

**Anti-CD47 (Extracellular region) Antibody**  
Catalog # AN1709**Specification****Anti-CD47 (Extracellular region) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q08722</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	35214

**Anti-CD47 (Extracellular region) Antibody - Additional Information**

Gene ID 961

**Other Names**

Antigenic surface determinant protein OA3, Integrin-associated protein, IAP, Leukocyte surface antigen CD47, MER6

**Target/Specificity**

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. SIRP $\alpha$  expressed on myeloid cells including macrophages, and neuronal cells in the central nervous system, can bind CD47. SIRP $\alpha$  cytoplasmic tail can inhibit macrophage phagocytosis towards CD47-expressing cells. Thus, the CD47/SIRP $\alpha$  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-SIRP $\alpha$  interaction are being actively pursued for clinical applications. In addition to SIRP $\alpha$ , CD47 interacts with thrombospondin-1, VEGFR2, FAS, and certain integrins in different contexts, and influences their downstream signaling.

**Format**

Protein G Purified

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-CD47 (Extracellular region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

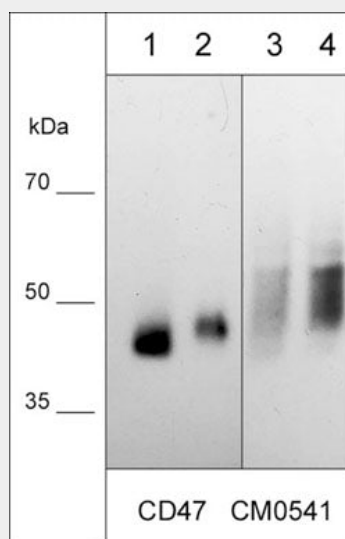
Blue Ice

**Anti-CD47 (Extracellular region) Antibody - Protocols**

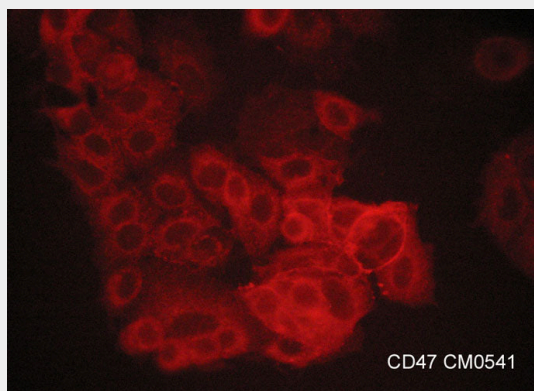
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

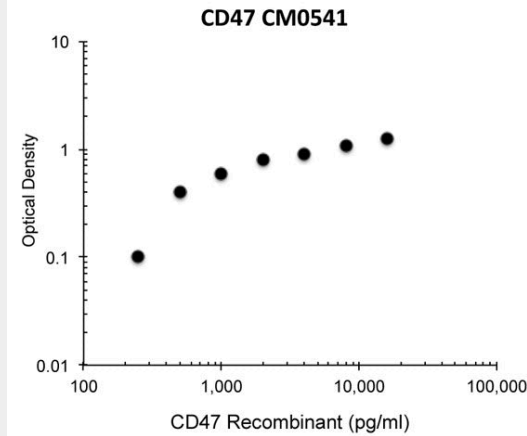
#### Anti-CD47 (Extracellular region) Antibody - Images



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.



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.



Representative Standard Curve using mouse monoclonal anti-CD47 (CM0541) for ELISA capture of human recombinant CD47 extracellular region with a His-tag. Captured protein was detected by suitable anti-His-tag antibody followed by appropriate secondary antibody HRP conjugate.

### Anti-CD47 (Extracellular region) Antibody - Background

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