

Anti-Heparan Sulfate Proteoglycan (Large) / Perlecan HSPG2 Monoclonal Antibody

Catalog Number: M02029

Introduction

The clone MYG13 recognizes CD22 cell surface antigen, a 130-140kDa protein. The expression of CD22 is primarily restricted to the normal and neoplastic B cells but does not express on other hematopoietic cells. The initiation of expression of CD22 starts in the cytoplasm of pro-B and pre-B cells. Although CD22 is not expressed by plasma cells, it is abundantly expressed by the follicular mantle and marginal zone B-cells. Being a member of the immunoglobulin superfamily, CD22 serves as an adhesion receptor for sialic acid-bearing ligands expressed on erythrocytes and leukocytes. The role of CD22 in the activation of B-cells is primarily associated with tyrosine kinases mediated signal transduction pathways.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development by CapricoBio or are reported in the literature.

Application Information

Each lot of this antibody has been pre-titrated and tested by flow cytometric analysis of human PBMCs such that 5ul of this product is sufficient for staining of 1 million cells in a 100ul staining volume or 100ul of whole blood. It is recommended that antibody reactivity be empirically titrated for optimal performance in the application of interest.

About HSPG2

This monoclonal antibody specifically precipitates heterogeneous material of high MW, identified as perlecan, a major heparan-sulfate proteoglycan (HSPG) within all basement membranes and cell surfaces. It does not cross-react with laminin, fibronectin, or dermatan sulfate proteoglycan. Because of perlecan's strategic location and ability to store and protect growth factors, it has been strongly implicated in the control of tumor cell growth and metastatic behavior. Perlecan possesses angiogenic and growth-promoting attributes primarily by acting as a co-receptor for basic fibroblast growth factor (FGF-2). Suppression of perlecan causes substantial inhibition of neoplastic growth and neovascularization. Thus, perlecan is a potent inducer of neoplasm growth and angiogenesis in vivo and therapeutic interventions targeting this key modulator of tumor progression may improve neoplastic treatment.

Overview

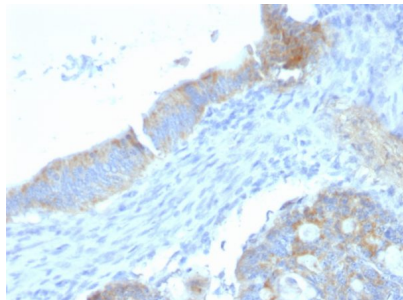
Product Name	Anti-Heparan Sulfate Proteoglycan (Large) / Perlecan HSPG2 Monoclonal Antibody
Reactive Species	Cow, Human, Monkey, Mouse, Pig, Fish
Description	Boster Bio Anti-Heparan Sulfate Proteoglycan (Large) / Perlecan HSPG2 Monoclonal Antibody (Catalog # M02029). Tested in Flow Cytometry, IF, IHC applications. This antibody reacts with Human, Monkey, Cow, Pig, Mouse, Fish.
Conjugate	APC
Application	Flow Cytometry, IF, IHC
Clonality	Monoclonal Clone: SPM255

Formulation	Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA at 1.0mg/ml.
Storage Instructions	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Host	Rat
Uniprot ID	P98160

Technical Details

Immunogen	Murine EHS laminin preparation
Predicted Reactive Species	Bovine
Isotype	IgG2a, kappa
Form	Liquid
Concentration	Purified antibody with BSA and azide at 200ug/ml
Purification	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Flow Cytometry (1-2ug/million cells)</p> <p>Immunofluorescence (1-2ug/ml)</p> <p>Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes)</p> <p>Optimal dilution for a specific application should be determined.</p>

Anti-Heparan Sulfate Proteoglycan (Large) / Perlecan HSPG2 Monoclonal Antibody (M02029) Images



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Anti-Heparan Sulfate Monoclonal Antibody (SPM255).

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Heparan Sulfate Proteoglycan (Large) / Perlecan HSPG2 Monoclonal Antibody