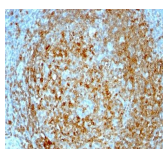


# CD74 Monoclonal Mouse Antibody (BU45)



## Product Description

Recognizes proteins of 33, 35 and 41 kDa, which are identified as various isoforms of CD74. Its epitope is localized in the extracellular domain of CD74. CD74 is a type II transmembrane protein which binds to the peptide binding groove of newly synthesized MHC class II alpha/beta heterodimers and prevents their premature association with endogenous polypeptides. The CD74 molecule plays a critical role in the presentation of peptides, by the MHC class II antigens, to CD4 positive lymphocytes. CD74 is expressed on MHC class II positive cells including B cells, a subset of activated T cells, monocytes, and dendritic cells and by various types of carcinomas. CD74 is expressed primarily by antigen presenting cells, such as B-lymphocytes (from before the pre-B cell stage to before the plasma cell stage), macrophages, and monocytes, and many epithelial cells. Anti-CD74 stains predominantly germinal center lymphocytes and B-cell lymphomas, but rarely T-cell lymphomas. Anti-CD74 has been shown to be useful in differentiating atypical fibroxanthoma (-) from malignant fibrous histiocytoma ( ).

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 0189, Anti-CD74 (BU45)**

## Product attributes

Antibody number	#0189
Antibody reactivity (target)	CD74
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	BU45
Isotype	IgG1, kappa
Molecular weight	33-41 kDa
Synonyms	CLIP; DHLAG; Gamma chain of class II antigens; HLA class II histocompatibility antigen gamma chain; HLA-DR antigens-associated invariant chain; HLADR-gamma (HLADG); Ia antigen-associated invariant chain; Ia-gamma; Major histocompatibility complex class II invariant chain; MHC HLA-DR gamma chain
Human gene symbol	CD74
Entrez gene ID	972
SwissProt	P044233
Unigene	436568
Immunogen	B lymphoblastoid cell line HFB1
Antibody target cellular localization	Plasma membrane, Perinuclear
Species reactivity	Human
Expected antibody applications	Flow, surface (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: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	Daudi Cells. Tonsil or lymph node.
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
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	Antigen presenting 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>
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	

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.

Immunology (1995) 84: 177-182. (IP, Flow)

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Product link: <https://biotium.com/product/monoclonal-anti-cd74-bu45/>