



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

HAMSTER ANTI MOUSE CD31: Azide Free

With HRP-conjugated secondary antibody

Catalog No.
DS-MB-00604

Species:
Mouse

Isotype:
Hamster IgG

Description

Cell adhesion molecules are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are thought to play an important role in embryogenesis and development. Neuronal cell adhesion molecule (NCAM) expression is observed in a variety of human tumors including neuroblastomas, rhabdomyosarcomas, Wilm's tumors, Ewing's sarcomas and some primitive myeloid malignancies. The intracellular adhesion molecule-1 (ICAM-1), also referred to as CD54, is an integral membrane protein of the immunoglobulin superfamily and recognizes the B2 α 1 and B2 α M Integrins. PECAM-1 (platelet/endothelial cell adhesion molecule-1), also referred to as CD31, is a glycoprotein expressed on the cell surfaces of monocytes, neutrophils, platelets and a subpopulation of T cells. VCAM-1 (vascular cell adhesion molecule-1) was first identified as an adhesion molecule induced on human endothelial cells by inflammatory cytokines such as IL-1, tumor necrosis factor (TNF) and lipopolysaccharide (LPS). The KALIG gene encodes a nerve cell adhesion molecule (NCAM)- like protein and is deleted in 66% of patients with Kallmann's syndrome, anosmia with secondary hypogonadism.

Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting			•	
Immunohistology - frozen			•	
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry	•			0.1ug/ml
Immunofluorescence staining			•	
Functional Assays	•			

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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Preparation

The IgG fraction of tissue culture supernatant was purified by Caprylic Acid Precipitation.

Specificity

Ds-MB-00604 reacts with the 130-140kD protein, PECAM-1 found on mouse monocytes, platelets, granulocytes and endothelial cells. Clone 2H8 effectively inhibits transmigration of activated polymorphonuclear cells and monocytes across the endothelium. In a mouse model for acute peritonitis clone - 2H8 blocks acute inflammation. For Flowcytometry: Use 5ul of the suggested working dilution to label 100ul of whole blood.

Reconstitution

Supplied as 500 µg of purified antibody. It is reconstituted with 1ml of sterile PBS. Its final concentration is 0.5 mg/ml. **Please avoid freeze-thaw cycles.**

Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

Storage

Store at -20°C only. Shipped at 4°C and minimize freezing and thawing when use.

Reference

Xie, Y. & Muller, W.A. (1993) Molecular cloning and adhesive properties of murine platelet/endothelial cell adhesion molecule 1. Proc. Natl. Acad. Sci. 90: 5569-5573.

Bogen, S. *et al.* (1994) Monoclonal antibody to murine PECAM-1 (CD31) blocks acute inflammation in vivo. J. Exp. Med. 179: 1059-1064.

Newman, P.J. *et al.* (1992) Activation-dependent changes in human platelet PECAM-1: phosphorylation, cytoskeletal association, and surface membrane redistribution. J. Cell Biol. 119: 239-246.

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