



Recombinant Protein Technical Manual

Recombinant Human Kallikrein 13/KLK13 Protein (His Tag)(Active) RPES0484

Product Data:

Product SKU: RPES0484

Size: 10 μ g

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_056411.1

Protein Information:

Molecular Mass: 28.4 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: 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/ μ g. (Activation description: The proenzyme needs to be activated by Lysyl-Endopeptidase for an activated form)

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per μ g 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: Kallikrein3; Kallikrein-Like Protein 4; KLK-L4; KLK13; KLKL4

Immunogen Information:

Sequence: Met 1-Ile 262

Background:

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.