

Anti-Human CD49d-174Yb

Catalog: 3174018B

Package Size: 100 tests

Storage: Store product at 4°C. Do not freeze.

Reactivity: Cynomolgus Monkey, Rhesus, Chimpanzee, Olive Baboon, Squirrel Monkey, Marmoset, Bovine, Canine, Ovine, Equine, Feline,

Clone: 9F10

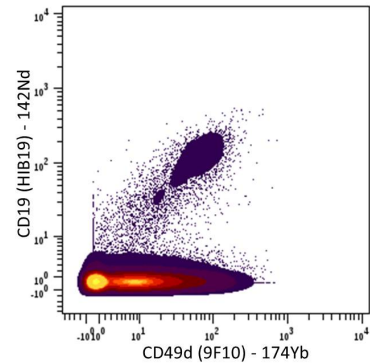
Isotype: IgG1

Formulation: Antibody stabilizer with 0.05% Sodium Azide

Technical Information

Validation: Each lot of conjugated antibody is quality control tested by CyTOF[®] analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended Usage: The suggested use is 1 µl for up to 3 X 10⁶ live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human PBMCs stained with 142Nd-anti-CD19 (HIB19) and 174Yb-anti-CD49d (9F10).

Description

CD49d, also known as α4 integrin or VLA-4 α chain, is an integrin chain that forms a heterodimer with either integrin β1 (α4β1, VLA-4) or β7 (α4β7). CD49d binds to VCAM-1 and MadCAM-1 and to fibronectin and collagens and plays a role in leukocyte adhesion to endothelium and extracellular matrix. CD49d is a marker to isolate pure populations of Treg cells due to its absence on Foxp3+ cells. The 9F10 antibody is able to costimulate T cell activation. CD49d is expressed broadly on T lymphocytes, B lymphocytes, monocytes, thymocytes, eosinophils, basophils, mast cells, NK cells, dendritic cells, and some non-hematopoietic cells, but not on normal red blood cells, platelets or neutrophils.

References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Newell, E.W., et al. Cytometry by Time-of-Flight Shows Combinatorial Cytokine Expression and Virus-Specific Cell Niches within a Continuum of CD8+ T Cell Phenotypes. *Immunity* 36 January 2012: 142-152.

Ornatsky, O. I., et al. **Highly Multiparametric Analysis by Mass Cytometry.** *J Immunol Methods* 361 (1-2):1-20, 2010.

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