

Recombinant mouse IL-33 protein

Catalog Number: ATGP2860

PRODUCT INFORMATION

Expression system

E.coli

Domain

109-266aa

UniProt No.

Q8BVZ5

NCBI Accession No.

NP_001158196.1

Alternative Names

Interleukin-33, IL-33, Il1f11, NF-HEV, 230117N10Rik

PRODUCT SPECIFICATION

Molecular Weight

18.1 kDa (181aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol, 1mM DTT

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 $\leq$ 0.1ng/ml.

Tag

His-Tag

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

Description

Interleukin 33 (IL-33) is a 32kDa proinflammatory cytokine that may also regulate gene transcription in producer

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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 mouse IL33 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

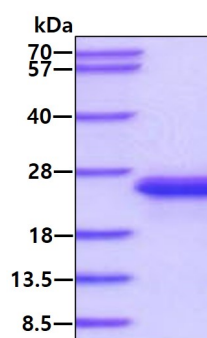
<MGSSHHHHH SGLVPRGSH MGS>SIQGTSL LTQSPASLST YNDQSVSFVL ENGCVINVD DSGKDQEQDQ
VLLRYYESPC PASQSGDGVD GKKLMVMNMP IKDIDIWLHA NDKDYSVELQ RGDVSPPEQA FFVLHKKSSD FVSFECKNLP
GTYIGVKDNQ LALVEEKDES CNNIMFKLSK I

General References

Schmitz J., et al (2005) Immunity 23:479-490
Ali S., et al (2011) J. Immunol. 187:1609-1616

DATA

SDS-PAGE



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

Biological Activity

Mouse IL-33 stimulates cell proliferation D10.G4.1 mouse helper T cells. The ED50 range ≤ 0.1 ng/ml.

