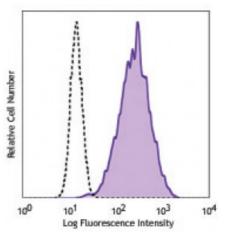
## **Product Data Sheet**

## PE anti-mouse CD49a

Catalog # / Size:	1313015 / 25 μg 1313020 / 100 μg
Clone:	ΗΜα1
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.
<b>Concentration:</b>	NULL



C1300 (mouse neuroblastoma cell line) cells were stained with CD49a (clone HM $\alpha$ 1) PE (filled histogram) or Armenian hamster IgG PE isotype control (open histogram).

## **Applications:**

Applications: Recommended Usage:	Flow Cytometry 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 $\leq 0.25$ 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:	<ol> <li>Miyake S, <i>et al.</i> 1994. <i>Eur. J. Immunol.</i> 24:2000. (FC, Block)</li> <li>Tanaka T, <i>et al.</i> 1995. <i>Int. Immunol.</i> 7:1183. (Block)</li> <li>Nagaoka M, <i>et al.</i> 2014. <i>J Immunol.</i> 193:2812. <u>PubMed</u></li> <li>Burton BR, <i>et al.</i> 2014. <i>Nat Commun.</i> 5:4741. <u>PubMed</u></li> </ol>
Description:	CD49a is a 1179 aa, type I transmembrane glycoprotein also known as $\alpha 1$ integrin, VLA-1 $\alpha$ chain, or integrin $\alpha 1$ . It associates antibody v042010 with CD29 ( $\beta 1$ 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	1. Barczyk M, <i>et al.</i> 2010. <i>Cell Tissue Res.</i> 339:269.

References:

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