

# Anti-MyD88 Antibody

**Catalog # ABO10975** 

# **Specification**

# **Anti-MyD88 Antibody - Product Information**

Application WB, IHC
Primary Accession Q99836
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Myeloid differentiation primary response protein MyD88(MYD88) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### **Anti-MyD88 Antibody - Additional Information**

**Gene ID 4615** 

#### **Other Names**

Myeloid differentiation primary response protein MyD88, MYD88

Calculated MW 33233 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Rat, Mouse, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human, Rat, Mouse<br/>cbr>

### **Subcellular Localization**

Cytoplasm.

### **Tissue Specificity**

Ubiquitous. .

#### **Protein Name**

Myeloid differentiation primary response protein MyD88

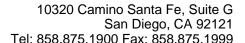
#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

### **Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human MyD88(174-188aa FVQEMIRQLEQTNYR), different from the related rat and mouse sequences by one amino acid.

### **Purification**





Immunogen affinity purified.

**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Contains 1 death domain.

# **Anti-MyD88 Antibody - Protein Information**

Name MYD88 (<u>HGNC:7562</u>)

#### **Function**

Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response (PubMed: <a href="http://www.uniprot.org/citations/15361868" target=" blank">15361868</a>, PubMed:<a href="http://www.uniprot.org/citations/18292575" target="blank">18292575</a>, PubMed:<a href="http://www.uniprot.org/citations/33718825" target="blank">33718825</a>). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/15361868" target=" blank">15361868</a>, PubMed:<a href="http://www.uniprot.org/citations/24316379" target="blank">24316379</a>, PubMed:<a href="http://www.uniprot.org/citations/19506249" target="blank">19506249</a>). Increases IL-8 transcription (PubMed: <a href="http://www.uniprot.org/citations/9013863" target=" blank">9013863</a>). Involved in IL-18-mediated signaling pathway. Activates IRF1 resulting in its rapid migration into the nucleus to mediate an efficient induction of IFN-beta, NOS2/INOS, and IL12A genes. Upon TLR8 activation by GU-rich single-stranded RNA (GU-rich RNA) derived from viruses such as SARS-CoV-2, SARS-CoV and HIV-1, induces IL1B release through NLRP3 inflammasome activation (PubMed: <a href="http://www.uniprot.org/citations/33718825" target=" blank">33718825</a>). MyD88-mediated signaling in intestinal epithelial cells is crucial for maintenance of gut homeostasis and controls the expression of the antimicrobial lectin REG3G in the small intestine (By similarity).

**Cellular Location** Cytoplasm. Nucleus

Tissue Location Ubiquitous..

# **Anti-MyD88 Antibody - Protocols**

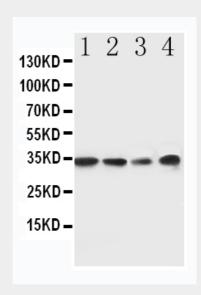
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

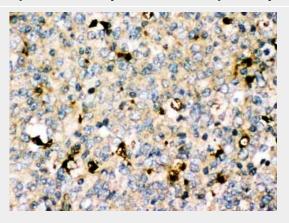


- Flow Cytomety
- Cell Culture

### Anti-MyD88 Antibody - Images



Anti-MyD88 antibody, ABO10975, Western blottingLane 1: Rat Spleen Tissue Lysate Lane 2: Rat Thymus Tissue Lysate Lane 3: JURKAT Cell LysateLane 4: RAJI Cell Lysate



Anti-MyD88 antibody, ABO10975, IHC(P)IHC(P): Human Tonsil Tissue

# Anti-MyD88 Antibody - Background

MYD88(MYELOID DIFFERENTIATION PRIMARY RESPONSE GENE 88), is a protein that, in humans, is encoded by the MYD88 gene. MyD88 is a key downstream adapter for most Toll-like receptors(TLRs) and interleukin-1 receptors(IL1Rs). And it is mapped on 3p22.2. MYD88 encodes a cytosolic adapter protein that plays a central role in the innate and adaptive immune response. This protein functions as an essential signal transducer in the interleukin-1 and Toll-like receptor signaling pathways. Qverexpression of MYD88 caused an increase in the level of transcription from the interleukin-8 promoter. The C-terminal domain of MYD88 has significant sequence similarity to the cytoplasmic domain of IL1RAP. Inhibiting the IL1R-MYD88 pathway in vivo could block the damage from acute inflammation that occurs in response to sterile cell death, and do so in a way that might not compromise tissue repair or host defense against pathogens.

#### Anti-MyD88 Antibody - Citations

• DFMG attenuates the activation of macrophages induced by co-culture with LPC-injured HUVE-12 cells via the TLR4/MyD88/NF-kB signaling pathway.



