Human IgE Fc Protein, His Tag

Catalog # IGE-H52H9AI

Application

Human IgE Fc 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

IgE

Source

Human IgE Fc Protein, His Tag (IGE-H52H9AI) is expressed from human 293 cells (HEK293). It contains AA Ser 106 - Gly 427 (Accession # P01854-1).

Predicted N-terminus: Ser 106

Molecular Characterization

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

The protein has a calculated MW of 37.6 kDa. The protein migrates as 43-53 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Purity

>90% as determined by SDS-PAGE.

>90% 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.

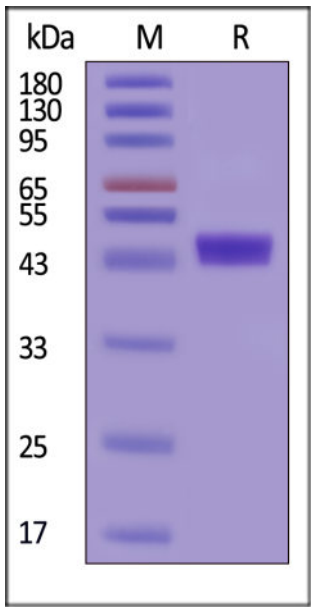
This product is stable after storage at:

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

ACRO Quality Management System

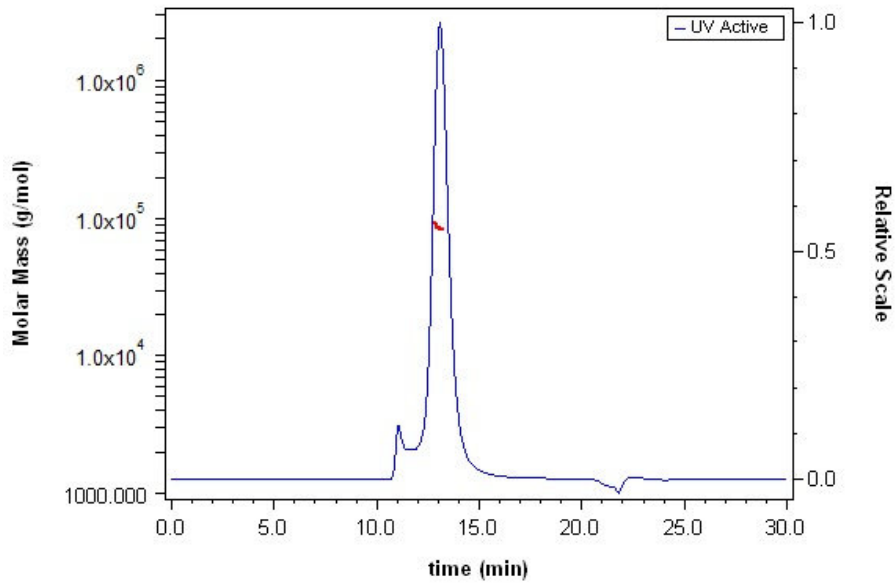
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



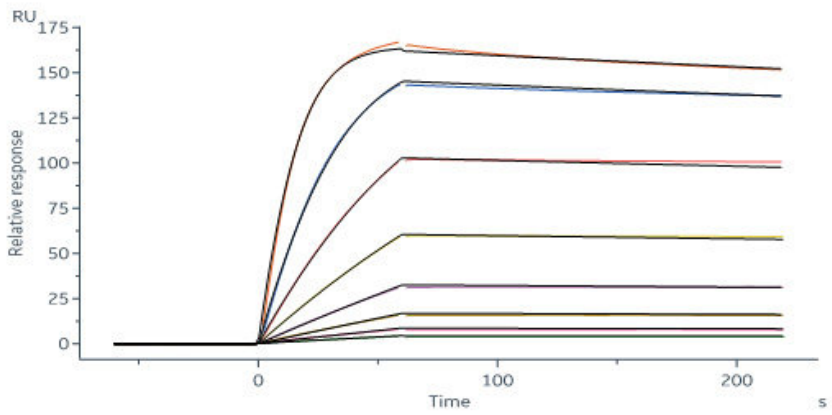
Human IgE Fc Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human IgE Fc Protein, His Tag (Cat. No. IGE-H52H9AI) is more than 90% and the molecular weight of this protein is around 76-96 kDa verified by SEC-MALS.

Activity-SPR



Omalizumab (biosimilar) captured on a Protein A chip binds Human IgE Fc Protein, His Tag (Cat. No. IGE-H52H9AI) with binding affinity comparable to the quality standard, as determined by SPR (Biacore 8K) (QC tested).

Background

As one of the five designated immunoglobulin isotypes, immunoglobulin E (IgE) plays a major role in atopic conditions by inducing immediate hypersensitivity reactions. IgE also contributes significantly to the body's immune response to parasitic infections. IgE antibodies are predominantly found in the tissues, firmly attached to effector cells, such as mast cells and basophils, by high-affinity IgE Fc receptor (Fc epsilon RI) and low-affinity IgE receptor (Fc epsilon RII).