

Rabbit MyD88 Polyclonal Antibody | anti-MyD88 antibody

MyD88 Antibody

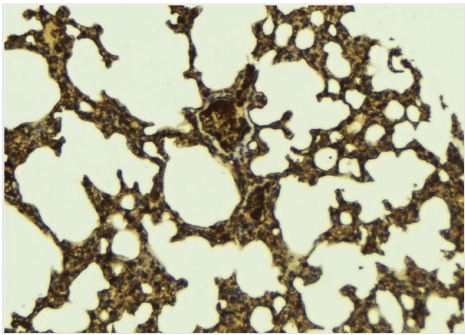
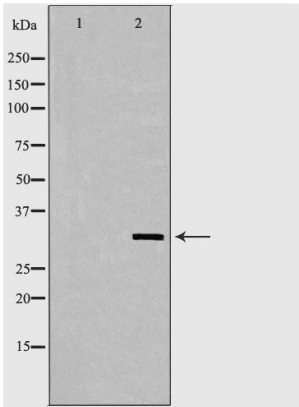
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325944	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MyD88; Polyclonal Antibody; MyD88 Antibody; Mutant myeloid differentiation primary response 88; MYD 88; Myd88; MYD88_HUMAN; MYD88D; Myeloid differentiation marker 88; Myeloid differentiation primary response 88; Myeloid differentiation primary response gene (88); Myeloid differentiation primary response gene 88; Myeloid differentiation primary response gene; Myeloid differentiation primary response protein MyD88; OTTHUMP00000161718; OTTHUMP00000208595; OTTHUMP00000209058; OTTHUMP00000209059; OTTHUMP00000209060; anti-MyD88 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MyD88 antibody detects endogenous levels of total MyD88
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	159
Applicable Applications for anti-MyD88 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MyD88
Subcellular Location	Cytoplasm.
Tissue Specificity	Ubiquitous.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA325944 at 1/100 staining Mouse lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Jurkat whole cell lysates, using MyD88 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MyD88 antibody

Description: 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 (1-3). TLRs recognize conserved motifs found in various pathogens and mediate defense responses. Triggering of the TLR pathway leads to the activation of NF-kappaB and subsequent regulation of immune and inflammatory genes. The TLRs and members of the IL-1 receptor family share a conserved stretch of approximately 200 amino acids known as the TIR domain. Upon activation, TLRs associate with a number of cytoplasmic adaptor proteins containing TIR domains including MyD88 (myeloid differentiation factor), MAL/TIRAP (MyD88-adaptor-like/TIR-associated protein), TRIF (Toll-receptor-associated activator of interferon), and TRAM (Toll-receptor-associated molecule). This association leads to the recruitment and activation of IRAK1 and IRAK4, which form a complex with TRAF6 to activate TAK1 and IKK. Activation of IKK leads to the degradation of I-kappaB that normally maintains NF-kappaB inactivity by sequestering it in the cytoplasm. MyD88 was originally isolated as a myeloid differentiation primary response gene that is rapidly induced upon IL-6 stimulated differentiation of M1 myeloleukemic cells into macrophages (4-6). It contains an amino-terminal death domain separated from a carboxyl-terminal TIR domain and functions as an adaptor in TLR/IL-1 receptor signaling (7). The death domain of MyD88 mediates interactions with the IRAK complex triggering a signaling cascade that includes the activation of NF-kappaB (8, 9).

Function: Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response (PubMed:15361868, PubMed:18292575). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-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-beta, NOS2/INOS, and IL12A genes. 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). Subunit Structure: Homodimer. Also forms heterodimers with TIRAP. Binds to TLR2, TLR4, IRAK1, IRAK2 and IRAK4 via their respective TIR domains. Interacts with IL18R1. Interacts with BMX, IL1RL1, IKKBE and IRF7. Interacts with LRRFIP1 and LRRFIP2; this interaction positively regulates Toll-like receptor (TLR) signaling in response to agonist. Interacts with FLII. LRRFIP1 and LRRFIP2 compete with FLII for MYD88-binding. Interacts with IRF1. Upon IL1B treatment, forms a complex with PELI1, IRAK1, IRAK4 and TRAF6; this complex recruits MAP3K7/TAK1, TAB1 and TAB2 to mediate NF-kappa-B activation. Direct binding of SMAD6 to PELI1 prevents the complex formation and hence negatively regulates IL1R-TLR signaling and eventually NF-kappa-B-mediated gene expression. May interact with PIK3AP1. Interacts (via TIR domain) with DHX9 (via H2A and OB-fold regions); this interaction is direct (PubMed:20696886). Interacts with OTUD4 deubiquitinase; the interaction is direct (PubMed:29395066).

Post-translational Modifications: Ubiquitinated; undergoes 'Lys-63'-linked polyubiquitination. OTUD4 specifically hydrolyzes 'Lys-63'-linked polyubiquitinated MYD88.

Similarity: The intermediate domain (ID) is required for the phosphorylation and activation of IRAK.

NCBI AND UNIPROT INFORMATION

NCBI GI #	289546500
-----------	-----------

NCBI GeneID	4615
NCBI Accession #	NP_001166037.1
NCBI GenBank Nucleotide #	NM_001172566.1
UniProt Accession #	Q99836 ; P78397 ; Q53XS7 ; B4DKH8 ; B4DKU4 ; B4DQ60 ; B4DQ72 ; J3KPU4 ; J3KQ87 ; J3KQJ6
Molecular Weight	Observed: 33 kDa Predicted: 34 kDa
NCBI Official Full Name	myeloid differentiation primary response protein MyD88 isoform 5
NCBI Official Synonym Full Names	MYD88, innate immune signal transduction adaptor
NCBI Official Symbol	MYD88
NCBI Official Synonym Symbols	MYD88D
NCBI Protein Information	myeloid differentiation primary response protein MyD88
UniProt Protein Name	Myeloid differentiation primary response protein MyD88
UniProt Gene Name	MYD88

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/myd88-antibody-immunohistochemistry-western-blot-elisa/325944>