Six human homologs of the *Drosophila* toll receptor were initially identified based on their sequence similarities and designated toll-like receptors (TLR). Toll receptors are involved in mediating dorsoventral polarization in the developing *Drosophila* embryo and also participate in the host immunity. The TLR family of proteins are characterized by a highly conserved toll homology (TH) domain, which is essential for toll-induced signal transduction. TLR1, as well as the other TLR family members, are type I transmembrane receptors that characteristically contain an extracellular domain consisting of several leucine-rich regions along with a single cytoplasmic toll/IL-1R-like domain. TLR2 and TLR4 are activated in response to lipopolysaccharide (LPS) stimulation, which results in the activation and translocation of NFκB and suggests that these receptors are involved in mediating inflammatory responses. Expression of TLR receptors is highest in peripheral blood leukocytes, macro-phages and monocytes. TLR6 is highly homologous to TLR1, sharing greater than 65% sequence identity; like other members of TLR family, it induces NFκB signaling upon activation.

**Chromosomal Location**

Genetic locus: TLR4 (human) mapping to 9q33.1; Tlr4 (mouse) mapping to 4 C1.

**Source**

TLR4 (M-300) is a rabbit polyclonal antibody raised against amino acids 339-638 mapping within an N-terminal extracellular domain of TLR4 of mouse origin.

**Product**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**Applications**

TLR4 (M-300) is recommended for detection of TLR4 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of glycosylated TLR4: 95/120 kDa.

**Storage**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**Research Use**

For research use only, not for use in diagnostic procedures.

**Select Product Citations**


Try TLR4 (25): sc-293072, our highly recommended monoclonal alternative to TLR4 (M-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see TLR4 (25): sc-293072.