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Anti-MyD88 Antibody

Catalog # ABO10975

Product Information

Application	WB, IHC-P
Primary Accession	Q99836
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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.

Additional Information

Gene ID	4615
Other Names	Myeloid differentiation primary response protein MyD88, MYD88
Calculated MW	33233
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm .
Tissue Specificity	Ubiquitous. .
Source	Eukaryota
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.

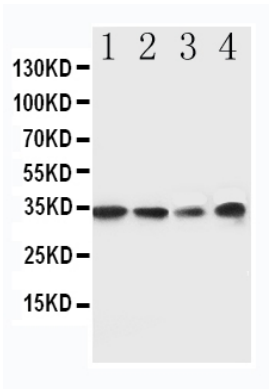
Protein Information

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, PubMed:40638072). 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..

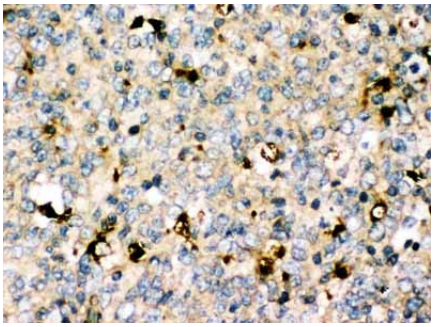
Background

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.