

Monoclonal Antibody to CD38 - FITC

Alternate names:	ADP-ribosyl cyclase 1, Cyclic ADP-ribose hydrolase 1, T10, cADPr hydrolase 1
Catalog No.:	AM08041FC-N
Quantity:	0.5 mg
Concentration:	0.5 mg/ml
Background:	Murine CD38, a type II transmembrane glycoprotein, is a bifunctional ectoenzyme capable of catabolizing Nicotinamide adenine dinucleotide (NAD ⁺) to cyclic ADP-ribose (cADPR), and then hydrolyzing cADPR to adenosine diphosphoribose (ADPR). It is expressed at high levels on the surface of peripheral B-lineage cells, and at low density on germinal center B cells from unimmunized mice. It has also been reported to be expressed at moderate levels on NK cells, a proportion of peripheral T cells, and a subpopulation of thymocytes which are mostly TCR α beta ⁺ , CD4 ⁻ , CD8 ⁻ . Murine CD38 is also expressed by all Mac-1 ⁺ macrophages in the peritoneal cavities of unimmunized mice, but not by unstimulated bone-marrow-derived macrophages.
Uniprot ID:	P56528
NCBI:	NP_031672.2
GeneID:	12494
Host / Isotype:	Rat / IgG2a
Clone:	NIMR-5
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative. Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: < / = 1 μ g/10e6 cells. (Ref.1-8) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is specific to CD38 (Mr. 42-46 kDa). Monoclonal antibodies to CD38 have been shown to induce B- and T-cell proliferation, protect B cells from apoptosis, and inhibit B lymphopoiesis. (Ref.1-8) Species: Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Harada, N., L. Santos-Argumedo, R. Chang, J. C. Grimaldi, F. E. Lund, C. I. Brannan, N. G. Copeland, N. A. Jenkins, A. W. Heath, and R. M.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com



- Parkhouse. 1993. *J. Immunol.* 151:3111.
2. Santos-Argumedo, L., C. Teixeira, G. Preece, P. A. Kirkham, and R. M. E. Parkhouse. 1993. *J. Immunol.* 151:3119.
3. Howard, M., J. C. Grimaldi, J. F. Bazan, F. E. Lund, L. Santos-Argumedo, R. M. E. Parkhouse, T. F. Walseth, and H. C. Lee. 1993. *Science* 262:1056.
4. Lund, F., N. Solvason, J. C. Grimaldi, R. M. Parkhouse, and M. Howard. 1995. *Immunol. Today* 16:469.
5. Kirkham, P. A., L. Santos-Argumedo, M. M. Harnett, and R. M. Parkhouse. 1994. *Immunology* 83:513.
6. Bean, A. G. D., D. I. Godfrey, W. G. Ferlin, L. Santos-Argumedo, R. M. E. Parkhouse, M. C. Howard, and A. Zlotnik. 1996. *Int. Immunol.* 7:213.
7. Oliver, A. and J. Kearney. 1996. Personal Communication.
8. Kumagai, M., E. Coustan-Smith, D. J. Murray, O. Silvennoinen, K. G. Murti, W. E. Evans, F. Malavasi, and D. Campana. 1995. *J. Exp. Med.* 181:1101.

Pictures:

Immunofluorescent Staining: BALB/c spleen cells were double-stained with Rat anti-Mouse CD38-R-PE and Rat anti-Mouse CD19-FITC (clone 6D5). Lymphocytes were gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 0.3 µg/10e6 cells.

