

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 \geq 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 ΔA_{275} 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).