

Brilliant Violet 605™ anti-human CD4 Antibody

Catalog# / Size	357435 / 25 tests 357436 / 100 tests
Clone	A161A1
Regulatory Status	RUO
Other Names	T4/Leu-3
Isotype	Rat IgG2b, κ
Description	CD4, also known as T4/Leu-3, is a 55 kD single-chain type I transmembrane glycoprotein and member of the immunoglobulin superfamily. It is expressed on most thymocytes, helper T cells, type II NKT cells, and monocytes/macrophages. CD4 is part of the TCR/CD3 complex, binds to $\beta 2$ domain from the MHC class II molecule, and participates in TCR signal transduction. CD4 is the receptor of IL-16 and is a coreceptor for the human immunodeficiency virus (HIV) and human herpes virus 7 (HHV-7).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Human CD4 T cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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Antigen Details

Structure	55 kD, type I transmembrane glycoprotein, member of the Ig superfamily
Distribution	Helper T cells, subset of thymocytes, monocytes/macrophages, type II NKT cells
Interaction	Part of the TCR/CD3 complex
Ligand/Receptor	$\beta 2$ domain from the MHC class II
Cell Type	Macrophages, Monocytes, NKT cells, T cells
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Zhu J, <i>et al.</i> 2010. <i>Annu Rev. Immunol.</i> 28:445. 2. Vignali DA. 2010. <i>J. Immunol.</i> 184:5933. 3. Zhou L, <i>et al.</i> 2009. <i>Immunity</i> 30:646. 4. Singer A, <i>et al.</i> 2008. <i>Nat. Rev. Immunol.</i> 8:788. 5. Zhu J and Paul WE. 2008. <i>Blood</i> 112:1557.
Gene ID	920

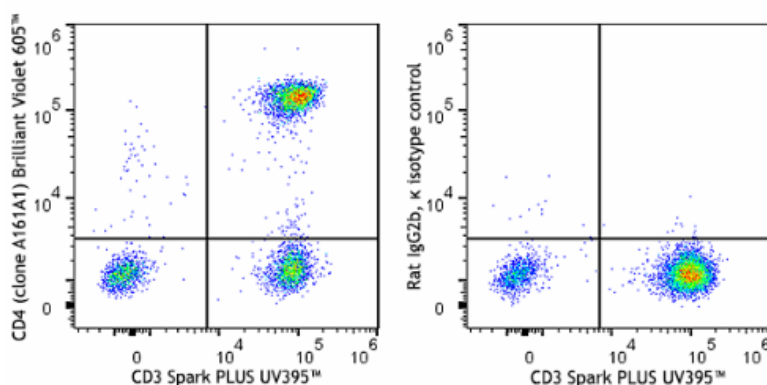
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Cyanine5 anti-human CD4, PE/Cyanine7 anti-human CD4, APC anti-human CD4, PE/Dazzle™ 594 anti-human CD4, Alexa Fluor® 700 anti-human CD4, APC/Cyanine7 anti-human CD4, Brilliant Violet 510™ anti-human CD4, Biotin anti-human CD4, Purified anti-human CD4, PerCP/Cyanine5.5 anti-human CD4, Brilliant Violet 605™ anti-human CD4 Antibody, PE anti-human CD4, FITC anti-human CD4, APC/Fire™ 750 anti-human CD4, Alexa Fluor® 647 anti-human CD4, Brilliant Violet 421™ anti-human CD4

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone SK7) Spark PLUS UV395™ and anti-human CD4 (clone A161A1) Brilliant Violet 605™ (left) or rat IgG2b, κ Brilliant Violet 605™ isotype control (right).

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