

Pro-Urokinase, human recombinant

CATALOG #: 7695-10 10 µg
 7695-50 50 µg
 7695-500 500 µg

ALTERNATIVE NAMES: Single chain Urokinase-type plasminogen activator (scuPA), Urokinase-type Plasminogen Activator uPA, PLAU.

SOURCE: *E. coli*

FORM: Lyophilized

FORMULATION: Lyophilized from proprietary buffer.

RECONSTITUTION: Briefly spin down the vial and reconstitute in water to 0.5-1 mg/ml and store at -80°C.

PURITY: ≥90% by SDS-PAGE.

MOL. WT.: 49.3 kDa

STORAGE CONDITIONS: Stable at -80°C for at least 1 year as supplied. Store reconstituted aliquots at -80°C. Avoid repeated freeze and thaw cycles.

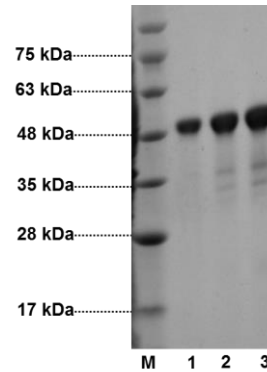
BACKGROUND: Urokinase or Urokinase-type plasminogen activator (uPA) is a serine protease (EC 3.4.21.73). It is secreted as a single-chain zymogen, pro-Urokinase, possessing little or no intrinsic enzymatic activity. The single chain zymogen is converted into the active two chain enzyme (tcuPA) by cleavage of the bond between Lys157 and Ile158. After activation, Urokinase specifically cleaves the proenzyme plasminogen to form the active enzyme plasmin. The active plasmin then catalyzes the breakdown of fibrin polymers of blood clots. Urokinase is involved in a number of biological functions including fibrinolysis, embryogenesis, cell migration, tissue remodeling, ovulation, and wound healing. Additionally, it is a potent marker of invasion and metastasis in a variety of human cancers associated with breast, stomach, colon, bladder, ovary, brain and endometrium.

ACTIVITY ASSAY: BioVision's Pro-Urokinase is converted into the active two chain enzyme (tcuPA) by activation with Plasmin Sepharose Beads (Cat # 7926) at 37°C. The enzyme is fully active as seen from its ability to cleave a fluorogenic substrate N-carbobenzyloxy-Gly-Gly-Arg-7-amido-4-methylcoumarin (Z-GGR-AMC) (Cat # K728-100).

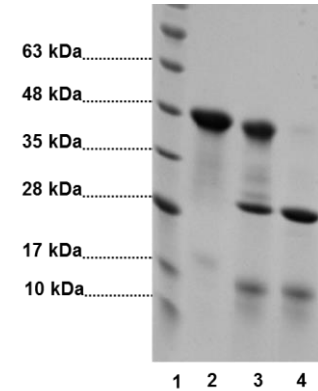
APPLICATIONS: BioVision's Urokinase can be used for activity assays, screening inhibitors, selectivity profiling and as controls in Western blotting, ELISA, Dot blotting, etc.

SPECIFIC ACTIVITY: >1200 mU/mg (1 U = Digestion of 1 µmole of Z-GGR-AMC substrate in 1 min at 37°C.)

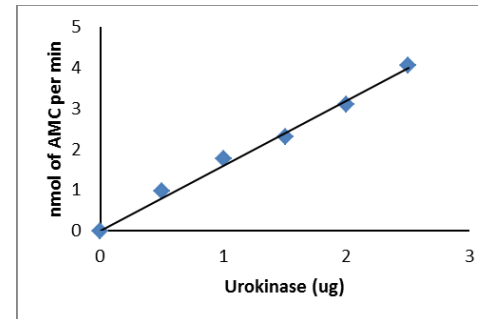
For research use only



SDS-PAGE (4-20%) of h-Pro-Urokinase:
 1: Protein Marker
 2: Pro-Urokinase (5 µg)
 3: Pro-Urokinase (10 µg)
 4: Pro-Urokinase (15 µg)



SDS-PAGE (12%) of Activation of h-Pro-Urokinase:
 1: Protein Marker
 2: Pro-Urokinase (15 µg)
 3-4: Pro-Urokinase (15 µg) after 2 h and 3 h of activation with Plasmin respectively.



Activity of Pro-Urokinase measured after activation with plasmin using Urokinase Activity Assay Kit (K728-100).

RELATED PRODUCTS:

- Urokinase, human recombinant (Cat # 7696-10, 50, 500)
- Urokinase Sepharose beads (Cat # 7927-1, 5, 25)
- Urokinase, Human (Cat. No. 4793-100, -1000)
- Urokinase Antibody (Cat. No. 5793-100)
- Human CellExp™ UPA, human recombinant (Cat # 7248-10, 50)
- Plasmin Sepharose Beads (Cat # 7926-1, 5, 25)
- Urokinase Sepharose Beads (Cat # 7927-1, 5, 50)
- Urokinase Activity Fluorometric Assay Kit (Cat. No. K728-100)
- Urokinase Inhibitor Screening Kit (Fluorometric) (Cat. No. K727-100)
- Honokiol (Cat. No. 1762-10, -50)
- uPAR Antibody (Cat. No. 3440-100)
- uPAR Antibody (Cat. No. 3722-100)

