

# Anti-ADAM17 Picoband Antibody

Catalog # ABO12864

#### Specification

## Anti-ADAM17 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionADAM17: P78536HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for ADAM17 detection. Tested with WB, Direct ELISA inHuman;Mouse;Rat.Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-ADAM17 Picoband Antibody - Additional Information

**Application Details** Western blot, 0.1-0.5 μg/ml<br><br> Direct ELISA, 0.1-0.5 μg/ml<br>

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 r°Constitution, 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.



# Anti-ADAM17 Picoband Antibody - Protein Information

### Anti-ADAM17 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ADAM17 Picoband Antibody - Images

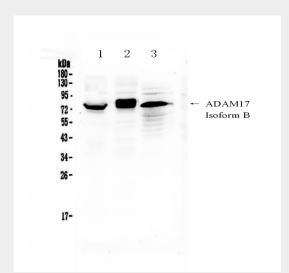


Figure 1. Western blot analysis of ADAM17 using anti-ADAM17 antibody (ABO12864). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse thymus 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 lgG-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.

### Anti-ADAM17 Picoband Antibody - Background

ADAM17(ADAM metallopeptidase domain 17), also called TACE (tumor necrosis factor- $\hat{1}\pm$ -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- $\hat{l}\pm$ ) at the surface of the cell, and from within theintracellular 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- $\hat{l}\pm$ ), and is of known physiological importance. ADAM17 was the first 'sheddase' 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.