Datasheet: MCA497RT

Description:	RAT ANTI MOUSE F4/80
Specificity:	F4/80
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Cl:A3-1
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. 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	▪			
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 Antigen Retrieval Techniques.**

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	Thioglycollate stimulated peritoneal macrophages from C57BL/6 mice.
External Database Links	**UniProt:** Q61549 Related reagents **Entrez Gene:** 13733 Emr1 Related reagents
Synonyms	Gpf480
RRID	AB_1102558
Fusion Partners	Spleen cells from immunised HOB2 rats were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Rat anti mouse F4/80 antibody, clone CI:A3-1** recognizes the murine F4/80 antigen, 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). 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, *et al.* 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, *et al.* 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, *et al.* 2005) Rat anti mouse F4/80 antibody, clone CI:A3-1 modulates cytokine levels released in response to *Listeria monocytogenes* (Warschkau & Kiderlen, 1999). A Human anti-idiotypic CI:A31 antibody, clone 17867 (HCA154) which binds to and blocks activity of Rat anti mouse F4/80 antibody, clone CI:A3-1 is also available for use as

a control in experiments utilizing clone A3-1.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

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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: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Useful Reagents

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025C)
ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

'M368104:200529'

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