

DESCRIPTION

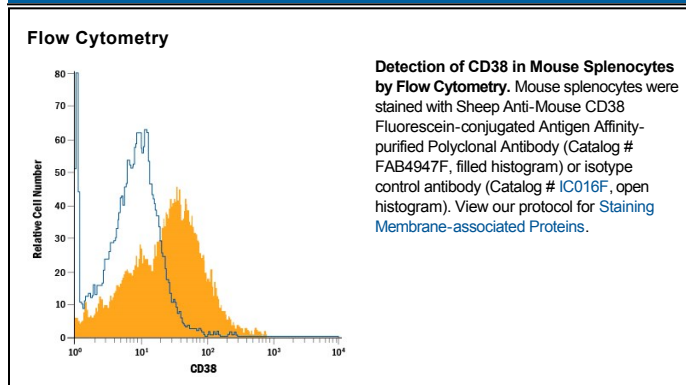
Species Reactivity	Mouse
Specificity	Detects mouse CD38 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant human CD38 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD38 Leu45-Thr304 Accession # EDL37596
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD38, also known as ADP-ribosyl Cyclase and Cyclic ADP-ribose Hydrolase, is a Type II integral membrane protein. The enzyme is able to transform NAD(P)⁺ into three different products with calcium mobilizing ability; cyclic ADP-ribose, NAADP⁺, and ADP-ribose (1). CD38 is expressed in B and T lymphocytes, osteoclasts, and in cardiac, pancreatic, liver and kidney cells (2, 3). Through its production of cyclic ADP-ribose, CD38 modulates calcium-mediated signal transduction in many types of cells, including neutrophils and pancreatic β cells (4, 5). CD38 has been shown to regulate oxytocin secretion, and may be involved in the development of complex social behaviors in mammals (6).

References:

- Schuber, F. and F.E. Lund (2004) *Curr. Mol. Med.* **4**:249.
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- Sun, L. *et al.* (1999) *J. Cell Biol.* **146**:1161.
- Partida-Sanchez, S. *et al.* (2001) *Nature Med.* **7**:1209.
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