SONY

Product Data Sheet

Brilliant Violet 785™ anti-human CD223 (LAG-3)

Catalog # / Size: 2446605 / 25 tests
2446610 / 100 tests

Clone: 11C3C65

Isotype: Mouse IgG1, κ

Immunogen: Human LAG-3 transfected cells.

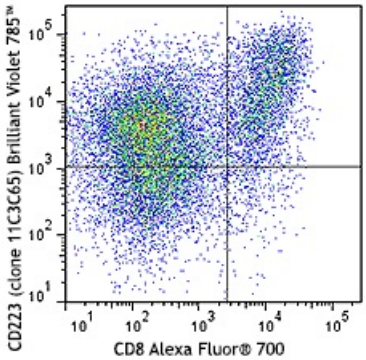
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: HCDM listed

Concentration: Lot-specific



CD3/CD28/IL-2 stimulated (three days) peripheral blood mononuclear cells (PBMCs) were stained with CD8 Alexa Fluor® 700 and CD223 (clone 11C3C65) Brilliant Violet 785™ (top) or mouse IgG1, κ Brilliant Violet 785™ isotype control (bottom).

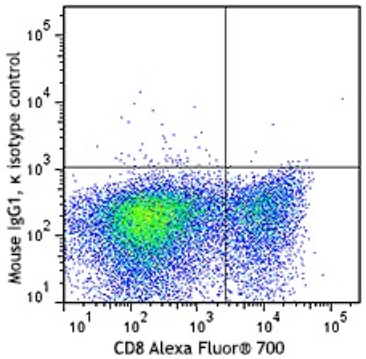
Applications:

Applications: Flow Cytometry

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 or 5 µl per 100 µl of whole blood. 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.

Application Notes: The staining of clone 11C3C65 cannot be blocked by clone 7H2C65, which is another anti-human CD223 (LAG-3) antibody.



CD3/CD28/IL-2 stimulated (three days) peripheral blood mononuclear cells (PBMCs) were stained with CD8 Alexa Fluor® 488 and CD223 (Clone 7H2C65) APC (Left) or mouse IgG1

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Application References:

1. Costes V, *et al.* 1999. *Hum. Pathol.* 30:1405. (IF)
2. Gattei V, *et al.* 1999. *Br. J. Haematol.* 104:152. (WB)
3. Bologna-Molina R, *et al.* 2008. *Oral Oncol.* 44:805. (IHC)
4. Itoua MR, *et al*. 2014. *Biomed. Res. Int*. 2014:536482.

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.

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.

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