Datasheet: MCA497PE

Description:	RAT ANTI MOUSE F4/80:RPE
Specificity:	F4/80
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	Cl:A3-1
Isotype:	IgG2b
Quantity:	100 TESTS

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	▪			Neat

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.

Target Species

Mouse

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

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
1% Bovine Serum Albumin
5% Sucrose

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_322048
Fusion Partners	Spleen cells from immunized HOB2 rats were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Rat anti Mouse F4/80 antibody, clone 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.
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Further Reading	1. Gordon, S. *et al.* (1992) Antigen markers of macrophage differentiation in murine tissues. Curr Top Microbiol Immunol. 181: 1-37.
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
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