EXBIO Antibodies

PRODUCT DATA SHEET

11-595-C100

Monoclonal Antibody to CD11b (mouse) Purified Antibody (0.1 mg)

Clone:	M1/70
Isotype:	Rat IgG2b
Specificity:	The rat monoclonal antibody M1/70 detects CD11b (integrin alphaM subunit), a type I transmembrane protein mainly expressed on monocytes/macrophages, granulocytes and NK-cells, which associates with CD18 to form Mac-1 integrin that plays important role in cell-cell interactions.
Regulatory Status:	RUO
Immunogen:	B10 mouse spleen cells enriched for T cells
Species Reactivity:	Human, Non-Human Primates, Mouse, Rabbit
Application:	Flow Cytometry Recommended dilution:1 µg/ml Immunoprecipitation Immunohistochemistry (frozen sections) Functional Application In vitro blocking of CD11b
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-G affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8ºC. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD11b (integrin alphaM subunit) is a 165-170 kDa type I transmembrane glycoprotein that non-covalently associates with integrin beta2 subunit (CD18); expression of the CD11b chain on the cell surface requires the presence of the CD18 antigen. CD11b/CD18 integrin (Mac-1, CR3) is highly expressed on NK cells, neutrophils, monocytes and less on macrophages. CD11b/CD18 integrin is implicated in various adhesive interactions of monocytes, macrophages and granulocytes, facilitating their diapedesis, as well as it mediates the uptake of complement coated particles, serving as a receptor for the iC3b fragment of the third complement component.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz

References:

*Springer T, Galfrè G, Secher DS, Milstein C: Monoclonal xenogeneic antibodies to murine cell surface antigens: identification of novel leukocyte differentiation antigens. Eur J Immunol. 1978 Aug;8(8):539-51.
*Ault KA, Springer TA: Cross-reaction of a rat-anti-mouse phagocyte-specific monoclonal antibody (anti-Mac-1) with human monocytes and natural killer cells. J Immunol. 1981 Jan;126(1):359-64.
*Sanchez-Madrid F, Simon P, Thompson S, Springer TA: Mapping of antigenic and functional epitopes on the alpha- and beta-subunits of two related mouse glycoproteins involved in cell interactions, LFA-1 and Mac-1. J Exp Med. 1983 Aug 1;158(2):586-602.
*Whiteland JL, Nicholls SM, Shimeld C, Easty DL, Williams NA, Hill TJ: Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 1995 Mar;43(3):313-20.
*Dembic Z, Schenck K, Bogen B: Dendritic cells purified from myeloma are primed with tumor-specific antigen (idiotype) and activate CD4+ T cells. Proc Natl Acad Sci U S A. 2000 Mar 14;97(6):2697-702.
*Welt FG, Edelman ER, Simon DI, Rogers C: Neutrophil, not macrophage, infiltration precedes neointimal thickening in balloon-injured arteries. Arterioscler Thromb Vasc Biol. 2000 Dec;20(12):2553-8.
*Zhang Y, McCormick LL, Desai SR, Wu C, Gilliam AC: Murine sclerodermatous graft-versus-host disease, a model for human scleroderma: cutaneous cytokines, chemokines, and immune cell activation. J Immunol. 2002 Mar 15;168(6):3088-98.
*Brickson S, Ji LL, Schell K, Olabisi R, St Pierre Schneider B, Best TM: M1/70 attenuates blood-borne neutrophil oxidants, activation, and myofiber damage following stretch injury. J Appl Physiol. 2003 Sep;95(3):969-76.
*Leon F, Contractor N, Fuss I, Marth T, Lahey E, Iwaki S, la Sala A, Hoffmann V, Strober W, Kelsall BL: Antibodies to complement receptor 3 treat established inflammation in murine models of colitis and a novel model of psoriasiform dermatitis. J Immunol. 2006 Nov 15;177(10):6974-82.
*Takagi H, Numazaki M, Kajiwara T, Abe Y, Ishii M, Kato C, Kojima N: Cooperation of specific ICAM-3 grabbing nonintegrin-related 1 (SIGNR1) and complement receptor type 3 (CR3) in the uptake of oligomannose-coated liposomes by macrophages. Glycobiology. 2009 Mar;19(3):258-66.
*And many other.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz