

Anti-CD5 Antibody

Catalog # AP95745

Product Information

Application	WB, IHC, FC
Primary Accession	P06127
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	54578

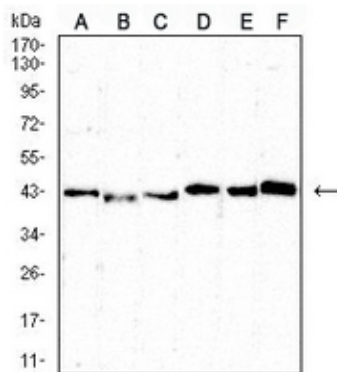
Additional Information

Gene ID	921
Other Names	LEU1; T-cell surface glycoprotein CD5; Lymphocyte antigen T1/Leu-1; CD5
Target/Specificity	Recombinant fusion protein of human CD5 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

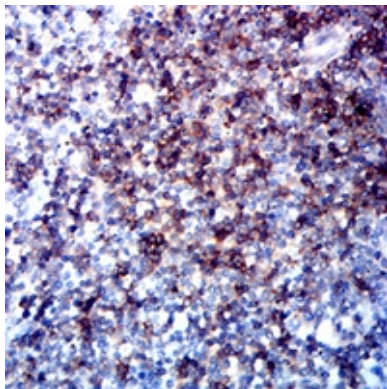
Protein Information

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

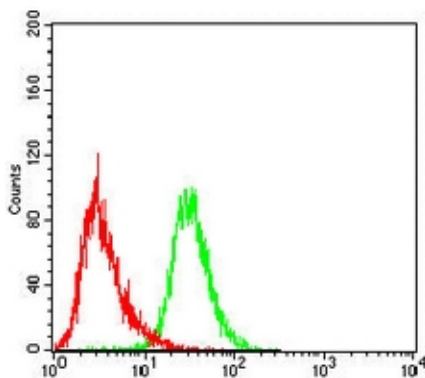
Images



Western blot analysis of CD5 expression in MOLT4 (A), MOLT4 (B), U937 (C), L1210 (D), HEK239 (E), HEK293-6e (F) whole cell lysates. (Predicted band size: 55 kD; Observed band size: 43 kD)



Immunohistochemical analysis of CD5 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of THP1 cells using Anti-CD5 Antibody (green) and negative control (red).

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