

# Human PLAU/uPA Protein (active form)

Cat. No. PLA-HM101

## Description

<b>Source</b>	Recombinant Human PLAU/uPA Protein (active form) is expressed from HEK293 with His tag at the C-Terminus. It contains Ser21-Leu431, which consists of two chains: Long chain A (Ser21-Phe177) and chain B (Ile179-Leu431). The long chain A is further cleaved to yield a short chain A (Lys156-Phe177) and N-Terminus fragment (Ser21-Lys155).
<b>Accession</b>	P00749-1
<b>Molecular Weight</b>	The protein has a predicted MW of 17.9 kDa (long chain A), 29.2 kDa (chain B) and 15.3 kDa (N-terminal fragment). The protein migrates to 30-38 kDa (chain B) and 17 kDa (N-terminal fragment) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

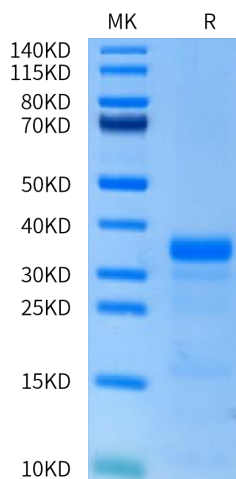
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in 1% HCOOH, 1 mM DTT (pH 3.0). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 1% HCOOH, 1mM DTT (pH 3.0).
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Plasminogen activator, urokinase (uPA) is a secreted serine protease, cleaving the sequence Cys-Pro-Gly-Arg560-Val561-Val-Gly-Gly-Cys in plasminogen to form plasmin. Dysregulation of PLAU is often accompanied by various cancers and PLAU inhibition could suppress tumor growth. Collectively, PLAU is necessary for tumor progression and can be a diagnostic and prognostic biomarker in HNSCC.

## Assay Data

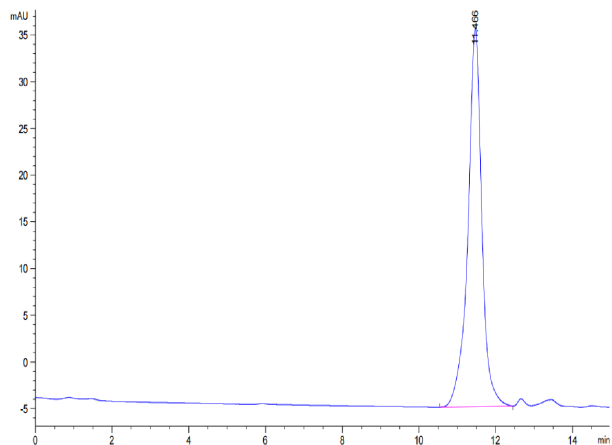
### Bis-Tris PAGE



Human PLAU (activated by trypsin) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human PLAU (activated by trypsin) is greater than 95% as determined by SEC-HPLC.

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#### Bioactivity Data

Measured by its ability to cleave a peptide substrate, N-carbobenzyloxy-Gly-Gly-Arg-7-amido-4-methylcoumarin (Z-GGR-AMC). The specific activity is >2000 pmol/min/μg (QC Test).