Datasheet: MCA497GA

**Description:** RAT ANTI MOUSE F4/80

**Specificity:** F4/80

**Format:** Purified

**Product Type:** Monoclonal Antibody

**Clone:** Cl:A3-1

**Isotype:** IgG2b

**Quantity:** 0.1 mg

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**Product Details**

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.abdserotec.com/protocols](http://www.abdserotec.com/protocols).

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<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry</td>
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<td>Immunohistochemistry - Frozen</td>
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<td>Immunohistochemistry - Paraffin(1)</td>
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<td>Immuno-electron Microscopy</td>
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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. **F4/80 antibody 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 [www.abdserotec.com/f480-protocol](http://www.abdserotec.com/f480-protocol).

**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

**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

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 Cl:A3-1, recognises the murine F4/80 antigen, a 160 kD cell surface glycoprotein that is a 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 reported to vary during macrophage maturation and activation. The F4/80 antigen is expressed on a wide range of mature tissue macrophages including Kupffer cells, Langerhans, 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 expression has also been reported 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 yet been determined but recent studies suggest a role for F4/80 in the generation of efferent CD8+ve regulatory T cells (Lin, et al., 2005).

Clone Cl:A3-1 has been reported to modulate cytokine levels released in response to Listeria monocytogenes (Warschkau & Kiderlen, 1999).

An anti-idiotypic Cl:A31 antibody, clone 17867, is also available from AbD Serotec which is designed as a control antibody for use in conjunction with clone Cl:A3-1. This product, HCA154, specifically binds to and blocks this F4/80 antibody.

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

References

**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.

**Shelf Life**

18 months from date of despatch.
Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR73...)  RPE
Goat Anti Rat IgG (STAR69...)  FITC
Goat Anti Rat IgG (STAR80...)  FITC
Goat Anti Rat IgG (H/L) (305001...)  HRP
Goat Anti Rat IgG2b (STAR114...)  HRP

Recommended Negative Controls

RAT IgG2b NEGATIVE CONTROL (MCA1125)