

**CD6 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2011a****Specification****CD6 Antibody - Product Information**

Application	E, WB, IF, FC, IHC
Primary Accession	<a href="#">P30203</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	71.8kDa KDa

**Description**

This gene encodes a protein found on the outer membrane of T-lymphocytes as well as some other immune cells. The encoded protein contains three scavenger receptor cysteine-rich (SRCR) domains and a binding site for an activated leukocyte cell adhesion molecule. The gene product is important for continuation of T cell activation. This gene may be associated with susceptibility to multiple sclerosis (PMID: 19525953, 21849685). Multiple transcript variants encoding different isoforms have been found for this gene.

**Immunogen**

Purified recombinant fragment of human CD6 (AA: 18-199) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CD6 Antibody - Additional Information**

**Gene ID** 923

**Other Names**

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

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/200 - 1/1000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## CD6 Antibody - 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:<a href="http://www.uniprot.org/citations/15048703" target="\_blank">15048703</a>, PubMed:<a href="http://www.uniprot.org/citations/15294938" target="\_blank">15294938</a>, PubMed:<a href="http://www.uniprot.org/citations/16352806" target="\_blank">16352806</a>, PubMed:<a href="http://www.uniprot.org/citations/16914752" target="\_blank">16914752</a>, PubMed:<a href="http://www.uniprot.org/citations/24945728" target="\_blank">24945728</a>, PubMed:<a href="http://www.uniprot.org/citations/24584089" target="\_blank">24584089</a>). Contributes to signaling cascades triggered by activation of the TCR/CD3 complex (PubMed:<a href="http://www.uniprot.org/citations/24584089" target="\_blank">24584089</a>). Functions as a costimulatory molecule; promotes T-cell activation and proliferation (PubMed:<a href="http://www.uniprot.org/citations/15294938" target="\_blank">15294938</a>, PubMed:<a href="http://www.uniprot.org/citations/16352806" target="\_blank">16352806</a>, PubMed:<a href="http://www.uniprot.org/citations/16914752" target="\_blank">16914752</a>). Contributes to the formation and maturation of the immunological synapse (PubMed:<a href="http://www.uniprot.org/citations/15294938" target="\_blank">15294938</a>, PubMed:<a href="http://www.uniprot.org/citations/16352806" target="\_blank">16352806</a>). 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:<a href="http://www.uniprot.org/citations/17601777" target="\_blank">17601777</a>). LPS binding leads to the activation of signaling cascades and down-stream MAP kinases (PubMed:<a href="http://www.uniprot.org/citations/17601777" target="\_blank">17601777</a>). Mediates activation of the inflammatory response and the secretion of pro-inflammatory cytokines in response to LPS (PubMed:<a href="http://www.uniprot.org/citations/17601777" target="\_blank">17601777</a>).

### 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 - 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](#)