Glowing products for science

# CD3e Monoclonal Mouse Antibody (SK7) - Biotium Choice

Biotum

CD3e (clone SK7) is a validated mouse monoclonal antibody that recognizes the epsilon chain of the CD3 protein complex and T cell co-receptor. The antibody belongs to the Biotium Choice list of select antibodies that have been validated and optimized in-house for optimal performance.

#### **Product Description**

CD3e (clone SK7) is a mouse monoclonal antibody derived from the extracellular domain of the CD3 epsilon chain. This antibody belongs to the Biotium Choice list of select antibodies that have been validated and optimized in-house for optimal performance. The antibody is available conjugated to either a CF® Dye or Astral<sup>TM</sup> tandem dye. They are supplied in PBS, 0.1% BSA, 0.05% azide.

CD3 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.

As an isotype control, we recommend <u>Isotype Control, Monoclonal Mouse IgG1 Kappa (IGG1/1331)</u> for this antibody.

## Discover Sharper Signals and Unmatched Panel Flexibility with Biotium Choice Antibodies Powered by CF® Dyes and Astral Leap™ Tandem Dyes

Biotium Choice antibodies are carefully curated and validated in-house to offer exceptional signal-to-noise. Labeled with our advanced CF® Dyes and Astral Leap<sup>TM</sup> tandem dyes, they are our top-recommended antibodies for flow cytometry and other applications.

#### **Biotium Choice Antibody Features**

- Robust and validated clones against common targets
- Developed and optimized for flow cytometry and other applications
- Conjugated to bright, photostable <a href="CF® Dyes">CF® Dyes</a> for superior signal and clarity
- Also available with <u>Astral Leap™ tandem dyes</u> for expanding multiplexing
- New antibody clones and dye conjugates continuously in development

View our full catalog of Biotium Choice antibodies

#### **Product attributes**

Antibody number	#P002			
Antibody reactivity (target)	CD3e			
<b>Biotium Choice Antibody</b>	Primary			
Antibody type	Biotium Choice Flow Antibodies, Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	SK7			
Isotype	IgG1, kappa			
Molecular weight	23 kDa			
Synonyms	CD3 epsilon; CD3 TCR 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 thymocytes			
Antibody target cellular localization	Plasma membrane			
Verified antibody applications	Flow (surface) (verified)			
Species reactivity	Human			
Antibody application notes	Recommended concentration for flow cytometry: 5 uL per million cells/0.1 mL $$			
Positive control	Human peripheral blood mononuclear cells (PBMCs), CCRF-CEM or HL-60			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light			
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: PBS/0.1% BSA/0.05% azide			
Volume per assay	5 uL/test			
Antibody research areas	Immunology			
Cell/tissue expression	Lymphocytes, T-cells			
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.			
Tumor expression	Leukemia/lymphoma			

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

### CD3e Monoclonal Mouse Antibody (SK7) - Biotium Choice

Conjugation	Ex/Em	Conc.	Size	Catalog No.	Dye Features
<u>CF®405S</u> 411/431 nm	300 ug/mL	25 tests (125 uL)	P002-405S-125	CF®405S Features	
			100 tests (500 uL)	P002-405S-500	
<u>CF®405M</u> 416/452 nm	300 ug/mL	25 tests (125 uL)	P002-405M-125	CF®405M Features	
			100 tests (500 uL)	P002-405M-500	
<u>CF®405L</u> 413/547 nm	200 ug/mL	25 tests (125 uL)	P002-405L-125	CF®405L Features	
			100 tests (500 uL)	P002-405L-500	
<u>CF®488A</u> 490/516 nm	490/516 nm	200 ug/mL	25 tests (125 uL)	P002-488A-125	CF®488A Features
		100 tests (500 uL)	P002-488A-500		
<u>CF®503R</u> 503/532 nm	200 ug/mL	25 tests (125 uL)	P002-503R-125	CF®503R Features	
			100 tests (500 uL)	P002-503R-500	
<u>CF®514</u> 516/549 nm	200 ug/mL	25 tests (125 uL)	P002-514-125	CF®514 Features	
			100 tests (500 uL)	P002-514-500	
<u>CF®568</u> 562/584 nm	200 ug/mL	25 tests (125 uL)	P002-568-125	CF®568 Features	
			100 tests (500 uL)	P002-568-500	
<u>CF®575</u> 571/601 nm	150 ug/mL	25 tests (125 uL)	P002-575-125		
			100 tests (500 uL)	P002-575-500	
RPE-Astral <sup>TM</sup> 616 496, 546, 566/617 nm	100 ug/mL	25 tests (125 uL)	P002-R616-125		
			100 tests (500 uL)	P002-R616-500	
<u>CF®647Plus</u> 652/668 nm	100 ug/mL	25 tests (125 uL)	P002-647P-125		
			100 tests (500 uL)	P002-647P-500	
<u>CF®660C</u> 667/685 nm	300 ug/mL	25 tests (125 uL)	P002-660C-125	CF®660C Features	
			100 tests (500 uL)	P002-660C-500	
<u>CF®700</u> 696/721 nm	200 ug/mL	25 tests (125 uL)	P002-700-125	CF®700 Features	
	-	100 tests (500 uL)	P002-700-500		
CF®820 822/835 nm	822/835 nm	20 ug/mL	25 tests (125 uL)	P002-820-125	CF®820 Features
		-	100 tests (500 uL)	P002-820-500	
R-PE 496, 546, 565/576 nm	496, 546, 565/576 nm	100 ug/mL	25 tests (125 uL)	P002-RPE-125	
	-	100 tests (500 uL)	P002-RPE-500		
APC 651/660 nm	200 ug/mL	25 tests (125 uL)	P002-APC-125		
			100 tests (500 uL)	P002-APC-500	

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