

## Datasheet: MCA1322

<b>Description:</b>	RAT ANTI MOUSE CD204
<b>Specificity:</b>	CD204
<b>Other names:</b>	SCAVENGER RECEPTOR TYPE I/II
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2F8
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.25 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](http://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)	▪			

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.**

<b>Target Species</b>	Mouse
<b>Species Cross Reactivity</b>	Reacts with: Pig, Channel catfish <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Raw 264 cell line.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P30204</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">20288</a> Msr1   <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Scvr
<b>Fusion Partners</b>	Spleen cells from immunised AO rats were fused with cells of the Y3 rat myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD204 antibody, clone 2F8</b> 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 (<a href="#">Fraser et al. 1993</a>).</p> <p>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 (<a href="#">Daugherty et al. 2000</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Fraser, I. <i>et al.</i> (1993) Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor. <a href="#">Nature. 364 (6435): 343-6.</a></li> <li>de Villiers, W.J. <i>et al.</i> (1994) Macrophage-colony-stimulating factor selectively enhances macrophage scavenger receptor expression and function. <a href="#">J Exp Med. 180 (2): 705-9.</a></li> <li>Hughes, D.A. <i>et al.</i> (1995) Murine macrophage scavenger receptor: in vivo expression and function as receptor for macrophage adhesion in lymphoid and non-lymphoid organs. <a href="#">Eur J Immunol. 25 (2): 466-73.</a></li> <li>Gordon, S. (1995) The macrophage. <a href="#">Bioessays. 17 (11): 977-86.</a></li> <li>Hughes, D.A. <i>et al.</i> (1994) Murine M phi scavenger receptor: adhesion function and expression. <a href="#">Immunol Lett. 43 (1-2): 7-14.</a></li> <li>Aid, S. <i>et al.</i> (2008) Neuroinflammatory response to lipopolysaccharide is exacerbated in mice genetically deficient in cyclooxygenase-2. <a href="#">J Neuroinflammation. 5: 17.</a></li> <li>Daugherty, A. <i>et al.</i> (2000) Polymorphism of class A scavenger receptors in C57BL/6 mice. <a href="#">J Lipid Res. 41 (10): 1568-77.</a></li> <li>Moldenhauer, L.M. <i>et al.</i> (2010) GM-CSF is an essential regulator of T cell activation competence in uterine dendritic cells during early pregnancy in mice. <a href="#">J Immunol. 185 (11): 7085-96.</a></li> <li>Luechtenborg, B. <i>et al.</i> (2008) Function of scavenger receptor class A type I/II is not important for smooth muscle foam cell formation. <a href="#">Eur J Cell Biol. 87: 91-9.</a></li> <li>Sever-Chroneos, Z. <i>et al.</i> (2011) Surfactant Protein A (SP-A)-mediated Clearance of <i>Staphylococcus aureus</i> Involves Binding of SP-A to the Staphylococcal Adhesin Eap and the Macrophage Receptors SP-A Receptor 210 and Scavenger Receptor Class A. <a href="#">J Biol Chem. 286: 4854-70.</a></li> </ol>

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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.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®649</a> , <a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

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