# Anti-CD10 Antibody [SN75-07]

## ET1611-82

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|---|---|
| **Product Type:** | Recombinant Rabbit monoclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse, Rat |
| **Applications:** | WB, FC, IHC-P, IF-Cell, IF-Tissue |
| **Molecular Wt:** | Predicted band size: 86 kDa |
| **Clone number:** | SN75-07 |

**Description:** CD10, also called the common acute lymphoblastic leukemia antigen (CALLA) and neutral endopeptidase (NEP), is a type II integral membrane glycoprotein. CD10 acts as a zinc metalloprotease that cleaves a variety of biologically active peptides including Angiotensins I and II. It is expressed on early B and T lymphoid precursors, B blasts, some granulocytes, bone marrow stromal cells and certain epithelial cells including some tumor cell lines. CD10 is used as a marker of common acute lymphocytic leukemias and some lymphomas.

**Immunogen:** Synthetic peptide within Human CD10 aa 1-50 / 750.

**Positive control:** Ramos cell lysate, Daudi cell lysate, Mouse kidney tissue lysate, Mouse small intestine tissue lysate, Rat lung tissue lysate, 293, human kidney tissue, human prostate carcinoma tissue, human small intestine tissue, human peripheral blood granulocytes.

**Subcellular location:** Cell membrane.

**Database links:** SwissProt: P08473 Human | Q61391 Mouse | P07861 Rat

**Recommended Dilutions:**

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| **WB** | 1:2,000 |
| **IF-Cell** | 1:50-1:200 |
| **FC** | 1:1,000 |
| **IHC-P** | 1:50-1:5,000 |
| **IF-Tissue** | 1:100 |

**Storage Buffer:** 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

## Images

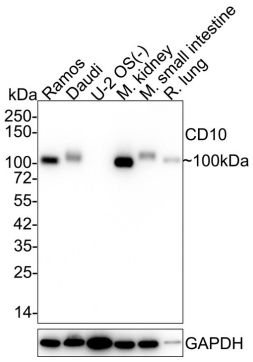


**Fig1:** Western blot analysis of CD10 on different lysates with Rabbit anti-CD10 antibody (ET1611-82) at 1/2,000 dilution.

Lane 1: Ramos cell lysate (15 µg/Lane)
Lane 2: Daudi cell lysate (15 µg/Lane)
Lane 3: U-2 OS cell lysate (negative) (15 µg/Lane)
Lane 4: Mouse kidney tissue lysate (20 µg/Lane)
Lane 5: Mouse small intestine tissue lysate (20 µg/Lane)
Lane 6: Rat lung tissue lysate (20 µg/Lane)

Predicted band size: 86 kDa
Observed band size: 100 kDa

Exposure time: 24 seconds; ECL: K1802;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1611-82) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

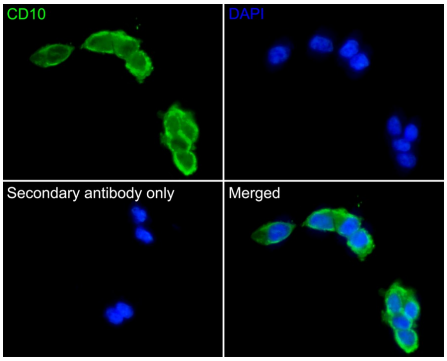


**Fig2:** Immunocytochemistry analysis of 293 cells labeling CD10 with Rabbit anti-CD10 antibody (ET1611-82) at 1/50 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-CD10 antibody (ET1611-82) at 1/50 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

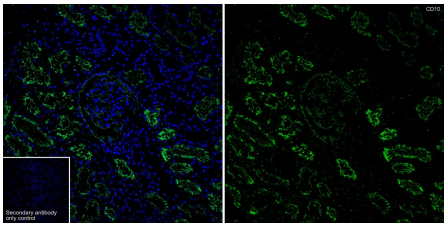

**Fig3:** Immunofluorescence analysis of paraffin-embedded human kidney tissue labeling CD10 with Rabbit anti-CD10 antibody (ET1611-82) at 1/100 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (ET1611-82, green) at 1/100 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

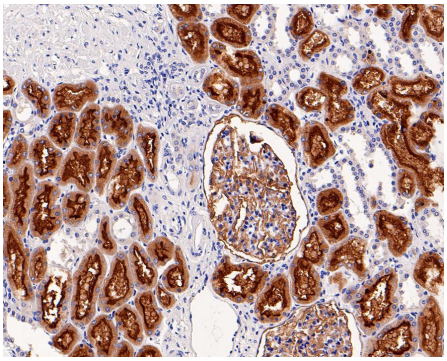

**Fig4:** Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-CD10 antibody (ET1611-82) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with $ddH_2O$ and PBS, and then probed with the primary antibody (ET1611-82) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

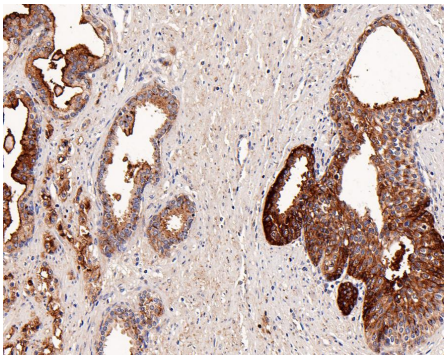

**Fig5:** Immunohistochemical analysis of paraffin-embedded human prostate carcinoma tissue with Rabbit anti-CD10 antibody (ET1611-82) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with $ddH_2O$ and PBS, and then probed with the primary antibody (ET1611-82) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

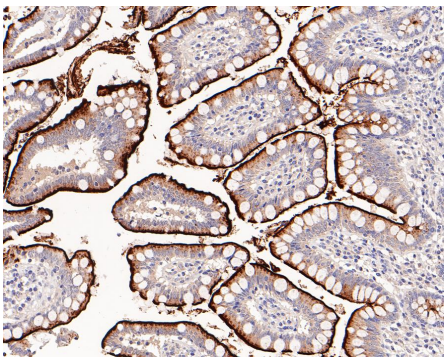

**Fig6:** Immunohistochemical analysis of paraffin-embedded human small intestine tissue with Rabbit anti-CD10 antibody (ET1611-82) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with $ddH_2O$ and PBS, and then probed with the primary antibody (ET1611-82) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

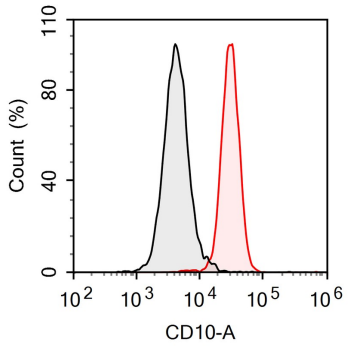


**Fig7:** Flow cytometric analysis of human peripheral blood granulocytes labeling CD10.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (ET1611-82, 1μg/mL) (red). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Kim, TH. et al. 2015. Expression of p27 and Jun activation domain-binding protein 1 in endometriosis. Arch. Gynecol. Obstet. 292: 377-81.
2. Engel, BJ. et al. 2015. Multilayered, Hyaluronic Acid-Based Hydrogel Formulations Suitable for Automated 3D High Throughput Drug Screening of Cancer-Stromal Cell Cocultures. Adv Healthc Mater. 4: 1664-74.