

Brilliant Violet 785™ anti-mouse CD45 Antibody

Catalog# / Size	157223 / 50 µg
Clone	S18009F
Regulatory Status	RUO
Other Names	T200, Ly-5, LCA
Isotype	Rat IgG2b, κ
Description	CD45 is a 180-240 kD glycoprotein also known as the leukocyte common antigen (LCA), T200, or Ly-5. It is a member of the protein tyrosine phosphatase (PTP) family, expressed on all hematopoietic cells except mature erythrocytes and platelets. There are different isoforms of CD45 that arise from variable splicing of exons 4, 5, and 6, which encode A, B, and C determinants, respectively. CD45 plays a key role in TCR and BCR signal transduction. These isoforms are very specific to the activation and maturation state of the cell as well as cell type. The primary ligands for CD45 are galectin-1, CD2, CD3, CD4, TCR, CD22, and Thy-1.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant mouse CD45
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 785™ under optimal conditions.
Concentration	0.2 mg/mL
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)

Antigen Details

Structure	Protein tyrosine phosphatase (PTP) family, 180-240 kD
Distribution	All hematopoietic cells except mature erythrocytes and platelets
Function	Phosphatase, T and B cell activation
Interaction	Mesenchymal Stem Cells, B cells, Dendritic cells, Tregs
Ligand/Receptor	Galectin-1, CD2, CD3, CD4, TCR, CD22, Thy-1
Biology Area	Cell Biology, Immunology, Innate Immunity
Molecular Family	CD Molecules

Antigen References

1. Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook Academic Press.*
2. Trowbridge IS, *et al.* 1994. *Annu. Rev. Immunol.* 12:85.
3. Kishihara K, *et al.* 1993. *Cell.* 74:143.
4. Pulido R, *et al.* 1988. *J. Immunol.* 140:3851.

Gene ID

[19264](#)

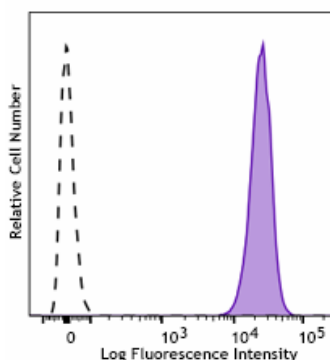
Related Protocols

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

Other Formats

PE/Fire™ 810 anti-mouse CD45, FITC anti-mouse CD45, Purified anti-mouse CD45, PerCP/Cyanine5.5 anti-mouse CD45, Pacific Blue™ anti-mouse CD45, APC/Cyanine7 anti-mouse CD45, Brilliant Violet 785™ anti-mouse CD45 Antibody, PerCP/Fire™ 806 anti-mouse CD45, Spark YG™ 581 anti-mouse CD45 (Flexi-Fluor™), Brilliant Violet 605™ anti-mouse CD45, Brilliant Violet 510™ anti-mouse CD45, PE/Cyanine7 anti-mouse CD45, Alexa Fluor® 700 anti-mouse CD45

Product Data



C57BL/6 splenocytes were stained with anti-mouse CD45 (clone S18009F) Brilliant Violet 785™ (filled histogram) or rat IgG2b, κ Brilliant Violet 785™ isotype control (open histogram).

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