

## TLR3 Conjugated Antibody

Catalog No: #C32281



Package Size: #C32281-AF350 100ul #C32281-AF405 100ul #C32281-AF488 100ul

#C32281-AF555 100ul #C32281-AF594 100ul #C32281-AF647 100ul

#C32281-AF680 100ul #C32281-AF750 100ul #C32281-Biotin 100ul

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## Description

Product Name	TLR3 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total TLR3 protein.
Immunogen Description	Recombinant protein of human TLR3.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	TLR3;CD283
Accession No.	Swiss-Prot#:O15455NCBI Gene ID:7098
Uniprot	O15455
GeneID	7098;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	99
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Product Description

Antibodies were purified by affinity purification using immunogen.

## 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- $\kappa$ B 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 I $\kappa$ B that normally maintains NF- $\kappa$ B 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- $\kappa$ B 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- $\kappa$ B and IRF3 (11-13).

**Note:** This product is for in vitro research use only