Creative Enzymes®

Native Human Urokinase

Cat. No. PHAM-262

Lot. No. (See product label)

Introduction

Description	Urokinase is a serine protease (EC 3.4.21.73). Urokinase was originally isolated from human urine, but is present in several physiological locations, such as blood stream and the extracellular matrix. The primary physiological substrate is plasminogen, which is an inactive form (zymogen) of the serine protease plasmin. Activation of plasmin triggers a proteolysis cascade that, depending on the physiological environment, participates in thrombolysis or extracellular matrix degradation. This links urokinase to vascular diseases and cancer.
Synonyms	Urokinase; EC 3.4.21.73; urokinase-type plasminogen activator; uPA; U-plasminogen activator; Cellular plasminogen activator; Urinary plasminogen activator

Product Information

Species	Human
Source	Human urine
Form	Lyophilized from 1 mL of 50 mM Tris-HCl, pH 7.4 with 100 mM NaCl, 0.1% PEG 6000, and 200 mM mannitol
EC Number	EC 3.4.21.73
CAS No.	9039-53-6
Purity	Purity by SDS Electrophoresis ≧ 95 %
Activity	> 500 units/mg protein
Pathway	ATF-2 transcription factor network, organism-specific biosystem; Blood Clotting Cascade, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem.
Function	protein binding; serine-type endopeptidase activity.
Unit Definition	One unit will activate that amount of plasminogen which will produce a ΔA275 of 1.0 per ml per minute at pH 7.5 at 37 °C, when measuring perchloric acid soluble products from α-casein (1 cm light path).