

Native Human Thrombin

Cat. No. NATE-0699

Lot. No. (See product label)

Introduction

Description

Thrombin is a serine protease that in humans is encoded by the F2 gene. Prothrombin (coagulation factor II) is proteolytically cleaved to form thrombin in the coagulation cascade, which ultimately results in the reduction of blood loss. Thrombin in turn acts as a serine protease that converts soluble fibrinogen into insoluble strands of fibrin, as well as catalyzing many other coagulation-related reactions.

Synonyms

thrombin; 9002-04-4; EC 3.4.21.5; fibrinogenase; thrombase; thrombofort; topical; thrombin-C; tropostasin; activated blood-coagulation factor II; blood-coagulation factor IIa; factor IIa; E thrombin; β -thrombin; γ -thrombin

Product Information

Species

Human

Source

Human plasma

Form

lyophilized powder

EC Number

EC 3.4.21.5

CAS No.

9002-04-4

Activity

600-2,000 NIH units/mg protein (biuret) or > 2,000 NIH units/mg protein (E1%/280 = 19.5); > 125 NIH units/mg protein (biuret)

Buffer

When reconstituted with 1 mL water, vial contains stated activity in 0.15 M sodium chloride and 0.05 M sodium Citrate, pH 6.5.

Pathway

Angiopoietin receptor Tie2-mediated signaling, organism-specific biosystem; Blood Clotting Cascade, organism-specific biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; Common Pathway, organism-specific biosystem; Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem

Function

calcium ion binding; growth factor activity; peptidase activity; protein binding; receptor binding; contributes_to receptor binding; serine-type endopeptidase activity; thrombospondin receptor activity