ARG62871
anti-CD47 antibody [MEM-122]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MEM-122] recognizes CD47
Tested Reactivity	Hu, NHuPrm, Pig
Tested Application	FACS, IHC-Fr, WB
Specificity	The clone MEM-122 reacts with an extracellular epitope of 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
Host	Mouse
Clonality	Monoclonal
Clone	MEM-122
Isotype	IgM
Target Name	CD47
Immunogen	COS-7 (African green monkey) cells
Conjugation	Un-conjugated
Alternate Names	Leukocyte surface antigen CD47; CD antigen CD47; Antigenic surface determinant protein OA3; MER6; OA3; Protein MER6; IAP; Integrin-associated protein

Application Instructions

Application table

Application	Dilution
FACS	2 µg/ml
IHC-Fr	Assay-dependent
WB	Assay-dependent

Application Note: WB: Under non-reducing condition.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

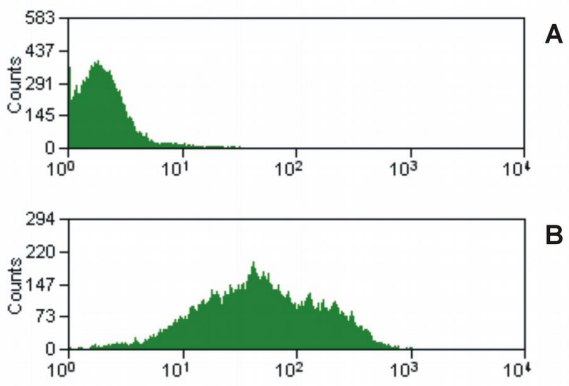
Form	Liquid
Purification	Purified from ascites by CHT-chromatography and precipitation methods.
Purity	> 95% (by SDS-PAGE)
Buffer	TBS (pH 8.0) and 15 mM Sodium azide
Preservative	15 mM Sodium azide

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 397042 Pig GeneID: 961 Human Swiss-port # Q08722 Human Swiss-port # Q9GKE8 Pig
Gene Symbol	CD47
Gene Full Name	CD47 molecule
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.
Function	Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May be involved in membrane permeability changes induced following virus infection. [UniProt]
Research Area	Cancer antibody; Immune System antibody
Calculated Mw	35 kDa

Images



ARG62871 anti-CD47 antibody [MEM-122] FACS image

Flow Cytometry: Porcine peripheral blood stained with ARG62871 anti-CD47 antibody [MEM-122], followed by incubation with FITC-labelled secondary antibody.
Panel A was stained with Isotype mouse IgM control.