

MD2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6351a**Specification**

MD2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y6Y9](#)**MD2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 23643**Other Names**

Lymphocyte antigen 96, Ly-96, ESOP-1, Protein MD-2, LY96, ESOP1, MD2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6351a](/product/products/AP6351a) was selected from the N-term region of human MD2. 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.

MD2 Antibody (N-term) Blocking Peptide - Protein Information**Name** LY96**Synonyms** ESOP1, MD2**Function**

Binds bacterial lipopolysaccharide (LPS) (PubMed:[17803912](http://www.uniprot.org/citations/17803912), PubMed:[17569869](http://www.uniprot.org/citations/17569869)). Cooperates with TLR4 in the innate immune response to bacterial lipopolysaccharide (LPS), and with TLR2 in the response to cell wall components from Gram-positive and Gram-negative bacteria (PubMed:[11160242](http://www.uniprot.org/citations/11160242), PubMed:[11593030](http://www.uniprot.org/citations/11593030)). Enhances TLR4-dependent activation of NF-kappa-B (PubMed:[10359581](http://www.uniprot.org/citations/10359581)). Cells expressing both LY96 and TLR4, but not TLR4 alone, respond to LPS (PubMed:[10359581](#)).

href="http://www.uniprot.org/citations/10359581" target="_blank">10359581).

Cellular Location

Secreted, extracellular space. Secreted Note=Retained in the extracellular space at the cell surface by interaction with TLR4 (PubMed:10359581).

MD2 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MD2 Antibody (N-term) Blocking Peptide - Images**MD2 Antibody (N-term) Blocking Peptide - Background**

MD2 cooperates with toll-like receptor 4 (TLR4) on the cell surface in the innate immune response to bacterial lipopolysaccharide (LPS), and with TLR2 in the response to cell wall components from Gram-positive and Gram-negative bacteria. This protein enhances TLR4-dependent activation of NF-kappa-B. Cells expressing both MD2 and TLR4, but not TLR4 alone, respond to LPS.

MD2 Antibody (N-term) Blocking Peptide - References

Nishitani, C., et al., Biochem. Biophys. Res. Commun. 328(2):586-590 (2005). Pugin, J., et al., Blood 104(13):4071-4079 (2004). Hyakushima, N., et al., J. Immunol. 173(11):6949-6954 (2004). Fujimoto, T., et al., J. Biol. Chem. 279(46):47431-47437 (2004). Hamann, L., et al., Genes Immun. 5(4):283-288 (2004).