

Anti-GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Monoclonal Antibody

Catalog Number: M02393

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 HSP90B1

Recognizes a protein of 94kDa, which is identified as the glucose-regulated protein 94 (grp94) and also tumor rejection antigen (gp96). Grp94 shows a high degree of sequence homology with the heat shock protein 90 (hsp90). This monoclonal antibody is highly specific to grp94 and shows minimal cross-reaction with other members of the HSP90 family. Grp's are a class of proteins unresponsive to heat shock and are induced by glucose deprivation. Grp94 has been briefly studied as a prognostic factor in breast cancer.

Overview

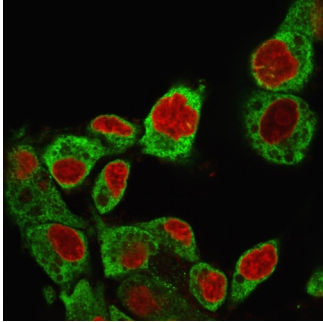
Product Name	Anti-GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Monoclonal Antibody
Reactive Species	Chicken, Cow, Dog, Guinea pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep, Horse, Xenopus laevis
Description	Boster Bio Anti-GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Monoclonal Antibody (Catalog # M02393). Tested in Flow Cytometry, IF, WB, IHC applications. This antibody reacts with Human, Monkey, Horse, Cow, Sheep, Pig, Rabbit, Dog, Rat, Mouse, Hamster, Guinea pig, Chicken, Xenopus laevis.
Conjugate	APC
Application	Flow Cytometry, IF, IHC, WB
Clonality	Monoclonal Clone: SPM249
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	P14625

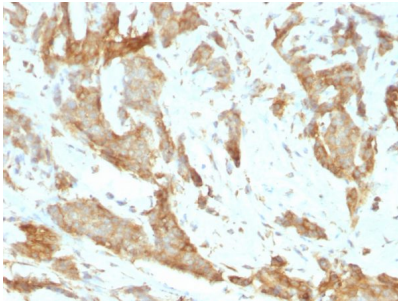
Technical Details

Immunogen	Purified glucose regulated protein 94 (grp94) from chicken oviducts
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>Western Blot (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&degC followed by cooling at RT for 20 minutes)</p> <p>Optimal dilution for a specific application should be determined.</p>

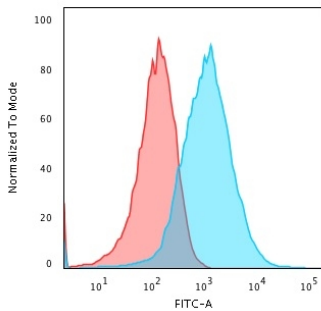
Anti-GRP94 / HSP90B1 (Endoplasmic Reticulum Marker) Monoclonal Antibody (M02393) Images



Immunofluorescence analysis of HePG2 cells labeling GRP94 with Anti-GRP94 Monoclonal Antibody (SPM249) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red).



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with Anti-GRP94 Monoclonal Antibody (SPM249).



Flow Cytometric analysis of PFA-fixed HePG2 cells using Anti-GRP94 Monoclonal Antibody (SPM249) followed by Goat anti-Rat- IgG-CF488 (Blue); Isotype Control (Red).

1 Publications Citing This Product

1. PubMed ID: 27738755, Ibutilide protects against cardiomyocytes injury via inhibiting endoplasmic reticulum and mitochondrial stress pathways

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