

Product datasheet

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ARG23457 anti-CD11b + CD11c antibody [OX-42] (PE)

Package: 50 tests Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [OX-42] recognizes CD11b + CD11c

Mouse anti Rat CD11b, clone OX-42, recognizes rat CD11b, also known as integrin alpha-M, the receptor for the iC3b component of complement. CD11b is a 1151 amino acid single pass type 1 transmembrane glycoprotein posessing a single vWFA domain and multiple FG-GAP repeats. CD11b is expressed on most macrophages, including resident and activated peritoneal macrophages and Kupffer cells and around 35% of alveolar macrophages. The antibody also labels dendritic cells, granulocytes and microglia in the brain (Robinson et al.1986). Mouse anti Rat CD11b, clone OX-42 is reported to inhibit complement mediated rosettes (Robinson et al.1986) as well as inhibit myelin binding and

uptake (van der Laan et al.1996).

Tested Reactivity Rat

Tested Application FACS

Host Mouse

Clonality Monoclonal

Clone OX-42 Isotype IgG2a

Target Name CD11b + CD11c

Species Rat

Immunogen Resident rat peritoneal macrophages.

Conjugation PE

Alternate Names MAC1A; CR3A; CR-3 alpha chain; Cell surface glycoprotein MAC-1 subunit alpha; Integrin alpha-M;

MAC-1; CD11 antigen-like family member B; Leukocyte adhesion receptor MO1; MO1A; SLEB6;

Neutrophil adherence receptor; CD antigen CD11b; CD11B

Application Instructions

Application table

Application Dilution

FACS Neat - 1:20

Application Note FACS: Use 10 μ l of the suggested working dilution to label 10^6 cells in 100 μ l.

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

Properties

Form Liquid

Purification Purified by ion exchange chromatography.

Buffer PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose.

Preservative 0.09% Sodium azide

Stabilizer 1% BSA and 5% Sucrose

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol ITGAM

Gene Full Name integrin, alpha M (complement component 3 receptor 3 subunit)

Background CD11b (integrin alpha M chain): Integrins are heterodimeric integral membrane proteins composed of

an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form a leukocyte-specific integrin referred to as macrophage receptor 1 ('Mac-1'), or inactivated-C3b (iC3b) receptor 3 ('CR3'). The alpha M beta 2 integrin is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles. Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Mar 2009]

Function CD11b: Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes,

macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens (PubMed:9558116, PubMed:20008295). It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). May regulate phagocytosis-induced apoptosis in extravasated neutrophils. May play a role in mast cell development. Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs

during brain development. [UniProt]

Highlight Related products:

CD11 antibodies; CD11 ELISA Kits; CD11 Duos / Panels; Anti-Mouse IgG secondary antibodies;

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Calculated Mw 127 kDa