

CD11b Monoclonal Antibody (ICRF44)

Catalog NumberMA5-16725

Product data sheet

Details		Species Reactivity	
Size	1 mg	Species reactivity	Human, Non-human primate
Host/Isotope	Mouse / IgG1	Published species	Not Applicable
Class	Monoclonal	Tested Applications	
Type	Antibody	Flow Cytometry (Flow)	Dilution *1:50-1:100
Clone	ICRF44	Functional Assay (FN)	Assay-dependent
Immunogen	Rheumatoid synovial cells and human monocytes	Immunohistochemistry (Frozen) (IHC (F))	1:50-1:500
Conjugate	Unconjugated	Immunoprecipitation (IP)	Assay-dependent
Form	Liquid	Published Applications	
Concentration	1 mg/mL	Flow Cytometry (Flow)	See 1 publications below
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	

Product specific information

This antibody does not react with cat. The epitope recognized by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. We recommend the use of acetone fixation for frozen sections. A suggested positive control for immunohistochemical applications is human tonsil.

Background/Target Information

CD11b (integrin alpha-M, ITGAM, integrin alpha-X, ITGAX) is a 165 kDa adhesion molecule that associates non-covalently with integrin beta-2 (CD18). The CD11b/CD18 heterodimeric complex is also known as integrin alpha-M beta-2, Mac-1, and CR3 (complement receptor 3). CD11b is expressed on the surface of monocytes/macrophages, granulocytes, activated lymphocytes, a subset of NK cells, a subset of dendritic cells, and microglia in the brain. CD11b/CD18 functions as the receptor for ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), CD14, CD50, CD23, heparin, iC3b, fibrinogen, and Factor X -these adhesions are critical for cell-cell and cell-matrix interactions. CD11b is expressed on 8% of spleen cells, 44% of bone marrow cells, and less than 1% of thymocytes, and is commonly used as a microglial marker in nervous tissue. The expression of CD11b increases during monocyte maturation and expression levels vary on tissue macrophages. Further, peritoneal macrophages are reported to express higher levels of CD11b than splenic macrophages. Diseases associated with CD11b dysfunction include systemic lupus erythematosus 6 and ITGAM-related susceptibility to systemic lupus erythematosus.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

PubMed References For CD11b Monoclonal Antibody (ICRF44)

1 Flow Cytometry References

Species / Dilution	Summary
	MA5-16725 was used in flow cytometry to develop a xenotransplantation system using human hematopoietic stem cells and mice
Not Applicable / Not Cited	<p>Nature protocols ( 2009; 3: 1932)</p> <p><b>"In vivo evaluation of human hematopoiesis through xenotransplantation of purified hematopoietic stem cells from umbilical cord blood."</b></p> <p>Author(s):Park CY,Majeti R,Weissman IL</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/nprot.2008.194">http://dx.doi.org/10.1038/nprot.2008.194</a></p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE; (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.