

Anti-TLR4 Antibody

ER1706-43



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 96/91/73 kDa

Description: 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 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 lipopolysacchride (LPS) stimulation, which results in the activation and translocation of NFkB and suggests that these receptors are involved in mediating inflammatory responses. Expression of TLR receptors is highest in peripheral blood leukocytes, macro-phages, and TLR6 is highly homologous to TLR1, sharing greater than 65% sequence identity, and, like other members of TLR family, it induces NFkB signaling upon activation.

Immunogen: Synthetic peptide within human TLR4 aa 766-820.

Positive control: HeLa, HUVEC, PMVEC, rat kidney tissue, human skin tissue, human spleen tissue, mouse colon tissue, Jurkat.

Subcellular location: Cell membrane.

Database links: SwissProt: O00206 Human | Q9QUK6 Mouse | Q9QX05 Rat

Recommended Dilutions:

IF-Cell	1:50-1:200
IHC-P	1:50-1:500
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

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Images

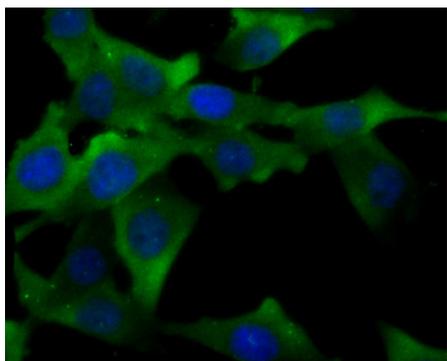


Fig1: ICC staining TLR4 in PMVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

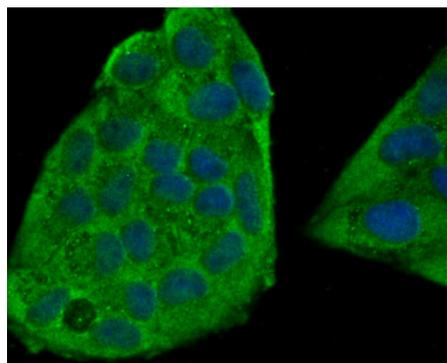


Fig2: ICC staining TLR4 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

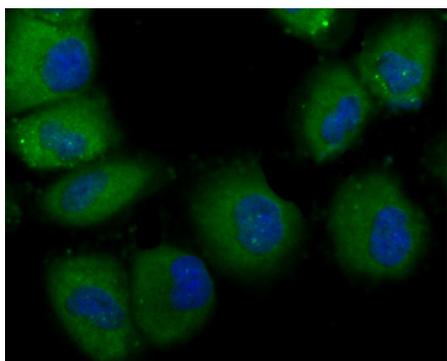


Fig3: ICC staining TLR4 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

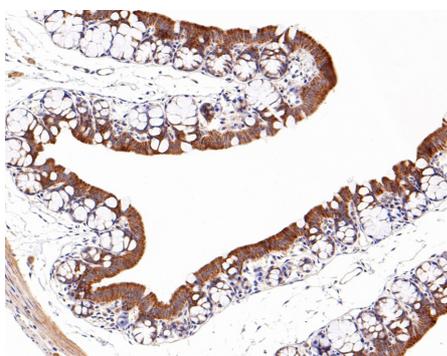


Fig4: Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-TLR4 antibody (ER1706-43) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ER1706-43) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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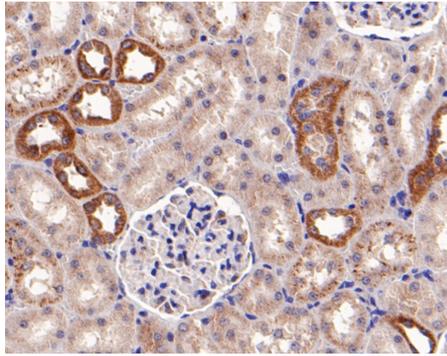


Fig5: Immunohistochemical analysis of paraffin-embedded rat kidney tissue with Rabbit anti-TLR4 antibody (ER1706-43) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ER1706-43) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

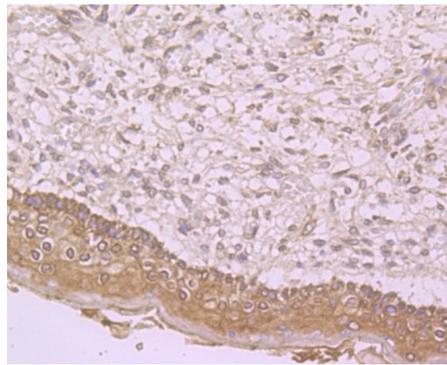


Fig6: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-TLR4 antibody. Counter stained with hematoxylin.

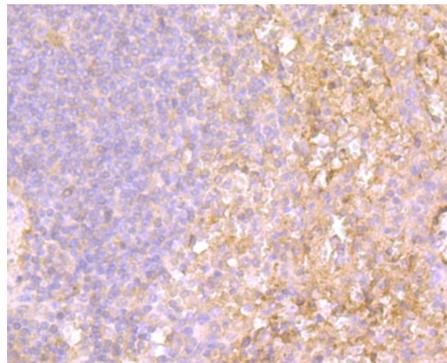


Fig7: Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-TLR4 antibody. Counter stained with hematoxylin.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Tang HL et al. Toll-Like Receptor 4 in Paraventricular Nucleus Mediates Visceral Hypersensitivity Induced by Maternal Separation. *Front Pharmacol* 8:309 (2017).
2. Zou Y et al. Effects of feeding untreated, pasteurized and acidified waste milk and bunk tank milk on the performance, serum metabolic profiles, immunity, and intestinal development in Holstein calves. *J Anim Sci Biotechnol* 8:53 (2017).

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