



E90997

## TLR1 Polyclonal Antibody

**Catalog Number:** E90997

**Amount:** 100ul

**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 (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- $\kappa$ B 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 $\kappa$ B that normally maintains NF- $\kappa$ B inactivity by sequestering it in the cytoplasm. Toll-like receptor expression is highest in peripheral blood leukocytes, monocytes, macrophages, though TLR1 expression may be less restricted than other family members (4,5). TLR1 associates with TLR2 to cooperatively mediate immune responses to bacterial lipoproteins and lead to NF- $\kappa$ B activation (6,7). TLR1 shows highest homology to TLR6, which shares 69% sequence identity (8).

**Species:** Rabbit

**Isotype:** IgG

**Storage/Stability:** Store at -20°C or -80°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** TLR1;CD281;DKFZp547I0610;DKFZp564I0682;KIAA0012;MGC104956;MGC126311;MGC126312;TIL;rsc786 ;

**Immunogen:** Recombinant protein of human TLR1

**Purification:** Affinity purification

**Reactivity:** H M R

**Applications:** WB IHC

**Molecular Weight:** 90kDa

**Swiss-Prot No. :** Q15399

**Gene ID:** 7096

**References:** 1. Akira, S. (2003) *J Biol Chem* 278, 38105-8. 2. Beutler, B. (2004) *Nature* 430, 257-63. 3. Dunne, A. and O'Neill, L.A. (2003) *Sci STKE* 2003, re3. 4. Muzio, M. et al. (2000) *J Leukoc Biol* 67, 450-6. 5. Ochoa, M.T. et al. (2003) *Immunology* 108, 10-5. 6. Takeuchi, O. et al. (2002) *J Immunol* 169, 10-4. 7. Sandor, F. et al. (2003) *J Cell Biol* 162, 1099-110. 8. Takeuchi, O. et al. (1999) *Gene* 231, 59-65.

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