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Anti-MYD88 Antibody

Catalog # AP51372

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q99836
Reactivity	Human, Mouse, Rat, Pig, Bovine, Sheep, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33233

Additional Information

Gene ID	4615
Other Names	Myeloid differentiation primary response protein MyD88
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MYD88. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

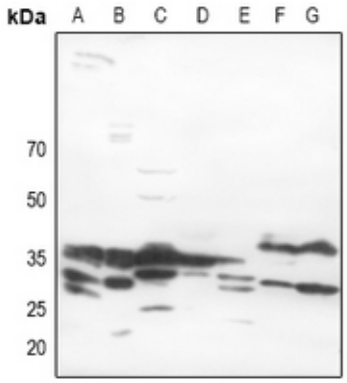
Name	MYD88 (HGNC:7562)
Function	Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response (PubMed:15361868, PubMed:18292575, PubMed:33718825, PubMed:37971847). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine 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..

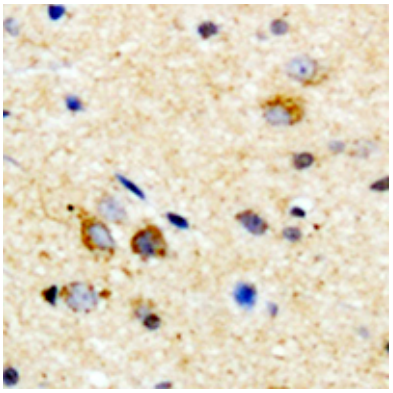
References

Hardiman G.,et al.Oncogene 13:2467-2475(1996).
Bonnert T.P.,et al.FEBS Lett. 402:81-84(1997).
Nakajima T.,et al.Immunogenetics 60:727-735(2008).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

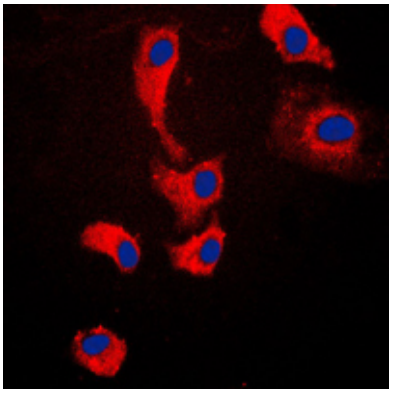
Images



Western blot analysis of MYD88 expression in HEK293T (A), Hela (B), mouse lung (C), mouse muscle (D), mouse spleen (E), rat muscle (F), rat spleen (G) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 33; 31; 28 kD)



Immunohistochemical analysis of MYD88 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MYD88 staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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