

Recombinant human IL-33 protein

Catalog Number: ILC0701

PRODUCT INFORMATION

Expression system

E.coli

Domain

112-270aa

UniProt No.

O95760

NCBI Accession No.

NP_254274

Alternative Names

Interleukin-33, Interleukin-1 family member 11, IL-1F11, Nuclear factor from high endothelial venules, NF-HEV, DVS27-related protein, DVS27, C9orf26

PRODUCT SPECIFICATION

Molecular Weight

18.1 kDa (160aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0)

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using D10.G4.1 mouse helper T cells. The ED50 range $\leq$ 0.3ng/ml.

Tag

Non-Tagged

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human IL-33 protein

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Description

Interleukin 33 (IL-33) is a 32kDa proinflammatory cytokine that may also regulate gene transcription in producer cells. IL-33 is structurally related to IL-1, which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1 (IL1 receptor-like-1), which is known also as ST2. Binding of IL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces expression of IL-4, IL-5, IL-13 and leads to severe pathological changes in mucosal organs and in vitro, it can be divided to N-terminal fragment of 12kDa and C-terminal fragment of 18kDa by cleavage of caspase-1. Recombinant human IL-33(C-terminal fragment) was expressed in E.coli and purified by using conventional chromatography techniques.

Amino acid Sequence

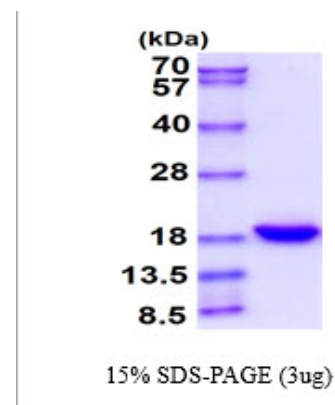
MSITGISPIT EYLASLSTYN DQSITFALED ESYEIYVEDL KKDEKKDKVL LSYYESQHPS NESGDGVDGK MLMVTLSP TK
DFWLHANNKE HSVELHKCEK PLPDQAFFVL HNMHSNCVSF ECKTDPGVFI GVKDNHLALI KVDSSSENLC T ENILFKLSET

General References

Schmitz., et al. (2005) immunity 23(5):479-90
Baekkevold, E.S., et al. (2003) Am. J.Pathol. 163(1):69-90

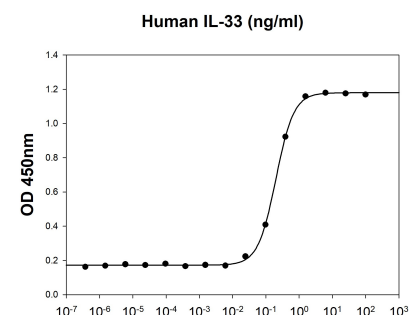
DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Human IL-33 in a cell proliferation assay using D10.G4.1 mouse helper T cells. The ED50 range ≤ 0.3 ng/ml.