

CD45RO Monoclonal Mouse Antibody (UCHL-1)



Product Description

Recognizes a 180-185 kDa protein, identified as isoform of leukocyte common antigen (CD45RO) (4th Leucocyte Typing Workshop: Code No. N31). The epitope recognized by this antibody is sensitive to neuraminidase digestion. This antibody reacts with mature activated T-cells, most thymocytes, and a sub-population of resting T-cells within both CD4 and CD8 subsets. It shows no reactivity with normal B or natural killer cells, but reacts with granulocytes and monocytes. Reportedly, it is useful to identify T-cell lymphomas and leukemias. It rarely stains NK cells or B-cell lymphomas.

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 0003, Anti-CD45RO (UCHL-1)

Call us: 800-304-5357 Email: techsupport@biotium.com

Product attributes

Product attributes				
Antibody number	#0003			
Antibody reactivity (target)	CD45RO			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	UCHL-1			
Isotype	IgG2a, kappa			
Molecular weight	180-185 kDa			
Synonyms	B220, CD45R, GP180, Leukocyte common antigen (LCA), Loc, Ly-5, Lyt-4, Protein tyrosine phosphatase receptor type C (PTPRC), Receptor-type tyrosine-protein phosphatase C, T200 glycoprotein			
Human gene symbol	PTPRC			
Entrez gene ID	5788			
SwissProt	P08575			
Unigene	654514			
Immunogen	Cultured human T-cells from an IL-2-dependent T-cell line (CA1) (UCHL-1); Recombinant human CD45RO protein (T200/797)			
Antibody target cellular localization	Plasma membrane			
Verified antibody applications	Flow (surface) (verified), IF (verified), IHC (FFPE) (verified)			
Species reactivity	Chimpanzee, Human, Marmoset			
Expected antibody applications	Functional studies (published for clone), IP (published for clone), WB (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, Immunohistology formalin-fixed 0.25-0.5 ug/mL, Staining of formalin-fixed buster requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user			
Positive control	CCRF-CEM, Jurkat or MOLT-4 cells. Paracortex in a tonsil or a reactive lymph node.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ 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 i 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	T-cells			

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	

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References

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

- Immunology (1988) 64: 331-336. (immunoprecipitation)
 Knapp W, et al. Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.
 J Biol Chem (1996) 271(2): 755-760.
 J Immunol (2005) 174: 2712-2719. (functional studies)

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