**BACKGROUND**

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 is characterized by a highly conserved Toll homology (TH) domain, which is essential for Toll-induced signal transduction. Expression of TLR receptors is highest in peripheral blood leukocytes, macrophages and monocytes. 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. TLR3 is highly expressed in placenta and pancreas, and is limited to the dendritic subpopulation of leukocytes. TLR3 recognizes dsRNA and its recognition of viral dsRNA can activate NFκB signaling. TLR6 is highly homologous to TLR1, sharing greater than 65% sequence identity. Like other members of TLR family, TLR6 induces NFκB signaling upon activation.

**CHROMOSOMAL LOCATION**

Genetic locus: TLR3 (human) mapping to 4q35.1.

**SOURCE**

TLR3 (TLR3.7) is a mouse monoclonal antibody raised against full length TLR3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

TLR3 (TLR3.7) is available conjugated to agarose (sc-32232 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-32232 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-32232 PE), fluorescein (sc-32232 FITC), Alexa Fluor® 488 (sc-32232 AF488) or Alexa Fluor® 647 (sc-32232 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

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**APPLICATIONS**

TLR3 (TLR3.7) is recommended for detection of TLR3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:500-1:5000), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TLR3 siRNA (h): sc-36685, TLR3 shRNA Plasmid (h): sc-36685-SH and TLR3 shRNA (h) Lentiviral Particles: sc-36685-V.

Molecular Weight of TLR3: 117 kDa.

**STORAGE**

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

**SELECT PRODUCT CITATIONS**