Datasheet: MCA2293GA

BATCH NUMBER 1607

Description:	RAT ANTI MOUSE CD107b
Specificity:	CD107b
Other names:	MAC-3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	M3/84
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)**Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code BUF09) for this purpose.**

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Glycoproteins purified from mouse peritoneal macrophage membranes.
External Database Links	**UniProt:** P17047 Related reagents **Entrez Gene:** 16784 Lamp2 Related reagents
Synonyms	Lamp-2
RRID	AB_2134762
Fusion Partners	Spleen cells from immunised Lewis rats were fused with cells of the mouse P3-NSI/1-Ag4-1 myeloma cell line.
Specificity	**Rat anti Mouse CD107b antibody, clone M3/84** recognizes murine CD107b, also known as MAC-3 and LAMP-2. CD107b is a transmembrane glycoprotein that is associated with lysosomal membranes and is primarily expressed on mononuclear phagocytes. Expression of CD107b does vary between cell populations and the molecular weight of CD107b can vary between ~92-120 kDa. CD107b is involved in aspects of leucocyte adhesion (Kannan *et al.* 1996). The expression of CD107b is predominantly cytoplasmic - flow cytometry results are improved by the use of a membrane permeabilisation procedure prior to staining.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Springer, T.A. (1981) Monoclonal antibody analysis of complex biological systems. Combination of cell hybridization and immunoadsorbents in a novel cascade procedure and its application to the macrophage cell surface. J Biol Chem. 256 (8): 3833-9. 2. Flotte, T.J. *et al.* (1983) Dendritic cell and macrophage staining by monoclonal antibodies in tissue sections and epidermal sheets. Am J Pathol. 111 (1): 112-24. 3. Ho, M.K. & Springer, T.A. (1983) Tissue distribution, structural characterization, and biosynthesis of Mac-3, a macrophage surface glycoprotein exhibiting molecular weight heterogeneity. J Biol Chem. 258 (1): 636-42. 4. Ulrich, R. *et al.* (2010) Machine learning approach identifies new pathways associated with demyelination in a viral model of multiple sclerosis. J Cell Mol Med. 14 (1-2): 434-48. 5. Amirbekian, V. *et al.* (2007) Detecting and assessing macrophages in vivo to evaluate atherosclerosis noninvasively using molecular MRI. Proc Natl Acad Sci U S A. 104: 961-6. 6. Fan, D. *et al.* (2014) Differential role of TIMP2 and TIMP3 in cardiac hypertrophy,

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Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing

	as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2293GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC

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