

Active Native Bovine Protein C - DEGR (active site blocked)

Cat. No. PROC-273B Lot. No. (See product label)

SPECIFICATION

Species	Bovine
Source	Plasma
ProteinLength	1-456 aa
Description	<p>Activated protein C (APC) is an anticoagulant serine protease derived from the two chain, vitamin K-dependent zymogen, protein C. A complex between alpha-thrombin and thrombomodulin catalyzes a single cleavage at Arg-12 (Arg-14 in bovine) in the heavy chain of protein C, to generate activated Protein C. Several non-physiologically relevant proteases such as RVV-X activator, trypsin, and PROTAC are also capable of activating protein C. APC functions as an anticoagulant which catalyzes the proteolytic inactivation of the cofactors, factors Va and VIIIa, leading to inhibition of the prothrombinase and factor Xase complexes. The inactivation of factors Va and VIIIa is both Ca²⁺ and phospholipid dependent. The vitamin K dependent cofactor, protein S, moderately increases this rate of inactivation by forming a 1:1 complex with APC (K_d=6x10⁻⁹M).</p>
Form	20 mM Hepes, 150 mM NaCl, pH 7.4
Bio-activity	Chromogenic assay
Molecular Mass	52650
Purity	>95% by SDS-PAGE. NOT tissue/cell culture grade. Not tested for endotoxin.

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Characteristic Extinction coefficient:13.7, Isoelectric point:4.2-4.5, Percent carbohydrate:0.14, Structure:two chains, Mr=35,000 and 21,000, disulfide linked, NH2-terminal gla domain two EGF domains

Storage -80°C

GENE INFORMATION

Gene Name PROC protein C (inactivator of coagulation factors Va and VIIIa) [Bos taurus]

Official Symbol PROC

Synonyms vitamin K-dependent protein C; autoprothrombin IIA; anticoagulant protein C; blood coagulation factor XIV

Gene ID 281428

mRNA Refseq NM_001166512

Protein Refseq NP_001159984

Chromosome Location 2q12

Pathway Cell surface interactions at the vascular wall, organism-specific biosystem; Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, conserved biosystem

Function calcium ion binding; serine-type endopeptidase activity

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