# Human EGF R Protein, His Tag

Catalog # EGR-H5222AI

## Application

Human EGF R 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

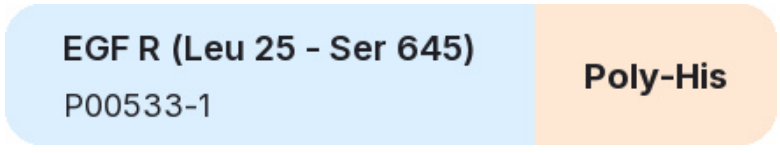
EGFR, ERBB, ERBB1, HER1, PIG61, mENA

## Source

Human EGF R Protein, His Tag (EGR-H5222AI) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # P00533-1).

Predicted N-terminus: Leu 25

## Molecular Characterization




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

The protein has a calculated MW of 70.5 kDa. The protein migrates as 65-80 kDa and 90-130 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Purity

>90% 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.**

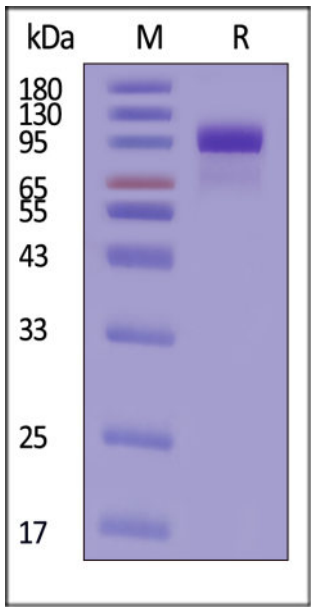
This product is stable after storage at:

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

## ACRO Quality Management System

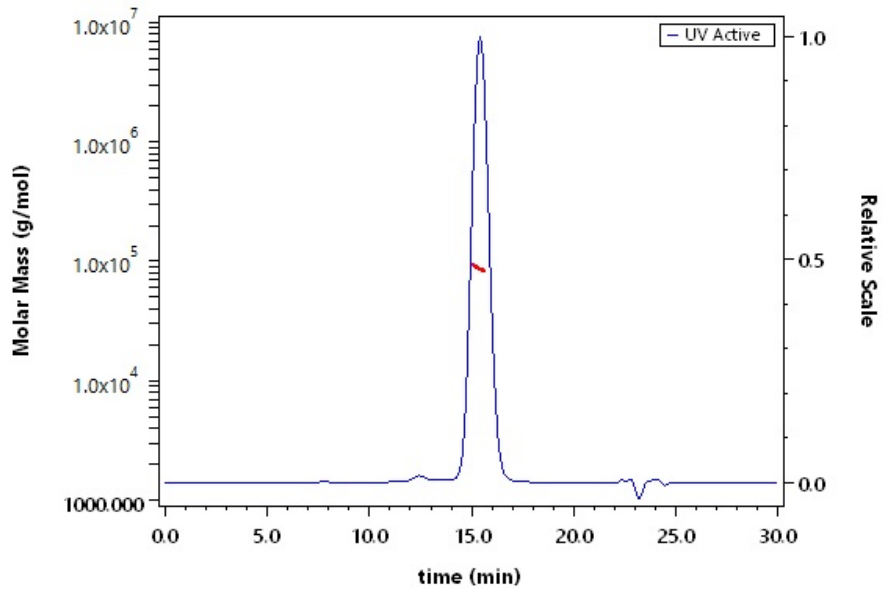
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

## SDS-PAGE



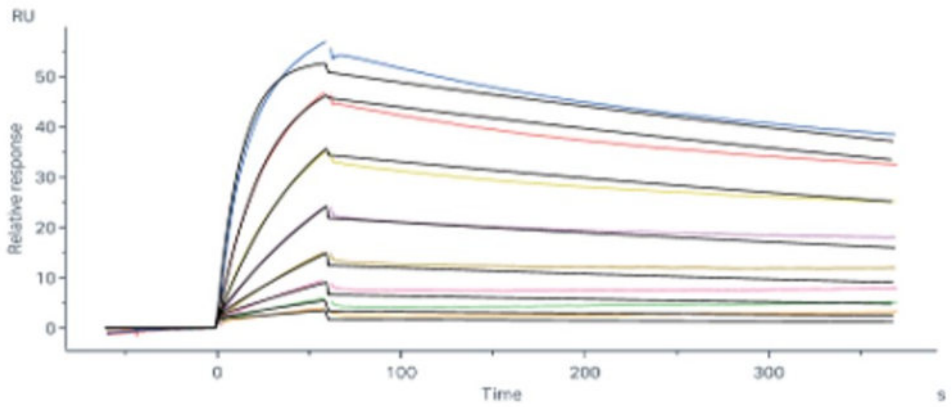

Human EGF R Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

## SEC-MALS




The purity of Human EGF R Protein, His Tag (Cat. No. EGR-H5222AI) is more than 95% and the molecular weight of this protein is around 80-105 kDa verified by SEC-MALS.

## Activity-SPR




Bispecific Anti-Human EGFR & c-Met Antibody captured on Protein A Chip can bind Human EGF R Protein, His Tag (Cat. No. EGR-H5222AI) with an affinity constant of 6.74 nM as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer.

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