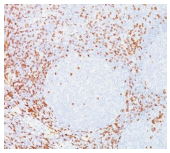
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CD7 Monoclonal Mouse Antibody (T3-3A1)



Product Description

Recognizes a protein of 40 kDa, identified as CD7, a member of the immunoglobulin gene superfamily. Its N-terminal amino acids 1-107 are highly homologous to Ig kappa-L chains whereas the carboxyl-terminal region of the extracellular domain is proline-rich and has been postulated to form a stalk from which the Ig domain projects. CD7 is expressed on the majority of immature and mature T-lymphocytes, and T cell leukemia. It is also found on natural killer cells, a small subpopulation of normal B cells and on malignant B cells. Cross-linking surface CD7 positively modulates T cell and NK cell activity as measured by calcium fluxes, expression of adhesion molecules, cytokine secretion and proliferation. CD7 associates directly with phosphoinositol 3'-kinase. CD7 ligation induces production of D-3 phosphoinositides and tyrosine phosphorylation.

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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0978, Anti-CD7 (T3-3A1)

Product attributes

Antibody number	#0978
Antibody reactivity (target)	CD7
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	T3-3A1
Isotype	IgG1, kappa
Molecular weight of antigen	40 kDa
Synonyms	CD27 ligand (CD27L); CD27LG; Ki24; Surface antigen CD70; Tumor necrosis factor (ligand) superfamily, member 7 (TNFSF7)
Human gene symbol	CD7
Entrez gene ID	924
SwissProt	P09564
Unigene	186820
Immunogen	Human T cells
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), IF (published for clone), IP (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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Jurkat, HUT-78, Molt-4, CEM cells, or human peripheral blood lymphocytes. 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, Signal transduction
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	NK cells, T-cells
Tumor expression	Leukemia/lymphoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

References

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

1. PNAS USA (1979) 76: 5829-5833.
2. PNAS USA (1980) 77(5): 2914-2918. (IP; functional studies)
3. J Immunol Meth (1987) 96(2), 201-209. (cell ELISA)
4. PNAS USA (1996) 93: 10348-10353. (cell depletion)
5. Blood (1998) 91(8) 2760-2771. (Flow)
6. J Cell Biol (1998) 142(5): 1245-1256. (IF; IP)
7. Theranostics (2018) 8(21): 6070-6087. (mAb characterization; in vivo imaging)