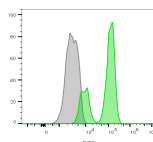


# CD3e Monoclonal Mouse Antibody (B-B12)



## Product Description

Reacts with five invariable CD3 chains (designated as  $\alpha$  and  $\beta$ ) with molecular weight ranging from 16-28 kDa. CD3 is expressed, typically at high levels, on peripheral T cells and majority of T cell neoplasms. Thymocytes express CD3 at different level on the cell surface in the course of differentiation and, in cortical thymus, CD3 is predominantly Intracytoplasmic. The CD3 complex is closely associated at the lymphocyte cell surface with T cell antigen receptor (TCR) and is involved in transducing antigen-recognition signals into cytoplasm of T cells and in regulating the cell surface expression of the TCR complex.

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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1052, Anti-CD3e (B-B12)**

## Product attributes

Antibody number	#1052
Antibody reactivity (target)	CD3e
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	B-B12
Isotype	IgG1, 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	Human T cell leukemia cells
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (surface) (verified), IF (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: 1-2 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	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	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

## References

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

Kishimoto T. et al. eds. Leukocyte Typing VI, p44-48 and p1111, Garland Publishing, Inc, New York and London, 1997.

This datasheet was generated on August 6, 2025 at 09:13:55 AM. Visit product page to check for updated information before use. Product link: <https://biotium.com/product/monoclonal-anti-cd3e-b-b12/>