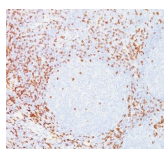


## CD7 Monoclonal Mouse Antibody (T3-3A1)



### 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](mailto: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

<b>Antibody number</b>	#0978
<b>Antibody reactivity (target)</b>	CD7
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	T3-3A1
<b>Isotype</b>	IgG1, kappa
<b>Molecular weight</b>	40 kDa
<b>Synonyms</b>	CD27 ligand (CD27L); CD27LG; Ki24; Surface antigen CD70; Tumor necrosis factor (ligand) superfamily, member 7 (TNFSF7)
<b>Human gene symbol</b>	CD7
<b>Entrez gene ID</b>	924
<b>SwissProt</b>	P09564
<b>Unigene</b>	186820
<b>Immunogen</b>	Human T cells
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Human
<b>Expected antibody applications</b>	ELISA (published for clone), Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)
<b>Antibody application notes</b>	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
<b>Positive control</b>	Jurkat, HUT-78, Molt-4, CEM cells, or human peripheral blood lymphocytes. Lymph node and tonsil.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Antibody research areas</b>	Immunology, Signal transduction
<b>Product origin</b>	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.
<b>Cell/tissue expression</b>	NK cells, T-cells
<b>Tumor expression</b>	Leukemia/lymphoma

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>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 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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## 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)

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Product link: <https://biotium.com/product/monoclonal-anti-cd7-t3-3a1/>