SONY

Product Data Sheet

APC anti-mouse CD49e

Catalog # / Size: 1119065 / 25 µg
1119070 / 100 µg

Clone: 5H10-27(MFR5)

Isotype: Rat IgG2a, κ

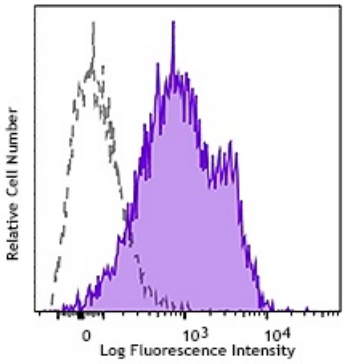
Immunogen: (C57BL/6 x A/J)F1 mouse mast cell line

Reactivity: Mouse

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

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

Concentration: 0.2 mg/ml



C57BL/6 mouse bone marrow cells were stained with CD49e (clone 5H10-27) APC (filled histogram) or Rat IgG2a, κ APC 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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining[6,7] of acetone-fixed frozen sections, blocking of cell-cell adhesion[1-5], inhibition of TNF-β_1 costimulated T cell proliferation[3], and costimulation of T cell proliferation by cross-linked 5H10-27 antibody[3].

Application References:

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Kinashi T, *et al.* 1994 *Blood Cells* 20:25.
3. Hemler ME. 1990. *Annu. Rev. Immunol.* 8:365.

Description: CD49e is a 135 kD protein, also known as α_5 integrin or VLA-5 α chain. It is a member of the integrin family, expressed on thymocytes, splenic B cells, activated T cells, and mast cells. CD49e associates with CD29 (integrin β_1 chain) to form the fibronectin receptor (VLA-5). CD49e plays a critical role in both adhesion and T cell costimulation. The primary ligand for CD49e/CD29 (VLA-5) is fibronectin. The 5H10-27(MFR5) antibody has been shown to block CD49e mediated interactions and promote the *in vitro* stimulation of $CD8^+$ T cells.

Antigen References:

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Kinashi T, *et al.* 1994 *Blood Cells* 20:25.
3. Hemler ME. 1990. *Annu. Rev. Immunol.* 8:365.

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