

CD5 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13533c

Specification

CD5 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	P06127
Other Accession	NP_055022.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54578
Antigen Region	203-232

CD5 Antibody (Center) - Additional Information

Gene ID 921

Other Names

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

Target/Specificity

This CD5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 203-232 amino acids from the Central region of human CD5.

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

CD5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CD5 Antibody (Center) - 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, 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

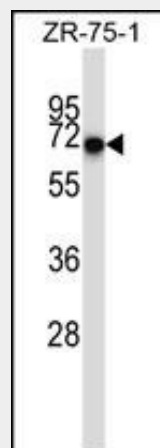
Cell membrane {ECO:0000250|UniProtKB:P13379}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P13379}

CD5 Antibody (Center) - Protocols

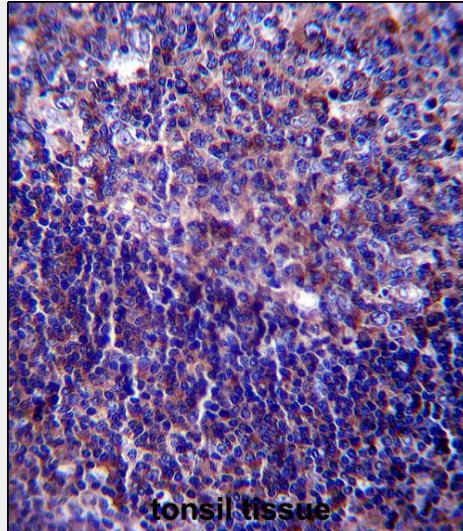
Provided below are standard protocols that you may find useful for product applications.

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

CD5 Antibody (Center) - Images



CD5 Antibody (Center) (Cat. #AP13533c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the CD5 antibody detected the CD5 protein (arrow).



CD5 Antibody (Center) (Cat. #AP13533c) immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CD5 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

CD5 Antibody (Center) - Background

CD5 may act as a receptor in regulating T-cell proliferation. CD5 interacts with CD72/LYB-2.

CD5 Antibody (Center) - References

- Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009)
- Yoshino, N., et al. Ann Thorac Cardiovasc Surg 15(5):324-327(2009)
- Garaud, S., et al. Ann. N. Y. Acad. Sci. 1173, 280-285 (2009) :
- Liang, X.S., et al. Br. J. Haematol. 146(4):418-423(2009)
- Vera, J., et al. Proc. Natl. Acad. Sci. U.S.A. 106(5):1506-1511(2009)