Recombinant IL1FA protein (His tag)

Catalog Number	547834
Synonyms	IL-1F10; Family of interleukin 1-theta; FIL1 theta; Interleukin-1 HY2; IL-1HY2; Interleukin-1 theta; IL-1 theta; Interleukin-38; IL-38
Species	Human
Expression System	E. coli
Accession	Q8WWZ1
Molecular Weight	Predictes a molecular mass of 18.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-152
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 1-152 aa (Q8WWZ1) 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-38 (IL-38), also known as IL-1F10, is a high-purity protein fragment (amino acids 1-152) designed for immunology and cytokine research. This fragment offers a stable and soluble unit ideal for investigating IL-38's role in modulating immune responses, including its effects on T-cell and dendritic cell activity. Interleukin-38 is a cytokine with immunomodulatory functions, acting as a ligand for the IL-36 receptor (IL-36R/IL1RL2. It does not induce cytokine production alone but regulates immune cell responses: it reduces IL-22 and IL-17A production by T-cells exposed to Candida albicans, decreases IL-36G-induced IL-8 production in peripheral blood mononuclear cells, and enhances LPS-stimulated IL-6 production in dendritic cells. The protein is localized in the cytoplasm and is secreted via a TMED10-dependent pathway involving unfolding and translocation to the ERGIC, facilitating its extracellular immunoregulatory roles. This makes IL-38 a key player in balancing inflammatory processes and a valuable target for studying autoimmune and infectious diseases.