

32-4499: Recombinant Human Protein-c

Alternative Name : Vitamin K-dependent protein C, Anticoagulant protein C, Autoprothrombin IIA, Blood coagulation factor XIV, PROC, PC, APC, PROC1, THPH3, THPH4.

Description

Source : HEK 293 cells. PROC Human Recombinant full length protein (33-461 aa) produced in HEK 293 cells with a C-terminal His-tag, having a molecular weight of 72kDa. Human PROC is purified by proprietary chromatographic techniques. Protein C (PROC) is a vitamin K-dependent serine protease which regulates blood coagulation by inactivating factors Va and VIIIa in the presence of calcium ions and phospholipids. PROC is cleaved to its activated form by the thrombin-thrombomodulin complex. This activated form, which contains a serine protease domain, functions in degradation of the activated forms of coagulation factors V and VIII. Mutations in the PROC gene are linked with thrombophilia due to protein C deficiency, neonatal purpura fulminans, and recurrent venous thrombosis. Protein C is synthesized as a single chain precursor, which is cleaved into a light and a heavy chain held together by a disulfide bond. The enzyme is at that time activated by thrombin, which cleaves a tetradecapeptide from the amino end of the heavy chain; this reaction, which occurs at the surface of endothelial cells, is intensely promoted by thrombomodulin.

Product Info

Amount : 10 µg
Purification : Greater than 80.0% as determined by SDS-PAGE.
Content : PROC protein is supplied in 50mM Tris pH 7.5, 300mM NaCl and 10% Glycerol.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.
Amino Acid : MWQLTSLLLFVATWGISGTPAPLDSVFSSSERAHQVLRIRKRANSFLEELRHSSLERE
CIEEICDFEEAKEIFQNVDLTLAFWSKHVDGDQCLVLPLEHPCASLCCGHGTCIDGIG
SFSCDCRSGWEGRFQCQREVSLNCSLDNNGGCTHYCLEEVGWRRCSAPGYKLGD
DLLQCHPAVKFPCGRPWKRMKKRSHLKRDTEDQEDQVDPRLIDGKMTRRGDSPW
QVVLLDSKKKLACGAVLIHPSWVLTAAHCMDESKLLVRLGEYDLRRWEKWELDLDIK
EVFVHPNYSKSTTDNDIALHQAQATLSQTIVPICLPDSGLAERELNQAGQETLVTGW
GYHSSREKEAKRNRTFVLNFIKIPVPHNECSEVMSNMVSENMLCAGILGDRQDACE
GDSGGPMVASFHGTWFLVGLVSWGEGCGLLHNYGVYTKVSRYLWDWIHGHIRDKEAP
QKSWAPEFHSHHHHHHH. The first 32 amino acids are predicted as signal peptide.

