

Anti-Toll-Like Receptor 4 Rabbit pAb

Purified Rabbit Polyclonal Antibody

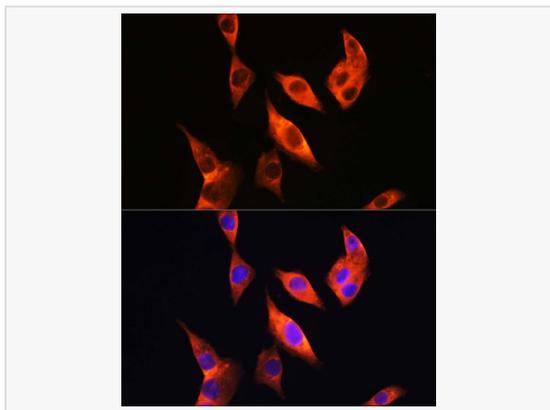
Catalog # P100808

Product Information

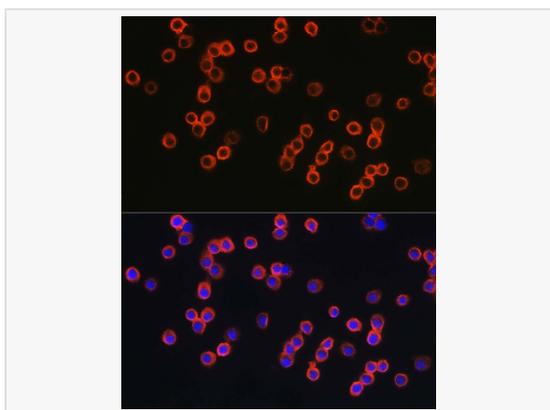
Application	WB, IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:500~1:1,000; IF 1:50~1:200; IP 0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 27-228 of human TLR4 (NP_612564.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Toll-Like Receptor 4 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

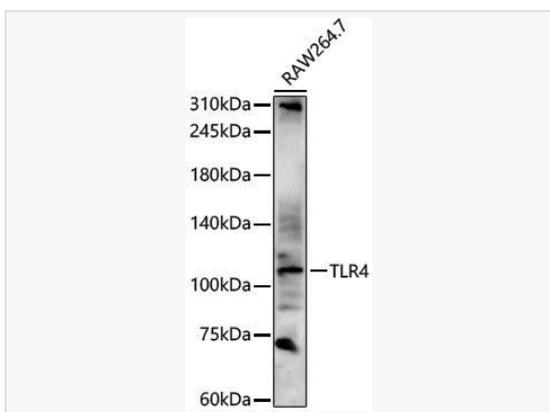
Synonyms	TOLL; CD284; TLR-4; ARMD10; TLR4.
Calculated MW	Calculated MW: 96 kDa; Observed MW: 100-135 kDa
Uniprot ID	O00206
Gene ID	7099
Background	The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. In silico studies have found a particularly strong binding of surface TLR4 with the spike protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of Coronavirus disease-2019 (COVID-19). This receptor has also been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness, and with susceptibility to age-related macular degeneration. Multiple transcript variants encoding different isoforms have been found for this gene.



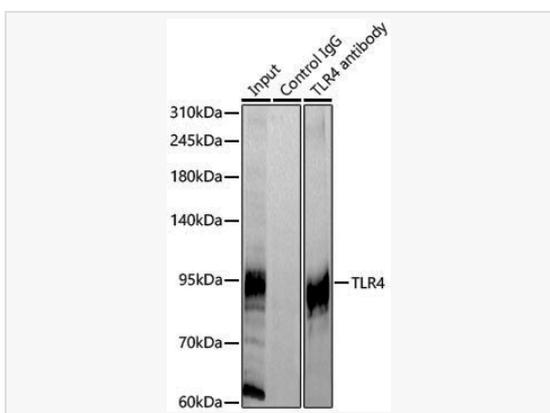
Immunofluorescence analysis of HepG2 cells using TLR4 Rabbit pAb (P100808) at dilution of 1:200 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of RAW264.7 cells using TLR4 Rabbit pAb (P100808) at dilution of 1:200 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of various lysates, using TLR4 Rabbit pAb (P100808) at 1:2,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.



Immunoprecipitation analysis of 300ug extracts of HeLa cells using 3ug TLR4 Rabbit pAb (P100808 1:100). Western blot was performed from the immunoprecipitate using TLR4 Rabbit pAb antibody (P100808) at a dilution of 1:500.