



ADAM 10 (CT) (kuz) (TNF α converting enzyme). Rabbit Polyclonal Antibody
KUZ; MADM

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).

ORDERING INFORMATION

CATALOG NUMBER
X1106P

SIZE
100 μ g
FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided in phosphate buffered saline solution containing 0.02% sodium azide as a preservative

CONCENTRATION
See vial for concentration

ISOTYPE
IgG

APPLICATIONS
Western Blot

SPECIES REACTIVITY
Human, Mouse, Rat

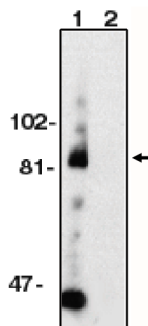
ACCESSION NUMBER

Human	O14672
Mouse	O35598
Rat	Q10743

IMMUNOGEN

Synthetic peptide corresponding to amino acids 732 to 748 off the human ADAM10. Immunogen sequence is identical in bovine and rat and differs from the mouse protein by one amino acid.

Western blot analysis using anti-ADAM10 (CT) antibody at 0.5 μ g/ml on Jurkat cell lysate for ADAM10. 1) No blocking peptide used. 2) Blocking peptide used.



POSITIVE CONTROL/TISSUE EXPRESSION

Jurkat whole cell lysate

COMMENTS

Detects ADAM10 by Western blot at 0.25 to 1 $\mu\text{g/ml}$. Detects an 85 kDa band can be detected in Jurkat cell lysates which may represent precursor protein. A faint 60 kDa band is also detected in some cell lines, including Jurkat, which may be processed mature protein. Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Antigen Immunoaffinity Purification

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Rosendahl, M.S., et al., Identification and characterization of a pro-tumor necrosis factor-alpha-processing enzyme from the ADAM family of zinc metalloproteases. *J. Biol. Chem.* 1997, 272, 24588-24593
2. Pan, D. & Rubin, G.M., Kuzbanian controls proteolytic processing of Notch and mediates lateral inhibition during *Drosophila* and vertebrate neurogenesis. *Cell* 1997, 90, 271-280
3. Qi, H., et al., Processing of the notch ligand delta by the metalloprotease Kuzbanian. *Science* 1999, 283, 91-94
4. Howard, L., et al., Molecular cloning of MADM: a catalytically active mammalian disintegrin-metalloprotease expressed in various cell types. *Biochem. J.* 1996, 317, 45-50

PRODUCT SPECIFIC REFERENCES