

Human CellExp™ PLAU / uPA (Activated), Human Recombinant

CATALOG NO: P1549-10 10 µg

ALTERNATE NAMES: Urokinase, PLAU, ATF, UPA, URK, u-PA, BDPLT5, QPD

MOL. WT. This protein carries a polyhistidine tag at the C-terminus. The active form of Human PLAU is a disulfide-linked heterodimer composed of long chain A (Ser 21 - Phe 177) and chain B (Ile 179 - Leu 431) with calculated MW of 17.8 kDa and 29.2 kDa. The long chain A is further cleaved to yield a short chain A (Lys 156 - Phe 177) and N-terminal fragment (Ser 21 - Lys 155) with calculated MW of 15.3 kDa. The protein migrates as 17 kDa (N-terminal fragment), 32-35 kDa (chain B) and 45-50 kDa (long chain A & chain B) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

SOURCE: HEK 293 cells

PURITY: >90%

ENDOTOXIN: Less than 1.0 EU per µg by the LAL method.

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in 25 mM HEPES, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization

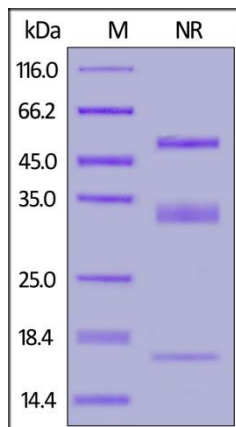
RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in deionized water. Do not vortex. For extended storage, it is recommended to store at -70°C

SPECIFIC ACTIVITY: 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 >2,000 pmol/min/µg, as measured under the described conditions.

STORAGE CONDITIONS: For long term storage, the product should be stored at a lyophilized state at -20°C or lower. Once reconstituted, store at -70°C for 3 months under sterile conditions. Avoid repeated freeze-thaw cycles.

DESCRIPTION: Urokinase-type plasminogen activator is also known as PLAU and UPA, a serine protease with an extremely limited substrate specificity, cleaving the sequence Cys – Pro – Gly - Arg560 - Val561 – Val – Gly – Gly – Cys in plasminogen to form plasmin. uPA is a potent marker of invasion and metastasis in a variety of human cancers associated with breast, stomach, colon, bladder, ovary, brain and endometrium. uPA and its receptor (uPAR) have been implicated in a broad spectrum of pathophysiological processes, including fibrinolysis, proteolysis, inflammation, atherogenesis and plaque destabilization, all of which are involved in the pathogenesis of MI (myocardial infarction).

AMINO ACID SEQUENCE: aa Ser 21 - Leu 431



Human PLAU, His Tag (activated by trypsin) on SDS-PAGE under non-reducing (NR) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

RELATED PRODUCTS:

- Human CellExp™ UPA, human recombinant (7248)
- Urokinase Activity Fluorometric Assay Kit (K728)
- Urokinase Antibody (5793)
- Urokinase Inhibitor Screening Kit (Fluorometric) (K727)
- Urokinase, Human (4793)
- uPAR Antibody (3440)

FOR RESEARCH USE ONLY! Not to be used on humans.