



# Recombinant Protein Technical Manual

## Recombinant Human Kallikrein 11/KLK11 Protein (His Tag)(Active) RPES0999

### Product Data:

**Product SKU:** RPES0999

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_006844.1

### Protein Information:

**Molecular Mass:** 27 kDa

**AP Molecular Mass:** 40 kDa

**Tag:** C-His

**Bio-activity:** 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/µg. (Activation description: The proenzyme needs to be activated by Thermolysin for an activated form)

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Kallikrein1; hK11; Hippostasin; Serine Protease 20; Trypsin-Like Protease; KLK11; PRSS20; TLSP

## Immunogen Information:

**Sequence:** Met 1-Asn 250

## 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.