

Mouse anti-Human CD47 Monoclonal Antibody | anti-CD47 antibody

CD47 (Extracellular region) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71590	Mouse	Human	Immunoprecipitation, Immunocytochemistry, ELISA, Western Blot

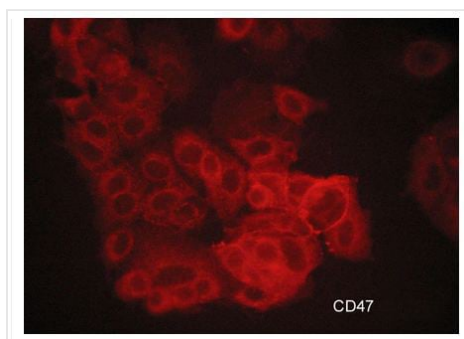
PRODUCT SYNONYMS

CD47; Monoclonal Antibody; CD47 (Extracellular region) Antibody; anti-CD47 antibody

PRODUCT SPECIFICATIONS

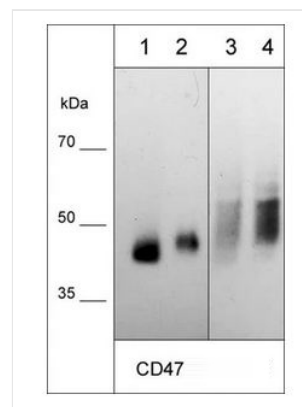
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M054
Specificity	Clone M054 mouse monoclonal antibody detects native human CD47, as well as aldehyde-fixed CD47. The antibody works for staining in immunocytochemistry, capture and detection in ELISA, native immunoprecipitation and western blot. The antibody detects a 45 to 55kDa band in native western blots of A431, BEAS-2B, MCF7, NCI-H446, NCI-H28, and NCI-H2052 cell lines.
Purity/Purification	Protein G chromatography
Form/Format	Mouse monoclonal antibody purified with protein G chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CD47 antibody	IP (Immunoprecipitation), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone (M054) was generated from a recombinant protein that included the extracellular region of human CD47 protein.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of CD47 in aldehyde fixed human MCF7 breast carcinoma cells. The cells were labeled with mouse monoclonal anti-CD47 (CM0541). The antibody was detected using goat anti-mouse DyLight 594.



WB (Western Blot)

Native western blot of human BEAS-2B lung cells (lane 1), NCI-H446 lung cancer cells (lane 2), lung mesothelioma cells: NCI-H28 (lane 3), and NCI-H2052 (lane 4). The blot was probed with mouse monoclonal anti-CD47 (CM0541) at 1:500.

ADDITIONAL INFORMATION

Related Product Information for anti-CD47 antibody	CD47 is a five-pass transmembrane protein expressed on all normal cells, as well as in cancer cells. CD47 is used by macrophages to distinguish between "self" and "non-self" cells. SIRPalpha expressed on myeloid cells including macrophages, and neuronal cells in the central nervous system, can bind CD47. SIRPalpha cytoplasmic tail can inhibit macrophage phagocytosis towards CD47-expressing cells. Thus, the CD47/SIRPalpha pathway serves as an innate immune checkpoint. Additionally, CD47 was reported to modulate lymphocyte cell activation and proliferation. CD47 is over-expressed in many types of cancer, and the expression level of CD47 on cancer cells is negatively associated with cancer survival. Monoclonal antibody therapies that can block CD47-SIRPalpha interaction are being actively pursued for clinical applications. In addition to SIRPalpha, CD47 interacts with thrombospondin-1, VEGFR2, FAS, and certain integrins in different contexts, and influences their downstream signaling.
References	Murata, Y. et al. (2014) J Biochem. 155:335. Soto-Pantoja et al. (2015) Crit Rev Bioch Mol Biol. 50:212.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1171879
NCBI GeneID	961
UniProt Accession #	Q08722; Q53Y71; Q96A60; A8K198; D3DN59
Molecular Weight	323
NCBI Official Full Name	Leukocyte surface antigen CD47
NCBI Official Synonym Full Names	CD47 molecule
NCBI Official Symbol	CD47
NCBI Official Synonym Symbols	IAP; OA3; MER6
NCBI Protein Information	leukocyte surface antigen CD47; CD47 glycoprotein; Rh-related antigen; integrin associated protein; integrin-associated protein; integrin-associated signal transducer; antigenic surface determinant protein OA3; antigen identified by monoclonal antibody 1D
UniProt Protein Name	Leukocyte surface antigen CD47
UniProt Gene Name	CD47
UniProt Synonym Gene Names	MER6; IAP
UniProt Entry Name	CD47_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd47-antibody-clone-m054-immunoprecipitation-immunocytochemistry-western-blot-elisa/71590>