

Purified Rabbit Anti-human TLR4

Catalog Number: TP376

Lot Number: 062600

Content: Protein A purified rabbit IgG, 200 µg, with 0.1% sodium azide, lyophilized.

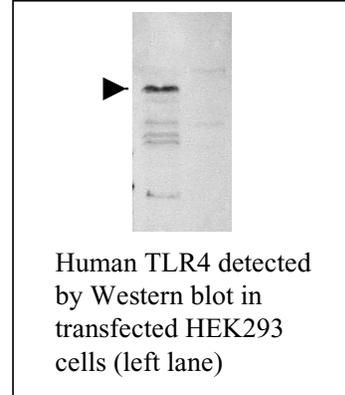
(Reconstitute to 1 mg/ml by adding 200 µl PBS)

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with the TLR4 protein, was generated using *E. coli*-expressed human TLR4 (a.a. 6-169) as an immunogen. The tested titer for Western blot is 1:3,000. The Ab is also suitable for flow cytometry analysis of cell-surface expression of TLR4.

Cross-reactivity with other TLRs has not been determined.

Storage Condition: 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

Background: TLR4 (Toll-like receptor 4) is a mammalian homologue of the *Drosophila* Toll protein. The human TLR4 is a 799-residue type-1 transmembrane protein. The extracellular domain has leucine-rich repeats and the intracellular domain is similar to that of



the IL-1 receptor. TLR4 is a receptor for lipopolysaccharide (LPS). In mice that are genetically tolerant to endotoxin, mutations have been identified in the intracellular domain of TLR4 that abolish LPS responsiveness. TLR4 uses a mechanism similar to that of the IL-1 receptor for signal transduction that leads to activation of NF-κB.

References:

1. Rock, F.L., et al. (1998) A family of human receptors structurally related to *Drosophila* Toll. *PNAS* 95:588-93.
2. Medzhitov, R. et al. (1997) A human homologue of the *Drosophila* Toll protein signals activation of adaptive immunity. *Nature* 388:394-7.
3. Poltorak, A. et al. (1998) Defective LPS signaling in C3H/HeJ and C57BL/10ScCr mice: mutations in Tlr4 gene. *Science* 282:2085-8.