ARG23377
anti-CD11b antibody [CA16.3E10]

Package: 500 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [CA16.3E10] recognizes CD11b Mouse anti Dog CD11b antibody, clone CA16.3E10 is a monoclonal antibody recognising the canine CD11b cell surface antigen, a member of the alpha integrin family. CD11b forms one of the possible alpha chains of the canine leukocyte adhesion complexes (LeuCAMs), these contain a common 95 kDa β chain (CD18) non-covalently bound to either a 150 kDa (CD11c), 165 kDa (CD11b) or 180 kDa (CD11a) α chain (Moore et al. 1990. The CD11/CD18 complex is also known as the CR3 receptor.Canine CD11b is expressed by granulocytes, monocytes, NK cells and some macrophages. Mouse anti Dog CD11b (CA16.3E10) has been used tio evaluate the effect of anaesthetic administration of CD11b expression on canine neutrophils (Maeda et al. 2010) demonstrating attenuation of CD11b expression at high concentrations administered lidocaine hydrochloride and reduced adhesion of neutrophils to endothelium.
Tested Reactivity	Bov, Cat, Dog, Goat, Pig
Tested Application	FACS, IHC-Fr, IP
Host	Mouse
Clonality	Monoclonal
Clone	CA16.3E10
Isotype	IgG1
Target Name	CD11b
Species	Dog
Immunogen	Affinity purified beta-2 integrins from splenic lysate
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
FACS	Neat
IHC-Fr	Assay-dependent
IP	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.
FACS: Use 10 µl of the suggested working dilution to label 10^6 cells or 100 µl whole blood.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

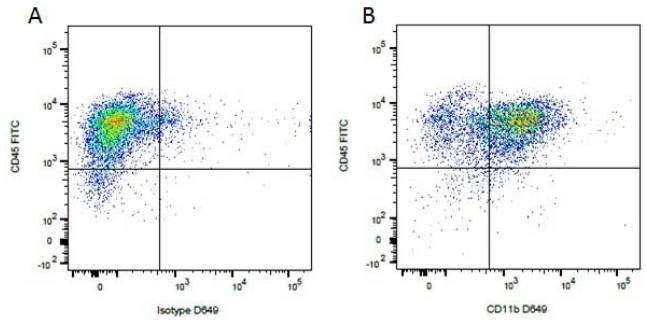
Properties

Form	Liquid
Purification	Tissue Culture Supernatant.
Buffer	PBS and 0.1% Sodium azide.
Preservative	0.1% Sodium azide
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

Images



ARG23377 anti-CD11b antibody [CA16.3E10] FACS image

Flow Cytometry: Figure A. FITC conjugated Mouse anti Canine CD45 and purified Mouse IgG1 isotype control detected with Goat anti Mouse IgG1 DyLight 649. Figure B. FITC conjugated Mouse anti Canine CD45 and ARG23377 anti-CD11b antibody [CA16.3E10] detected with Goat anti Mouse IgG1 DyLight 649. All experiments performed on red cell lysed Canine blood gated on mononuclear cells.