10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

## Specification

### Anti-CD47 (Extracellular region) Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q08722 |
| 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. SIRPα expressed on myeloid cells including macrophages, and neuronal cells in the central nervous system, can bind CD47. SIRPα cytoplasmic tail can inhibit macrophage phagocytosis towards CD47-expressing cells. Thus, the CD47/SIRPα pahtway 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-SIRPα interaction are being actively pursued for clinical applications. In addition to SIRPα, CD47 interacts with thrombospondin-1, VEGFR2, FAS, and certain integrins in different contexts, and influences their downstream signaling.

**Dilution**
WB~~1:1000

**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

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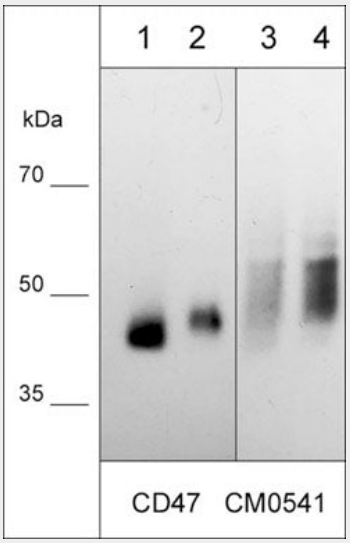
## Anti-CD47 (Extracellular region) Antibody - Protocols

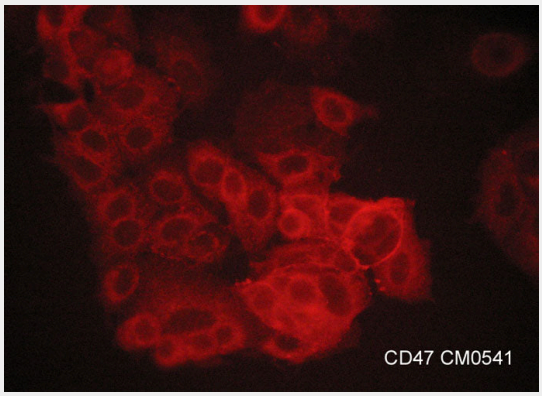
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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.

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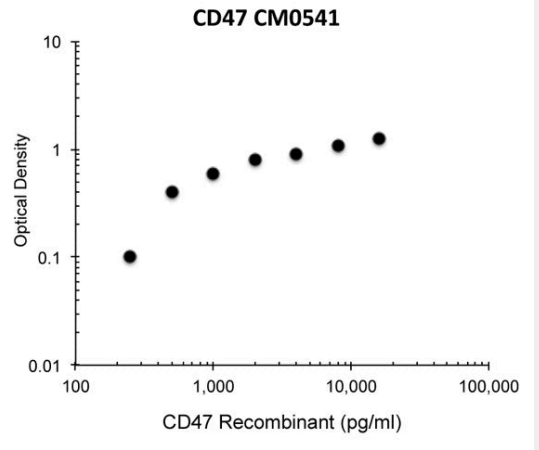


Representative Standard Curve using mouse monoclonal anti-CD47 (CM0541) for ELISA capture of human recombinant CD47 extracellular region with a His-tag. Captured protein was detected by suitable anti-His-tag antibody followed by appropriate secondary antibody HRP conjugate.

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

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