

## CD3e Monoclonal Mouse Antibody (RIV9)



## **Product Description**

Reacts with five invariable CD3 chains designated CD3y, CD3d, CD3e, CD3f, and CD3n with molecular weight ranging from 16-28 kDa. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T cell activation. It is found on all mature T-lymphocytes, NK, T-cells, and some thymocytes. It 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. This MAb is particularly useful for induction of T cell activation in vitro and in vivo due to its unusual IgG3 isotype.

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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0322, Anti-CD3 (RIV9)

Call us: 800-304-5357

## **Product attributes**

Product attributes		
Antibody number	#0322	
Antibody reactivity (target)	CD3	
Antibody type	Primary	
Host species	Mouse	
Clonality	Monoclonal	
Clone	RIV9	
Isotype	IgG3, kappa	
Molecular weight	20 kDa	
Synonyms	CD3 epsilon, CD3 TCR complex, CD3E, CD3e antigen epsilon polypeptide (TiT3 complex), Leu-4 epsilon chain, T cell antigen receptor complex epsilon subunit of T3, T-cell surface antigen T3, 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 peripheral lymphocytes	
Antibody target cellular localization	Plasma membrane	
Verified antibody applications	Flow (surface) (verified), IF (verified)	
Species reactivity	Human, Mouse, Rat	
Expected antibody applications	IHC (frozen), Functional studies (published for clone), IP (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, 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	
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 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
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.

- Transplant Proc (1989) 21: 1026-7. (functional studies)
  Eur J Immunol (1990) 20(4): 943-945. (immunoprecipitation)
  Knapp W et al. (eds) Leukocyte Typing IV, p245 and 1059, Oxford University Press, Oxford, 1989.
  Immunology (1994) 83: 457-464. (immunofluorescence, frozen tissue)
  Schlossman S et al. (eds) Leukocyte Typing V. Oxford University Press, Oxford, 1995.

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