Product Datasheet

TLR3 Antibody

Catalog No: #32281

Package Size: #32281-1 50ul #32281-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	TLR3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB
Species Reactivity	Human
Specificity	The antibody detects endogenous level of total TLR3 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human TLR3.
Target Name	TLR3
Other Names	TLR3; CD283;
Accession No.	Swiss-Prot:O15455NCBI Gene ID:7098
Uniprot	O15455
GeneID	7098;
SDS-PAGE MW	99KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

WB□1:500 - 1:2000

Background

Members of the Toll-like receptor (TLR) family, named for the closely related Toll receptor in Drosophila, play a pivotal role in innate immune responses (1-3). TLRs recognize conserved motifs found in various pathogens and mediate defense responses. Triggering of the TLR pathway leads to the activation of NF-κB and subsequent regulation of immune and inflammatory genes. The TLRs and members of the IL-1 receptor family share a conserved stretch of approximately 200 amino acids known as the TIR domain. Upon activation, TLRs associate with a number of cytoplasmic adaptor proteins containing TIR domains including MyD88 (myeloid differentiation factor), MAL/TIRAP (MyD88-adaptor-like/TIR-associated protein), TRIF (Toll-receptor-associated activator of interferon), and TRAM (Toll-receptor-associated molecule). This association leads to the recruitment and activation of IRAK1 and IRAK4, which form a complex with TRAF6 to activate TAK1 and IKK. Activation of IKK leads to the degradation of IκB that normally maintains NF-κB inactivity by sequestering it in the cytoplasm.

TLR3 functions as a receptor for double-stranded (ds)RNA typically associated with viral infection (4). It was originally shown to be specifically expressed in dendritic cells of the leukocyte family (5). TLR3 has also been found in placenta and lung, and can be induced by LPS in a variety of tissues (4,6). TLR3 is predominantly localized to early endosomes (7,8). Binding of dsRNA, or the analog polyinosine-polycytidylic acid (pIpC), to TLR3 triggers activation of transcription factors NF-κB and IRF3 through the adaptor protein TICAM-1/TRIF (9,10). TRIF associates with members of the TRAF family and with RIP that combine to activate NF-κB and IRF3 (11-13).

Note: This product is for in vitro research use only