

Basic Information

Product Name	Anti-TLR4 Antibody
Gene Name	TLR4
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.
Immunogen	E.coli-derived human TLR4 recombinant protein (Position: Q39-Q616).
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	100KD
Dilution Ratios	Western blot(WB): 1:500-2000 Flow cytometry (FCM):1-3μg/1x10 ⁶ cells (ELISA): 1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

TLR4, Toll-like receptor 4, is a protein that in humans is encoded by the TLR4 gene. TLR 4 is a toll-like receptor. TLR4, the human homolog of Drosophila Toll, is a type I transmembrane protein with an extracellular domain consisting of a leucine-rich repeat region and an intracellular domain homologous to that of human interleukin-1 receptor. The TLR4 gene is mapped to chromosome 9q32-q33 by fluorescence in situ hybridization. It detects lipopolysaccharide from Gram-negative bacteria and is thus important in the activation of the innate immune system. The protein encoded by this gene is a member of the Toll-like receptor (TLR) family, which plays 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. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity.

Selected Validation Data

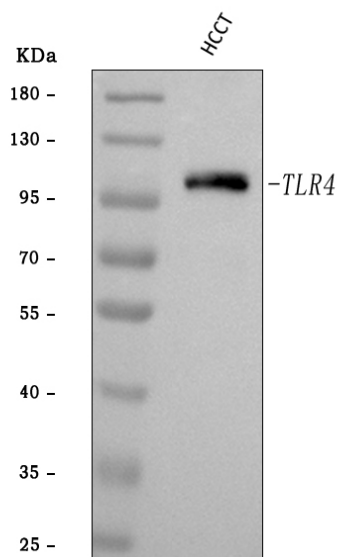


Figure 1. Western blot analysis of anti- TLR4 antibody (A00017-2). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: Hcct whole cell lysates.

Use rabbit anti- TLR4 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for TLR4 at approximately 100KD. The expected band size for TLR4 is at 96KD.

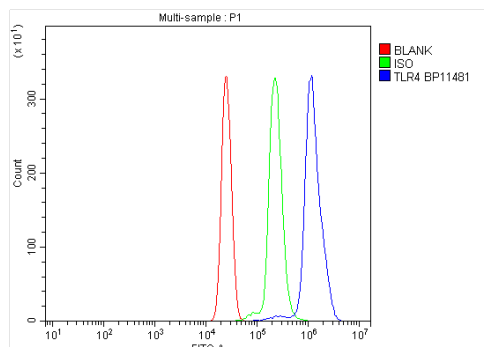


Figure 2. Flow cytometry analysis of U937 cell (1x10⁶) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).