EXBIO Antibodies

PRODUCT DATA SHEET

PB-219-T025

Monoclonal Antibody to CD29 Pacific Blue™ conjugated (25 tests)

Clone: MEM-101A

Isotype: Mouse IgG1

Specificity: The antibody MEM-101A reacts with CD29 (integrin beta1 chain), a 130 kDa single chain type I glycoprotein expressed as a heterodimer (non-covalently associated with the integrin alpha subunits 1-6). CD29 is broadly expressed on majority of hematopoietic and non-hematopoietic cells (leukocytes, platelets, fibroblasts, endothelial cells, epithelial cells and mast cells).
HLDA VI; WS Code AS A048

Regulatory Status: RUO

Immunogen: Raji Burkitt's lymphoma cell line

Species Reactivity: Human, Porcine, Canine (Dog)

Negative Species: Mouse

Preparation: The purified antibody is conjugated with Pacific Blue™ under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension.
The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD29 (beta1 integrin subunit, GPIIa) forms non-covalently linked heterodimers with at least 6 different alpha chains (alpha1-alpha6, CD49a-f) determining the binding properties of beta1 (VLA) integrins. These integrins mediate cell adhesion to collagen, fibronectin, laminin and other extracellular matrix (ECM) components. This interaction hinders cell death, whereas disruption of anchorage to ECM leads to apoptosis. Decreased expression of most beta1 integrins correlates with acquiring multidrug resistance of tumour cells during selection in presence of antitumour drug. In platelets, translocation of intracellular pool of beta1 integrins to the plasma membrane following thrombin stimulation. These integrins are also up-regulated in leukocytes during emigration and extravascular migration and appear to be critically involved in regulating the immune cell trafficking from blood to tissue, as well as in regulating tissue damage and disease symptoms related to inflammatory bowel disease. Through a beta1 integrin-dependent mechanism, fibronectin and type I collagen enhance cytokine secretion of human airway smooth muscle in response to IL-1beta.

For laboratory research only, not for drug, diagnostic or other use.

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