

Datasheet for ABIN7554145

IL-33 Protein (AA 1-270) (His tag)





Overview

Quantity:	1 mg
Target:	IL-33 (IL33)
Protein Characteristics:	AA 1-270
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-33 protein is labelled with His tag.

Product Details

Custom-made recombinant IL33 Protein expressed in mammalian cells.
MKPKMKYSTN KISTAKWKNT ASKALCFKLG KSQQKAKEVC PMYFMKLRSG LMIKKEACYF
RRETTKRPSL KTGRKHKRHL VLAACQQQST VECFAFGISG VQKYTRALHD SSITGISPIT
EYLASLSTYN DQSITFALED ESYEIYVEDL KKDEKKDKVL LSYYESQHPS NESGDGVDGK
MLMVTLSPTK DFWLHANNKE HSVELHKCEK PLPDQAFFVL HNMHSNCVSF ECKTDPGVFI
GVKDNHLALI KVDSSENLCT ENILFKLSET Sequence without tag. The proposed Purification
Tag is based on experiences with the expression system, a different complexity of the
protein could make another tag necessary. In case you have a special request, please
contact us.
If you are looking for a specific domain and are interested in a partial protein or a different
isoform, please contact us regarding an individual offer.
Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

IL-33 (IL33)

Target Details

Target:

Alternative Name:

IL33 (IL33 Products)

Background:

Interleukin-33 (IL-33) (Interleukin-1 family member 11) (IL-1F11) (Nuclear factor from high endothelial venules) (NF-HEV) [Cleaved into: Interleukin-33 (95-270), Interleukin-33 (99-270), Interleukin-33 (109-270)], FUNCTION: Cytokine that binds to and signals through the IL1RL1/ST2 receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells (PubMed:16286016, PubMed:19841166). Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2-associated cytokines (PubMed:17853410, PubMed:18836528). Also involved in activation of mast cells, basophils, eosinophils and natural killer cells (PubMed:17853410, PubMed:18836528). Acts as an enhancer of polarization of alternatively activated macrophages (PubMed:19841166). Acts as a chemoattractant for Th2 cells, and may function as an 'alarmin', that amplifies immune responses during tissue injury (PubMed:17853410, PubMed:18836528). Induces rapid UCP2-dependent mitochondrial rewiring that attenuates the generation of reactive oxygen species and preserves the integrity of Krebs cycle required for persistent production of itaconate and subsequent GATA3-dependent differentiation of inflammation-resolving alternatively activated macrophages (By similarity).

{ECO:0000250|UniProtKB:Q8BVZ5, ECO:0000269|PubMed:16286016,

ECO:0000269|PubMed:17853410, ECO:0000269|PubMed:18836528,

ECO:0000269|PubMed:19841166}., FUNCTION: In quiescent endothelia the uncleaved form is constitutively and abundantly expressed, and acts as a chromatin-associated nuclear factor with transcriptional repressor properties, it may sequester nuclear NF-kappaB/RELA, lowering expression of its targets (PubMed:21734074). This form is rapidely lost upon angiogenic or proinflammatory activation (PubMed:18787100). {ECO:0000269|PubMed:18787100,

ECO:0000269|PubMed:21734074}.

Molecular Weight: 30.8 kDa

UniProt: 095760

Pathways: Production of Molecular Mediator of Immune Response

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for

functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

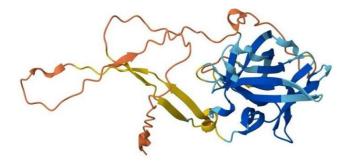
Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

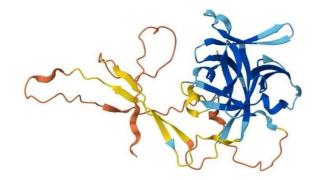
Expiry Date: 12 months



Protein Structure

Image 1. AlphaFold protein structure predicition of Human Recombinant IL33 Protein, UniprotID 095760

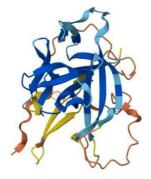




Protein Structure

Image 2. AlphaFold protein structure predicition of Human Recombinant IL33 Protein, UniprotID 095760





Protein Structure

Image 3. AlphaFold protein structure predicition of Human Recombinant IL33 Protein, UniprotID 095760

