

Primary Antibodies (/us/en/home/life-science/antibodies/primary-antibodies.html) >  
CD8 Antibodies (/antibody/primary/target/cd8)

Invitrogen

# CD8a Monoclonal Antibody (RPA-T8), Brilliant Violet™ 421, eBioscience™

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Catalog # **404-0088-42**

100 Tests

CAD 476.00

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Quantity

1

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[productType=Antibody&primarySiteId=Local&productId=404-0088-42&productDescription=CD8a Monoclonal Antibody \(RPA-T8\), Brilliant Violet&trade; 421, eBioscience](/content/lifetech/global/en/home/global-eBio.html?productType=Antibody&primarySiteId=Local&productId=404-0088-42&productDescription=CD8a Monoclonal Antibody (RPA-T8), Brilliant Violet&trade; 421, eBioscience)

**Protocols**

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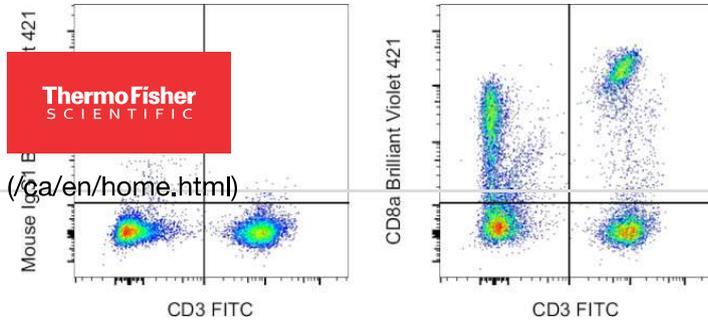
**Performance Guarantee**

[\(/us/en/home/life-science/antibodies/antibody-application-performance-guarantee.html\)](/us/en/home/life-science/antibodies/antibody-application-performance-guarantee.html)

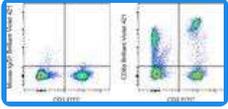
FIGURE: 1 / 1

## CD8a Antibody (404-0088-42) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, FITC (Product # 11-0038-42 (/order/genome-database/details/antibody/11-0038-42)) and Mouse IgG1 kappa Isotype Control, Brilliant Violet 421 (Product # 404-4714-81 (/order/genome-



database/details/antibody/404-4714-81)) (left) or CD8a Monoclonal Antibody, Brilliant Violet 421 (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)). View more



## Product Details

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 $\mu$ L (0.125 $\mu$ g)/test	-
<b>Product Specifications</b>		

Species Reactivity

Human

Home


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Mouse / IgG1, kappa


[\(/ca/en/home.html\)](/ca/en/home.html)

Recommended Isotype Control

**Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Brilliant Violet™ 421, eBioscience™**  
 ([//www.thermofisher.com/antibody/product/404-4714-81](http://www.thermofisher.com/antibody/product/404-4714-81))

Class

Monoclonal

Type

Antibody

Clone

RPA-T8

Conjugate

Brilliant Violet™ 421

 View additional formats 

Excitation/Emission Max

406/423 nm

**View spectra** (</order/fluorescence-spectraviewer?SID=srch-svtool&UID=BV421>)

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\_2925489

### Product Specific Information

Description: The RPA-T8 monoclonal antibody reacts with the human CD8a molecule, an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha/beta) or as a homodimer (CD8 alpha/alpha). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T-cell development and activation of mature T cells.

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Applications: This RPA-T8 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.



(/ca/en/home.html)

Applications Tested: This RPA-T8 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

Brilliant Violet™ 421 (BV421) is a dye that emits at 423 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.

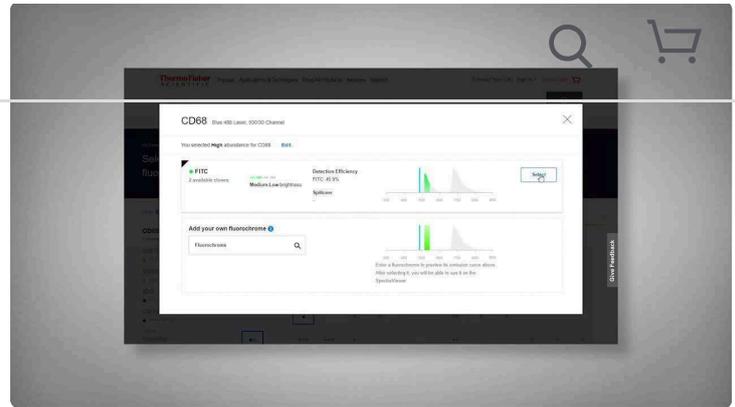
Excitation: 407 nm; Emission: 423 nm; Laser: Violet Laser.

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### Target Information

Cluster of differentiation 8 (CD8), a type I transmembrane glycoprotein of the immunoglobulin family of receptors, plays an integral role in signal transduction, and T cell differentiation and activation. CD8 is predominantly expressed on T cells as a disulfide-linked heterodimer of CD8alpha and CD8beta, where it functions as a co-receptor, along with T cell receptor (TCR), for major histocompatibility complex class I (MHC-I) molecules; whereas its counterpart, CD4, acts

science/cell-analysis/flow-cytometry/antibodies-for-flow-cytometry/flow-cytometry-panel-builder.html)



### 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.

as a co-receptor for MHC-II molecules. CD8 exists on the cell surface, where the CD8alpha chain binds to MHC-I. CD8 is also expressed on a subset of T cells, NK cells, monocytes and dendritic cells as disulfide-linked homodimers of CD8alpha. Ligation of MHC-I/peptide complexes presented by antigen-presenting cells (APCs), triggers the recruitment of lymphocyte-specific protein tyrosine kinase (Lck), which leads to lymphokine production, motility and cytotoxic T lymphocyte (CTL) activation. Once activated, CTLs play a crucial role in the clearance of pathogens and tumor cells. Differentiation of naive CD8+ T cells into CTLs is strongly enhanced by IL-2, IL-12 and TGF-beta1.

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## Related Products for

Flow Cytometry

Secondary Antibodies

Additional Formats

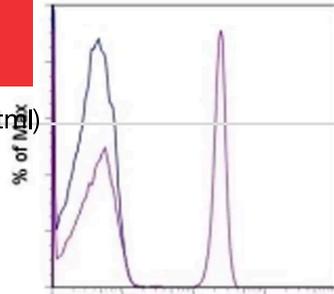
Isotype Controls

Buffers FC

Viability Dyes FC

Co

(/ca/en/home.html)



CD4 Purified/Anti-Mouse IgG1 FITC

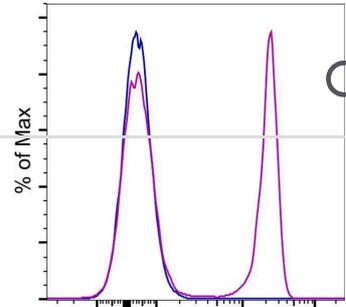
Catalog # 11-4015-80

**Invitrogen**  
**Rat anti-Mouse IgG1 Secondary**  
**Antibody, FITC, eBioscience™**

(/antibody/product/11-4015-80)

CAD 98.50 ⓘ | 100 µg

Add To Cart



Anti-mIgG1 Super Bright 600

Catalog # 63-4015-

**Invitrogen**  
**Rat anti-Mouse IgG1 Secondary**  
**Antibody, Super Bright™ 600,**  
**eBioscience™**

(/antibody/product/63-4015-82)

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## References (0)

Have you cited this product in a publication?  
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## Bioinformatics

**Protein Aliases:** CD8 antigen, alpha polypeptide (p32);  
CD8 antigen, beta polypeptide 1 (p37); CD8a; CD8alpha;  
CD8b; CD8beta; fCD8; Leu-2; leu-2a; Leu2 T-lymphocyte

Function(s)



View more

Gene A; CD8B; CD8B1; LEU2; LY3;  
LYT3; MIAL, p32, P37  
(/ca/en/home.html)

Process(es)



UniProt ID: (Human) P01732

(<http://www.uniprot.org/uniprot/P01732>), (Human)

P10966 (<http://www.uniprot.org/uniprot/P10966>)

Entrez Gene ID: (Human) 925

(<http://www.ncbi.nlm.nih.gov/gene?term=925>),

(Human) 926 (<http://www.ncbi.nlm.nih.gov/gene?term=926>)

## 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 you with a credit for a future purchase.\*

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