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 ≤ 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

Catalog Number: ILC0701

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

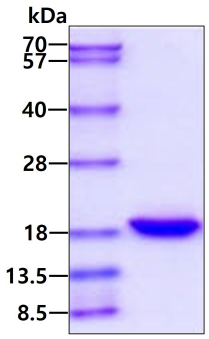
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General References

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

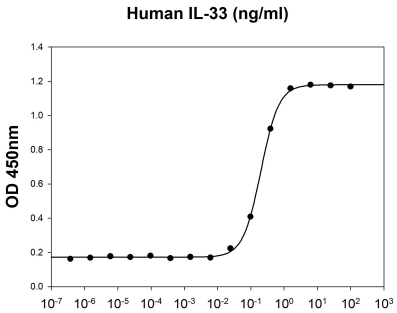
DATA

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 ≤ 0.3ng/ml.