Anti-Urokinase Antibody

HA500429

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Rat
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 49 kDa

Description: Urokinase, also known as urokinase-type plasminogen activator (uPA), is a serine protease present in humans and other animals. The human urokinase protein was discovered, but not named, by McFarlane and Pilling in 1947. Urokinase was originally isolated from human urine, and it is also present in the blood and in the extracellular matrix of many tissues. The primary physiological substrate of this enzyme is plasminogen, which is an inactive form (zymogen) of the serine protease plasmin. Activation of plasmin triggers a proteolytic cascade that, depending on the physiological environment, participates in thrombolysis or extracellular matrix degradation. This cascade had been involved in vascular diseases and cancer progression. Urokinase is encoded in humans by the PLAU gene, which stands for "plasminogen activator, urokinase". The same symbol represents the gene in other animal species.

Immunogen: Recombinant protein within Human Urokinase 10- 200 aa

Positive control: PC-3M cell lysate, MCF-7 cell lysate, LANCAP cell lysate, rat kidney tissue lysate, rat stomach tissue lysate, PC-3M.

Subcellular location: Secreted.

Database links: SwissProt: P00749 Human | P29598 Rat

Recommended Dilutions:

WB	1,000-2,000
IF-Cell	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

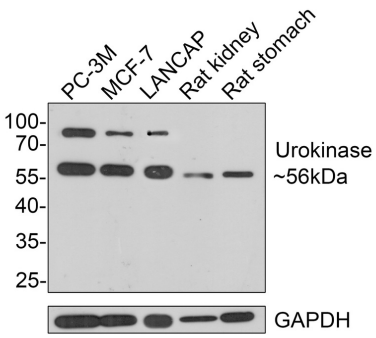

Fig1: Western blot analysis of Urokinase on different lysates with Rabbit anti-Urokinase antibody (HA500429) at 1/2,000 dilution.

Lane 1: PC-3M cell lysate (10 µg/Lane)
Lane 2: MCF-7 cell lysate (10 µg/Lane)
Lane 3: LANCAP cell lysate (10 µg/Lane)
Lane 4: Rat kidney tissue lysate (20 µg/Lane)
Lane 5: Rat stomach tissue lysate (20 µg/Lane)

Predicted band size: 49 kDa
Observed band size: 56 kDa

Exposure time: 2 minutes;

10% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500429) at 1/2,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

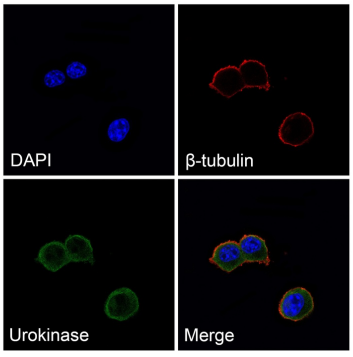

Fig2: Immunocytochemistry analysis of PC-3M cells labeling Urokinase with Rabbit anti-Urokinase antibody (HA500429) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at 37℃. Cells were then incubated with Rabbit anti-Urokinase antibody (HA500429) at 1/200 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, Red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 647, HA1127) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Crippa MP. Urokinase-type plasminogen activator. Int J Biochem Cell Biol. 2007;39(4):690-4.
2. Wakita T, Hayashi T, Nishioka J, Tamaru H, Akita N, Asanuma K, Kamada H, Gabazza EC, Ido M, Kawamura J, Suzuki K. Regulation of carcinoma cell invasion by protein C inhibitor whose expression is decreased in renal cell carcinoma. Int J Cancer. 2004 Feb 10;108(4):516-23.