

Anti-PLAUR Picoband Antibody

Catalog # ABO10132

Specification

Anti-PLAUR Picoband Antibody - Product Information

ApplicationWBPrimary Accession003405HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Urokinase plasminogen activator surfacereceptor(U-PAR/uPAR)(PLAUR) detection. Tested with WB in Human.

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

Anti-PLAUR Picoband Antibody - Additional Information

Gene ID 5329

Other Names Urokinase plasminogen activator surface receptor, U-PAR, uPAR, Monocyte activation antigen Mo3, CD87, PLAUR, MO3, UPAR

Calculated MW 36978 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization

Cell membrane . Cell projection, invadopodium membrane . Colocalized with FAP (seprase) preferentially at the cell surface of invadopodia membrane in a cytoskeleton-, integrin- and vitronectin-dependent manner. .

Tissue Specificity Expressed in neurons of the rolandic area of the brain (at protein level). Expressed in the brain.

Protein Name Urokinase plasminogen activator surface receptor(U-PAR/uPAR)

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

Immunogen

E.coli-derived human PLAUR recombinant protein (Position: E230-S286). Human PLAUR shares 63.2% amino acid (aa) sequence identity with both mouse and rat PLAUR.



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-PLAUR Picoband Antibody - Protein Information

Name PLAUR

Synonyms MO3, UPAR

Function

Acts as a receptor for urokinase plasminogen activator (PubMed:15677461). Plays a role in localizing and promoting plasmin formation. Mediates the proteolysis-independent signal transduction activation effects of U-PA. It is subject to negative-feedback regulation by U-PA which cleaves it into an inactive form.

Cellular Location

Cell membrane. Cell projection, invadopodium membrane Note=Colocalized with FAP (seprase) preferentially at the cell surface of invadopodia membrane in a cytoskeleton-, integrin- and vitronectin- dependent manner. [Isoform 2]: Secreted {ECO:0000250|UniProtKB:P49616}

Tissue Location

Expressed in neurons of the rolandic area of the brain (at protein level). Expressed in the brain

Anti-PLAUR 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-PLAUR Picoband Antibody - Images





Figure 1. Western blot analysis of PLAUR using anti- PLAUR antibody (ABO10132). 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: HELA whole Cell 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- PLAUR antigen affinity purified polyclonal antibody (Catalog # ABO10132) at 0.5 \hat{l}_{4} g/mL overnight at 4ŰC, 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 PLAUR at approximately 39KD, 55KD. The expected band size for PLAUR is at 37KD.

Anti-PLAUR Picoband Antibody - Background

PLAUR (PLASMINOGEN ACTIVATOR RECEPTOR, UROKINASE-TYPE), also known as UPAR or CD87, is multidomain glycoprotein tethered to the cell membrane with a glycosylphosphotidylinositol (GPI) anchor. PLAUR consists of three different domains of the Ly-6/uPAR/alpha-neurotoxin family. PLAUR is originally identified as a saturable binding site for urokinase on the cell surface. And the gene plays an important role in many normal as well as pathologic processes. The PLAUR gene is localized to 19q13.31. PLAUR is a part of the plasminogen activation system, which in the healthy body is involved in tissue reorganization events such as mammary gland involution and wound healing. PLAUR binds urokinase and thus restricts plasminogen activation to the immediate vicinity of the cell membrane. Thus it seems to be an important player in the regulation of this process. In human coronary artery vascular smooth muscle cells, UPA stimulates cell migration via a UPAR signaling complex containing TYK2 and phosphatidylinositol 3-kinase.