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

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~~0.059027777777778

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 (HGNC:7562)

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

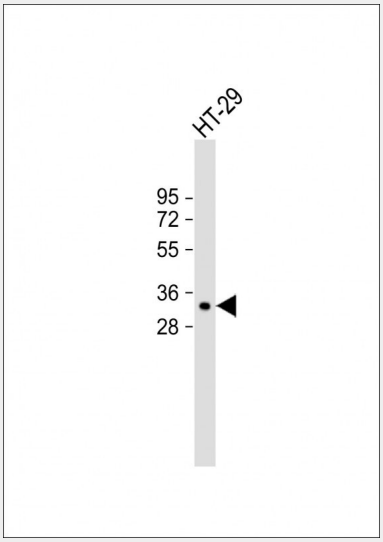
Tissue Location
Ubiquitous..

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.

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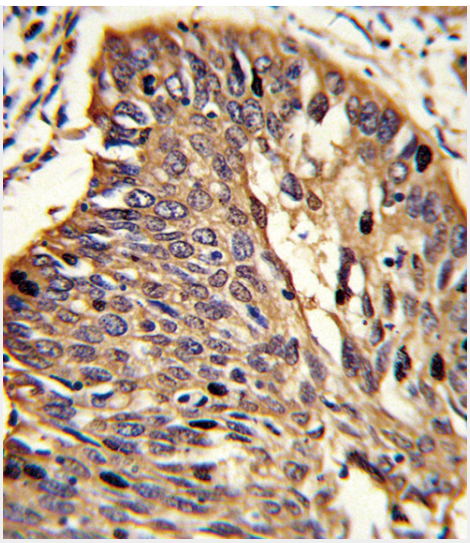
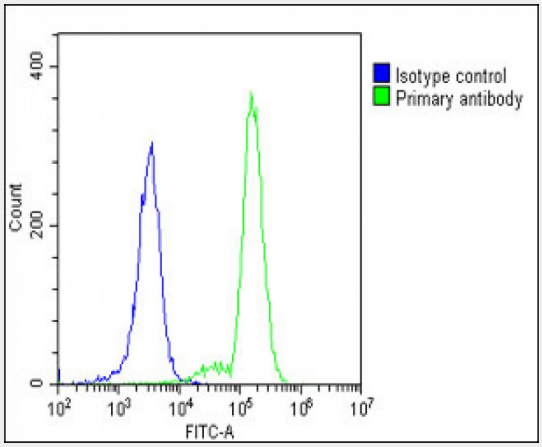


Formalin-fixed and paraffin-embedded human lung carcinoma reacted with MyD88 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 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.