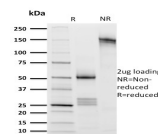


# CD8A Monoclonal Mouse Antibody (UCHT4)



## Product Description

CD8 is a cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha/beta) or as a homodimer (CD8 alpha/alpha). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class 1 and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells. For mature T-cells, CD4 and CD8 are mutually exclusive, so anti-CD8, generally used in conjunction with anti-CD4. It is a useful marker for distinguishing helper/inducer T-lymphocytes, and most peripheral T-cell lymphomas are CD4 /CD8-. Anaplastic large cell lymphoma is usually CD4 and CD8-, and in T-lymphoblastic lymphoma/leukemia, CD4 and CD8 are often co-expressed. CD8 is also found in littoral cell angioma of the spleen. This MAb binds to the CD8 alpha chain, at an epitope distinct from that recognized by UCHT14.

Also view our [CD8a Monoclonal Mouse Biotium Choice Antibody \(SK1\)](#). This antibody belongs to the Biotium Choice list of select antibodies that have been developed and validated in-house for optimal performance. The antibody has been validated in flow cytometry.

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 1628, Anti-CD8A (UCHT4)**

## Product attributes

Antibody number	#1628
Antibody reactivity (target)	CD8A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	UCHT4
Isotype	IgG2a, kappa
Molecular weight	32 kDa
Synonyms	CD8 antigen; alpha polypeptide (p32); T8/Leu-2 T-lymphocyte differentiation antigen; Ly3; LYT3; MAL; T-cell surface glycoprotein CD8 alpha chain
Human gene symbol	CD8A
Entrez gene ID	925
SwissProt	P01732
Unigene	85258
Immunogen	Thymocytes followed by Sezary T cells.
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (surface) (verified)
Species reactivity	Human
Expected antibody applications	Functional studies (published for clone), IF (published for clone), IP (published for clone)
Antibody application notes	Flow cytometry: 1-2 ug/million cells; Optimal dilution for a specific application should be determined., Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody
Positive control	Jurkat, HuT78 or hPBL Tonsil.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
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
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
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	<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.

- Eur J Immunol (2005) 35: 2896-2908. (functional studies)
- J Biol Chem (2007) 282(18): 13884-13894. (immunoprecipitation)
- Traffic (2015) 16(12): 1330-1341. (immunofluorescence)