Human Coagulation factor VII /F7 Protein (pro form)

Cat. No. CF7-HM107

Description

Source	Recombinant Human Coagulation factor VII /F7 Protein (pro form) is expressed from HEK293 with His tag at the C-terminus.
	It contains Ala61-Pro466.
Accession	P08709-1
Molecular Weight	The protein has a predicted MW of 46.69 kDa. Due to glycosylation, the protein migrates to 52-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 85% as determined by HPLC

Formulation and Storage

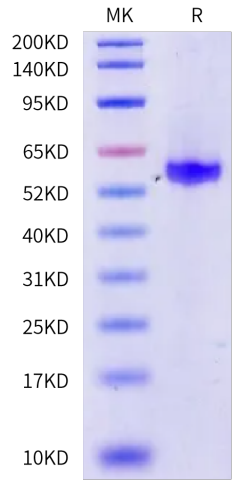
Formulation	Supplied as 0.22 μm filtered solution in 20mM NaAC, 150mM NaCl (pH 5.0).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Factor VII is the coagulation protease responsible for starting a cascade of proteolytic events that lead to thrombin generation, fibrin deposition, and platelet activation. The FVII protein also contains two epidermal growth factor-like (EGF-like) domains and an activation peptide with a glycosylated asparagine that provides a proteolytic cleavage site. The catalytic regions exhibit the serine protease activity, which leads to various functions of the protein[18]. The role of FVII in the pathogenesis of various cancers has extensively been studied.

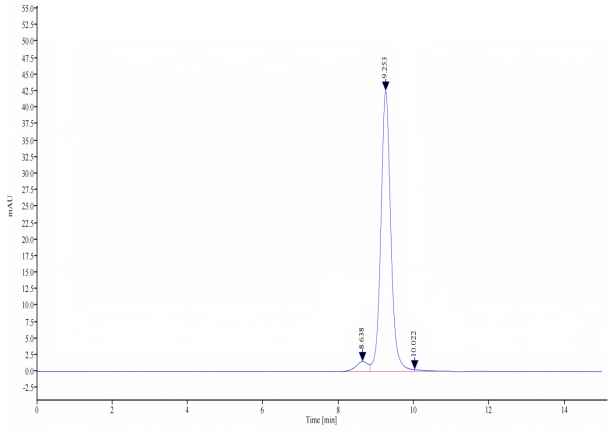
Assay Data

Bis-Tris PAGE



Human Coagulation factor VII on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human Coagulation factor VII is greater than 85% as determined by SEC-HPLC.

Human Coagulation factor VII /F7 Protein (pro form)

Cat. No. CF7-HM107

Assay Data

Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate Boc-VPR-AMC. The specific activity is >80 pmol/min/μg.