ARG23481
anti-CD11b antibody [ED8]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [ED8] recognizes CD11b Mouse anti Rat CD11b antibody, clone ED8 recognizes a membrane antigen on rat macrophages, monocytes, dendritic cells and granulocytes. It also recognizes small ramified microglia in the central nervous system. No other cell types are positive for ED8. The recognized antigen is a heterodimer consisting of ~160 and ~95 kDa, belonging to the family of adhesion molecules CD11b/CD18, also designated as Mac-1 antigen or CR3. Mouse anti Rat CD11b antibody, clones ED7 and ED8 may recognize closely related epitopes on the same molecule. Both clones ED7 and ED8 induce homotypic aggregation of granulocytes (Drasković-Pavlović et al. 1999).
Tested Reactivity	Rat
Tested Application	IHC-Fr
Host	Mouse
Clonality	Monoclonal
Clone	ED8
Isotype	IgG1
Target Name	CD11b
Species	Rat
Immunogen	Rat spleen cell homogenate with Freund's complete adjuvant.
Conjugation	Un-conjugated
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
IHC-Fr	Assay-dependent

Application Note: IHC-Fr: The epitope recognized by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Arigo recommends the use of acetone fixation for frozen sections.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. 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: CD11b antibodies; CD11b Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: New antibody panels and duos for Tumor immune microenvironment Anti-SerpinB9 therapy, a new strategy for cancer therapy
Research Area	MDSC Marker antibody; Myeloid-derived suppressor cell antibody
Calculated Mw	127 kDa