

## **Product Data Sheet**

## PE anti-human CD29

Catalog # / Size: 303003 / 25 tests

303004 / 100 tests

Clone: TS2/16

**Isotype:** Mouse IgG1,  $\kappa$ 

Workshop Number: V A-S202

Reactivity: Human, Cross-Reactivity\*: Cattle (Bovine, Cow)

Preparation: The antibody was purified by affinity chromatography, and conjugated with

PE under optimal conditions. The solution is free of unconjugated PE and

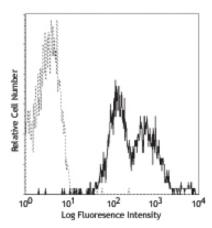
unconjugated antibody.

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

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes stained with TS2/16 PE

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. Test size products are transitioning from 20 μl to 5 μl per test. Please check your vial or your CoA to find the

suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at

www.biolegend.com/testsize regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>3</sup>, immunohistochemical staining<sup>3,5</sup> of acetone-fixed frozen tissue sections, and activation<sup>4,7,8</sup> of integrin  $\beta_1$ . The LEAFTM purified antibody

(Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 303010).

Application References: 1. Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

2. Gutierrez-Lopez M, et al. 2003. J. Biol. Chem. 278:208.

Guiterrez-Lopez M, et al. 2003. J. Biol. Crem. 278.206
Hemler ME, et al. 1984. J. Immunol. 132:3011.
Sanchez-Aparicio P, et al. 1994. J. Cell Biol. 126:271.
Frank NY, et al. 2005. Cancer Res. 65:4320.
Murga M, et al. 2005. Blood 105:1992.
Porter JC and Hogg N. 1997. J. Cell Biol. 138:1437.
Conway RE, et al. 2006. Mol. Cell. Biol. 26:5310.

**Description:** CD29 is a 130 kD single chain type I glycoprotein, known as integrin  $\beta_1$ , VLA- $\beta$  chain, or gplIa. It is broadly expressed

on a majority of hematopoietic and non-hematopoietic cells, including leukocytes (although at low level on

granulocytes), platelets, fibroblasts, endothelial cells, epithelial cells, and mast cells. CD29 is a member of the integrin family. It is non-covalently associated with integrin  $\alpha$ 1- $\alpha$ 6 chains to form VLA-1 to VLA-6 molecules, respectively.

Integrins which include CD29 bind to several cell surface (e.g. VCAM-1, MadCAM-1) and extracellular matrix molecules. CD29 acts as a fibronectin receptor and is involved in a variety of cell-cell and cell-matrix interactions.

Antigen References: 1. Hemler M. 1990. Annu. Rev. Immunol. 8:365.

2. Hynes R. 1992. Cell 69:11.

**Related Products: Product** PE anti-human CD49d

PE Mouse IgG1,  $\kappa$  Isotype Ctrl Cell Staining Buffer RBC Lysis Buffer (10X)

Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone 9F10 MOPC-21

Application FC, ICFC

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