Datasheet: MCA1322EL

Description:	RAT ANTI MOUSE CD204:Low Endotoxin
Specificity:	CD204
Other names:	SCAVENGER RECEPTOR TYPE I/II
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	2F8
Isotype:	IgG2b
Quantity:	0.5 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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
Immunohistology - Resin		▪		
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting (2)	▪			
Functional Assays	▪			

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)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

(2)**This product recognises CD204 in J774 cells under non-reduced conditions only.**

Target Species	Mouse
Species Cross Reactivity	Reacts with: Pig, Channel catfish **N.B.** Antibody reactivity and working conditions may vary between species.
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	None present

Stabilisers	
Carrier Free	Yes
Endotoxin Level	<0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Raw 264 cell line.
External Database Links	**UniProt:** P30204 Related reagents **Entrez Gene:** 20288 Msr1 Related reagents
Synonyms	Scvr
Fusion Partners	Spleen cells from immunised AO rats were fused with cells of the Y3 rat myeloma cell line.
Specificity	**Rat anti Mouse CD204 antibody, clone 2F8** recognizes the murine scavenger receptor class A (SRA), type I and II, also known as CD204. CD204 is expressed by tissue macrophages and functions both as an endocytic receptor for lipoproteins and as an adhesion receptor for macrophages binding to ligand rich tissues e.g. atherosclerotic lesions. Clone 2F8 inhibits the uptake of acetylated low-density lipoproteins and also inhibits divalent cation independent adhesion (Fraser *et al.* 1993). Rat anti Mouse CD204 antibody, clone 2F8 recognizes an epitope within SRA that is polymorphic in the SRA from C57BL/6 mice. Clone 2F8 is therefore unsuitable for use with the C57BL/6 mouse strain (Daugherty *et al.* 2000).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Fraser, I. *et al.* (1993) Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor. Nature. 364 (6435): 343-6. 2. de Villiers, W.J. *et al.* (1994) Macrophage-colony-stimulating factor selectively enhances macrophage scavenger receptor expression and function. J Exp Med. 180 (2): 705-9. 3. Hughes, D.A. *et al.* (1995) Murine macrophage scavenger receptor: in vivo expression and function as receptor for macrophage adhesion in lymphoid and non-lymphoid organs. Eur J Immunol. 25 (2): 466-73. 4. Gordon, S. (1995) The macrophage. Bioessays. 17 (11): 977-86. 5. Hughes, D.A. *et al.* (1994) Murine M phi scavenger receptor: adhesion function and expression. Immunol Lett. 43 (1-2): 7-14. 6. Aid, S. *et al.* (2008) Neuroinflammatory response to lipopolysaccharide is exacerbated in mice genetically deficient in cyclooxygenase-2. J Neuroinflammation. 5: 17. 7. Daugherty, A. *et al.* (2000) Polymorphism of class A scavenger receptors in C57BL/6 mice. J Lipid Res. 41 (10): 1568-77. 8. Moldenhauer, L.M. *et al.* (2010) GM-CSF is an essential regulator of T cell activation competence in uterine dendritic cells during early pregnancy in mice. J Immunol. 185 (11): 7085-96. 9. Luechtenborg, B. *et al.* (2008) Function of scavenger receptor class A type I/II is not important for smooth muscle foam cell formation. Eur J Cell Biol. 87: 91-9.

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Storage

Store at -20^{o}C only.

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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649, DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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