Recombinant TRYB1 protein (His tag)

Catalog Number	545031
Synonyms	Tryptase-1; Tryptase I; Tryptase alpha-1
Species	Human
Expression System	E. coli
Accession	Q15661
Molecular Weight	Predictes a molecular mass of 28.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	32-275
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 32-275 aa (Q15661) 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 alpha/beta-1 (Tryptase-1) Fragment (residues 32-275) is a high-quality, soluble protein designed for structural and biochemical studies. This 244-amino acid fragment represents a stable, functionally relevant portion of the major mast cell protease, enabling researchers to investigate its role in innate immunity and inflammatory processes with enhanced experimental reliability. Tryptase alpha/beta-1 (encoded by TPSAB1) is the predominant neutral protease in mast cells, secreted during mast cell activation and degranulation. As a key mediator in immune responses, it contributes to innate immunity through proteolytic activity. The full-length protein cleaves substrates including fibronectin, with isoform-specific efficiency variations. Naturally localized to secretory granules and released upon mast cell stimulation, tryptase represents a critical component in inflammation and immune regulation pathways. The provided recombinant fragment (32-275) maintains structural integrity while offering optimal solubility for experimental applications.