Recombinant IL25 protein (His tag)

Catalog Number	538940
Synonyms	IL-25; Interleukin-17E; IL-17E
Species	Human
Expression System	E. coli
Accession	Q9H293
Molecular Weight	Predictes a molecular mass of 13.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	73-177
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 73-177 aa (Q9H293) 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 Interleukin-25 (IL-25) Fragment (aa 73-177) is a high-quality, soluble protein designed for structural and biochemical studies. This 105-amino acid fragment, derived from the full-length IL-25 (also known as IL-17E), retains key functional characteristics, making it ideal for investigating cytokine signaling and immune regulation in research applications. Interleukin-25 (IL-25), encoded by the IL25 gene in humans, is a cytokine secreted by various cell types, including eosinophils, T-helper type 2 (Th2) cells, and epithelial cells. It plays a critical role in adaptive immune responses by promoting and augmenting Th2 responses locally and systemically. IL-25 signals through a receptor complex of IL17RA and IL17RB, activating the JAK2-STAT5A pathway to stimulate the secretion of type-2 cytokines such as IL4, IL9, and IL13. Additionally, it induces the release of IL8 and IL6 from eosinophils via MAPK and NF-kappa-B pathway activation. IL-25 also inhibits the differentiation of T-helper (Th17) cells through the production of IL4, IL5, and IL13, highlighting its importance in immune balance. As a secreted protein, IL-25 functions extracellularly to modulate immune cell communication and cytokine networks.