

## TLR4 Peptide

**Subcategory:** Blocking Peptide, Synthetic Peptide

**Cat. No.:** 300110

**Unit:** 0.1 mg

**Description:**

Toll-like receptor family (TLR) has a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. TLRs recognize pathogen-associated molecular patterns (PAMP) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. Toll-like receptor 4 (TLR4) cooperates with LY96 and CD14 to mediate the innate immune response to bacterial lipopolysaccharide (LPS). TLR4 acts via MYD88, TIRAP and TRAF6 to lead to NFκB activation, cytokine secretion and inflammatory response. TLR4 is highly expressed in placenta, spleen and peripheral blood leukocytes. Genetic variation in TLR4 is associated with age-related macular degeneration 10 (ARMD10), an irreversible vision loss.

**Format:** Each vial contains 0.1 ml peptide in deionized water for a final concentration of 1 mg/ml. Use at 5.6 ug/ml for a 100X excess over antibody for maximum blocking effect.

**Alternate Names:** Toll-like receptor 4; hToll; CD284; TLR4

**Accession No.:** O00206

**MW:** 1580.0 g/mol

**Sequence:** The synthetic peptide used to raise the antibody Cat. No. 251111 is selected from a sequence within the C-term region of rat TLR4. For blocking experiments, a 10 to 100 fold molar excess to antibody is recommended.

**Composition:** C77H125N23O13

**Purity:** Purity > 80% by HPLC

**Solubility:** Distilled water for a solution up to 2 mg/ml, otherwise we recommend using acetonitrile.

**Storage:** Store at -20°C. The product is hygroscopic and must be protected from light. Product is guaranteed one year from the date of shipment. Following reconstitution, store at -20°C.

For research use only, not for diagnostic or therapeutic procedures.