

## PE/Cy5 anti-human CD29

**Catalog # / Size:** 2115025 / 25 tests  
2115030 / 100 tests

**Clone:** TS2/16

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

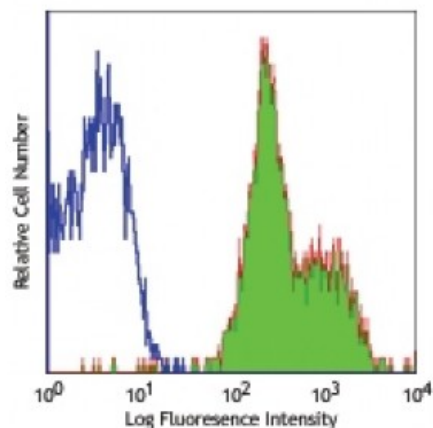
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy5 under optimal conditions. The solution is free of unconjugated PE/Cy5 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** V A-S202

**Concentration:** Lot-specific



Human peripheral blood lymphocytes stained with TS2/16 PE/Cy5

## Applications:

**Applications:** Flow Cytometry

**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 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>3</sup>, immunohistochemical staining of acetone-fixed frozen tissue sections<sup>3,5</sup>, and activation of integrin  $\beta_1$ <sup>4,7,8</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 303010). Clone TS2/16 recognizes epitope A2.<sup>10</sup>

- Application References:**
- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
  - Gutierrez-Lopez M, *et al.* 2003. *J. Biol. Chem.* 278:208.
  - Hemler ME, *et al.* 1984. *J. Immunol.* 132:3011. (IHC, IP)
  - Sanchez-Aparicio P, *et al.* 1994. *J. Cell Biol.* 126:271. (Activ)
  - Frank NY, *et al.* 2005. *Cancer Res.* 65:4320. (IHC)
  - Murga M, *et al.* 2005. *Blood* 105:1992. (FC) [PubMed](#)
  - Porter JC and Hogg N. 1997. *J. Cell Biol.* 138:1437. (Activ)
  - Conway RE, *et al.* 2006. *Mol. Cell. Biol.* 26:5310. (Activ)
  - Wesseling J, *et al.* 1995. *J. Cell. Biol.* 129:255. (Dog Reactivity)
  - Rubio G, *et al.* 2002. *Cancer Immunol. Immunother.* 51:130.
  - Dong A, *et al.* 2015. *J Biol Chem.* 290:8016. [PubMed](#)
  - Paebst F, *et al.* 2014. *Cytometry A.* 85(8):678-87. (Horse reactivity)

**Description:** CD29 is a 130 kD single chain type I glycoprotein also known as integrin  $\beta_1$ , VLA- $\beta$  chain, or gp11a. 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.