## CD8 Monoclonal Mouse Antibody (C8/144B)



## **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.

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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0749, Anti-CD8 (C8/144B)

## **Product attributes**

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Product attributes			
Antibody number	#0749		
Antibody reactivity (target)	CD8		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	C8/144B		
Isotype	IgG1, 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	A 13 amino acid peptide from C-terminal cytoplasmic domain of alpha chain of human CD8 molecule.		
Verified antibody applications	IHC (FFPE) (verified)		
Antibody target cellular localization	Plasma membrane		
Species reactivity	Human		
Species reactivity  Antibody application notes	Human  Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user		
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Antibody application notes  Positive control	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user		
Antibody application notes  Positive control Shipping condition	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light,		
Antibody application notes  Positive control Shipping condition Storage Conditions	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when		
Antibody application notes  Positive control Shipping condition Storage Conditions Shelf life	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pf 1-6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when stored as recommended		
Antibody application notes  Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when stored as recommended For research use only (RUO) 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: 0.8A-free: 1 mg/mL in PBS/0.05% azide, Purified: 0.8A-free: 1 mg/mL in PBS/0.05% azide, Purified: 0.8A-free: 1 mg/mL in PBS/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS/0.05% azide,		
Antibody application notes  Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 0 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when stored as recommended For research use only (RUO) 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 application notes  Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation  Antibody research areas	Not recommended for flow cytometry, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user HuT78 or hPBL. Tonsil Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when stored as recommended For research use only (RUO) 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 Immunology Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in		

Email: techsupport@biotium.com

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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