10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TLR3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1503a

Specification

TLR3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O15455

TLR3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 7098

Other Names
Toll-like receptor 3, CD283, TLR3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1503a was selected from the C-term region of human Human TLR3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TLR3 Antibody (C-term) Blocking Peptide - Protein Information

Name TLR3 (HGNC:11849)

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. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. Acts via the adapter TRIF/TICAM1, leading to NF-kappa-B activation, IRF3 nuclear translocation, cytokine secretion and the inflammatory response.

Cellular Location
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endosome membrane. Early endosome

Tissue Location
Expressed at high level in placenta and pancreas. Also detected in CD11c+ immature dendritic

cells. Only expressed in dendritic cells and not in other leukocytes, including monocyte precursors. TLR3 is the TLR that is expressed most strongly in the brain, especially in astrocytes, glia, and neurons

TLR3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TLR3 Antibody (C-term) Blocking Peptide - Images

TLR3 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses. Use of alternative polyadenylation sites to generate different length transcripts has been noted for this gene.

TLR3 Antibody (C-term) Blocking Peptide - References

Heinz, S., et al., J. Biol. Chem. 278(24):21502-21509 (2003).Sarkar, S.N., et al., J. Biol. Chem. 278(7):4393-4396 (2003).Matsumoto, M., et al., Biochem. Biophys. Res. Commun. 293(5):1364-1369 (2002).Takami, M., et al., J. Immunol. 169(3):1516-1523 (2002).Kadowaki, N., et al., J. Exp. Med. 194(6):863-869 (2001).