# Recombinant ILRUN protein (His tag)

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| **Catalog Number** | 545949 |
| **Synonyms** | Inflammation and lipid regulator with UBA-like and NBR1-like domains protein |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9H6K1 |
| **Molecular Weight** | Predictes a molecular mass of 23.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band. |

## Product Information

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| **Sequence Region** | 1-195 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >85%, 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 1-195 aa (Q9H6K1) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Protein ILRUN (1-195) is a high-quality, stable fragment of the human Inflammation and lipid regulator with UBA-like and NBR1-like domains protein, designed for structural and biochemical studies. This fragment supports research into ILRUN's role as a negative regulator of innate antiviral responses, offering a soluble and functional unit ideal for investigating immune signaling pathways.<br>Protein ILRUN, encoded by the ILRUN gene in Homo sapiens, functions as a negative regulator of the innate antiviral response. It inhibits IRF3-dependent cytokine production, including IFNA, IFNB, and TNF, by interacting with IRF3 and impeding its recruitment to type I interferon promoter sequences. Additionally, ILRUN reduces nuclear levels of the coactivators EP300 and CREBBP, further suppressing immune signaling. The protein is localized in both the cytoplasm and nucleus, highlighting its involvement in key cellular compartments for immune regulation. This recombinant fragment (residues 1-195) was selected for its stability and solubility, enabling detailed analysis of ILRUN's mechanistic roles without containing known functional domains. |