Creative Enzymes®

Native β-hemolytic Streptococcus Streptokinase

Cat. No. NATE-0670

Lot. No. (See product label)

Introduction

Description	Streptokinase (SK) is an enzyme secreted by several species of streptococci that can bind and activate human plasminogen. SK is used as an effective and inexpensive thrombolysis medication in some cases of myocardial infarction (heart attack) and pulmonary embolism. Streptokinase belongs to a group of medications known as fibrinolytics, and complexes of streptokinase with human plasminogen can hydrolytically activate other unbound plasminogen by activating through bond cleavage to produce plasmin. There are three domains to Streptokinase, denoted α (residues 1–150), β (residues 151–287), and γ (residues 288–414). Each domain binds plasminogen, although none can activate plasminogen independently.
Applications	Streptokinase is commonly used as a thrombolytic agent in the therapy of ischemic stroke. This therapy carries the important risk of intracerebral hemorrhage. Streptokinase is also used in the treatment of complicated parapneumonic effusions and empyema where adverse reactions, allergic type, are rare. Streptokinase is commonly used as a thrombolytic agent in the therapy of ischemic stroke. This therapy carries the important risk of intracerebral hemorrhage. Streptokinase is also used in the treatment of complicated parapneumonic effusions and empyema where adverse reactions, allergic type, are rare. Streptokinase has been used in a study to compare primary coronary intervention and thrombolytic therapy in my ocardial infarction patients.
Synonyms	Streptokinase; SK; EC 3.4.99.0; 9002-01-1

Product Information

Species	β-hemolytic Streptococcus
Source	β-hemolytic Streptococcus (Lancefield Group C)
Form	Lyophilized powder containing ~50% total protein by biuret and sodium glutamate. Total protein composed of enzyme protein and human serum albumin.
EC Number	EC 3.4.99.0
CAS No.	9002-01-1
Activity	> 3,500 units/mg solid
Unit Definition	One unit will liquify a standard clot of fibrinogen, plasminogen, and thrombin at pH 7.5 at 37°C in 10 min.

Storage and Shipping Information

Storage	−20°C