

**mFluor™ Violet 450 Anti-human CD29
Antibody *HI29a***Catalog number: 102900Z0, 102900Z1
Unit size: 100 tests, 500 tests**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD29 (ITGB1, Integrin β 1)
Clone	HI29a
Conjugate	mFluor™ Violet 450

Biological Properties

Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Violet 450 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Violet 450
Excitation Wavelength	406 nm
Emission Wavelength	445 nm

Applications

The HI29a monoclonal antibody binds with human CD29, a 130 kD transmembrane protein often found on the surface of fibroblasts and platelets. CD29 is a member of essential cellular pathways, namely, the cytokine-mediated signaling pathway, integrin-mediated signaling pathway and CD40 signaling pathway. Also, it has been thought to be involved with vital biological processes like cell adhesion, especially cell

adhesion mediated by integrin. In some organisms, CD29 acts to positively regulate apoptotic process, acts to positively regulate signaling receptor activity and enhances angiogenesis. From a research standpoint, it is of biological interest due to its association with critical macromolecules/ligands such as VCAM-1. CD29 is a fairly uncommon antibody target, with a little more than 7000 publications in the last decade. Even still, CD29 has been widely used in cell adhesion, cell biology and stem cells research, frequently serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to mFluor™ Violet 450 (ex/em = 406/445 nm). It is compatible with the 405 nm laser and 452/45 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant VYB).