

## Anti-MYD88 Antibody Picoband®

Catalog Number: A00025-3

### About MYD88

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. Overexpression 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.

### Overview

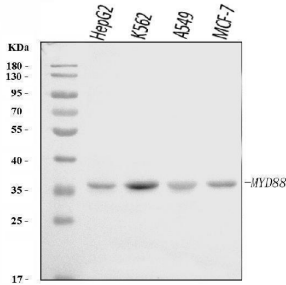
Product Name	Anti-MYD88 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-MYD88 Antibody Picoband® catalog # A00025-3. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q99836

### Technical Details

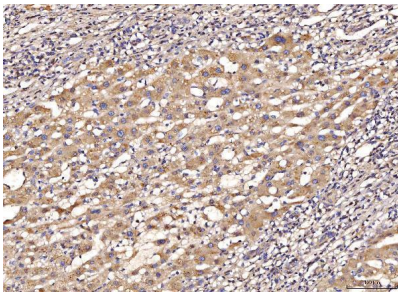
Immunogen	E.coli-derived human MYD88 recombinant protein (Position: R62-P296).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 ug/ml, -

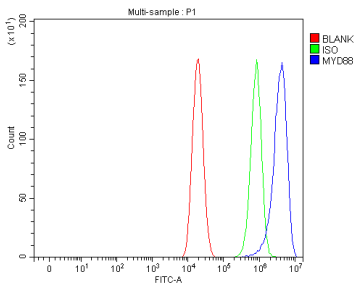
## Anti-MYD88 Antibody Picoband® (A00025-3) Images



Western blot analysis of MYD88 using anti-MYD88 antibody (A00025-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human MCF-7 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MYD88 antigen affinity purified polyclonal antibody (Catalog # A00025-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MYD88 at approximately 37 kDa. The expected band size for MYD88 is at 37 kDa.



IHC analysis of MYD88 using anti-MYD88 antibody (A00025-3). MYD88 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MYD88 Antibody (A00025-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Flow Cytometry analysis of Caco-2 cells using anti-MYD88 antibody (A00025-3). Overlay histogram showing Caco-2 cells stained with A00025-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MYD88 Antibody (A00025-3, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

1. PubMed ID: 10.1371/journal.pone.0109980, Toll-Like Receptor 4 Prompts Human Breast Cancer Cells Invasiveness via Lipopolysaccharide Stimulation and Is Overexpressed in Patients with Lymph Node Metastasis
2. PubMed ID: 10.1186/s13098-015-0086-4, High glucose induces and activates Toll-like receptor 4 in endothelial cells of diabetic retinopathy
3. PubMed ID: 10.1016/j.ijbiomac.2016.05.002, Bletilla striata polysaccharide inhibits angiotensin II-induced ROS and inflammation via NOX4 and TLR2 pathways

Visit [bosterbio.com/anti-myd88-picoband-trade-antibody-a00025-3-boster.html](http://bosterbio.com/anti-myd88-picoband-trade-antibody-a00025-3-boster.html) to see all 3 publications.

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### Anti-MYD88 Antibody

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