# Datasheet: MCA497 BATCH NUMBER 1702

Description:	RAT ANTI MOUSE F4/80
Specificity:	F4/80
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	CI:A3-1
lsotype:	lgG2b
Quantity:	2 ml

## **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 <u>www.bio-rad-antibodies.com/protocols</u>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat - 1/10
Immunohistology - Frozen				
Immunohistology - Paraffin (1)	•			
Immunohistology - Resin				
ELISA			•	
Immunoprecipitation	-			
Western Blotting			•	
Immunofluorescence	•			
Radioimmunoassays				
Immuno-electron Microscopy				

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) Rat anti Mouse F4/80 antibody, clone A3-1 requires pre-treatment of paraffin sections prior to staining. Proteinase K is recommended for tissues fixed for less than 24 hours. Citrate buffer pH 6.0 is recommended for tissues fixed for more than 24 hours. Please view the protocol at <u>Antigen Retrieval Techniques</u>.

Target Species Mouse

Product Form	Tissue Culture Supernatant - liquid
Preparation	Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 5-10% foetal calf serum
Buffer Solution	None present
Preservative Stabilisers	0.09% Sodium Azide
Immunogen	Thioglycollate stimulated peritoneal macrophages from C57BL/6 mice.
External Database Links	UniProt: <u>Q61549</u> <u>Related reagents</u> Entrez Gene: <u>13733</u> Emr1 <u>Related reagents</u>
Synonyms	Gpf480
RRID	AB_2335599
Fusion Partners	Spleen cells from immunised HOB2 rats were fused with cells of the mouse NS1 myeloma cell line.
Specificity	<b>Rat anti mouse F4/80 antibody, clone CI:A3-1</b> recognizes the <u>murine F4/80 antigen</u> , a ~160 kDa cell surface glycoprotein member of the EGF-TM7 family of proteins which shares 68% overall amino acid identity with human EGF module-containing mucin-like hormone receptor 1 (EMR1).
Specificity	~160 kDa cell surface glycoprotein member of the EGF-TM7 family of proteins which shares 68% overall amino acid identity with human EGF module-containing mucin-like hormone receptor 1 (EMR1). Expression of F4/80 is heterogeneous and is modulated during macrophage maturation and activation. The F4/80 antigen is expressed on a wide range of mature tissue macrophages including Kupffer cells, Langerhans cells, microglia, macrophages located in the gut lamina propria, peritoneal cavity, lung, thymus, bone marrow stroma and macrophages in the red pulp of the spleen (Hume, <i>et al.</i> 1984). F4/80 antigen is also expressed on a subpopulation of dendritic cells but is absent from macrophages located in T cell areas of the spleen and lymph node (Gordon, <i>et al.</i> 1994). The ligands and biological functions of the F4/80 antigen have not been fully determined but a role for F4/80 in the generation of efferent CD8+ve regulatory T cells is proposed (Lin, <i>et al.</i> 2005)
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Specificity	<ul> <li>~160 kDa cell surface glycoprotein member of the EGF-TM7 family of proteins which shares 68% overall amino acid identity with human EGF module-containing mucin-like hormone receptor 1 (EMR1).</li> <li>Expression of F4/80 is heterogeneous and is modulated during macrophage maturation and activation. The F4/80 antigen is expressed on a wide range of mature tissue macrophages including Kupffer cells, Langerhans cells, microglia, macrophages located in the gut lamina propria, peritoneal cavity, lung, thymus, bone marrow stroma and macrophages in the red pulp of the spleen (Hume, <i>et al.</i> 1984). F4/80 antigen is also expressed on a subpopulation of dendritic cells but is absent from macrophages located in T cell areas of the spleen and lymph node (Gordon, <i>et al.</i> 1994). The ligands and biological functions of the F4/80 antigen have not been fully determined but a role for F4/80 in the generation of efferent CD8+ve regulatory T cells is proposed (Lin, <i>et al.</i> 2005)</li> <li>Rat anti mouse F4/80 antibody, clone CI:A3-1 modulates cytokine levels released in</li> </ul>

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	Adipose Tissue Inflammation and Promotes Macrophage Anti- Nutr Biochem. May 5;108764 [Epub ahead of print].	inflammatory Activation. J
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 repear as this may denature the antibody. Should this product contain recommend microcentrifugation before use.	
Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10053 available at: https://www.bio-rad-antibodies.com/SDS/MCA497 10053	
Regulatory	For research purposes only	

## **Related Products**

#### **Recommended Secondary Antibodies**

Goat Anti Rat IgG2b (STAR114...)HRPGoat Anti Rat IgG (H/L) (305001...)HRPGoat Anti Rat IgG (STAR69...)FITCGoat Anti Rat IgG (STAR73...)RPE

Worldwide

North & South	Tel: +1 800 265 7376	Worl
America	Fax: +1 919 878 3751	
	Email: antibody_sales_us@bio-rad.co	

Tel: +44 (0)1865 852 700 **Europe** Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_de@bio-rad.com To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M368075:200529'

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