

## Toll-Like Receptor 7 (TLR7) Antibody

Catalogue No.: abx117019

TLR7 Antibody is a Rabbit Polyclonal antibody against TLR7. 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. 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. TLR7, 8 and 9 form a group of structurally related TLR family members that are localized to intracellular endosomes. TLR7 shows highest expression in lung, placenta, and spleen. TLR7 mediates responses to a class of synthetic compounds, including imidazoquinolines, guanosine-based drugs that induce anti-viral responses. Naturally, TLR7 responds to ssRNA viruses to activate NF- $\kappa$ B and trigger IFN production.

<b>Target:</b>	TLR7
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Tested Applications:</b>	ELISA, WB, IHC
<b>Recommended dilutions:</b>	WB: 1/500 - 1/2000, IHC: 1/50 - 1/200. Optimal dilutions/concentrations should be determined by the end user.
<b>Immunogen:</b>	Recombinant protein of human TLR7.
<b>Purification:</b>	Affinity Chromatography.
<b>Form:</b>	Liquid
<b>Isotype:</b>	IgG
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.
<b>Swiss Prot:</b>	<a href="#">Q9NYK1</a>

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**GeneID:** [51284](#)

**Gene Symbol:** TLR7

**Buffer:** PBS, pH7.3, containing 0.02% sodium azide and 50% Glycerol.

**Note:** This product is for research use only.