lgals1 (mouse) mapping to 15 E1.

SOURCE

galectin-1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of galectin-1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-19276 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

galectin-1 (N-16) is recommended for detection of galectin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

galectin-1 (N-16) is also recommended for detection of galectin-1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for galectin-1 siRNA (h): sc-35441, galectin-1 siRNA (m): sc-37259, galectin-1 shRNA Plasmid (h): sc-35441-SH, galectin-1 shRNA Plasmid (m): sc-37259-SH, galectin-1 shRNA (h) Lentiviral Particles: sc-35441-V and galectin-1 shRNA (m) Lentiviral Particles: sc-37259-V.

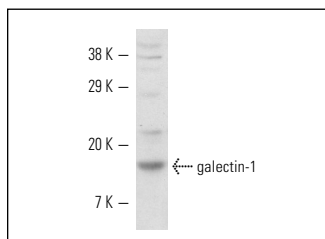
Molecular Weight of galectin-1: 14 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, NIH/3T3 whole cell lysate: sc-2210 or SK-MEL-28 cell lysate: sc-2236.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



galectin-1 (N-16): sc-19276. Western blot analysis of galectin-1 expression in NIH/3T3 whole cell lysate.

SELECT PRODUCT CITATIONS

- Martín, B., et al. 2008. Biological pathways contributing to organ-specific phenotype of brain metastatic cells. *J. Proteome Res.* 7: 908-920.
- Liu, X., et al. 2009. Proteomics-based identification of differentially expressed proteins including galectin-1 in the blood plasma of type 2 diabetic patients. *J. Proteome Res.* 8: 1255-1262.
- Reynolds, J.L., et al. 2012. Morphine and galectin-1 modulate HIV-1 infection of human monocyte-derived macrophages. *J. Immunol.* 188: 3757-3765.

RESEARCH USE

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

PROTOCOLS

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