

**TLR9 Blocking Peptide**  
**Catalog # PBV10232b****Specification**

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**TLR9 Blocking Peptide - Product Information**

Primary Accession	<a href="#">O9EQU3</a>
Other Accession	<a href="#">NP_112455</a>
Gene ID	<b>81897</b>
Calculated MW	<b>116412</b>

**TLR9 Blocking Peptide - Additional Information****Gene ID** 81897**Application & Usage**

The peptide is used for blocking the antibody activity of TLR9. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

**Other Names**

Toll-like receptor 9, CD289, Tlr9

**Target/Specificity**

TLR9

**Formulation**

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

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

**TLR9 Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/18931679" target="\_blank">18931679</a>, PubMed:<a href="http://www.uniprot.org/citations/21402738" target="\_blank">21402738</a>, PubMed:<a href="http://www.uniprot.org/citations/14993594" target="\_blank">14993594</a>, PubMed:<a href="http://www.uniprot.org/citations/17474149" target="\_blank">17474149</a>, PubMed:<a href="http://www.uniprot.org/citations/25686612" target="\_blank">25686612</a>, PubMed:<a href="http://www.uniprot.org/citations/18820679" target="\_blank">18820679</a>). Plays a role in defense against systemic mouse cytomegalovirus infection (PubMed:<a href="http://www.uniprot.org/citations/14993594" target="\_blank">14993594</a>). Controls lymphocyte response to Helicobacter infection (PubMed:<a href="http://www.uniprot.org/citations/17474149" target="\_blank">17474149</a>). 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 Blocking Peptide - 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 Blocking Peptide - Images**