# Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag

Catalog # IL3-H52H6AI

## Application

Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow and supporting high-throughput experimental validation to accelerate the transition from AI prediction to wet-lab validation.

## Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.

## Synonyms

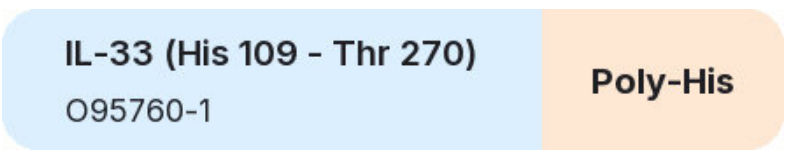
IL33, DV27, C9ORF26, IL1F11, NFHEV, DKFZp586H0523, DVS27, NFEHEV, RP11-575C20.2

## Source

Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag (IL3-H52H6AI) is expressed from human 293 cells (HEK293). It contains AA His 109 - Thr 270 (Accession # O95760-1(C208S,C227S,C232S,C259S)).

Predicted N-terminus: His 109

## Molecular Characterization




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

The protein has a calculated MW of 20.2 kDa. The protein migrates as 24-27 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

## Formulation

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

## Shipping and Storage

This product is supplied and shipped on dry ice.

**Please avoid repeated freeze-thaw cycles.**

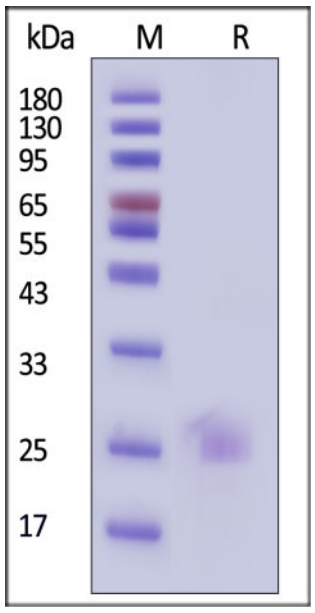
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

## ACRO Quality Management System

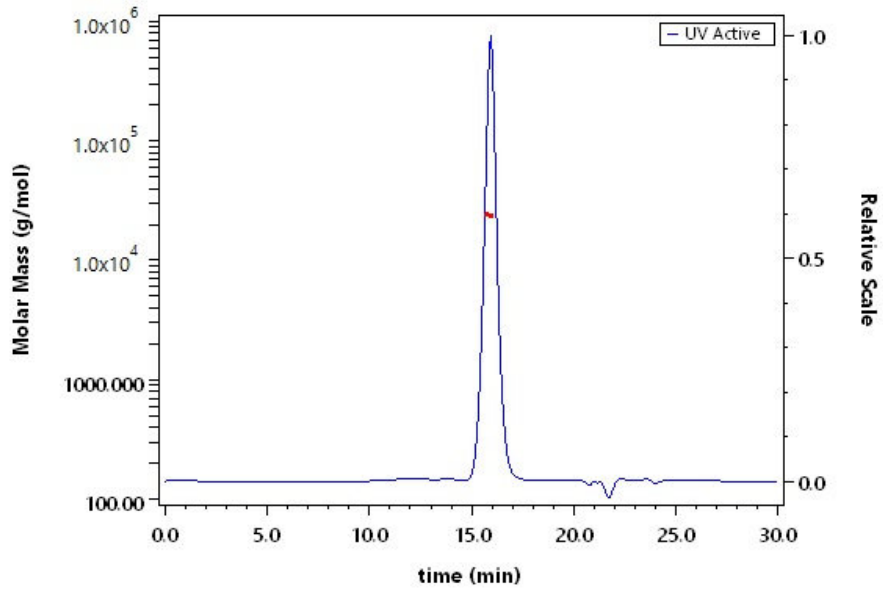
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

## SDS-PAGE



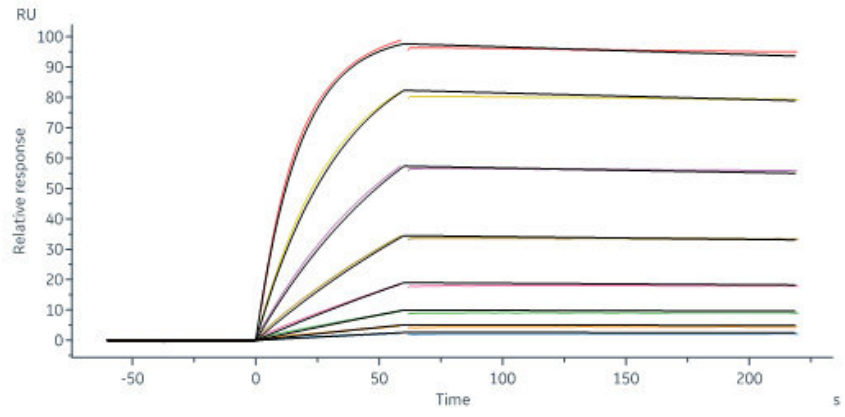

Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

## SEC-MALS




The purity of Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag (Cat. No. IL3-H52H6AI) is more than 95% and the molecular weight of this protein is around 18-28 kDa verified by SEC-MALS.

## Activity-SPR




Daclizumab (biosimilar) captured on Protein A Chip can bind Human IL-33 (C208S, C227S, C232S, C259S) Protein, His Tag (Cat. No. IL3-H52H6AI) with an affinity constant of 0.233 nM as determined in a SPR assay (Biacore 8K) (QC 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.

Discounts, Gifts, and more!