

Recombinant Human Kallikrein 13/KLK13 Protein (His Tag)

Catalog No. PKSH031770

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

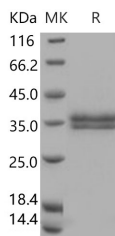
Description

Synonyms	Kallikrein-13;Kallikrein-Like Protein 4;KLK-L4;KLK13;KLKL4
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ile 262
Accession	NP_056411.1
Calculated Molecular Weight	28.4 kDa
Tag	C-His
Bioactivity	Measured by its ability to cleave the fluorogenic peptide substrate Boc-VPR-AMC (R&D Systems, Catalog # ES011). The specific activity is > 200 pmoles/min/μg. (Activation description: The proenzyme needs to be activated by Lysyl-Endopeptidase for an activated form)

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Tissue kallikrein 13 (hK13); also known as KLK-L4 (kallikrein-like gene 4); is a member of the human tissue kallikrein family of serine proteases having diverse physiological functions in many tissues. The KLK13 gene resides on chromosome 19q13.3-4 along with other 14 members in a gene cluster and shares a high degree of homology. KLK13 is a trypsin-like; secreted serine protease expressed specifically in the testicular tissue including prostate; salivary gland; breast; and testis. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and may play a role in metastasis. KLK13 may be involved in the pathogenesis and/or progression of breast and ovary cancers; and is regarded as a novel cancer biomarker. In addition; KLK13 interacts and forms complexes with several serum protease inhibitors; such as alpha2-macroglobulin; and its expression is regulated by steroid hormones.