Recombinant IL15 protein (His tag)

Catalog Number	546959
Synonyms	IL-15
Species	Human
Expression System	E. coli
Accession	P40933
Molecular Weight	Predictes a molecular mass of 14.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	49-162
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 49-162 aa (P40933) 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-15 (IL-15) Fragment (aa 49-162) is a highly stable and soluble protein fragment designed for structural and biochemical studies. This product captures the essential functional domain of IL-15, enabling researchers to investigate its role in immune cell modulation and cytokine signaling pathways with precision and reliability. Interleukin-15 (IL-15) is a critical cytokine in human immune responses, contributing to both innate and adaptive immunity by stimulating the proliferation of natural killer cells, T-cells, and B-cells, and promoting cytokine secretion. It uniquely associates with its high-affinity receptor IL15RA on cell surfaces, activating JAK-STAT signaling pathways, including phosphorylation of STAT3 and STAT5, to regulate immune cell survival and function. In monocytes, IL-15 induces chemokine production, such as IL8 and CCL2, to attract immune cells to infection sites. The full-length protein exists in isoforms with distinct subcellular localizations: one isoform (IL15-S48AA) is secreted, while another (IL15-S21AA) is stored intracellularly in the cytoplasm and nucleus. This recombinant fragment (aa 49-162) represents a stable, soluble unit ideal for exploring IL-15's mechanistic roles in immune regulation.