Brilliant Violet 711™ anti-human CD223 (LAG-3) Antibody

Catalog# / Size	369319 / 25 tests 369320 / 100 tests
Clone	11C3C65
Regulatory Status	RUO
Other Names	CD223, LAG-3, LAG3, lymphocyte-activation gene-3
Isotype	Mouse IgG1, κ
Description	CD223, also known as LAG-3, is a 70 kD type I transmembrane glycoprotein that is involved in T-cell signaling. Similar to CD4, CD223 binds MHC class II, but with a higher affinity. CD223 negatively regulates T-cell activation. It is expressed by activated T-cells and natural killer cells (NKs), as well as regulatory T-cells. It is transiently expressed on the surface of activated T-cells in acute conditions but high expression is maintained under tolerizing conditions. CD223 deficiency results in reduced tumor growth. CD223 and PD-1 can act in synergy and reverse exhausted phenotypes, improve tumor rejection, and control viral load.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human LAG-3 transfected 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 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	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. 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. 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)
Application Notes	The staining of clone 11C3C65 cannot be blocked by clone 7H2C65, which is another anti-human CD223 (LAG-3) antibody.

Product Citations	1. Myers JA, *et al.* 2022. JCI Insight. :. PubMed 2. Carnevale J, *et al.* 2022. Nature. 609:174. PubMed 3. Evgin L, *et al.* 2020. Nat Commun. 2.671527778. PubMed
RRID	AB_2716124 (BioLegend Cat. No. 369319) AB_2716125 (BioLegend Cat. No. 369320)

Antigen Details

Structure	70 kD transmembrane glycoprotein, Ig superfamily, highly homologous to CD4.
Distribution	Activated T-cells and natural killer cells (NKs) and regulatory T cells.
Function	Negatively regulates T-cell activation.
Ligand/Receptor	Binds MHC class II molecules.
Cell Type	Dendritic cells, NK cells, T cells, Tregs
Biology Area	Immunology, Inhibitory Molecules
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	1. Castelli C, *et al.* 2014. *Oncoimmunology.* 3(11):e967146. 2. Poirier N, *et al.* 2011. *Clin. Exp. Immunol.* 164:265. 3. Juno JA, *et al.* 2015. *Retrovirology.* 12:17. 4. Casati C, *et al.* 2006. *Cancer Res.* 66:4450.
Gene ID	3902

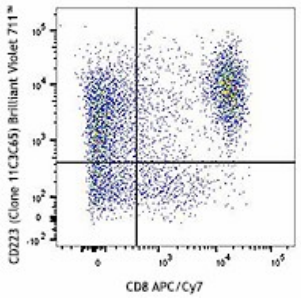
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

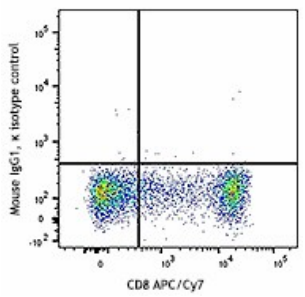
Other Formats

Purified anti-human CD223 (LAG-3), Alexa Fluor® 647 anti-human CD223 (LAG-3), PE anti-human CD223 (LAG-3), FITC anti-human CD223 (LAG-3), PE/Cyanine7 anti-human CD223 (LAG-3), PerCP/Cyanine5.5 anti-human CD223 (LAG-3), Brilliant Violet 421™ anti-human CD223 (LAG-3), Brilliant Violet 650™ anti-human CD223 (LAG-3), Brilliant Violet 510™ anti-human CD223 (LAG-3), Brilliant Violet 785™ anti-human CD223 (LAG-3), Brilliant Violet 711™ anti-human CD223 (LAG-3), Brilliant Violet 605™ anti-human CD223 (LAG-3), Alexa Fluor® 488 anti-human CD223 (LAG-3), Biotin anti-human CD223 (LAG-3), PE/Dazzle™ 594 anti-human CD223 (LAG-3), APC/Fire™ 750 anti-human CD223 (LAG-3), TotalSeq™-A0152 anti-human CD223 (LAG-3), TotalSeq™-C0152 anti-human CD223 (LAG-3), TotalSeq™-B0152 anti-human CD223 (LAG-3), TotalSeq™-D0152 anti-human CD223 (LAG-3), Alexa Fluor® 700 anti-human CD223 (LAG-3), Pacific Blue™ anti-human CD223 (LAG-3), PE/Cyanine5 anti-human CD223 (LAG-3), APC/Cyanine7 anti-human CD223 (LAG-3), APC/Fire™ 810 anti-human CD223 (LAG-3)

Product Data



CD3/CD28/IL-2 stimulated (three days) peripheral blood mononuclear cells (PBMCs) were stained with CD8 APC/Cy7 and CD223 (clone 11C3C65) Brilliant Violet 711™ (top) or mouse IgG1, κ Brilliant Violet 711™ isotype control (bottom).



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