Recombinant Human KLK2 protein (His Tag)

Catalog Number: PDEH100945

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

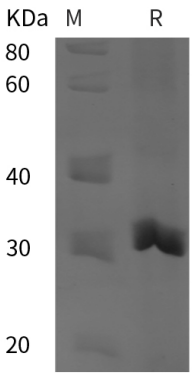
Description

Species	Human
Source	E.coli-derived Human KLK2 protein Ile25-Pro261, with an N-terminal His
Calculated MW	26.0 kDa
Observed MW	31 kDa
Accession	P20151
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Kallikrein-2 (KLK2) is a secreted serine protease that belongs to the peptidase S1 family of Kallikrein subfamily. KLK2 contains 1 peptidase S1 domain. It is highly expressed in the human prostate gland. KLK2 can cleave Met-Lys and Arg-Ser bonds in kininogen to release Lys-bradykinin, but Preferential cleavages of Arg-|-Xaa bonds in small molecule substrates. It also highly selective action to release kallidin (lysyl-bradykinin) from kininogen involves hydrolysis of Met-|-Xaa or Leu-|-Xaa. KLK2 is inhibited by serpins such as protein C inhibitor, antichymotrypsin, and plasminogen. KLK2 is considered to be a biomarker for prostate cancer.