Recombinant TRYG1 protein (His tag)

Catalog Number	548348
Synonyms	Serine protease 31; Transmembrane tryptase
Species	Human
Expression System	E. coli
Accession	Q9NRR2
Molecular Weight	Predictes a molecular mass of 28.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	20-270
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 20-270 aa (Q9NRR2) 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 Tryptase gamma (EC 3.4.21.-), also known as Serine protease 31 or Transmembrane tryptase, is provided as a fragment spanning residues 20-270. This 251-amino acid construct fully encompasses the Peptidase S1 domain, making it an ideal tool for investigating serine protease activity, substrate specificity, and domain-related functions in experimental settings. Tryptase gamma, encoded by the TPSG1 gene in Homo sapiens, is a membrane-associated serine protease. As indicated by its subcellular location, the full-length protein is a single-pass transmembrane protein localized to the membrane, suggesting roles in extracellular proteolysis and cell surface-mediated signaling. The cleavage of the full-length protein into light and heavy chains implies potential regulatory mechanisms for its protease activity. The provided recombinant fragment enables focused study of the catalytic and functional properties of the Peptidase S1 domain without the transmembrane region, facilitating in vitro assays and structural analyses.