

Synonym

IL33,DV27,C9ORF26,IL1F11,NFHEV,DKFZp586H0523,DVS27,NFEHEV,RP11-575C20.2

Source

Human IL-33 Protein, His Tag, premium grade(IL3-H52H7) is expressed from human 293 cells (HEK293). It contains AA His 109 - Thr 270 (Accession # [O95760-1](#)).

Predicted N-terminus: His

Human IL-33 Protein, His Tag, premium grade (IL3-H52H7), designed for preclinical stage, has the same activity and performance with GMP Human IL-33 Protein, which enables a seamless transition from preclinical development to clinical phases. Premium Grade product offer a cost efficient alternative of GMP Grade products for the early development phase when safety of raw materials is not top priority. By using Premium Grade products in early development phase, you can transition easily into clinical and commercial phase without need to revalidate the raw materials and modify manufacturing process.

Molecular Characterization

Poly-his

IL-33(His 109 - Thr 270)
O95760-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 20.2 kDa. The protein migrates as 25-30 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Sterility

The sterility testing was performed by membrane filtration method.

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

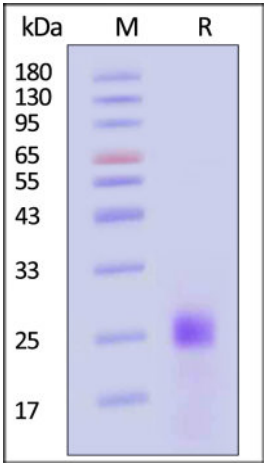
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

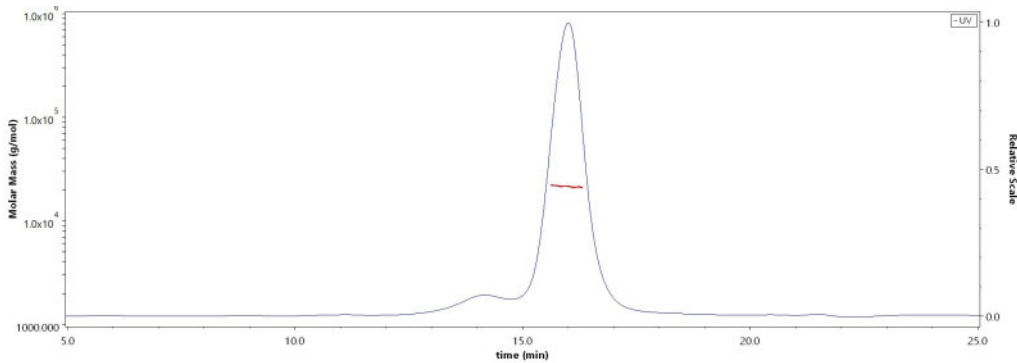
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human IL-33 Protein, His Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Human IL-33 Protein, His Tag, premium grade (Cat. No. IL3-H52H7) is more than 85% and the molecular weight of this protein is around 18-26 kDa verified by SEC-MALS.

[Report](#)

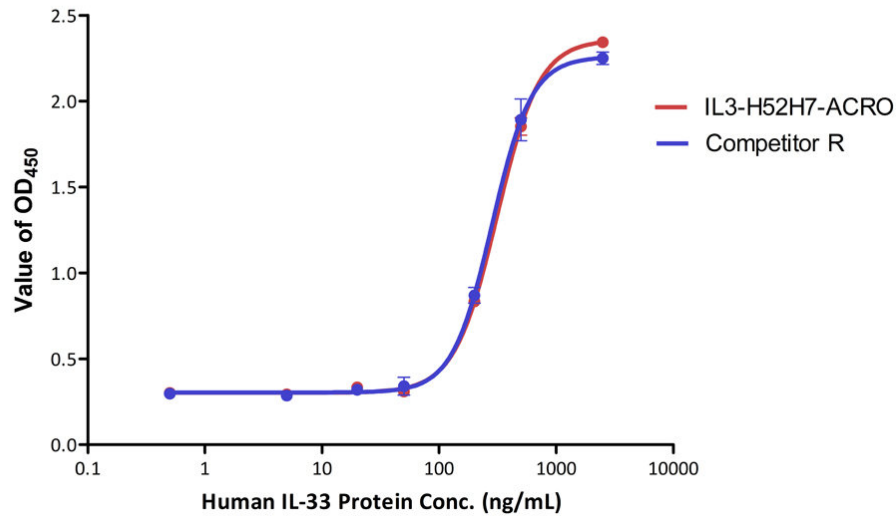
Discounts, Gifts,
and more!





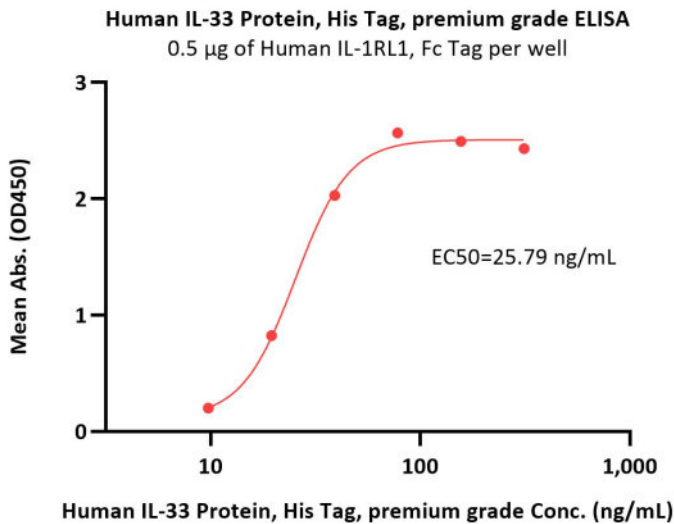
Bioactivity-Bioactivity CELL BASE

Human IL-33 Protein, His Tag, premium grade induces IL8 secretion in HUVECS



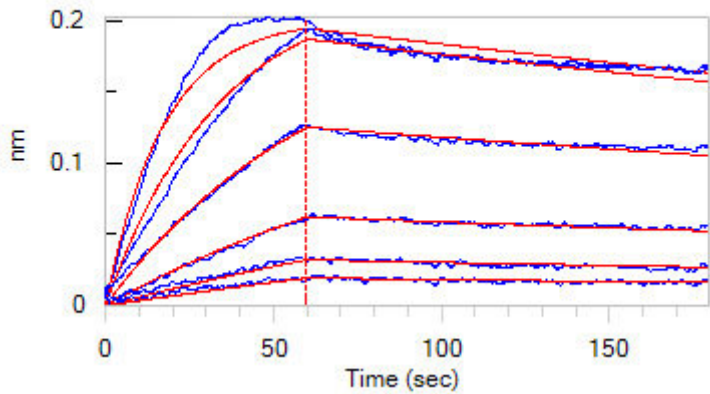
Human IL-33 Protein, His Tag, premium grade (Cat. No. IL3-H52H7) induces IL-8 secretion in HUVECs. The EC₅₀ for this effect is 193.0-311.8 ng/mL (Routinely tested).

Bioactivity-ELISA



Immobilized Human IL-1RL1, Fc Tag (Cat. No. IL1-H5250) at 5 µg/mL (100 µL/well) can bind Human IL-33 Protein, His Tag, premium grade (Cat. No. IL3-H52H7) with a linear range of 5-40 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human IL-1RL1, Fc Tag (Cat. No. IL1-H5250) on Protein A Biosensor, can bind with Human IL-33 Protein, His Tag, premium grade (Cat.



Human IL-33 Protein, His Tag, premium grade

Catalog # IL3-H52H7



No. IL3-H52H7) an affinity constant of 1.31 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 33 (IL33) is known as C9orf26, DKFZp586H0523, DVS27, NF-HEV, NFEHEV, RP11-575C20.2, and is a cytokine belonging to the IL-1 superfamily. IL-33 induces helper T cells, mast cells, eosinophils and basophils to produce type 2 cytokines. IL-33 mediates its biological effects by interacting with the receptors ST2 (aka IL1RL1) and IL-1 Receptor Accessory Protein (IL1RAP), activating intracellular molecules in the NF-κB and MAP kinase signaling pathways that drive production of type 2 cytokines (e.g. IL-5 and IL-13) from polarized Th2 cells. In vivo, IL-33 induces the expression of IL-4, IL-5, and IL-13 and leads to severe pathological changes in mucosal organs.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

