

## **Product datasheet for AM50237PU-S**

#### OriGene Technologies, Inc.

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### CD5 Mouse Monoclonal Antibody [Clone ID: C5/473+CD5/54/F6]

#### **Product data:**

Product Type: Primary Antibodies
Clone Name: C5/473+CD5/54/F6
Applications: FC, IF, IHC, IP, WB

Recommended Dilution: Western Blot: 0.5-1 µg/ml.

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

Flow Cytometry:  $0.5-1 \mu g/10^6$  cells. Immunofluorescence:  $0.5-1 \mu g/ml$ .

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: Human CD5 recombinant protein (C5/473) and A synthetic peptide from the intracellular

region of Human CD5 (CD5/54/F6).

**Specificity:** 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: C5/473+CD5/54/F6] - AM50237PU-S

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

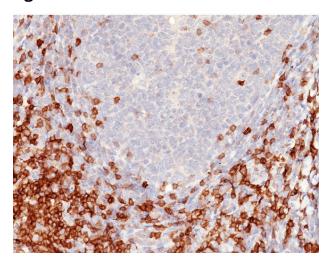
development and also fine-tunes TCR signaling. It is associated with antigen-specific receptor complex expressed on T-cells and B-1a cells and regulates T and B-cell mediated responses. CD5 signaling involves various kinases including PI3K, Src family tyrosine kinases, CKII, Ras

GAP, and members of MAPK.

Synonyms: CD5, LEU1



# **Product images:**



Formalin-Fixed, Paraffin-Embedded Human tonsil stained with CD5 Antibody (Clone C5/473 + CD5/54/F6).