Creative Enzymes®

Thrombin from Human, Recombinant

Cat. No. NATE-0702

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.
Applications	Thrombin is used for site specific cleavage of recombinant fusion proteins containing an accessible thrombin recognition site for removal of affinity tags. Thrombin has been used in a study to assess in vitro hemostatic properties of French lyophilized plasma.
Synonyms	thrombin; 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	HEK 293 cells
Form	aqueous solution; supplied as a solution in 20 mM MES, pH 6.0, 500 mM choline chloride
EC Number	EC 3.4.21.5
CAS No.	9002-04-4
Purity	> 95% (SDS-PAGE)
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

Storage and Shipping Information

Storage	−70°C