

10-3550: Monoclonal Antibody to human Galectin-3(Discontinued)

Clonality :	Monoclonal
Clone Name :	B2C10
Application :	IHC,FACS
Reactivity :	Human
Gene :	LGALS3
Gene ID :	3958
Uniprot ID :	P17931
Alternative Name :	MAC2, 35 kDa lectin, L-31, Laminin-binding protein, Lectin L-29, Mac-2 antigen
Isotype :	Mouse IgG1
Immunogen Information :	Recombinant human Galectin-3

Description

The monoclonal antibody B2C10 reacts with galectin-3, a 30 kDa protein. Galectin-3 is a member of the galectin family. The protein is composed of three domains: a small amino-terminal domain, a carboxyl-terminal carbohydrate recognition domain (CRD) and amino-terminal domain containing repeating elements. Galectin-3 is normally distributed in epithelia of many organs and various inflammatory cells, including macrophages, as well as dendritic cells and Kupffer cells. The expression of this lectin is up-regulated during inflammation, cell proliferation, cell differentiation and through trans-activation by viral proteins. The expression is also affected by neoplastic transformation: up-regulated in certain types of lymphomas and thyroid carcinoma, while down-regulated in other types of malignancies, such as colon, breast, ovarian and uterine carcinomas. Galectin-3 has been shown to function through both intracellular and extracellular actions. Related to its intracellular functions, galectin-3 has been identified as a component of heterogeneous nuclear ribonuclear protein (hnRNP), a factor in pre-mRNA splicing, and has been found to control cell cycle and prevent T cell apoptosis. On the other hand, this protein has also been demonstrated to function as extracellular molecule in activating various types of cells, including monocytes/macrophages, mast cells, neutrophils and lymphocytes. Galectin-3 has been shown to mediate cell-cell and cell-extracellular matrix interactions. The monoclonal antibody B2C10 inhibits the binding of ¹²⁵I-labeled galectin-3 to IgE coated on microtiter plates, the galectin-3's hemagglutination activity and galectin-3-induced superoxide production by human neutrophils. This inhibitory activity of B2C10 is probably the result of its disruption of the self-association process. The epitope of the monoclonal antibody B2C10 is found within the first 45 amino acids of galectin-3. The antibody B2C10 does not react with Galectin-3C and is cross reactive with mouse galectin-3.

Product Info

Amount :	3(Discontinued) / 500 µg
Content :	0.5 mg 0.2 µm filtered protein G purified antibody solution in PBS containing 0.1% bovine serum albumin.
Storage condition :	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.

Application Note

IHC: Endogenous peroxidase activity was blocked by incubation with 1.1% H₂O₂ for 10 minutes. Nonspecific binding of the second antibody was avoided by preincubation with normal rabbit serum for 15 minutes. Functional Studies: 10 mg/ml of B2C10, but not an isotype-matched control mAb, completely inhibited monocyte migration induced by galectin-3 at all concentrations examined. Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.