

# CD5 Antibody

Purified Mouse Monoclonal Antibody  
Catalog # AO1750a

## Product Information

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<b>Application</b>	WB, FC, E
<b>Primary Accession</b>	<a href="#">P06127</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	6A11
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	54578
<b>Description</b>	The human cd5 gene has two alternative exons 1: exon 1A (E1A) which encodes the full-length (FL) CD5 protein and exon 1B (E1B) which encodes a truncated (TR) isoform. The FL variant of CD5 protein is translocated to the plasma membrane, while its TR variant is retained in the cytoplasm.
<b>Immunogen</b>	Purified recombinant fragment of human CD5 (AA: 27-233) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	921
<b>Other Names</b>	T-cell surface glycoprotein CD5, Lymphocyte antigen T1/Leu-1, CD5, CD5, LEU1
<b>Dilution</b>	WB~~1/250 FC~~1/200 - 1/400 E~~1/10000
<b>Storage</b>	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.
<b>Precautions</b>	CD5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CD5
<b>Synonyms</b>	LEU1
<b>Function</b>	Lymphoid-specific receptor expressed by all T-cells and in a subset of B-cells known as B1a cells. Plays a role in the regulation of TCR and BCR signaling,

thymocyte selection, T-cell effector differentiation and immune tolerance. Acts by interacting with several ligands expressed on B-cells such as CD5L or CD72 and thereby plays an important role in contact-mediated, T-dependent B-cell activation and in the maintenance of regulatory T and B-cell homeostasis. Functions as a negative regulator of TCR signaling during thymocyte development by associating with several signaling proteins including LCK, CD3Z chain, PI3K or CBL (PubMed:[1384049](#), PubMed:[1385158](#)). Mechanistically, co- engagement of CD3 with CD5 enhances phosphorylated CBL recruitment leading to increased VAV1 phosphorylation and degradation (PubMed:[23376399](#)). Modulates B-cell biology through ERK1/2 activation in a Ca(2+)-dependent pathway via the non-selective Ca(2+) channel TRPC1, leading to IL-10 production (PubMed:[27499044](#)).

## Cellular Location

Cell membrane {ECO:0000250 | UniProtKB:P13379}; Single-pass type I membrane protein {ECO:0000250 | UniProtKB:P13379}

## References

1.Crit Rev Immunol. 2011;31(1):31-42.2.Blood. 2011 Dec 1;118(23):6107-14.

## Images

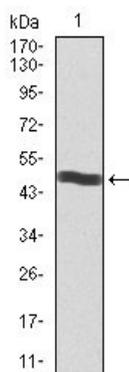


Figure 1: Western blot analysis using CD5 mAb against human CD5 recombinant protein. (Expected MW is 48.3 kDa)

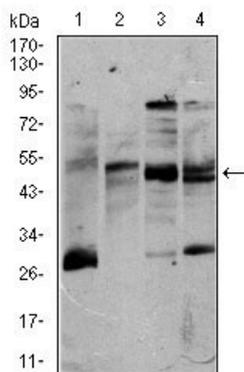


Figure 2: Western blot analysis using CD5 mouse mAb against K562 (1), Jurkat (2), Raji (3), and MOLT4 (4) cell lysate.

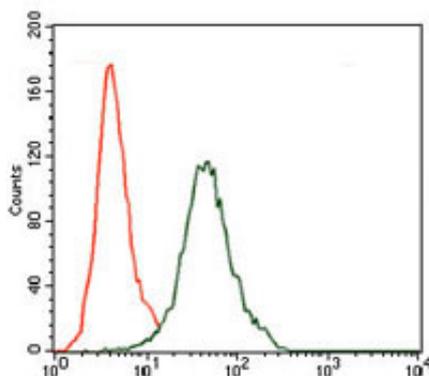


Figure 3: Flow cytometric analysis of Jurkat cells using CD5 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.