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CD3 Antibodies (/antibody/primary/target/cd3)

Invitrogen

CD3 Monoclonal Antibody (OKT3), Brilliant Violet™ 605, eBioscience™

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Catalog # **406-0037-42**

100 Tests

CAD **484.65**

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Quantity

1

[Request bulk or custom format \(/content/lifetech/global/en/home/global-lifetech-eBio.html?productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody \(OKT3\), Brilliant Violet™ 605, eBioscience&version=Local\)](/content/lifetech/global/en/home/global-lifetech-eBio.html?productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody (OKT3), Brilliant Violet™ 605, eBioscience&version=Local)

[productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody \(OKT3\), Brilliant Violet™ 605, eBioscience&version=Local](/content/lifetech/global/en/home/global-lifetech-eBio.html?productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody (OKT3), Brilliant Violet™ 605, eBioscience&version=Local)

Protocols

[https://www.thermo.com/content/lifetech/global/en/home/global-lifetech-eBio.html?productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody \(OKT3\), Brilliant Violet™ 605, eBioscience&version=Local](https://www.thermo.com/content/lifetech/global/en/home/global-lifetech-eBio.html?productType=Antibody&primarySiteId=Local&productId=406-0037-42&productDescription=CD3 Monoclonal Antibody (OKT3), Brilliant Violet™ 605, eBioscience&version=Local)
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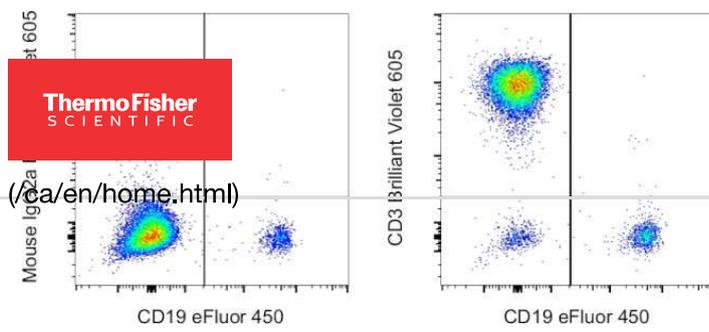
Performance Guarantee

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FIGURE: 1 / 1

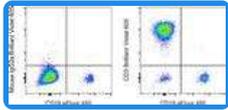
CD3 Antibody (406-0037-42) in Flow

Normal human peripheral blood cells were stained with CD19 Monoclonal Antibody, eFluor 450 (Product # 48-0199-42 (/order/genome-database/details/antibody/48-0199-42)) and Mouse IgG2a kappa Isotype Control, Brilliant Violet 605 (Product # 406-4724-81 (/order/genome-



database/details/antibody/406-4724-81)) (left) or CD3 Monoclonal Antibody, Brilliant Violet 605 (right). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50 (/order/catalog/product/00-6993-50)).

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Product Details

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μ L (0.5 μ g)/test	-

Product Specifications

Species Reactivity	Human	
Host	Mouse / IgG2a, kappa	 
(/ca/en/home.html)		
Class	Monoclonal	
Type	Antibody	
Clone	OKT3	
Conjugate	Brilliant Violet™ 605	View additional formats ▾
Excitation/Emission Max	406/603 nm View spectra (/order/fluorescence-spectraviewer?SID=srch-svtool&UID=BV605)	
Form	liquid	
Concentration	5 µL/Test	
Purification	Affinity chromatography	
Storage buffer	PBS, pH 7.2, with BSA	
Contains	0.09% sodium azide	
Storage conditions	4° C, store in dark, DO NOT FREEZE!	
Shipping conditions	Ambient (domestic); Wet ice (international)	
RRID 	AB_2937142	

Product Specific Information

Description: The OKT3 monoclonal antibody reacts with an epitope on the epsilon-subunit within the human CD3 complex. The OKT3 antibody has been reported to have potent immunosuppressive properties in vivo and has been proven effective in the treatment of renal, heart and liver allograft rejection. The CD3 subunits, gamma, delta, and epsilon chains, are required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. Crosslinking of TCR initiates an intracellular biochemical pathway resulting in cellular activation and proliferation. Antibody clones

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OKT3 and SK7 see different epitopes.

Applications Tested: This OKT3 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 μ L (0.5 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

Brilliant Violet™ 605 (BV605) is a tandem dye that emits at 605 nm and is intended for use on cytometers equipped with a violet (405 nm) laser. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright, Brilliant Violet™, Brilliant Ultra Violet™, or other polymer dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401-42 (<https://www.thermofisher.com/order/catalog/product/SB-4401-42>)) or Brilliant Stain Buffer™ (Product # 00-4409-75 (<https://www.thermofisher.com/order/catalog/product/00-4409-75>)) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer or Brilliant Stain Buffer for more information.

Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49 (<https://www.thermofisher.com/order/catalog/product/00-8222-49>)) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54 (<https://www.thermofisher.com/order/catalog/product/00-5333-54>)) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone-specific performance should be determined empirically.

Our internal testing suggests that Brilliant



How to use the Panel Builder

Watch the video to learn how to use the Invitrogen Flow Cytometry Panel Builder to build your next flow cytometry panel in 5 easy steps.

Violet™ 605 (BV605) is not compatible with
me

ThermoFisher
SCIENTIFIC

Ex mission: 605 nm; Laser:
Violet Laser
([see on home.html](#))



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Target Information

The CD3 subunit complex which is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules and this association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases. The genes encoding the CD3 epsilon, gamma and delta polypeptides are located on chromosome 11. Defects in the CD3 gene are associated with CD3 immunodeficiency.

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Related Products for

Flow Cytometry

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Secondary Antibodies

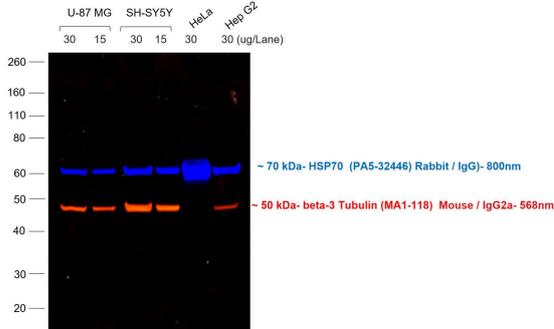
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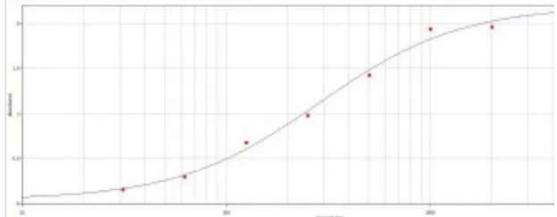
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References (0)

Have you cited this product in a publication?
Let us know so we can reference it here.

Cite this product (mailto:AntibodyContentGroup@thermofisher.com?subject=Add my citation)

Protein Aliases: CD247; CD247 antigen, zeta subunit; CD3 antigen, delta subunit; CD3 delta; CD3 TCR complex; CD3-epsilon; CD3d; CD3d antigen, delta polypeptide (TiT3 complex); CD3d molecule, delta (CD3-

View more

Gene Aliases: CD247; CD3-DELTA; CD3-GAMMA; CD3-ZETA; CD3D; CD3E; CD3G; CD3H; CD3Q; CD3Z; IMD17; IMD18; IMD19; IMD25; T3D; T3E; T3G; T3Z; TCRE; TCRZ

UniProt ID: (Human) P20963

(<http://www.uniprot.org/uniprot/P20963>), (Human)

P04234 (<http://www.uniprot.org/uniprot/P04234>),

(Human) **P07766**

Entrez Gene ID: (Human) 919

(<http://www.ncbi.nlm.nih.gov/gene?term=919>),

(Human) **915** ([http://www.ncbi.nlm.nih.gov/gene?](http://www.ncbi.nlm.nih.gov/gene?term=915)

[term=915](http://www.ncbi.nlm.nih.gov/gene?term=915)), (Human) **916**

Function(s)



Process(es)



Performance Guarantee

If an Invitrogen™ antibody doesn't perform as described on our website or datasheet, we'll replace the product at no cost to you, or provide

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