

# Urokinase, human recombinant

**CATALOG #:** 7696-10 10 µg  
 7696-50 50 µg  
 7696-500 500 µg

**ALTERNATIVE NAMES:** Two chain urokinase-type plasminogen activator (tcuPA), PLAUI, ATF, UPA, URK, u-PA, BDPLT5, QPD

**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.:** The active Urokinase is a two-chain glycoprotein and has a calculated MW of 49.3 kDa. DTT-reduced Protein migrates as two bands corresponding to the two chains with the molecular mass of 28.3 and 21 kDa.

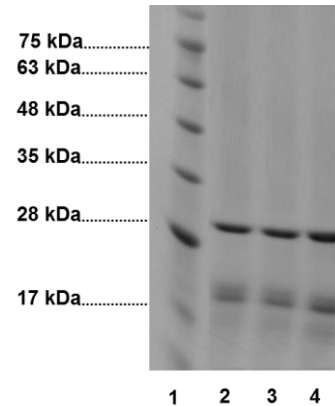
**STORAGE CONDITIONS:** Stable at -80°C for at least 1 year as supplied. Store reconstituted aliquots at -80°C. Avoid repeated freeze and thaw cycles.

**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 Lys158 and Ile159. 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 Urokinase is prepared by activation of Pro-Urokinase (Cat # 7695) 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).

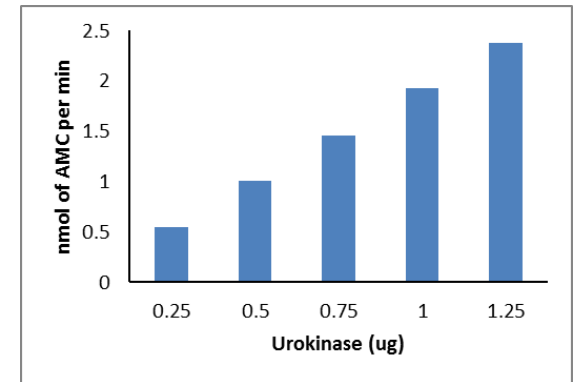
**APPLICATIONS:** BioVision's Urokinase can be used for activity assays, screening inhibitors, selectivity profiling and as controls in Western blotting, ELISA, Dot blotting, etc.

**SPECIFIC ACTIVITY:** >1500 mU/mg (1 U = Digestion of 1 µmole of Z-GGR-AMC substrate in 1 min at 37°C)



SDS-PAGE (4-20%) of h- Urokinase:

- 1: Protein Marker
- 2: Urokinase (3 µg)
- 3: Urokinase (6 µg)
- 4: Urokinase (9 µg)



Activity of Urokinase measured using Urokinase Activity Assay Kit (K728-100).

**RELATED PRODUCTS:**

- Urokinase Sepharose beads (Cat # 7927-1, 5, 25)
- Pro-Urokinase, human recombinant (Cat # 7695-10, 50, 500)
- Urokinase, Human (Cat. No. 4793-100, -1000)
- Human CellExp™ UPA, human recombinant (7248-10, 50)
- Urokinase Antibody (Cat. No. 5793-100)
- uPAR Antibody (Cat. No. 3440-100)
- uPAR Antibody (Cat. No. 3722-100)
- Urokinase Activity Fluorometric Assay Kit (Cat. No. K728-100)
- Urokinase Inhibitor Screening Kit (Fluorometric) (Cat. No. K727-100)
- GGACK Dihydrochloride (Cat. No. 1847-5)
- Honokiol (Cat. No. 1762-10, -50)
- Plasmin, Human Plasma (Cat. No. 4098-1000)
- Plasminogen, Human Plasma (Cat. No. 7549-1)
- Plasmin Sepharose beads (Cat # 7926-1, 5, 25)

**For Research Use Only! Not to be used in humans.**

