

## MyD88 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8521C

#### **Specification**

## MyD88 Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession Q99836
Other Accession B3Y682

Reactivity Human, Mouse Predicted Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 136-164

#### MyD88 Antibody (Center) - Additional Information

#### **Gene ID 4615**

#### **Other Names**

Myeloid differentiation primary response protein MyD88, MYD88

#### Target/Specificity

This MyD88 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 136-164 amino acids from the Central region of human MyD88.

#### **Dilution**

WB~~1:2000 IHC-P~~1:10~50 FC~~0.05902777777778

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

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

#### **Precautions**

MyD88 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### MyD88 Antibody (Center) - 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:15361868, PubMed:18292575, PubMed:33718825, PubMed:37971847). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:15361868, PubMed:19506249, PubMed:24316379). Increases IL-8 transcription (PubMed:9013863). 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:33718825). 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

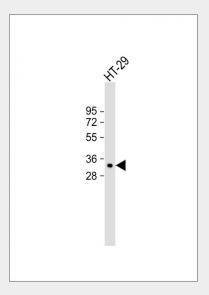
Tissue Location Ubiquitous..

## MyD88 Antibody (Center) - Protocols

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

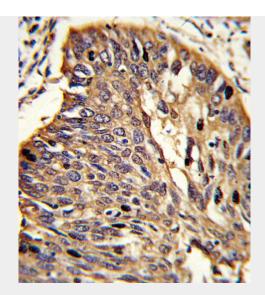
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### MyD88 Antibody (Center) - Images

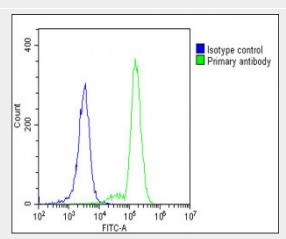


Anti-MyD88 Antibody (Center) at 1:2000 dilution + HT-29 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human lung carcinoma reacted with MyD88 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Overlay histogram showing K562 cells stained with AP8521C(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP8521C, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 $\mu$ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

# MyD88 Antibody (Center) - Background

Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response. It acts via IRAK1, IRAK2 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response and increases IL-8 transcription. It may be involved in myeloid differentiation.

## MyD88 Antibody (Center) - References

Bannon, C., et.al., Biochem. J. 423 (1), 119-128 (2009) Burns, K., et.al., J. Biol. Chem. 273 (20), 12203-12209 (1998)



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## MyD88 Antibody (Center) - Citations

- Activation of porcine alveolar macrophages by Actinobacillus pleuropneumoniae lipopolysaccharide via the TLR4/NF-κB mediated pathway.
- The anti-inflammatory effect and potential mechanism of cardamonin in DSS-induced colitis.
- Efficacy of atorvastatin on hippocampal neuronal damage caused by chronic intermittent hypoxia: involving TLR4 and its downstream signaling pathway.