

### Product datasheet for AM50236PU-T

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# CD5 Mouse Monoclonal Antibody [Clone ID: CD5/54/F6]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: CD5/54/F6

**Applications:** FC, IF, IHC, IP, WB

**Recommended Dilution: ELISA:** Use BSA free Antibody for Coating.

Western Blot: 0.5-1 µg/ml.

**Immunoprecipitation:** 0.5-1 μg/500 μg protein lysate.

**Flow Cytometry:** 0.5-1 µg/106 cells. **Immunofluorescence:** 0.5-1 µg/ml.

Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for

30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH

6.0, for 10-20 min followed by cooling at RT for 20 minutes. *Positive Control*: 293T, Ramos, or MOLT-4 Cells, Tonsil.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** A synthetic peptide from the intracellular region of human CD5.

**Specificity:** Recognizes Human CD5. Other species not tested.

Recognizes a 67kDa transmembrane protein, which is identified as CD5.

The CD5 antigen is found on 95% of thymocytes and 72% of peripheral blood lymphocytes. In lymph nodes, the main reactivity is observed in T cell areas. Anti-CD5 is a pan T-cell marker that also reacts with a range of neoplastic B-cells, e.g. chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), mantle cell lymphoma, and a subset (~10%) of diffuse large B-cell lymphoma. CD5 aberrant expression is useful in making a diagnosis of mature T-cell neoplasms. Anti-CD5 detection is diagnostic in CLL/SLL within a panel of other B-cell markers, especially one that includes anti-CD23. Anti-CD5 is also very useful in differentiating among mature small lymphoid cell malignancies. In addition, anti-CD5 can be used in distinguishing thymic carcinoma (+) from thymoma (-). Anti-CD5 does not react with granulocytes or

monocytes.

Cellular Localization: Cell surface.





#### CD5 Mouse Monoclonal Antibody [Clone ID: CD5/54/F6] - AM50236PU-T

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

**Concentration:** lot specific

**Purification:** Protein A/G Chromatography

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 67 kDa

Gene Name: CD5 molecule

Database Link: Entrez Gene 921 Human

P06127

**Background:** CD5, a 67KDa Type I transmembrane glycoprotein, is a member of SRCR superfamily

expressed specifically of thymocytes, mature T-cells and B-1a cells. CD5 has an extracellular domain with 3 SRCR domains and cytoplasmic tail is devoid of any intrinsic enzyme activity. CD5 functions as a dual receptor modulating either positive or negative co-stimulatory signals depending on the cell type and the developmental stage. It binds CD72 and provides

co-stimulatory signal for T-cell growth. CD5 plays an important role in thymocyte

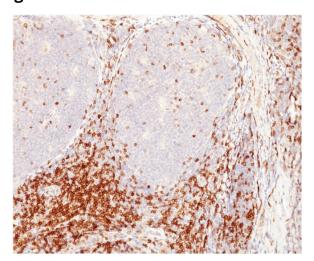
development and also fine-tunes TCR signaling. It is associated with antigen-specific receptor complex expressed on T-cells and B-1a cells and regulates T and B-cell mediated responses. CD5 signaling involves various kinases including PI3K, Src family tyrosine kinases, CKII, Ras

GAP, and members of MAPK.

Synonyms: CD5, LEU1



# **Product images:**



Formalin-Fixed, Paraffin-Embedded Human tonsil stained with CD5 Antibody (Clone CD5/54/F6)