

# galectin-12 (E-19): sc-67578

## BACKGROUND

Galectin-12, also designated galectin-related inhibitor of proliferation 1 in mouse, is a 314 amino acid protein encoded by the human gene LGALS12. Galectin-12 is a member of the galectin family consisting of  $\beta$ -galactoside-binding proteins with conserved carbohydrate recognition domains. Galectin-12 binds lactose and may participate in the apoptosis of adipocytes. This protein is preferentially expressed in peripheral blood leukocytes and adipocytes. Galectin-12 is induced by cell cycle block at the G<sub>1</sub> phase and causes G<sub>1</sub> arrest when overexpressed. The galectin-12 gene is expressed in mouse preadipo-cytes and is upregulated when preadipocytes undergo cell cycle arrest, concomitant with acquisition of the competence to undergo differentiation in response to adipogenic hormone stimulation. Galectin-12 is an adipocyte-expressed protein which is downregulated by various Insulin resistance-inducing hormones. As a result, galectin-12 may play a role in the pathogenesis of Insulin resistance.

## REFERENCES

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5. Liu, F.T., Patterson, R.J. and Wang, J.L. 2002. Intracellular functions of galectins. *Biochim. Biophys. Acta* 1572: 263-273.
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## CHROMOSOMAL LOCATION

Genetic locus: Lgals12 (mouse) mapping to 19 A.

## SOURCE

galectin-12 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of galectin-12 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-67578 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

galectin-12 (E-19) is recommended for detection of galectin-12 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-12 siRNA (m): sc-62363, galectin-12 shRNA Plasmid (m): sc-62363-SH and galectin-12 shRNA (m) Lentiviral Particles: sc-62363-V.

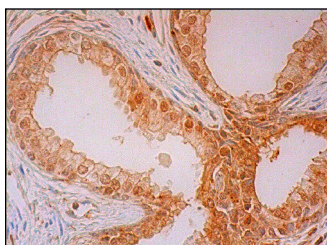
Molecular Weight of galectin-12: 35 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

## 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



galectin-12 (E-19): sc-67578. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing nuclear and cytoplasmic staining of glandular cells.

## 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) or our catalog for detailed protocols and support products.