

TLR9 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10411**Specification**

TLR9 Antibody - Product Information

Application	WB
Primary Accession	O9EQU3
Other Accession	NP_112455
Reactivity	Human, Mouse, Rat, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	116412

TLR9 Antibody - Additional Information**Gene ID** 81897**Application & Usage**

Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. The antibody recognizes ~113 kDa of full length and the 65 kDa cleaved fragment in Jurkat cell lysate. Reactivity to other species has not been tested.

Other Names

Toll-like receptor 9

Target/Specificity

TLR9

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

TLR9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TLR9 Antibody - Protein Information

Name Tlr9

Function

Key component of innate and adaptive immunity. TLRs (Toll- like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR9 is a nucleotide-sensing TLR which is activated by unmethylated cytidine-phosphate-guanosine (CpG) dinucleotides. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:18931679, PubMed:21402738, PubMed:14993594, PubMed:17474149, PubMed:25686612, PubMed:18820679). Plays a role in defense against systemic mouse cytomegalovirus infection (PubMed:14993594). Controls lymphocyte response to Helicobacter infection (PubMed:17474149). Upon CpG stimulation, induces B-cell proliferation, activation, survival and antibody production (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endosome. Lysosome. Cytoplasmic vesicle, phagosome. Note=Relocalizes from endoplasmic reticulum to endosome and lysosome upon stimulation with agonist (PubMed:18305481). Exit from the ER requires UNC93B1 (PubMed:18820679) Endolysosomal localization is required for proteolytic cleavage and subsequent activation (PubMed:18931679, PubMed:18820679). Intracellular localization of the active receptor may prevent from responding to self nucleic acid (PubMed:18820679).

Tissue Location

Expressed in the basolateral region of gastric epithelial cells with high levels detected in antrum and body mucosa (at protein level). Detected in spleen and stomach at higher levels in C57BL/6 mice than BALB/C.

TLR9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TLR9 Antibody - Images

TLR9 Antibody - Background

The Toll-like receptor (TLR) family of proteins are characterized by a highly conserved Toll homology (TH) domain, which is essential for Toll-induced signal transduction. TLR9 has been suggested as a receptor for unmethylated CpG dinucleotides in the bacterial DNA. TLR9 is highly expressed in the spleen.