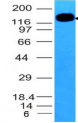


# CD50 Monoclonal Mouse Antibody (101-1D2)



## Product Description

Recognizes an N-glycosylated glycoprotein of 120 kDa with intra-chain disulfide bonds, identified as CD50 or ICAM-3 (WS: IV & V). Its epitope localizes in the D2 extracellular domain and is resistant to neuraminidase and proteases. CD50 is the major ligand for LFA-1 (CD11a/CD18) and may have signalling role to increase adhesion. It is expressed on thymocytes and T lymphocytes and is resistant to treatment with phosphatidylinositol (PI) phospholipase C. This MAb inhibits primary mixed lymphocyte culture (MLC) but not secondary MLC, cytotoxicity or proliferation induced by mitogens. It blocks binding of NK1-L16 stimulated T cells to L cells expressing CD50. This MAb is excellent for staining of formalin/paraffin tissues. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0177, Anti-CD50 (101-1D2)**

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- Knapp, W. et. al. Leucocyte Typing IV, p541, 667-670, 1087, Oxford Univ. Press, 1989.
- Schlossman SF, et. al. Leucocyte Typing V, p1542-1547, 2011, Oxford Univ. Press, 1993.
- Eur J Immunol (1993) 23: 1508-1512. (IP, Flow)
- Eur J Immunol (1994) 24: 1377-1382. (functional studies)
- J of Immunol (1995) 154(6):3015-24. (ELISA)

## Product attributes

Antibody number	#0177
Antibody reactivity (target)	CD50
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	101-1D2
Isotype	IgG2a, kappa
Molecular weight	110-160 kDa
Synonyms	ICAMR; Intercellular adhesion molecule 3 (ICAM3)
Human gene symbol	ICAM3
Entrez gene ID	3385
SwissProt	P32942
Unigene	354563
Immunogen	Stimulated human leukocytes
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Expected antibody applications	ELISA (published for clone), Flow, surface (published for clone), Functional studies (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistochemistry formalin-fixed 0.5-1 ug/mL. Staining of formalin/paraffin tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	HL-60 or THP-1 cells. Lymph node and tonsil
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide. HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA. Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide. Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Immunology
Cell/tissue expression	Lymphocytes, T-cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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