

# Urokinase, human recombinant protein

Two chain urokinase-type plasminogen activator (tcuPA), PLAU, ATF, UPA, URK, u-PA, BDPLT5 QPD

Catalog # PBV11272r

# **Specification**

# Urokinase, human recombinant protein - Product info

Primary Accession <u>P00749</u>

Calculated MW 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. KDa

# Urokinase, human recombinant protein - Additional Info

Gene ID 5328
Gene Symbol PLAU

**Other Names** 

Two chain urokinase-type plasminogen activator (tcuPA), PLAU, ATF, UPA, URK, u-PA, BDPLT5 QPD

Gene Source Human Source E.coli

Assay&Purity SDS-PAGE; ≥90%

Assay2&Purity2 HPLC; Recombinant Yes

Results  $>1500 \text{ mU/mg} (1 \text{ U} = \text{Digestion of } 1 \text{ } \mu\text{mole})$ 

of Z-GGR-AMC substrate in 1 min at 37°C.)

**Target/Specificity** 

Urokinase

#### **Application Notes**

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

**Format** 

Lyophilized powder

Storage

-20°C; Lyophilized from proprietary buffer.

### **Urokinase, human recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot



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- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Urokinase, human recombinant protein - Images

# Urokinase, human recombinant protein - 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.

# Urokinase, human recombinant protein - References

Holmes W.E., et al. Biotechnology (N.Y.) 3:923-929(1985). Jacobs P., et al. DNA 4:139-146(1985). Nagai M., et al. Gene 36:183-188(1985). Riccio A., et al. Nucleic Acids Res. 13:2759-2771(1985). Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBI databases.