

CD2 Monoclonal Mouse Antibody (1E7E8.G4)

Product Description

CD2 interacts through its amino-terminal domain with the extracellular domain of CD58 (also designated CD2 ligand) to mediate cell adhesion. CD2/CD58 binding can enhance antigen-specific T cell activation. CD2 is a transmembrane glycoprotein that is expressed on peripheral blood T lymphocytes, NK cells and thymocytes. CD58 is a heavily glycosylated protein with a broad tissue distribution in hematopoietic and other cells, including endothelium. Interaction between CD2 and its counter receptor LFA3 (CD58) on opposing cells optimizes immune system recognition, thereby facilitating communication between helper T lymphocytes and antigen-presenting cells, as well as between cytolytic effectors and target cells.

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® Dye 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0249, Anti-CD2 (1E7E8.G4)

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

Product attributes

Product attributes			
Antibody number	#0249		
Antibody reactivity (target)	CD2		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	1E7E8.G4		
Isotype	IgG2a, kappa		
Molecular weight	~50 kDa		
Synonyms	Erythrocyte receptor; LFA-2; LFA-3 receptor; Ly-37; Lymphocyte function antigen 2; Rosette receptor; SRBC; T-cell surface antigen CD2; T-cell surface antigen T11/Leu-5; T11		
Human gene symbol	CD2		
Entrez gene ID	914		
SwissProt	P06729		
Unigene	523500		
Immunogen	Human Thymocytes/Sezary T cells		
Antibody target cellular localization	Plasma membrane		
Verified antibody applications	Flow (verified), IF (verified), WB (verified)		
Species reactivity	Human		
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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user		
Positive control	293T or Jurkat cells. Lymph node and tonsil		
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 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.		

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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