Datasheet for ABIN5692920

anti-PLAU antibody (AA 179-431)

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Overview

Quantity:	100 µg
Target:	PLAU
Binding Specificity:	AA 179-431
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PLAU antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-PLAU Antibody Picoband®
Immunogen:	E. coli-derived human PLAU recombinant protein (Position: I179-L431).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-PLAU Antibody Picoband® (ABIN5692920). Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	PLAU
Alternative Name:	PLAU (PLAU Products)
Background:	Synonyms: Urokinase-type plasminogen activator, U-plasminogen activator, uPA, Urokinase-type plasminogen activator long chain A, Urokinase-type plasminogen activator short chain A, Urokinase-type plasminogen activator chain B, PLAU Tissue Specificity: Expressed in the prostate gland and prostate cancers. Background: Urokinase, also known as urokinase-type plasminogen activator (uPA), is a serine protease present in humans and other animals. This gene encodes a secreted serine protease that converts plasminogen to plasmin. The encoded preproprotein is proteolytically processed to generate A and B polypeptide chains. These chains associate via a single disulfide bond to form the catalytically inactive high molecular weight urokinase-type plasminogen activator (HMW-uPA). HMW-uPA can be further processed into the catalytically active low molecular weight urokinase-type plasminogen activator (LMW-uPA). This low molecular weight form does not bind to the urokinase-type plasminogen activator receptor. Mutations in this gene may be associated with Quebec platelet disorder and late-onset Alzheimer's disease. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed.
Molecular Weight:	48 kDa
Gene ID:	5328
UniProt:	P00749
Pathways:	Cellular Response to Molecule of Bacterial Origin, Carbohydrate Homeostasis, Autophagy, Smooth Muscle Cell Migration

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL ELISA, 0.1-0.5 µg/mL 1. Degryse, Bernard (1 June 2011). "The urokinase receptor system as strategic therapeutic target: challenges for the 21st century". Current Pharmaceutical Design. 17 (19): 1872-1873. 2. Tang, Linlin, Han, Xiuzhen (March 2013). "The urokinase plasminogen activator system in breast cancer invasion and metastasis". Biomedicine & Pharmacotherapy. 67 (2): 179-182.
Restrictions:	For Research Use only

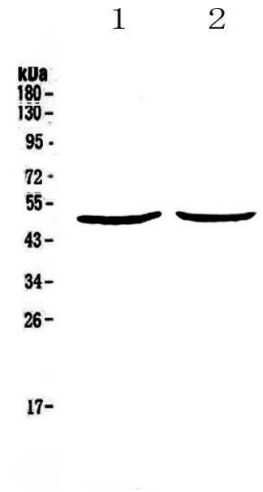
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in:	Wu, Li, Liu, Ning, Li: "Effects of Guiyuanfang and autologous transplantation of bone marrow stem cells on rats with liver fibrosis." in: **World journal of gastroenterology**, Vol. 11, Issue 8, pp. 1155-60, (2005) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of PLAU using anti-PLAU antibody . 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: rat pancreas tissue lysates, Lane 2: mouse pancreas 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-PLAU antigen affinity purified polyclonal antibody (Catalog #

) at 0.5 µg/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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PLAU at approximately 48KD. The expected band size for PLAU is at 48KD.