## SANTA CRUZ BIOTECHNOLOGY, INC.

# galectin-10 (D-8): sc-374395



## 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 occurs 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  $\beta$ -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

- 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.
- Weller, P.F., et al. 1982. Human eosinophil lysophospholipase: the sole protein component of Charcot-Leyden crystals. J. Immunol. 128: 1346-1349.
- Calafat, J., et al. 1997. Ultrastructural localization of Charcot-Leyden crystal protein in human eosinophils and basophils. Eur. J. Haematol. 58: 56-66.
- 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.
- 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.

## **CHROMOSOMAL LOCATION**

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

#### SOURCE

galectin-10 (D-8) is a mouse monoclonal antibody raised against amino acids 65-104 mapping within an internal region of galectin-10 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG\_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

galectin-10 (D-8) is available conjugated to agarose (sc-374395 AC), 500  $\mu$ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-374395 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374395 PE), fluorescein (sc-374395 FITC), Alexa Fluor\* 488 (sc-374395 AF488), Alexa Fluor\* 546 (sc-374395 AF546), Alexa Fluor\* 594 (sc-374395 AF594) or Alexa Fluor\* 647 (sc-374395 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor\* 680 (sc-374395 AF680) or Alexa Fluor\* 790 (sc-374395 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

## **RESEARCH USE**

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

## APPLICATIONS

galectin-10 (D-8) is recommended for detection of galectin-10 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) 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.

Positive Controls: CCRF-CEM cell lysate: sc-2225, human spleen extract: sc-363779 or HL-60 whole cell lysate: sc-2209.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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.

#### DATA





galectin-10 (D-8): sc-374395. Western blot analysis of galectin-10 expression in human PBL (A) and CCRF-CEM (B) whole cell lysates and human spleen tissue extract (C). galectin-10 (D-8): sc-374395. Western blot analysis of galectin-10 expression in HL-60 whole cell lysate.

## SELECT PRODUCT CITATIONS

 Ouyang, X., et al. 2019. Expression of Nup93 is associated with the proliferation, migration and invasion capacity of cervical cancer cells. Acta Biochim. Biophys. Sin. 51: 1276-1285.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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