Anti-ADAM10 Antibody [JM32-11]

ET1703-60

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP
Molecular Wt:	Predicted band size: 84 kDa
Clone number:	JM32-11

Description: ADAM (a disintegrin and metalloprotease) proteins are a family of over 30 membrane-anchored, glycosylated, Zn2+ dependent proteases that are involved in cell-cell, cell-matrix interface related processes including fertilization, muscle fusion, secretion of TNFα (tumor necrosis factor α), and modulation of the neurogenic function of Notch and Delta. ADAM proteins possess a signal-domain, a pro-domain, a metalloprotease domain, a disintegrin domain (integrin ligand) a cysteine-rich region, an epidermal growth factor-like domain, a transmembrane domain and a cytoplasmic tail. ADAMs are expressed in brain, testis, epididymis, ovary, breast, placenta, liver, heart, lung, bone and muscle, and catalyze proteolysis, adhesion, fusion and intracellular signaling. ADAM10 is a TNF-processing enzyme that cleaves pro-TNF, a membrane-bound precusor protein, at Ala 76-Val 77, which causes membrane shedding of soluble TNF.

Immunogen: Synthetic peptide within Human ADAM10 aa 715-748 / 748.

Positive control: Jurkat cell lysate, HeLa cell lysate, human lung tissue lysate, RAW264.7 cell lysate, mouse placenta tissue lysate, mouse brain tissue lysate, rat brain tissue lysate, rat spleen tissue lysate, human thyroid carcinoma tissue, human stomach tissue.

Subcellular location: Cell membrane. Endomembrane system.

Database links: SwissProt: O14672 Human | O35598 Mouse | Q10743 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IHC-P	1:1,000
IP	1-2μg/sample

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

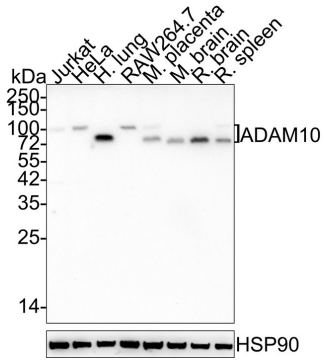

Fig1: Western blot analysis of ADAM10 on different lysates with Rabbit anti-ADAM10 antibody (ET1703-60) at 1/1,000 dilution.

Lane 1: Jurkat cell lysate (15 µg/Lane)
Lane 2: HeLa cell lysate (15 µg/Lane)
Lane 3: Human lung tissue lysate (30 µg/Lane)
Lane 4: RAW264.7 cell lysate (15 µg/Lane)
Lane 5: Mouse placenta tissue lysate (30 µg/Lane)
Lane 6: Mouse brain tissue lysate (30 µg/Lane)
Lane 7: Rat brain tissue lysate (30 µg/Lane)
Lane 8: Rat spleen tissue lysate (30 µg/Lane)

Lysates/proteins at 10 µg/Lane.

Predicted band size: 84 kDa
Observed band size: 75/100 kDa

Exposure time: 3 minutes; ECL: K1801;
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 (ET1703-60) at 1/1,000 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.

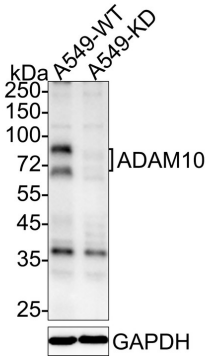

Fig2: Western blot analysis of ADAM10 on different lysates with Rabbit anti-ADAM10 antibody (ET1703-60) at 1/1,000 dilution.

Lane 1: A549-si NT cell lysate
Lane 2: A549-si ADAM10 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 84 kDa
Observed band size: 84/70 kDa

Exposure time: 2 minutes ; 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 (ET1703-60) at 1/1,000 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.

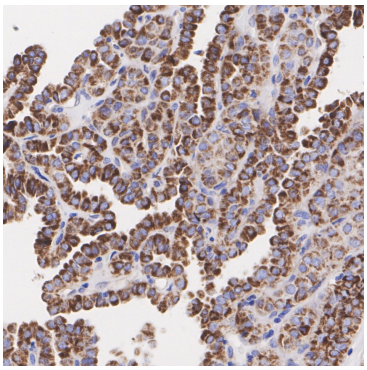

Fig3: Immunohistochemical analysis of paraffin-embedded human thyroid carcinoma tissue with Rabbit anti-ADAM10 antibody (ET1703-60) at 1/1,000 dilution.

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 (ET1703-60) at 1/100 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.

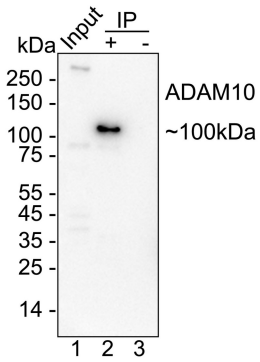

Fig4: ADAM10 was immunoprecipitated from 0.2 mg HeLa cell lysate with ET1703-60 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using ET1703-60 at 1/1,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)
Lane 2: ET1703-60 IP in HeLa cell lysate
Lane 3: Rabbit IgG instead of ET1703-60 in HeLa cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST
Exposure time: 59 seconds; ECL: K1801

Background References

1. Yang C et al. Enhancement of the nonamyloidogenic pathway by exogenous NGF in an Alzheimer transgenic mouse model. Neuropeptides 48:233-8 (2014).
2. Guo Q et al. Adam10 Mediates the Choice between Principal Cells and Intercalated Cells in the Kidney. J Am Soc Nephrol N/A:N/A (2014).