



Glowing products for science

CD3e Monoclonal Mouse Antibody (SK7) - Biotium Choice

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™ 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 [Isotype Control, Monoclonal Mouse IgG1 Kappa \(IGG1/1331\)](#) 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™ 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 [CF® Dyes](#) for superior signal and clarity
- Also available with [Astral Leap™ tandem dyes](#) for expanding multiplexing
- New antibody clones and dye conjugates continuously in development

[View our full catalog of Biotium Choice antibodies](#)

Call us : [800-304-5357](tel:800-304-5357)

Product attributes

Antibody number	#P002
Antibody reactivity (target)	CD3e
Biotium Choice Antibody	Primary
Antibody type	Biotium Choice Flow Antibodies, Biotium Choice Primary, 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; TCORE; 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

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Conjugation	Ex/Em	Conc.	Size	Catalog No.	Dye Features
CF@405S	411/431 nm	300 ug/mL	25 tests (125 uL)	P002-405S-125	CF@405S Features
100 tests (500 uL)	P002-405S-500				
CF@405M	416/452 nm	300 ug/mL	25 tests (125 uL)	P002-405M-125	CF@405M Features
100 tests (500 uL)	P002-405M-500				
CF@405L	413/547 nm	200 ug/mL	25 tests (125 uL)	P002-405L-125	CF@405L Features
100 tests (500 uL)	P002-405L-500				
CF@488A	490/516 nm	200 ug/mL	25 tests (125 uL)	P002-488A-125	CF@488A Features
100 tests (500 uL)	P002-488A-500				
CF@503R	503/532 nm	200 ug/mL	25 tests (125 uL)	P002-503R-125	CF@503R Features
100 tests (500 uL)	P002-503R-500				
CF@514	516/549 nm	200 ug/mL	25 tests (125 uL)	P002-514-125	CF@514 Features
100 tests (500 uL)	P002-514-500				
CF@568	562/584 nm	200 ug/mL	25 tests (125 uL)	P002-568-125	CF@568 Features
100 tests (500 uL)	P002-568-500				
CF@575	571/601 nm	150 ug/mL	25 tests (125 uL)	P002-575-125	
100 tests (500 uL)	P002-575-500				
RPE-Astral™616	496, 546, 566/617 nm	100 ug/mL	25 tests (125 uL)	P002-R616-125	
100 tests (500 uL)	P002-R616-500				
CF@647Plus	652/668 nm	100 ug/mL	25 tests (125 uL)	P002-647P-125	
100 tests (500 uL)	P002-647P-500				
CF@660C	667/685 nm	300 ug/mL	25 tests (125 uL)	P002-660C-125	CF@660C Features
100 tests (500 uL)	P002-660C-500				
CF@700	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	20 ug/mL	25 tests (125 uL)	P002-820-125	CF@820 Features
100 tests (500 uL)	P002-820-500				
RPE-Astral™775	496, 546, 565/774 nm	100 ug/mL	25 tests (125 uL)	P002-R775-125	RPE-Astral™775 Features
100 tests (500 uL)	P002-R775-500				
R-PE	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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