

TECHNICAL DATA SHEET

CyFlow™ CD29 APC **Anti-Hu; Clone MEM-101A**

REF CA236759



Sysmex Partec GmbH
Arndtstraße 11 a-b
02826 Görlitz
Germany
Tel.: +49 3581 8746 0
E-mail: info@sysmex-partec.com
www.sysmex-partec.com

Distributed in the U.S.A. and Canada by:
Sysmex America, Inc.
577 Aptakistic Road
Lincolnshire, IL 60069, U.S.A.
Tel.: 1-888-879-7639 or 1-847-367-3503
E-mail: cytometry@sysmex.com
<https://us.sysmex-flowcytometry.com/>

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD29
Alternative Names	Integrin β 1
Clone	MEM-101A
Clonality	monoclonal
Format	APC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Pig Dog
Negative Species Reactivity	Mouse
Quantity	100 tests
Immunogen	Raji cells: human Burkitt's lymphoma cell line

Specificity

The mouse monoclonal antibody MEM-101A recognizes CD29 antigen, a 130 kDa single chain type I glycoprotein expressed as a heterodimer (non-covalently associated with the integrin α 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

Application

The reagent is designed for flow cytometry analysis of human blood cells. Recommended usage is 10 μ l reagent / 100 μ l of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH \approx 7.4, containing 0.09% (w/v) sodium azide and 0.2% (w/v) BSA.

Storage and Stability

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

Background Information

CD29 (β 1 integrin subunit, GPIIa) forms non-covalently linked heterodimers with at least 6 different α chains (α 1- α 6, CD49a-f) determining the binding properties of β 1 (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 β 1 integrins correlates with acquiring multidrug resistance of tumor cells during selection in presence of antitumor drug. In platelets, translocation of intracellular pool of β 1 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 β 1 integrin-dependent mechanism, fibronectin and type I collagen enhance cytokine secretion of human airway smooth muscle in response to IL-1 β .

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.











Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at <http://www.sysmex-partec.com/services>, or at <https://us.sysmex-flowcytometry.com/> (U.S. customers only).

References

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Symbols

 REF	Reference number		Contains sufficient for <n> tests
 RUO	For research use only		Temperature limit
 LOT	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier