Monoclonal Antibody to CD47
Purified Antibody (0.1 mg)

Clone: MEM-122
Isotype: Mouse IgM
Specificity: The antibody MEM-122 reacts with CD47 (Integrin Associated Protein), a 50-55 kDa membrane adhesion molecule (thrombospondin receptor; immunoglobulin supergene family) expressed on leukocytes, platelets and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tumor cell lines. HLDA VI; WS Code AS A051
Regulatory Status: RUO
Immunogen: COS-7 (African green monkey) cells
Species Reactivity: Human, Non-Human Primates, Porcine
Application: Flow Cytometry
Recommended dilution: 2 µg/ml
Western Blotting
Application note: Non-reducing conditions.
Immunohistochemistry (frozen sections)
Purity: > 95% (by SDS-PAGE)
Purification: Purified by precipitation and chromatography
Concentration: 1 mg/ml
Storage Buffer: Tris buffered saline (TBS) with 15 mM sodium azide, approx. pH 8.0
Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration: See vial label
Lot Number: See vial label
Background: CD47 (integrin-associated protein, IAP) 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 (signal regulatory protein alpha, SIRP alpha), 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: