

HUMAN KLK3 PROTEIN, HFC TAG**Cat.#:** 11698**Product Name:** Human KLK3 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** APS;hK3;KLK2A1;PSA**Target:** KLK3**UNIPROT ID:** P07288**Description:** Recombinant human KLK3 protein with C-terminal human Fc tag

Background: Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. The gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. It encodes a single-chain glycoprotein, a protease which is synthesized in the epithelial cells of the prostate gland, and is present in seminal plasma. It is thought to function normally in the liquefaction of seminal coagulum, presumably by hydrolysis of the high molecular mass seminal vesicle protein. The serum level of this protein, called PSA in the clinical setting, is useful in the diagnosis and monitoring of prostatic carcinoma. Alternate splicing of this gene generates several transcript variants encoding different isoforms. [provided by RefSeq, Dec 2019]

Species/Host: HEK293**Molecular Weight:** The protein has a predicted molecular mass of 51.7 kDa after removal of the signal peptide.**Molecular Characterization:** KLK3(Ile25-Phe261) hFc(Glu99-Ala330)**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

