

TLR9 Blocking Peptide

Catalog # PBV10232b

Specification

TLR9 Blocking Peptide - Product Information

Primary Accession
Other Accession
MP_112455
Gene ID
81897
Calculated MW
116412

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.

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Other Names

Toll-like receptor 9, CD289, Tlr9

Target/Specificity

TLR9

Formulation

 $50~\mu g$ (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: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 Blocking Peptide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TLR9 Blocking Peptide - Images