BOSTER
antibody and ELISA experts

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Anti-MyD88 Antibody Picoband®

Catalog Number: PA1660

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. 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.

Overview

Product Name	Anti-MyD88 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MyD88 Antibody catalog # PA1660. Tested in IP, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. 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	IP, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q99836

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human MyD88, different from the related rat and mouse sequences by one amino acid.
Recommended Detection Systems	Boster recommends ECL Plus Western Blotting Substrate (Catalog # AR1196-200) 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

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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, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human

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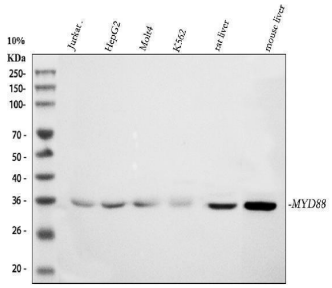
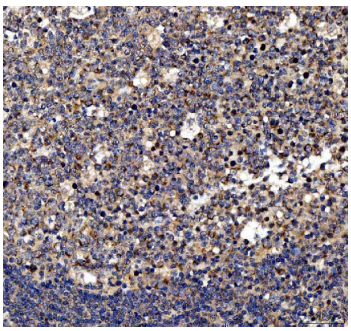
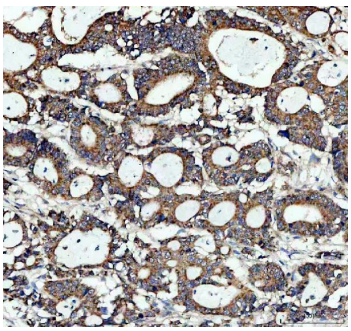
Anti-MyD88 Antibody Picoband® (PA1660) Images



Western blot analysis of MYD88 using anti-MYD88 antibody (PA1660). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human MOLT-4 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat liver tissue lysates, Lane 6: mouse liver tissue 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 (PA1660) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for MYD88 at approximately 36 kDa. The expected band size for MYD88 is at 33 kDa.



IHC analysis of MYD88 using anti-MYD88 antibody (PA1660). MYD88 was detected in a paraffin-embedded section of human tonsil 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 (PA1660) 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.



IHC analysis of MYD88 using anti-MYD88 antibody (PA1660). MYD88 was detected in a paraffin-embedded section of human colon 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 (PA1660) 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.

Immunoprecipitating (IP) MYD88 in HepG2 whole cell lysate. Western blot analysis of MYD88 using anti-MYD88 antibody (PA1660); Lane 1: HepG2 whole cell lysates (30ug); Lane 2:

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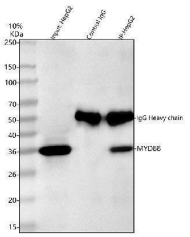
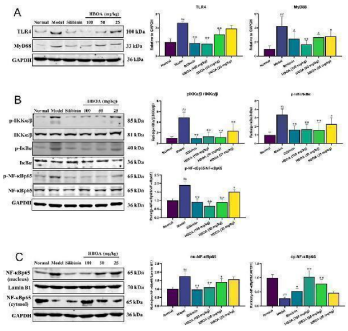


Rabbit control IgG instead of anti-MYD88 antibody in HepG2 whole cell lysate; Lane 3: anti-MYD88 antibody (2ug) + HepG2 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MYD88 antigen affinity purified polyclonal antibody (PA1660) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for MYD88 at approximately 36 kDa. The expected band size for MYD88 is at 33 kDa.



HBOA inhibits the TLR4/NF-kappaB signaling pathway. The protein expressions of (A) TLR4 and MyD88, (B) p-IKKalpha/beta, IKKalpha/beta, p-IkappaBalpha, IkappaBalpha, p-NF-kappaBp65, and NF-kappaBp65, and (C) nucleus NF-kappaBp65, Lamin B1, and cytosol NF-kappaBp65 were examined by Western blotting. * P < 0.05, ** P < 0.01 versus the model group; ## P < 0.01 versus the normal group.Index in PubMed under a CC BY license. PMID: 39323644

5 Publications Citing This Product

1. PubMed ID: 32593156, Li X,Shi MQ,Chen C,Du JR.Phthalide derivative CD21 ameliorates ischemic brain injury in a mouse model of global cerebral ischemia: involvement of inhibition of NLRP3.Int Immunopharmacol.2020 Sep;86:106714.doi: 10.1016/j.intimp.2020.106714.Epub 2020 Jun 24

2. PubMed ID: 26468333, High glucose induces and activates Toll-like receptor 4 in endothelial cells of diabetic retinopathy

3. PubMed ID: 25299052, Toll-Like Receptor 4 Prompts Human Breast Cancer Cells Invasiveness via Lipopolysaccharide Stimulation and Is Overexpressed in Patients with Lymph Node Metastasis

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Anti-MyD88 Antibody

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