



E92202

## TOLLIP Polyclonal Antibody

**Catalog Number:** E92202

**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 Toll/Interleukin-1 receptor (TIR) domain. Upon activation, TLRs associate with a number of cytoplasmic adaptor proteins containing TIR domains, including myeloid differentiation factor 88 (MyD88), MyD88-adaptor-like/TIR-associated protein (MAL/TIRAP), Toll-receptor-associated activator of interferon (TRIF), and Toll-receptor-associated molecule (TRAM). 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, which normally maintains NF- $\kappa$ B in an inactive state by sequestering it in the cytoplasm. Tollip (Toll interacting protein) is an adaptor protein discovered to be associated with the IRAK complex and recruited to IL1-R following IL-1 stimulation (4). Overexpression of Tollip results in impaired NF- $\kappa$ B signaling (4). Tollip also associates directly with TLR2 and TLR4 and inhibits TLR-mediated signaling through inhibition of IRAK (5). Studies of Tollip deficient mice suggest that it plays a role in the regulation of inflammatory cytokines in response to IL-1 and LPS (6).

**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:** FLJ33531; IL-1RAcPIP;

**Immunogen:** Recombinant protein of human TOLLIP

**Purification:** Affinity purification

**Reactivity:** H M R

**Applications:** WB IHC

**Molecular Weight:** 30kDa

**Swiss-Prot No. :** Q9H0E2

**Gene ID:** 54472

**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. Burns, K. et al. (2000) *Nat. Cell Biol.* 2, 346-351. 5. Zhang, G. and Ghosh, S. (2002) *J. Biol. Chem.* 277, 7059-7065. 6. Didierlaurent, A. et al. (2006) *Mol. Cell Biol.* 26, 735-742.

**For Research Use Only**

