

**iFluor™ 405 Anti-human CD29 Antibody**  
**\*HI29a\***Catalog number: 10290020, 10290021  
Unit size: 100 tests, 500 tests**Product Details**

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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**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD29 (ITGB1, Integrin $\beta$ 1)
Clone	HI29a
Conjugate	iFluor™ 405

**Biological Properties**

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Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	iFluor™ 405
Excitation Wavelength	403 nm
Emission Wavelength	427 nm

**Applications**

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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 iFluor™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 420/10 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).