



Anti-EMR1 monoclonal antibody, clone Dm:B4-2 [Pacific Blue™] (CABT-47627RM)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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. 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. 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.
Specificity	Rat anti mouse F4/80 antibody, clone Dm:B4-2, 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). Clone Dm:B4-2 has been reported to modulate cytokine levels released in response to Listeria monocytogenes.
Immunogen	Thioglycollate stimulated peritoneal macrophages from C57BL/6 mice.
Isotype	IgG2b
Source/Host	Rat
Species Reactivity	Mouse
Clone	Dm:B4-2
Conjugate	Pacific Blue
Applications	Flow Cytometry

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.
Format	Purified IgG conjugated to Pacific Blue? - liquid.
Concentration	IgG concentration 0.05 mg/ml.
Size	25 tests
Buffer	Phosphate buffered saline.
Preservative	0.09% Sodium Azide
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. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

GENE INFORMATION

Gene Name	Emr1 EGF-like module containing, mucin-like, hormone receptor-like sequence 1 [Mus musculus (house mouse)]
Official Symbol	Emr1
Synonyms	Emr1; EGF-like module containing, mucin-like, hormone receptor-like sequence 1; Ly71; F4/80; Gpf480; TM7LN3; DD7A5-7; EGF-TM7; EGF-like module-containing mucin-like hormone receptor-like 1; EMR1 hormone receptor; lymphocyte antigen 71; EGF-like module receptor 1; cell surface glycoprotein F4/80
Entrez Gene ID	13733
Protein Refseq	NP_034260
UniProt ID	Q3U9R0
Chromosome Location	17 D; 17 29.8 cM
Pathway	GPCRs; Non-odorant GPCRs
Function	G-protein coupled receptor activity; calcium ion binding; signal transducer activity; transmembrane signaling receptor activity
References	1. Austyn, J.M. and Gordon, S. (1981) F4/80, a monoclonal antibody directed specifically against the mouse macrophage. Eur. J. Immunol. 11: 805-815.

2. Hume, D.A., Perry, V.H., and Gordon, S. (1984) The Mononuclear Phagocyte System of the Mouse defined by Immunohistochemical Localisation of Antigen F4/80: Macrophages Associated with Epithelia. The Anatomical Record 210: 503-512.
 3. Lee, S.H. et al. (1985) Quantitative analysis of total macrophage content in adult mouse tissues. Immunochemical studies with monoclonal antibody F4/80. J. Exp. Med. 161: 475-489.
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