Recombinant PRS57 protein (His tag)

Catalog Number	542945
Synonyms	Neutrophil serine protease 4; NSP4; Serine protease 1-like protein 1
Species	Human
Expression System	E. coli
Accession	Q6UWY2
Molecular Weight	Predictes a molecular mass of 28.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	35-283
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 35-283 aa (Q6UWY2) 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 57 (PRSS57) Fragment (aa 35-283) - a highly purified, stable protein fragment ideal for structural studies and enzymatic characterization. This 249-amino acid fragment retains the catalytic activity of neutrophil serine protease 4, specifically cleaving after arginine, citrulline, and methylarginine residues, making it an essential tool for protease research and drug discovery. Serine Protease 57, also known as Neutrophil Serine Protease 4 (NSP4), is a human serine protease that exhibits preferential cleavage after arginine residues, with additional activity against citrulline (deimidated arginine) and methylarginine residues. This enzyme is stored in cytoplasmic granule lumens and is secreted as an active enzyme in response to neutrophil stimulation, playing a crucial role in immune response mechanisms. The protein's ability to process modified arginine residues suggests potential roles in regulating protein function through specific proteolytic cleavage events in inflammatory and immune processes.