

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.

Also view our <u>CD3e Monoclonal Mouse Biotium Choice Antibody (SK7)</u>. The 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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1050, Anti-CD3e (CRIS-7)

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

Product attributes

| Floudet attributes | |
|---------------------------------------|---|
| Antibody number | #1050 |
| Antibody reactivity (target) | CD3e |
| 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 localization | Plasma membrane |
| Verified antibody applications | Flow (surface) (verified), IF (verified) |
| Species reactivity | Human, Monkey |
| Expected antibody applications | Functional studies (published for clone) |
| 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 |
| 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 | 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 |
| 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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References

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

- 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.
 J Immunol 1991, 146(4):108 (functional studies)

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