

Native Bovine Factor X Activated (Xa)

Cat. No. NATE-0250

Lot. No. (See product label)

Introduction

Description Factor Xa catalyzes the hydrolysis of the Arg-Thr and then Arg-Ile bonds in prothrombin to yield active thrombin. The fairly strict recognition sequence is Ile-Glu (or Asp)-Gly-Arg-↓-X. It may sometimes cleave at other basic residues, depending on the conformation of the target protein. Factor Xa will not cleave if a proline residue follows the arginine of the recognition sequence.

Applications Fusion proteins are commonly expressed with a factor Xa cleavable Ile-Glu (or Asp)-Gly-Arg-↓-X sequence. Typically 1 mg of fusion protein can be incubated with 10 µg of factor Xa for 2.5 hours at 37 °C.

Synonyms EC 3.4.21.6; 9002-05-5; thrombokinase; prothrombase; prothrombinase; activated blood-coagulation factor X; autoprothrombin C; thromboplastin; plasma thromboplastin; factor Xa; activated Stuart-Prower factor; activated factor X; coagulation factor Xa

Product Information

Species Bovine

Source Bovine plasma

Form aqueous glycerol solution

EC Number EC 3.4.21.6

CAS No. 9002-05-5

Optimum pH 7.6-8.0

Optimum temperature 37°C

Pathway Common Pathway, organism-specific biosystem; Complement and Coagulation Cascades, organism-specific biosystem; Extrinsic Pathway, organism-specific biosystem

Function calcium ion binding; phospholipid binding; serine-type endopeptidase activity

Unit Definition One unit of activated Factor X will liberate 1.0 µmole of p-nitroanilide from N-benzoyl-L-isoleucyl-L-glutamyl-L-glycyl-L-arginine-p-nitroaniline per minute at pH 8.3 at 37°C.

Storage and Shipping Information

Storage -20°C