

## TLR4 Antibody

*TLR4 (NT): Toll-like receptor 4*

**CATALOG No. : 3141**

### BACKGROUND:

Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses (1-3). These proteins act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors such as Protein Kinase C (PKC) alpha/beta and NF- $\kappa$ B (4-6). Studies with TLR4-deficient mice indicate that the main ligand for TLR is lipopolysaccharide. Consequently, these mice also showed increased susceptibility to Gram-negative sepsis (7).

### SOURCE:

Rabbit polyclonal TLR4 antibody was raised against a peptide corresponding to 15 amino acids near the amino-terminus of human TLR4 (GenBank accession no. NP\_612564).

### APPLICATION:

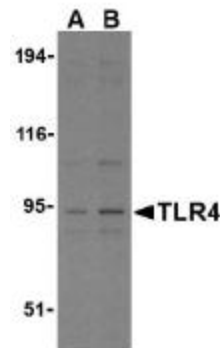
TLR4 antibody can be used for detection of TLR4 by Western blot at 2 to 5  $\mu$ g/ml. (Optimal dilution should be determined by user.) It is human specific. **For research use only.**

### STORAGE:

TLR4 antibody is supplied as ion exchange chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.

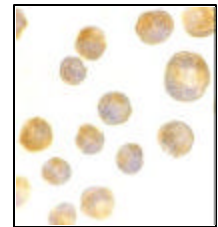
### RELATED PRODUCTS:

Blocking peptide, Catalog No. **3141P**.  
PC-3 Cell Lysate, Catalog No. **1216**.  
MyD88 Antibody (CT), Catalog No. **2127**.  
TIRAP Antibody (IN), Catalog No. **3255**.



Western blot analysis of TLR4 in PC-3 cell lysates with TLR4 antibody at (A) 2.5 and (B) 5  $\mu$ g/ml.

Immunocytochemistry of TLR4 in K562 cells with TLR4 antibody at 2  $\mu$ g/ml.



### REFERENCES:

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4. O'Neill LAJ, Fitzgerald FA, and Bowie AG. The Toll-IL-1 receptor adaptor family grows to five members. *Trends in Imm.* 2003; 24:286-9.
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.
6. Asehnoun K, Strassheim D, Mitra S, et al. Involvement of PKCalpha/beta in TLR4 and TLR2 dependent activation of NF-kappaB. *Cell Signal.* 2005; 17:385-94.
7. Poltorak A, He X, Smirnova I, et al. Defective LPS signaling in C3H/HeJ and C57BL/10ScCr mice: mutations in Tlr4 gene. *Science* 1998; 282:2085-8. (RD1005)

