

# **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 CD3e Monoclonal Mouse Biotium Choice Antibody (SK7). 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 0322, Anti-CD3 (RIV9)

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

Product	attributes
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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	
Species reactivity Expected antibody applications	Human, Mouse, Rat IHC (frozen), Functional studies (published for clone), IP (published for clone)	
Expected antibody	IHC (frozen), Functional studies (published for clone), IP	
Expected antibody applications	IHC (frozen), Functional studies (published for clone), IP (published for clone) 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	
Expected antibody applications Antibody application notes	IHC (frezen), Functional studies (published for clone), IP (published for clone) 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	
Expected antibody applications Antibody application notes Positive control	IHC (frozen), Functional studies (published for clone), IP (published for clone) Higher concentration may be required for direct detection using primary antibody, mountofluorescence: 1-20 g/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user Jurkat cells. Tonsil and lymph node	
Expected antibody applications Antibody application notes Positive control Shipping condition	IHC (frozen), Functional studies (published for clone), IP (published for clone) Higher concentration may be required for direct detection using primary 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 Jurkat cells. Tonsil and lymph node Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light,	
Expected antibody applications Antibody application notes Positive control Shipping condition Storage Conditions	IHC (frozen), Functional studies (published for clone), IP (published for clone) Higher concentration may be required for direct detection using primary antibody, mounofluorescence: 1-2 ug/m, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user Jurkat cells. Tonsil and lymph node Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when	
Expected antibody applications Antibody application notes Positive control Shipping condition Storage Conditions Shelf life	IHC (frezen), Functional studies (published for clone), IP (published for clone)      Higher concentration may be required for direct detection using primary antibody, moundulates than for indirect detection with secondary antibody. The secondary antibody is a secondary antibody is a secondary and a secondary and the secondary and antibody. The secondary antibody is a secondary and and the secondary and antibody. The secondary antibody is a secondary and a secondary antibody is a secondary and	
Expected antibody applications Antibody application notes Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate	IHC (frozen), Functional studies (published for clone), IP        (published for clone)        Higher concentration may be required for direct detection using primary antibody, conjugates than for indirect detection with secondary antibody. Immofluorescence: 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        Jurkat cells. Tonsil and lymph node        Room temperature        Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C        Guaranteed for at least 24 months from date of receipt when stored as recommended        For research use only (RUO)        Conjugates: 0.1 mg/mL in PBS/0.05% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified, BSA-free: 1	
Expected antibody applications Antibody application notes Note that the second	IHC (frozen), Functional studies (published for clone), IP      (published for clone)      Higher concentration may be required for direct detection with secondary antibody, monipulates than for indirect detection with secondary antibody. Immonfluorescence: 1-2 ug/ml., Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Optimal dilution for a specific application should be determined by user      Jurkat cells. Tonsil and lymph node      Room temperature      Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C      Guaranteed for at least 24 months from date of receipt when stored as recommended      For research use only (RUO)      Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.5% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, DSA-free: 1 mg/mL in PBS/0.05% using units of the serum albumin (BSA) from bovine serum (BSA) from bovine serum albumin (BSA) from bovine serum (Bost aurus), or recombinant BSA produced in	
Expected antibody applications Antibody application notes Constitute control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation	IHC (frozen), Functional studies (published for clone), IP      Higher concentration may be required for direct detection using primary antibody, Immunofluorescence: 1-2 ug/m, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user      Jurkat cells. Tonsil and lymph node      Room temperature      Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C      Guaranteed for at least 24 months from date of receipt when stored as recommended      For research use only (RUO)      Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.5% SSA, Purified: 0.2 mg/mL in PBS/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS/0.05% azide, Store 32 difference on the store on the st	

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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