

32-6815: KLK3 Human, HEK

Application : Functional Assay

Alternative Name : Prostate-specific antigen, PSA, Gamma-seminoprotein, Semin, Kallikrein-3, P-30 antigen, Semenogelase, KLK3, APS, hK3, KLK2A1

Description

Source: HEK293 Cells.

Sterile Filtered colorless solution.

Kallikrein-3 or KLK3 is a serine proteases subgroup, enzymes can cleave peptide bonds. KLK3 is found in the prostate and may be hold accountable to the regulation of semen liquefaction via seminogelin hydrolysis. The protein is expressed in low concentrations in men with healthy prostates serum. When elevated quantities are found it may show prostate cancer or different prostate disorders such as prostatitis and benign prostatic hyperplasia.

KLK3 Human Recombinant produced in HEK cells is a single, glycosylated, polypeptide chain (18-261 a.a) containing a total of 250 amino acids, having a molecular mass of 27.6kDa. KLK3 is fused to a 6 amino acid His-tag at C-terminus, and is purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : The KLK3 solution (0.25mg/ml) contains 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Storage condition :

Amino Acid : APLILSRIVG GWECEKHSQP WQVLVASRGR AVCGGVLVHP QWVLTAHAI RNKSVILLGR
HSLFHPEDTG QVFQVSHSFP HPLYDMSLLK NRFLRPGDDS SHDLMLLRSL EPAELTDAVK
VMDLPTQEPA LGTTCYASGW GSIEPEEFLT PKKLQCVDLH VISNDVCAQV HPQKVTKFML
CAGRWTGGKS TCSGDSGGPL VCNGVLQGIT SWGSEPCALP ERPSLYTKVV HYRKWIKDTI
VANPHHHHHH

Application Note

Specific activity is $\hat{A} > 250\text{pmol/min/ug}$. Defined by the amount of enzyme that cleaves 1pmole of Succinyl-ArgPro-Tyr-p-Nitroanilide to Succinyl-Arg-Pro-Tyr and p-Nitroanilide per minute at pH 7.5 at 37°C.