

ADAM10 Antibody

ADAM10 (CT): KUZ, MADM

CATALOG NO.: 2051

BACKGROUND:

Proinflammatory cytokine tumor necrosis factor- α (TNF- α) contributes to a variety of inflammatory responses and programmed cell death. Notch receptor and its ligand participate in cell fate decisions during vertebrate development and are associated with several human disorders, including a T-cell lymphoma. TNF- α , notch and its ligand delta are all membrane-bound molecules, which are cleaved by proteases to release mature proteins or functional receptor. ADAM10, a metalloprotease-disintegrin in the family of mammalian ADAM (for a disintegrin and metalloprotease), was recently identified to cleave TNF- α , notch and its ligand delta (1-3). The genes encoding human, mouse, and bovine ADAM10 were recently cloned and designated ADAM 10, kuzbanian (KUZ), and MADM, respectively, (1,2,4). ADAM10 mRNA is expressed in a variety of human and bovine tissues (1,4).

SOURCE:

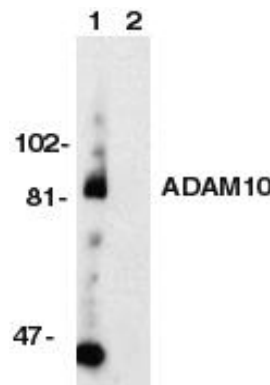
Rabbit polyclonal ADAM10 antibody was raised against a peptide corresponding to amino acids 732 to 748 of human ADAM10 (1). This sequence is identical to those of bovine and rat origins and differs from that of mouse ADAM10 by one amino acid (2,4).

APPLICATION:

ADAM10 antibody can be used for detection of ADAM10 by Western blot at 1:500 to 1:2000 dilution. (Optimal dilution should be determined by user.) Jurkat whole cell lysate can be used as positive control and an approximately 85 kDa band can be detected, which may represent precursor. ADAM10 antibody can also detect ADAM10 by immunocytochemistry at 2 μ g/ml. **For research use only.**

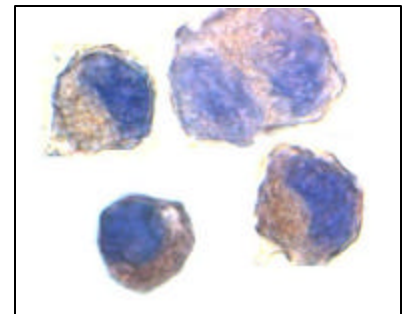
STORAGE:

ADAM10 antibody is supplied as ion exchange chromatography purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year. Azide free antibody is available.



Western blot analysis of ADAM10 in Jurkat whole cell lysate in the absence (1) or presence (2) of blocking peptide (Catalog no. 2051P) with ADAM10 antibody at 1 μ g/ml.

Immunocytochemical staining of K562 cells using ADAM10 antibody at 2 μ g/ml.



REFERENCES:

1. Rosendahl MS, Ko SC, Long DL, et al. Identification and characterization of a pro-tumor necrosis factor- α -processing enzyme from the ADAM family of zinc metalloproteases. *J Biol Chem* 1997;272:24588-93
2. Pan D, Rubin GM. Kuzbanian controls proteolytic processing of Notch and mediates lateral inhibition during *Drosophila* and vertebrate neurogenesis. *Cell* 1997;90:271-80
3. Qi H, Rand MD, Wu X, Sestan N, Wang W, Rakic P, Xu T, Artavanis-Tsakonas S. Processing of the notch ligand delta by the metalloprotease Kuzbanian. *Science* 1999;283:91-4
4. Howard L, Lu X, Mitchell S, Griffiths S, Glynn P. Molecular cloning of MADM: a catalytically active mammalian disintegrin-metalloprotease expressed in various cell types. *Biochem J* 1996;317:45-50. (RD1299)

