

Datasheet: MCA1322T

Description:	RAT ANTI MOUSE CD204
Specificity:	CD204
Other names:	SCAVENGER RECEPTOR TYPE I/II
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2F8
Isotype:	IgG2b
Quantity:	25 µg

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.

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

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) Special conditions apply – see(*)

Target Species	Mouse
Species Cross Reactivity	Reacts with: Pig 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 Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Raw 264 cell line
Synonyms	Scvr
Fusion Partners	Spleen cells from immunised AO rats were fused with cells of the Y3 rat myeloma cell line.
Specificity	<p>MCA1322 recognises 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 (1). We recommend the use of MCA1322EL for this purpose.</p> <p>N.B. Recent research shows that clone 2F8 recognises 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 (7).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Western Blotting	* MCA1322T recognises CD204 in J774 cells under non-reduced conditions only.
References	<ol style="list-style-type: none"> Fraser, I.P. <i>et al.</i> (1993) Divalent cation-independent macrophage adhesion inhibited by monoclonal antibody to murine scavenger receptor. Nature364:343-346. de Villiers, W.J.S. <i>et al.</i> (1994) Macrophage-colony-stimulating factor selectively enhances macrophage scavenger receptor expression and function J.Exp.Med.180:705-709. Hughes, D.A. <i>et al.</i> (1995) Murine Macrophage Scavenger Receptor: <i>in vivo</i> expression and function as receptor for macrophage adhesion in lymphoid and non-lymphoid organs. Eur.J.Immunol.25:466-473. Bell, M.D. <i>et al.</i> (1994) Upregulation of the macrophage scavenger receptor in response to different forms of injury in the CNS. J.Neurocytol.23:605-613. Hughes, D.A. <i>et al.</i> (1994) Murine Macrophage Scavenger Receptor: Adhesion function and Expression. Imm.Letts.43:7-14. Rosen, H. and Hughes, D.A. (1995) Assays of Myeloid Cell Function: Migration and adhesion <i>in vivo</i>. Weir Handbook of Experimental Immunology. London, Blackwell Scientific Publications. 5th, ed. In Press. Daugherty, A. <i>et al.</i> (2000) Polymorphism of class A scavenger receptors in C57BL/6 mice. J.LipidRes41:1568-1577. 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. JImmunol.185:7085-7096. 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. EurJCellBiol.87:91-9. Sever-Chroneos, Z. <i>et al.</i> (2011) Surfactant Protein A (SP-A)-mediated Clearance of Staphylococcus aureus Involves Binding of SP-A to the Staphylococcal Adhesin Eap and the Macrophage Receptors SP-A Receptor 210 and Scavenger Receptor Class A. JBiolChem.286:4854-70. Yang, C.N. <i>et al.</i> (2011) Mechanism mediating oligomeric Aβ clearance by naïve primary microglia. NeurobiolDis.Jan8.[Epubaheadofprint] Hald, A. <i>et al.</i> (2011) MMP9 is protective against lethal inflammatory mass lesions in the mouse colon. Dis ModelMech.4:212-27. Swain, S.D. <i>et al.</i> (2011) Pneumocystis infection in an immunocompetent host can promote collateral sensitization to respiratory antigens. InfectImmune.Feb22.[Epubaheadofprint] Nikolic, D. <i>et al.</i> (2011) SR-A ligand and M-CSF dynamically regulate SR-A expression and function in primary macrophages via p38 MAPK activation. BMCIimmunol.12:37.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
Shelf Life	18 months from date of despatch.

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