

Anti-PLAT/TPA Antibody

Catalog # ABO12036

### Specification

# Anti-PLAT/TPA Antibody - Product Information

ApplicationWBPrimary AccessionP00750HostRabbitReactivityHuman, MouseClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Tissue-type plasminogen activator(PLAT) detection. Tested with WB in Human:Mouse.

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

# Anti-PLAT/TPA Antibody - Additional Information

Gene ID 5327

**Other Names** Tissue-type plasminogen activator, t-PA, t-plasminogen activator, tPA, 3.4.21.68, Alteplase, Reteplase, Tissue-type plasminogen activator chain A, Tissue-type plasminogen activator chain B, PLAT

Calculated MW 62917 MW KDa

**Application Details** Western blot, 0.1-0.5 µg/ml, Human, Mouse<br>

**Subcellular Localization** Secreted, extracellular space.

**Tissue Specificity** 

Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk.

**Protein Name** Tissue-type plasminogen activator

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human TPA recombinant protein (Position: H366-P562). Human TPA shares 83% and 84% amino acid (aa) sequence identity with mouse and rat TPA, respectively.



**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.

Sequence Similarities Belongs to the peptidase S1 family.

# Anti-PLAT/TPA Antibody - Protein Information

## Name PLAT (<u>HGNC:9051</u>)

#### Function

Converts the abundant, but inactive, zymogen plasminogen to plasmin by hydrolyzing a single Arg-Val bond in plasminogen. By controlling plasmin-mediated proteolysis, it plays an important role in tissue remodeling and degradation, in cell migration and many other physiopathological events. During oocyte activation, plays a role in cortical granule reaction in the zona reaction, which contributes to the block to polyspermy (By similarity).

**Cellular Location** Secreted, extracellular space.

**Tissue Location** 

Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk

#### **Anti-PLAT/TPA 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-PLAT/TPA Antibody - Images





Anti-TPA Picoband antibody, ABO12036, Western blottingAll lanes: Anti TPA (ABO12036) at 0.5ug/mlLane 1: Mouse Lung Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugLane 4: A431 Whole Cell Lysate at 40ugLane 5: A375 Whole Cell Lysate at 40ugLane 6: A549 Whole Cell Lysate at 40ugPredicted bind size: 85KDObserved bind size: 85KD

# Anti-PLAT/TPA Antibody - Background

PLAT is also known as tPA. This gene encodes tissue-type plasminogen activator, a secreted serine protease which converts the proenzyme plasminogen to plasmin, a fibrinolytic enzyme. Tissue-type plasminogen activator is synthesized as a single chain which is cleaved by plasmin to a two chain disulfide linked protein. This enzyme plays a role in cell migration and tissue remodeling. Increased enzymatic activity causes hyperfibrinolysis, which manifests as excessive bleeding; decreased activity leads to hypofibrinolysis which can result in thrombosis or embolism. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms.