

TLR9 Antibody

TLR9 (CT): Toll-like receptor 9

CATALOG NO.: 3737

BACKGROUND:

Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in *Drosophila*. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses (1,2). TLR9 forms a subfamily along with TLR7 and TLR8 that recognize viral RNA and CpG DNA sequences (3) and are localized in intracellular acidic compartments such as the phagolysosome (4). Unlike other TLRs which act through adaptor molecules such as TOLLIP, TIRAP, TRIF, and MyD88 to activate various kinases and transcription factors to respond to potential infection (5), TLR9 is strictly dependent on MyD88 (3).

SOURCE:

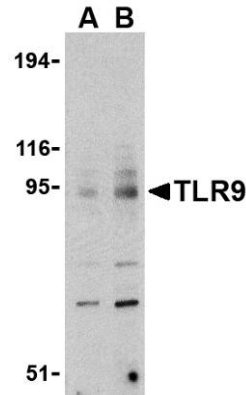
Rabbit polyclonal TLR9 antibody was raised against a peptide corresponding to 16 amino acids near the carboxy terminus of human TLR9 (GenBank accession no. AAH32713).

APPLICATION:

TLR9 antibody can be used for detection of TLR9 by Western blot at 1 to 2 $\mu\text{g/ml}$. (Optimal dilution should be determined by user.) Jurkat cell lysate can be used as a positive control. TLR9 antibody is human and mouse reactive. **This product is for research use only.**

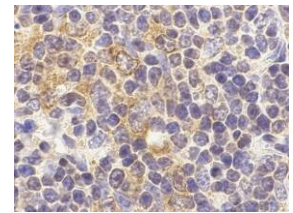
STORAGE:

TLR9 antibody is supplied as immunoaffinity chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.



Western blot analysis of TLR9 in Jurkat cell lysate with TLR9 antibody at (A) 1 and (B) 2 $\mu\text{g/ml}$.

Immunohistochemistry of TLR9 in mouse spleen cells with TLR9 antibody at 2 $\mu\text{g/ml}$.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3737P**.
Jurkat Cell Lysate, Catalog No. **1205**.
TLR9 Antibody (IN), Catalog No. **3739**.
TLR7 Antibody (IN), Catalog No. **3269**.
TLR8 Antibody (IN), Catalog No. **3281**.
MyD88 Antibody (CT), Catalog No. **2127**.
TIRAP Antibody (IN), Catalog No. **3155**.
TOLLIP antibody (IN), Catalog No. **3743**.

REFERENCES:

1. Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
2. Janeway CA Jr. and Medzhitov R. Innate immune recognition. *Annu. Rev. Immunol.* 2002; 20:197-216.
3. Wagner H. The immunobiology of the TLR9 subfamily. *Trends Immunol.* 2004; 381-6.
4. Nishiya T and DeFranco AL. Ligand-regulated chimeric receptor approach reveals distinctive subcellular localization and signaling properties of the Toll-like receptors. *J. Biol. Chem.* 2004; 279:19008-17.
5. McGettrick AF and O'Neill LAJ. The expanding family of MyD88-like adaptors in Toll-like receptor signal transduction. *Mol Imm.* 2004; 41:577-82. (RD0506)