

**Alexa Fluor® 647 anti-human Ganglioside GD2**

**Catalog # / Size:** 2386585 / 25 tests  
2386590 / 100 tests

**Clone:** 14G2a

**Isotype:** Mouse IgG2a, κ

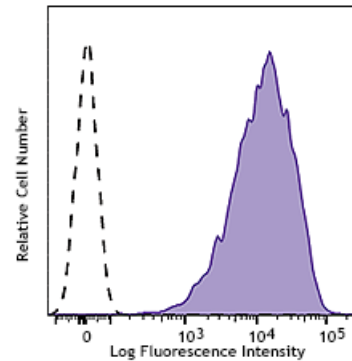
**Immunogen:** Neuroblastoma cell line LAN-1

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human melanoma cell line M21 was stained with Ganglioside GD2 (clone 14G2a) Alexa Fluor® 647 (filled histogram) or mouse IgG2a, κ Alexa Fluor® 647 isotype control (open histogram).

**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 in 100 µl staining volume or 5 µl per 100 µl of whole blood.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

**Application Notes:** Clone 14G2a is an isotype switch variant from parental hybridoma 14.18 (IgG3)<sup>1</sup>. Additional reported applications (for the relevant formats) include: inducing apoptosis and enhancing cytotoxicity of chemotherapeutic drugs in the neuroblastoma cell line <sup>2</sup>. 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.