CD3e Monoclonal Mouse Antibody (CRIS-7)



Product Description

Recognizes the epsilon chain of CD3 (Workshop V; Code: CD03.09), which consists of five different polypeptide chains (designated as gamma, delta, epsilon, zeta, and eta) with MW ranging from 16-28 kDa. The CD3 complex is closely associated at the lymphocyte cell surface with the T cell antigen receptor (TCR). Reportedly, CD3 complex is involved in signal transduction to the T cell interior following antigen recognition. The CD3 antigen is first detectable in early thymocytes and probably represents one of the earliest signs of commitment to the T cell lineage. In cortical thymocytes, CD3 is predominantly intra-cytoplasmic. However, in medullary thymocytes, it appears on the T cell surface. CD3 antigen is a highly specific marker for T cells, and is present in majority of T cell neoplasms. 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 <u>CF®</u> Dye <u>Brochure</u> 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.

References

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

- 1. McMichael AJ et al. (eds) Leukocyte Typing III, Oxford University Press, Oxford, 1987
- Knapp W et al. (eds) Leukocyte Typing IV, p245 and 1059, Oxford University Press, Oxford, 1989.
 Schlossman S et al. (eds) Leukocyte Typing V. Oxford University Press, Oxford, 1995.
- 4. J Immunol 1991, 146(4):108 (functional studies)

BSA-free

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Product attributes				
Antibody number	#1050			
Antibody reactivity	CD3e			
(target) Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	CRIS-7			
Isotype	IgG2a, kappa			
Molecular weight	20 kDa			
Synonyms	CD 3E, CD3 epsilon, CD3 TCR complex, CD3E, CD3e antigen epsilon polypeptide (TIT3 complex), T cell antigen receptor complex epsilon subunit of T3, T-cell surface antigen T3/Leu-4 epsilon chain, T-cell surface glycoprotein CD3 epsilon chain, T3E, TCRE, TIT3 complex			
Human gene symbol	CD3E			
Entrez gene ID	916			
SwissProt	P07766			
Unigene	3003			
Immunogen	Stimulated human leukocytes			
Antibody target cellular	Plasma membrane			
Verified antibody	Flow (surface) (verified), IF (verified)			
applications Species reactivity	Human, Monkey			
Expected antibody	Functional studies (published for clone)			
applications 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, Induce T cell activation and proliferation, Optimal dilution for a specific application should be determined by user			
Positive control	Jurkat cells. Tonsil and 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			
Cell/tissue expression	Lymphocytes, 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	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
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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