

galectin-10 (C-15): sc-69478

BACKGROUND

Charcot-Leyden crystals are endogenous hexagonal bipyramidal crystals present in human tissues and secretions. Presence of Charcot-Leyden crystals correlates with the increased numbers of peripheral blood or tissue eosinophils that occur with parasitic and allergic processes. Galectin-10, also referred to as Charcot-Leyden crystal (CLC) protein, singularly makes up these crystals. Galectin-10, a member of the galectin family of β -Galactoside binding proteins that bind to S-type animal lectins, is expressed solely in eosinophilic and basophilic leukocytes. Galectin-10 may possess carbohydrate or IgE-binding activities, and it plays a functional role in the biology of inflammation. Expression of galectin-10 is transcriptionally induced by butyric acid.

REFERENCES

1. Gleich, G.J., et al. 1976. Comparative properties of the Charcot-Leyden crystal protein and the major basic protein from human eosinophils. *J. Clin. Invest.* 57: 633-640.
2. Weller, P.F., et al. 1982. Human eosinophil lysophospholipase: the sole protein component of Charcot-Leyden crystals. *J. Immunol.* 128: 1346-1349.
3. Calafat, J., et al. 1997. Ultrastructural localization of Charcot-Leyden crystal protein in human eosinophils and basophils. *Eur. J. Haematol.* 58: 56-66.
4. Dvorak, A.M., et al. 1997. Localization of Charcot-Leyden crystal protein phenotypes of human basophils stimulated by f-Met peptide. *Clin. Exp. Allergy* 27: 452-474.
5. Dyer, K.D., et al. 1997. The genomic structure of the human Charcot-Leyden crystal protein gene is analogous to those of the galectin genes. *Genomics* 40: 217-221.
6. Swaminathan, G.J., et al. 1999. Selective recognition of mannose by the human eosinophil Charcot-Leyden crystal protein (galectin-10): a crystallographic study at 1.8 Å resolution. *Biochemistry* 38: 13837-13843.

CHROMOSOMAL LOCATION

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

SOURCE

galectin-10 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of galectin-10 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-69478 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-10 (C-15) is recommended for detection of galectin-10 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), 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).

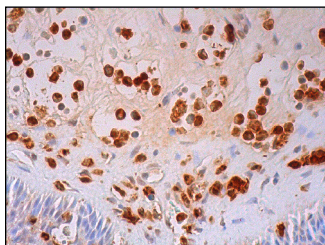
Suitable for use as control antibody for galectin-10 siRNA (h): sc-72087, galectin-10 shRNA Plasmid (h): sc-72087-SH and galectin-10 shRNA (h) Lentiviral Particles: sc-72087-V.

Molecular Weight of galectin-10: 17 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



galectin-10 (C-15): sc-69478. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing cytoplasmic and nuclear staining of inflammatory cells.

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.