Recombinant Human Kallikrein 11/KLK11 Protein (His Tag)

Catalog No. PKSH031437

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	Kallikrein-11;hK11;Hippostasin;Serine Protease 20;Trypsin-Like Protease;KLK11;PRSS20;TLSP
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Asn 250
Accession	NP_006844.1
Calculated Molecular Weight	27.0 kDa
Observed molecular weight	40 kDa
Tag	C-His
Bioactivity	Measured by its ability to cleave a colorimetric peptide substrate D-Val-Leu-Lys-ThioBenzyl ester (VLK-SBzl), in the presence of 5, 5'Dithio-bis (2-nitrobenzoic acid) (DTNB) (Edwards, K. M. et al., 1999, J. Biol. Chem. 274: 30468). The specific activity is > 200 pmoles/min/ μ g. (Activation description: The proenzyme needs to be activated by Thermolysin for an activated form)
Properties	
Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	

KDa MK R 116 66.2 45.0 35.0 25.0 18.4 14.4

> 90 % as determined by reducing SDS-PAGE.

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Background

kallikrein-related peptidase 11 (KLK11); also known as hippostasin; trypsin-like serine protease and PRSS20; is a member of human tissue kallikrein family. It is a subgroup of serine proteases with diverse physiological functions; which is implicated in carcinogenesis and some with potential that serving as novel biomarkers for ovarian and prostate cancer and other diseases. The KLK11 gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Two alternatively spliced forms exist; resulting in 250 (isoform 1) and 282 (isoform 2) amino acid sequences. Isoform 2 is identical to isoform 1; except for an inserted 32 amino acid segment. Isoform 1 is predominantly expressed in brain whereas isoform 2 is preferentially expressed in prostate.

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