

**PE anti-mouse CD49a**

**Catalog # / Size:** 1313020 / 100 µg  
1313015 / 25 µg

**Clone:** HMα1

**Isotype:** Hamster IgG

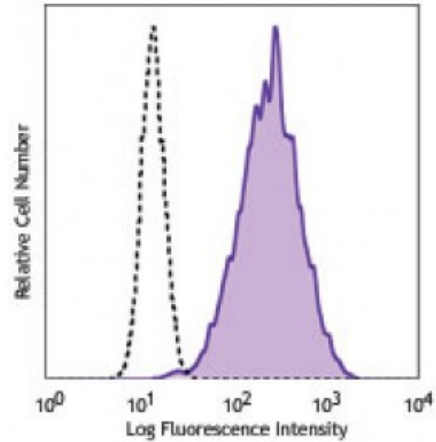
**Immunogen:** Mouse Neuroblastoma Cell Line C1300

**Reactivity:** Mouse

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** NULL



C1300 (mouse neuroblastoma cell line) cells were stained with CD49a (clone HMα1) PE (filled histogram) or Armenian hamster IgG PE 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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant format) include: inhibition of cell adhesion and cytokine production<sup>1,2</sup>.

- Application References:**
1. Miyake S, *et al.* 1994. *Eur. J. Immunol.* 24:2000. (FC, Block)
  2. Tanaka T, *et al.* 1995. *Int. Immunol.* 7:1183. (Block)
  3. Nagaoka M, *et al.* 2014. *J Immunol.* 193:2812. [PubMed](#)
  4. Burton BR, *et al.* 2014. *Nat Commun.* 5:4741. [PubMed](#)

**Description:** CD49a is a 1179 aa, type I transmembrane glycoprotein also known as α1 integrin, VLA-1 α chain, or integrin α1. It associates antibody v042010 with CD29 (β1 integrin) to form the VLA-1 complex, a collagen IV and alminin-1 receptor that is expressed on activated T cells, smooth muscle cells, endothelial cells, neuronal cells, fibroblasts, and mesenchymal cells. CD49a is an adhesion molecule and is involved in the regulation of leukocyte migration, T cell proliferation, and cytokine production.

**Antigen References:**

1. Barczyk M, *et al.* 2010. *Cell Tissue Res.* 339:269.