

Product name:	MyD88 (5Y8) Rabbit Monoclonal Antibody
Cat number:	MABN14273
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human MyD88
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000, IP 1:20-1:50
Molecular Weight:	33kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Members of the Toll-like receptor (TLR) family, named for the closely related Toll receptor in *Drosophila*, play a pivotal role in innate immune responses. TLRs recognize conserved motifs found in various pathogens and mediate defense responses. Triggering of the TLR pathway leads to the activation of NF- κ B and subsequent regulation of immune and inflammatory genes. 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). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF- κ B activation, cytokine secretion and the inflammatory response (PubMed:15361868, PubMed:24316379, PubMed:19506249). 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- β , 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).