

Brilliant Violet 510™ anti-human Ganglioside GD2

Catalog # / 2386580 / 100 tests
Size: 2386575 / 25 tests

Clone: 14G2a

Isotype: Mouse IgG2a, κ

Immunogen: Neuroblastoma cell line LAN-1

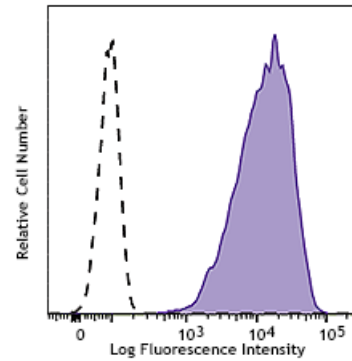
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

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

Workshop Number: HCDM listed

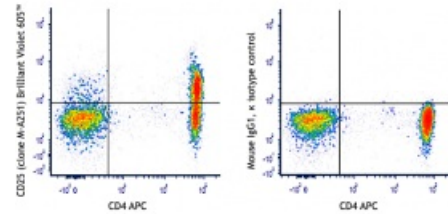
Concentration: Lot-specific



Human melanoma cell line M21 was stained with Ganglioside GD2 (clone 14G2a) Brilliant Violet 510™ (filled histogram) or mouse IgG2a, κ Brilliant Violet 510™ isotype control (open histogram).

Applications:

Applications: Flow Cytometry



Human peripheral blood lymphocytes were stained with CD4 APC and CD25 (clone M-A251) Brilliant Violet 605™ (left) or Mouse IgG1, κ Brilliant Violet 605™ isotype control (right).

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 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ is a trademark of Sirigen Group Ltd.

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Application Notes: Clone 14G2a is an isotype switch variant from parental hybridoma 14.18 (IgG3)¹. Additional reported applications (for the relevant formats) include: inducing apoptosis and enhancing cytotoxicity of chemotherapeutic drugs in the neuroblastoma cell line ². This clone has also been published as 14.G2a.

Application References:

1. Mujoo K, et al. 1989. *Cancer Res.* 49:2857. (Cyt)
2. Kowalczyk A, et al. 2009. *Cancer Lett.* 281:171. (Apop, Cyt)
3. Battula VL, et al. 2012. *J. Clin. Invest.* 122:2066. (FC)

Description: Ganglioside GD2 is a sialic acid-containing glycosphingolipid involved in cell attachment to the extracellular matrix. Expression of GD2 in normal tissue is restricted to cells from the central nervous system, peripheral nerves, skin melanocytes, and mesenchymal stem cells. However GD2 is highly expressed by tumors of neuro-ectodermal origin such as melanomas, gliomas, neuroblastomas, and small cell lung carcinoma. GD2 has been proposed as a marker for some cancer stem cells.

Antigen References:

1. Tarek N, et al. 2012. *J. Clin. Invest.* 122:3260.
2. Matthay KK, et al. 2012. *Clin. Cancer Res.* 18:2740.
3. Navid F, et al. 2010. *Curr. Cancer Drug Targets.* 10:200.