

**CD6 Antibody (clone UMCD6/3F7B5)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS17228****Specification****CD6 Antibody (clone UMCD6/3F7B5) - Product Information**

Application	WB, IHC-P, FuncS, FC
Primary Accession	<a href="#">P30203</a>
Other Accession	<a href="#">923</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Calculated MW	71801
Dilution	WB~~1:1000 IHC-P~~N/A FuncS~~N/A FC~~1:10~50

**CD6 Antibody (clone UMCD6/3F7B5) - Additional Information****Gene ID** [923](#)**Other Names**

CD6, CD6 molecule, T12, TP120, CD6 antigen

**Target/Specificity**

CD6 molecules of approximately 130 kd.

**Reconstitution & Storage**

50 mM sodium phosphate, pH 7.5, 100 mM potassium chloride, 150 mM sodium chloride, 0.5 mg/ml Gentamicin sulfate. Store at +4°C. DO NOT FREEZE.

**Precautions**

CD6 Antibody (clone UMCD6/3F7B5) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD6 Antibody (clone UMCD6/3F7B5) - 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: [24584089](http://www.uniprot.org/citations/24584089))

target="\_blank">24584089</a>, PubMed:<a href="http://www.uniprot.org/citations/24945728" target="\_blank">24945728</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

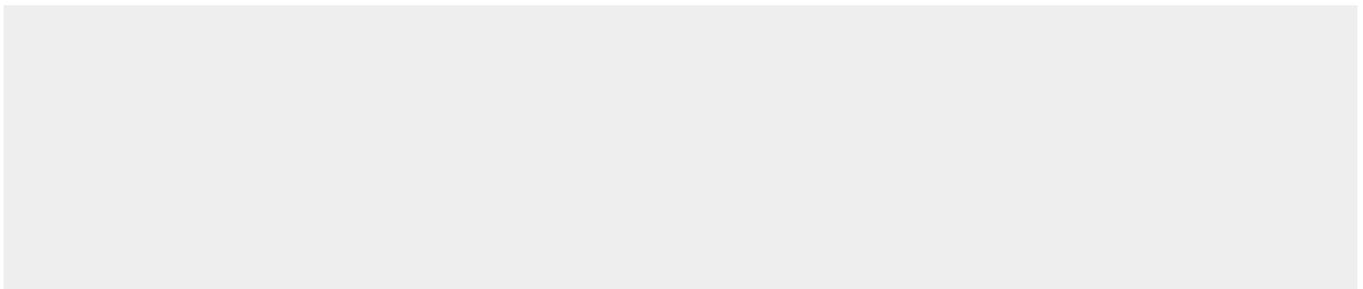
Detected on thymocytes (PubMed:15294938). Detected on peripheral blood T-cells (PubMed:15048703, PubMed:16352806) Detected on natural killer (NK) cells (PubMed:16352806). Soluble CD6 is detected in blood serum (at protein level) (PubMed:17601777). Detected in spleen, thymus, appendix, lymph node and 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

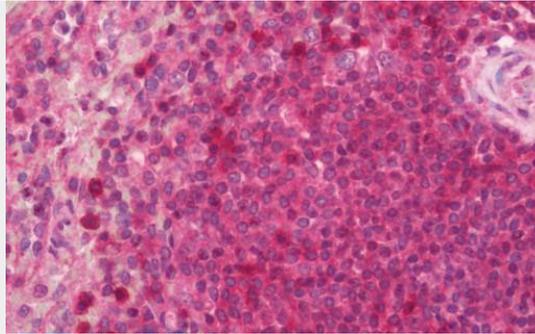
#### CD6 Antibody (clone UMCD6/3F7B5) - Protocols

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

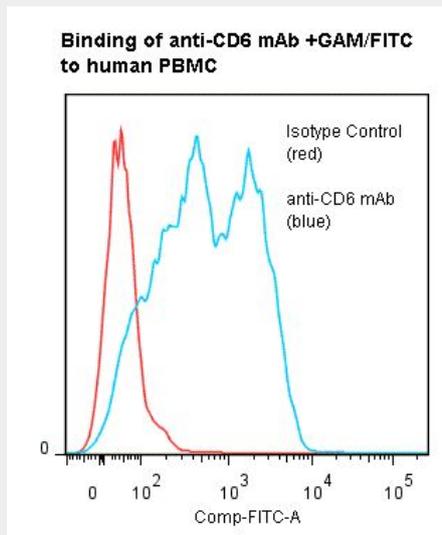
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CD6 Antibody (clone UMCD6/3F7B5) - Images





Human Spleen: Formalin-Fixed, Paraffin-Embedded (FFPE)



Flow cytometry of CD6 antibody

### **CD6 Antibody (clone UMCD6/3F7B5) - Background**

Involved in cell adhesion. Binds to CD166.

### **CD6 Antibody (clone UMCD6/3F7B5) - References**

- Bowen M.A., et al. J. Immunol. 158:1149-1156(1997).
- Taylor T.D., et al. Nature 440:497-500(2006).
- Aruffo A., et al. J. Exp. Med. 174:949-952(1991).
- Castro M.A., et al. J. Immunol. 178:4351-4361(2007).
- Swack J.A., et al. J. Biol. Chem. 266:7137-7143(1991).