

CD6 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10173c**Specification**

CD6 Antibody (Center) Blocking peptide - Product Information

Primary Accession [P30203](#)
Other Accession [NP_006716.3](#)

CD6 Antibody (Center) Blocking peptide - Additional Information

Gene ID 923

Other Names

T-cell differentiation antigen CD6, T12, TP120, CD6, CD6

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.

CD6 Antibody (Center) Blocking peptide - Protein Information

Name CD6 ([HGNC:1691](#))

Function

Cell adhesion molecule that mediates cell-cell contacts and regulates T-cell responses via its interaction with ALCAM/CD166 (PubMed: [15048703](http://www.uniprot.org/citations/15048703), PubMed: [15294938](http://www.uniprot.org/citations/15294938), PubMed: [16352806](http://www.uniprot.org/citations/16352806), PubMed: [16914752](http://www.uniprot.org/citations/16914752), PubMed: [24945728](http://www.uniprot.org/citations/24945728), PubMed: [24584089](http://www.uniprot.org/citations/24584089)). Contributes to signaling cascades triggered by activation of the TCR/CD3 complex (PubMed: [24584089](http://www.uniprot.org/citations/24584089)). Functions as a costimulatory molecule; promotes T-cell activation and proliferation (PubMed: [15294938](http://www.uniprot.org/citations/15294938), PubMed: [16352806](http://www.uniprot.org/citations/16352806), PubMed: [16914752](http://www.uniprot.org/citations/16914752)). Contributes to the formation and maturation of the immunological synapse (PubMed: [15294938](http://www.uniprot.org/citations/15294938), PubMed: [16352806](http://www.uniprot.org/citations/16352806), PubMed: [16914752](http://www.uniprot.org/citations/16914752)). Functions as a calcium- dependent pattern receptor that binds

and aggregates both Gram-positive and Gram-negative bacteria. Binds both lipopolysaccharide (LPS) from Gram-negative bacteria and lipoteichoic acid from Gram-positive bacteria (PubMed:17601777). LPS binding leads to the activation of signaling cascades and down-stream MAP kinases (PubMed:17601777). Mediates activation of the inflammatory response and the secretion of pro-inflammatory cytokines in response to LPS (PubMed:17601777).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=Detected at the immunological synapse, i.e., at the contact zone between antigen-presenting dendritic cells and T-cells (PubMed:15294938, PubMed:16352806). Colocalizes with the TCR/CD3 complex at the immunological synapse (PubMed:15294938)

Tissue Location

Detected on thymocytes (PubMed:15294938). Detected on peripheral blood T-cells (PubMed:15048703, PubMed:16352806) Detected on natural killer (NK) cells (PubMed:16352806). Soluble CD6 is detected in blood serum (at protein level) (PubMed:17601777). Detected in spleen, thymus, appendix, lymph node and peripheral blood leukocytes (PubMed:9013954). Expressed by thymocytes, mature T-cells, a subset of B-cells known as B-1 cells, and by some cells in the brain

CD6 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

CD6 Antibody (Center) Blocking peptide - Images

CD6 Antibody (Center) Blocking peptide - Background

CD6 is a monomeric 105- or 130-kD membrane glycoprotein that is involved in T-cell activation. The size difference between the 2 CD6 forms is due to differences in phosphorylation (Robinson et al., 1995 [PubMed 7589069]).

CD6 Antibody (Center) Blocking peptide - References

Nair, P., et al. Clin. Exp. Immunol. 162(1):116-130(2010) Swaminathan, B., et al. J. Neuroimmunol. 223 (1-2), 100-103 (2010) ; Johnson, B.A., et al. Genes Immun. 11(4):343-350(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) De Jager, P.L., et al. Lancet Neurol 8(12):1111-1119(2009)