TECHNICAL DATA SHEET

CyFlow™ CD47 Pacific Blue™
Anti-Hu; Clone MEM-122

REF **BL379138**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD47
Alternative Names	IAP
Clone	MEM-122
Clonality	monoclonal
Format	Pacific Blue™
Host / Isotype	Mouse / IgM
Species Reactivity	Human, Non-Human Primates | Pig
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	COS-7 African green monkey kidney cells

Specificity

The mouse monoclonal antibody MEM-122 recognizes CD47 antigen, a 50-55 kDa membrane adhesion molecule (thrombospondin receptor; immunoglobulin supergene family) expressed on leukocytes,

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platelets and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tumor cell lines.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing Tris buffered saline (TBS) solution, pH ≈8.0, containing 0.1% (w/v) sodium azide.

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

CD47 (IAP; integrin-associated protein) is an ubiquitously expressed cell surface transmembrane glycoprotein interacting with several integrins and regulating their functions. Engagement of CD47 by soluble ligands or counter receptors modulates various signaling pathways, such as activation of heterotrimeric G proteins. Binding secreted thrombospondin-1, CD47 counteracts graft vascularization. CD47 acts also as a ligand for CD172a (SIRP α; signal regulatory protein α), an immune inhibitory receptor on macrophages; this interaction prevents phagocytosis of CD47-positive cells. Moreover, CD47-CD172a system affects cell migration, B cell adhesion and T cell activation. CD47 is also involved in modulation of chondrocyte responses to mechanical signals, and promotes neuronal development, being especially abundant in synapse-rich regions of brain and retina.

References

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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