

Brilliant Violet 711™ anti-human CD10 Antibody

Catalog# / Size	312225 / 25 tests 312226 / 100 tests
Clone	HI10a
Regulatory Status	RUO
Workshop	V CD10.7
Other Names	Common acute lymphoblastic leukemia antigen (CALLA), Enkephalinase, Neutral endopeptidase, Neprilysin
Isotype	Mouse IgG1, κ
Description	CD10 is a 100 kD neutral endopeptidase and a member of the metalloprotease family. It is a type II transmembrane protein also known as common acute lymphoblastic leukemia antigen (CALLA), enkephalinase, and neprilysin. CD10 is expressed on B cell precursors, T cell precursors, and neutrophils. CD10 is involved in B cell development and has been shown to bind opioid enkephalins, bradykinin, angiotensins I and II, and other biologically active peptides.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Capuchin monkey, Chimpanzee
Antibody Type	Monoclonal
Host Species	Mouse
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 711™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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	<p>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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</p> <p>Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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 711™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>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.</p>
Excitation Laser	Violet Laser (405 nm)
Product Citations	

1. Frasca D, *et al.* 2018. PLoS One. 13:e0197472. [PubMed](#)
2. Laing AG, *et al.* 2020. Nat Med. 26:1623. [PubMed](#)
3. Rodda LB, *et al.* 2020. Cell. 184(1):169-183.e17. [PubMed](#)
4. Abdul-Jawad S, *et al.* 2021. Cancer Cell. 39(2):257-275.e6. [PubMed](#)
5. Townsley SM, *et al.* 2021. Cell Host Microbe. 29(4):564-578.e9. [PubMed](#)

RRID AB_2565875 (BioLegend Cat. No. 312225)
 AB_2565876 (BioLegend Cat. No. 312226)

Antigen Details

Structure	Type II transmembrane metalloprotease family, 100 kD
Distribution	B cell precursors, T cell precursors, neutrophils
Function	Zinc-binding metalloproteinase, B cell development
Ligand/Receptor	Biologically active peptides including opioid enkephalins, bradykinin, angiotensins I & II
Cell Type	B cells, Neutrophils
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Shipp M, <i>et al.</i> 1993. <i>Blood</i> 82:1052. 2. Lu B, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 181:2271.
Gene ID	4311

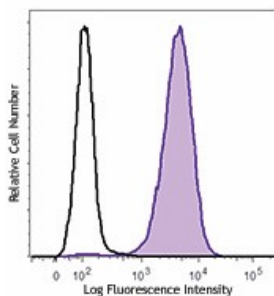
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD10, PE anti-human CD10, PE/Cyanine5 anti-human CD10, FITC anti-human CD10, APC anti-human CD10, APC/Cyanine7 anti-human CD10, PE/Cyanine7 anti-human CD10, PerCP/Cyanine5.5 anti-human CD10, Brilliant Violet 421™ anti-human CD10, Brilliant Violet 510™ anti-human CD10, Brilliant Violet 605™ anti-human CD10, Purified anti-human CD10 (Maxpar® Ready), Brilliant Violet 711™ anti-human CD10, PE/Dazzle™ 594 anti-human CD10, APC/Fire™ 750 anti-human CD10, TotalSeq™-A0062 anti-human CD10, TotalSeq™-C0062 anti-human CD10, TotalSeq™-B0062 anti-human CD10, Brilliant Violet 785™ anti-human CD10, TotalSeq™-D0062 anti-human CD10, GMP APC anti-human CD10, GMP FITC anti-human CD10, GMP PE/Cyanine7 anti-human CD10, GMP PE anti-human CD10

Product Data



Human peripheral blood granulocytes were stained with CD10 (clone HI10a) Brilliant Violet 711™ (filled histogram) or mouse IgG1, κ Brilliant Violet 711™ isotype control (open histogram).

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