

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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