Recombinant HEPS protein (His tag)

Catalog Number	546687
Synonyms	Transmembrane protease serine 1
Species	Human
Expression System	E. coli
Accession	P05981
Molecular Weight	Predictes a molecular mass of 29.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	163-417
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 163-417 aa (P05981) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Serine Protease Hepsin (EC 3.4.21.106) Fragment (aa 163-417) is a high-purity protein designed to encompass the complete Peptidase S1 domain, enabling focused investigation into protease activity, substrate cleavage, and associated signaling pathways. This fragment serves as an essential tool for studying hepsin's catalytic functions in a controlled experimental setting. Serine protease hepsin, encoded by the HPN gene in humans, is a transmembrane enzyme that cleaves extracellular substrates and plays a critical role in proteolytic processing. It contributes to the activation of growth factors such as HGF and MST1/HGFL, supports cell growth and morphology maintenance, and is involved in ACE2 processing. Additionally, hepsin mediates the cleavage of urinary UMOD, which is necessary for UMOD polymerization. The protein is localized to the cell membrane, specifically as a single-pass type II membrane protein, with apical membrane presence facilitating its extracellular proteolytic functions.