Recombinant IL17F protein (His tag)

Catalog Number	543409
Synonyms	IL-17F; Cytokine ML-1
Species	Human
Expression System	E. coli
Accession	Q96PD4
Molecular Weight	Predictes a molecular mass of 16.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	31-163
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 31-163 aa (Q96PD4) 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-17F (IL-17F) Fragment (aa 31-163) - A highly purified, stable protein fragment ideal for studying the structural and functional properties of this key immune cytokine involved in antimicrobial defense and inflammatory responses. Interleukin-17F (IL-17F), also known as Cytokine ML-1, is an effector cytokine that plays crucial roles in both innate and adaptive immunity. This secreted protein functions in antimicrobial host defense and maintenance of tissue integrity. IL-17F signals through IL17RA-IL17RC heterodimeric receptor complexes, activating downstream NF-kappa-B and MAP kinase pathways that lead to transcriptional activation of cytokines, chemokines, antimicrobial peptides, and matrix metalloproteinases. The protein is primarily involved in host defense against extracellular bacteria and fungi by inducing neutrophilic inflammation. As a signature effector cytokine of T-helper 17 cells (Th17), it stimulates neutrophil activation and recruitment at infection sites. IL-17F also promotes the production of antimicrobial beta-defensins by mucosal epithelial cells, regulates intestinal microbiota composition, and contributes to immune tolerance mechanisms. The recombinant fragment (amino acids 31-163) represents a stable, soluble unit optimized for structural and biochemical studies.