10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-uPA Antibody

Catalog # AP96003

Product Information

Application	WB, FC, IF/IC
Primary Accession	P00749
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	48523

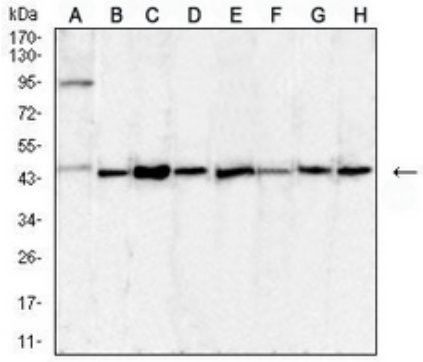
Additional Information

Gene ID	5328
Other Names	Urokinase-type plasminogen activator; U-plasminogen activator; uPA
Target/Specificity	Recombinant fusion protein of human uPA expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

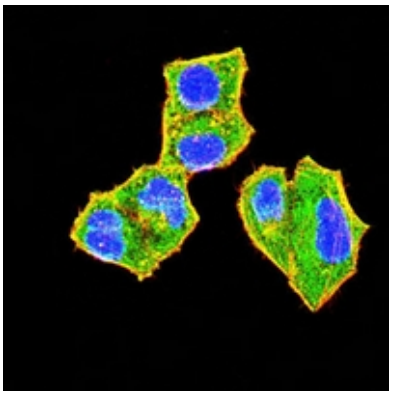
Protein Information

Name	PLAU (HGNC:9052)
Function	Serine protease that cleaves the inactive precursor plasminogen at a specific Arg-Val peptide bond, converting it into active plasmin (PubMed:1969415, PubMed:2521625, PubMed:4270330). Secreted as an inactive zymogen, it is recruited and activated at the cell surface through interaction with the urokinase plasminogen activator receptor (uPAR). Cell-surface activation enables localized, plasmin-dependent pericellular proteolysis, regulating extracellular matrix degradation in cell migration and tissue remodeling (PubMed:1829461, PubMed:2521625, PubMed:28849762). Also contributes to fibrinolysis and blood clot clearance by promoting plasmin generation (By similarity).
Cellular Location	Secreted. Note=Secreted as an inactive zymogen, it is activated through specific proteolytic cleavage.
Tissue Location	Expressed in the prostate gland and prostate cancers.

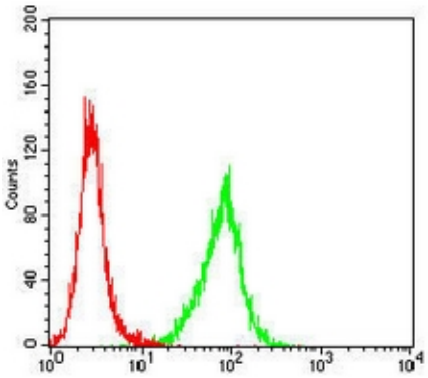
Images



Western blot analysis of uPA expression in PC3 (A), MCF7 (B), LNCap (C), DU145 (D), HCT116 (E), A549 (F), SKOV3 (G), HEK293 (H) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 46 kD)



Immunofluorescent analysis of uPA staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HeLa cells using Anti-uPA Antibody (green) and negative control (red).