Product Datasheet

Anti-human CD47 mAb

Catalog No: #CM096

Package Size: #CM096-1 25ug #CM096-2 100ug

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

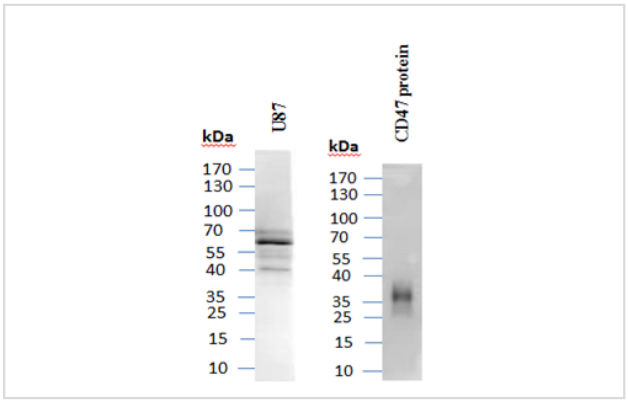
Description

Product Name	Anti-human CD47 mAb
Host Species	Mouse
Clonality	Monoclonal
Clone No.	4C4
Isotype	Mouse IgG1, κ
Applications	FC/WB/Active/ Block
Species Reactivity	Hu
Specificity	Detects human CD47 in direct ELISAs
Immunogen Description	Recombinant CD47 protein
Formulation	Lyophilized from a 0.2μm filtered solution in phosphate buffered saline (PBS) and reconstitute with sterile PBS .
Storage	Store protected from light at 2-8°C. Do not freeze. The expiration date is indicated on the vial label.

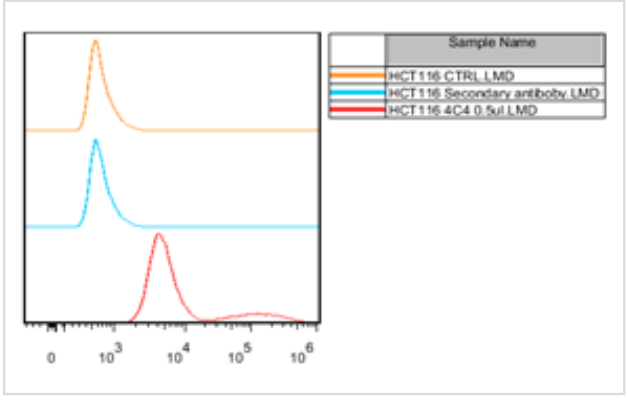
Application Details

Blockade of Receptor-ligand Interaction: In a functional ELISA, 4-8μg/mL of this antibody will block 75% of the binding of 5μg/mL of recombinant biotinylated human SIRP CD172a protein/His tag to immobilized recombinant human CD47/His protein coated at 10 μg/mL (100 μL/well).

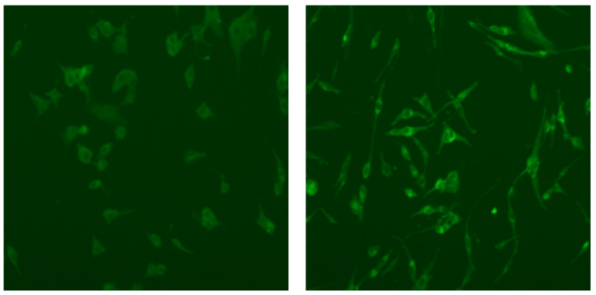
Images



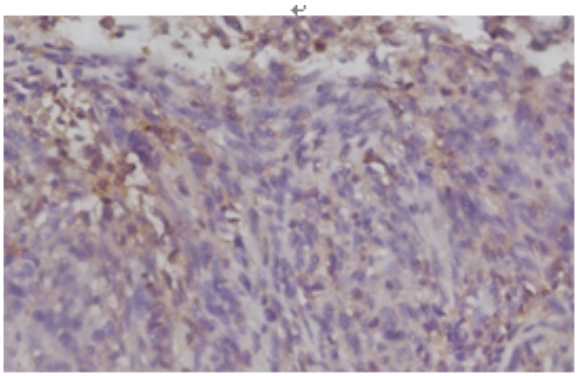
Western blot shows lysates of U87 cell line and CD47 Fc Chimera Protein. PVDF membrane was probed with 10 μg/mL of Anti-Human CD47 Antibody followed by HRP-conjugated Anti- Mouse IgG Secondary Antibody. Specific bands were detected for CD47 at approximately 55-70kDa (as indicated) in the U87cell line, at 35-40kDa after binding with CD47 protein.



Human Colon Cancer Cells were stained with Mouse Anti-Human CD47 Antibody, followed byGoat F(ab)2 Fragment Anti-Mouse IgG(H+L)-PE.



CD47 was detected in immersion fixed U87 and UW28 Human GliomaCell Line using Mouse Anti-Human CD47 Antibody at 50μg/mL for overnight incubation at 4°C. Cells were stained using theGoat Anti-Rabbit IgG H&L. Specific staining was localized to plasma membrane.



CD47 was detected in immersion fixed paraffin-embedded sections of human glioma 200 μg/mL Mouse Anti Human CD47 Antibody overnight at 4 °C. Tissue was stained with the GTVision TM+Detection System/Mo&Rband counterstained with hematoxylin (blue).

Product Description

CD47, known as integrin associated protein (IAP) is a transmembrane protein that belongs to the immunoglobulin superfamily and partners with membrane integrins and also binds the ligands thrombospondin-1 (TSP-1) and signal-regulatory protein alpha (SIRP).It is a 50 kDa membrane receptor that has extracellular N-terminal IgV domain, five transmembrane domains, and a short C-terminal intracellular tail. There are four alternatively spliced isoforms of CD47 that differ only in the length of their cytoplasmic tail, the shorter form is expressed in bone-marrow-derived cells, endothelial cells, and fibroblasts while the longer form is expressed by neural tissues. CD47 expression is widely distributed in hematopoietic cells including thymocytes, T cells, B cells, monocytes, platelets, and erythrocytes as well as epithelial cells, endothelial cells, fibroblasts, and neural tissues,it acts as a don't eat me signal to macrophages of the immune system which has made it a potential therapeutic target in some cancers, and more recently,for the treatment of pulmonary fibrosis.

Note: This product is for in vitro research use only