Product Data Sheet

Purified anti-CD49C (Integrin α3)

Catalog # / 4926010 / 100 μg

Size: $4926005 / 25 \mu g$

Clone: P1B5

Isotype: Mouse IgG1, κ

Immunogen: The P1B5 monoclonal antibody was

generated against human HT1080

cells.

Reactivity: Human

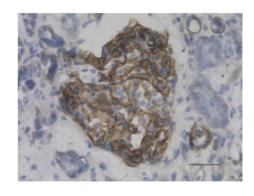
Preparation: The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5 mg/ml



IHC staining of purified anti-CD49C (Integrin $\alpha 3$) antibody (clone P1B5) on frozen human kidney tissue. The tissue was incubated with 1 μ g/ml of the primary antibody for 60 minutes at room temperature. Ultra-Streptavidin (USA) HRP kit (Multi-Species, DAB) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective.

Scale bar: 50 µm

Applications:

Applications: Flow Cytometry,

Immunohistochemistry, Other

Recommended

Usage:

Each lot of this antibody is quality control tested by formalin-fixed

paraffin-embedded

immunohistochemical staining. For

immunohistochemistry, a

concentration range of 1.0 - 5.0 µg/ml is suggested. For flow cytometric staining, the suggested use of this reagent is between 1.0 - 10 µg per million cells in 100 µl volume. For

immunocytochemistry, a

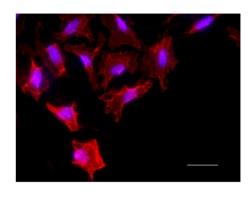
concentration range of $1.0 - 5.0 \,\mu\text{g/ml}$ is recommended. It is recommended that the reagent be titrated for optimal performance for each

application.

Application Notes:

This antibody recognizes the $\alpha 3\,$

subunit.



ICC staining of purified anti-CD49C (Integrin $\alpha 3$) antibody (clone P1B5) on HeLa cells. The cells were fixed with 4% PFA, permeabilized with a buffer containing 0.1% Triton X-100 and 0.25% BSA, and blocked with 2% normal goat serum and 0.02% BSA. The cells

Application References:

- 1. Wayner EA and Hoffstrom BG. 2007. Methods. Enzymol. 426:117.
- 2. Wayner EA, et al. 1993. J Cell Biol. 121:1141. (IP)
- 3. Carter WG, et al. 1990. J Cell Biol. 110:1387-404 (IP)
- 4. Wayner EA and Carter WG. 1987. J Cell Biol. 105:1873. (IP)

Description:

CD49c is a 150 kD α integrin chain known as $\alpha 3$ integrin or VLA-3 α chain. It is a type I transmembrane glycoprotein which is proteolytically cleaved into two disulfide linked fragments of 125 kD and 30 kD. CD49c forms a heterodimer with integrin $\beta 1$ ($\alpha 3\beta 1$, CD49c/CD29, VLA-3) and is expressed by many types of adhesion cells, such as endothelial cells, epithelial cells, and dermal fibroblasts. Weak expression has been reported on leukocytes. VLA-3 plays a role in cell-cell and cell-matrix adhesion through binding Kalinin, collagen, laminin-1, laminin-5, entactin, and fibronectin.

Antigen References:

- 1. Fitzgerald, K., et al. Eds. 2001. The Cytokine FactsBook. Academic Press, San Diego.
- 2. Hirano T. 1998. Int. Rev. Immunol. 16:249.
- 3. Patterson P. 1992. Curr. Opin. Neurobiol. 2:94.
- 4. van Oers M, et al. 1993. Ann. Hematol. 66:219.