

CD5 Antibody (clone MEM-32) Mouse Monoclonal Antibody Catalog # ALS11967

# Specification

# CD5 Antibody (clone MEM-32) - Product Information

Application	IHC
Primary Accession	<u>P06127</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	55kDa KDa

# CD5 Antibody (clone MEM-32) - Additional Information

Gene ID 921

Other Names T-cell surface glycoprotein CD5, Lymphocyte antigen T1/Leu-1, CD5, CD5, LEU1

**Target/Specificity** Crude thymus membrane fraction

**Reconstitution & Storage** Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions** CD5 Antibody (clone MEM-32) is for research use only and not for use in diagnostic or therapeutic procedures.

## CD5 Antibody (clone MEM-32) - Protein Information

Name CD5

Synonyms LEU1

#### Function

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, Pl3K or CBL (PubMed:<a href="http://www.uniprot.org/citations/1385158" target="\_blank">1385158</a>, PubMed:<a href="http://www.uniprot.org/citations/1384049" target="\_blank">1384049</a>). Mechanistically, co- engagement of CD3 with CD5 enhances phosphorylated CBL recruitment leading to increased VAV1 phosphorylation and degradation (PubMed:<a



href="http://www.uniprot.org/citations/23376399" target="\_blank">23376399</a>). 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:<a href="http://www.uniprot.org/citations/27499044" target=" blank">27499044</a>).

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

## CD5 Antibody (clone MEM-32) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### CD5 Antibody (clone MEM-32) - Images



Anti-CD5 antibody IHC of human spleen.

## CD5 Antibody (clone MEM-32) - Background

May act as a receptor in regulating T-cell proliferation.

## CD5 Antibody (clone MEM-32) - References

Jones N.H.,et al.Nature 323:346-349(1986). Calvo J.,et al.Tissue Antigens 47:257-261(1996). Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Taylor T.D.,et al.Nature 440:497-500(2006).