

Anti-ADAM17 Picoband Antibody

Catalog # ABO12864

Product Information

Application	WB, E
Primary Accession	ADAM17: P78536
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ADAM17 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Application Details	Western blot, 0.1-0.5 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Tissue Specificity	Ubiquitously expressed. Expressed at highest levels in adult heart, placenta, skeletal muscle, pancreas, spleen, thymus, prostate, testes, ovary and small intestine, and in fetal brain, lung, liver and kidney.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human ADAM17 recombinant protein (Position: R215-Y433).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Background

ADAM17(ADAM metalloproteinase domain 17), also called TACE (tumor necrosis factor- α -converting enzyme), is a 70-kDa enzyme that belongs to the ADAM protein family of disintegrins and metalloproteases.

Expression studies showed that the encoded protein cleaves precursor tumor necrosis factor-alpha to its mature form. Northern blot analysis revealed that the gene was expressed as a 5-kb mRNA in all tissues examined. ADAM17 is understood to be involved in the processing of tumor necrosis factor alpha (TNF- α) at the surface of the cell, and from within the intracellular membranes of the trans-Golgi network. This process, which is also known as 'shedding', involves the cleavage and release of a soluble ectodomain from membrane-bound pro-proteins (such as pro-TNF- α), and is of known physiological importance. ADAM17 was the first 'shedase' to be identified, and is also understood to play a role in the release of a diverse variety of membrane-anchored cytokines, cell adhesion molecules, receptors, ligands, and enzymes.

Images

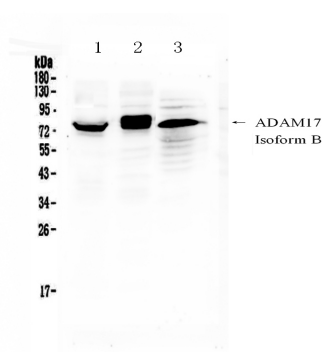


Figure 1. Western blot analysis of ADAM17 using anti-ADAM17 antibody (ABO12864). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse thymus tissue lysates, Lane 2: human Hela whole cell lysates, Lane 3: human placenta tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ADAM17 antigen affinity purified polyclonal antibody (Catalog # ABO12864) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ADAM17 at approximately 78KD. The expected band size for ADAM17 is at 97KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.