

galectin-14 (C-12): sc-240486

BACKGROUND

Galectins are a family of soluble b-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-14, also known as Gal-14, Placental protein 13-like (PPL13), LGALS14 or Charcot-Leyden crystal protein 2 (CLC2), is a 139 amino acid protein belonging to the galectin family. Galectin-14, which possesses a putative carbohydrate recognition domain, localizes to nucleus and is highly expressed in placenta and eosinophil-rich cells. Galectin-14 may also be expressed at low levels in aorta and ovary, as well as fetal brain, spleen and liver. In response to allergens, galectin-14 is released from eosinophils into the lumen of the lung and is therefore thought to have an important role in eosinophil function and allergic inflammation.

REFERENCES

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3. Dunphy, J.L., et al. 2002. Isolation and characterization of a novel eosinophil-specific galectin released into the lungs in response to allergen challenge. *J. Biol. Chem.* 277: 14916-14924.
4. French, A.T., et al. 2008. Up-regulation of intelectin in sheep after infection with *Teladorsagia circumcincta*. *Int. J. Parasitol.* 38: 467-475.
5. Athanasiadou, S., et al. 2008. Proteomic approach to identify candidate effector molecules during the *in vitro* immune exclusion of infective *Teladorsagia circumcincta* in the abomasum of sheep. *Vet. Res.* 39: 58.
6. Young, A.R., et al. 2009. Functional characterization of an eosinophil-specific galectin, ovine galectin-14. *Glycoconj. J.* 26: 423-432.
7. Kemp, J.M., et al. 2009. The relationship between the rapid rejection of *Haemonchus contortus* larvae with cells and mediators in abomasal tissues in immune sheep. *Int. J. Parasitol.* 39: 1589-1594.
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CHROMOSOMAL LOCATION

Genetic locus: LGALS14 (human) mapping to 19q13.2.

SOURCE

galectin-14 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of galectin-14 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-240486 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

galectin-14 (C-12) is recommended for detection of galectin-14 of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other galectin family members.

Suitable for use as control antibody for galectin-14 siRNA (h): sc-97484, galectin-14 shRNA Plasmid (h): sc-97484-SH and galectin-14 shRNA (h) Lentiviral Particles: sc-97484-V.

Molecular Weight of galectin-14: 16 kDa.

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.

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.