Datasheet for ABIN2191820

anti-F4/80 antibody (FITC)

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Overview

Quantity:	100 µg
Target:	F4/80 (EMR1)
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This F4/80 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Clone:	BM8
Isotype:	IgG2a
Cross-Reactivity (Details):	Cross reactivity: Mouse granulocytes : No, Mouse mast cells : No, Mouse platelets : No, Mouse lymphocytes : No, Mouse fibroblasts : No, Mouse endothelial cells : No
Sterility:	0.2 µm filtered

Target Details

Target:	F4/80 (EMR1)
Abstract:	EMR1 Products
Background:	The monoclonal antibody BM8 recognizes a 125 kDa extracellular macrophage membrane molecule, highly restricted to mature macrophage subpopulations residing in tissue. This

Target Details

	murine F4/80 glycoprotein contains seven-transmembrane (TM7) regions, which anchor the protein in the cell membrane, and thereby shows similarity in this region to G-protein-coupled receptors. The F4/80 Molecule shares overall structural homology to other members of the epidermal growth factor (EGF)-TM7 family. The antigen is detected on tissue fixed macrophages in all organs tested so far (spleen, lymph nodes, thymus, liver, skin). It is also present on Langerhans cells in the skin and Kupffer cells in the liver. It is absent on granulocytes, lymphocytes and thrombocytes. The expression of F4/80 increases upon maturation of macrophage precursors in bone marrow and blood as well as in ontogeny. The monoclonal antibody BM8 is the only macrophage marker that is able to distinguish non-destructive from destructive inflammation processes in the pancreas. Furthermore it is a unique histological marker of the progression from peri-insulitis to beta-cell destruction and diabetes in a mouse diabetes model. Immunogen BALB/c macrophages obtained from 14-day-old bone marrow cell cultures

Application Details

Application Notes:	For immunohistology, flow cytometry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting. Positive Mouse macrophages control Negative Mouse fibroblasts or granulocytes control
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 1.0 % bovine serum albumin and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.
Expiry Date:	12 months

Publications

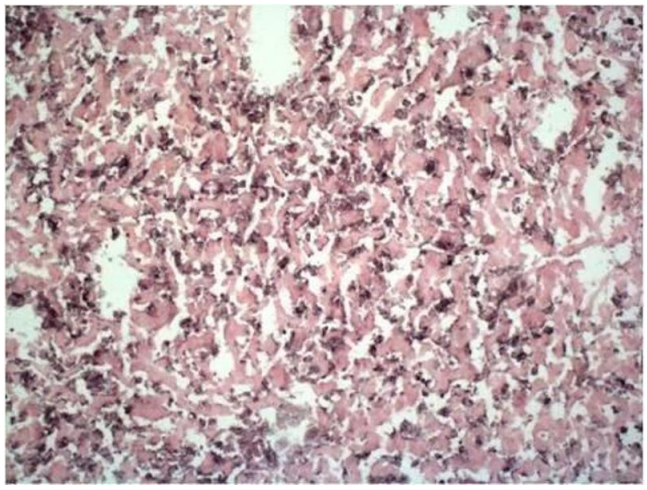
Product cited in:

Schaller, Macfarlane, Rupec, Gordon, McKnight, Pfeffer: "Inactivation of the F4/80 glycoprotein in the mouse germ line." in: **Molecular and cellular biology**, Vol. 22, Issue 22, pp. 8035-43, (2002) (PubMed).

Mackler, Iezza, Akin, McMillan, Yellon: "Macrophage trafficking in the uterus and cervix precedes parturition in the mouse." in: **Biology of reproduction**, Vol. 61, Issue 4, pp. 879-83, (1999) (PubMed).

Leenen, de Bruijn, Voerman, Campbell, van Ewijk: "Markers of mouse macrophage development detected by monoclonal antibodies." in: **Journal of immunological methods**, Vol. 174, Issue 1-2, pp. 5-19, (1994) (PubMed).

Images



Immunohistochemistry

Image 1. F4/80 expression on macrophages in mouse liver. Staining of frozen tissue section with antibody BM8