Biotinylated Human Amphiregulin Protein, His,Avitag™

Catalog # AMN-H82Q3

Synonyms

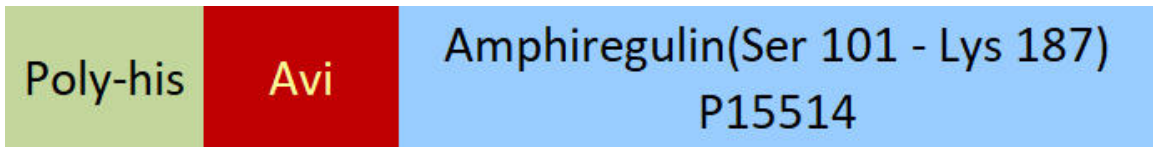
AR, AREGB, CRDGF, SDGF

Source

Biotinylated Human Amphiregulin Protein, His,Avitag (AMN-H82Q3) is expressed from human 293 cells (HEK293). It contains AA Ser 101 - Lys 187 (Accession # P15514).

Predicted N-terminus: Asp

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 25.6 kDa. The protein migrates as 20-25 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the SABA assay / HABA assay / binding ELISA.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

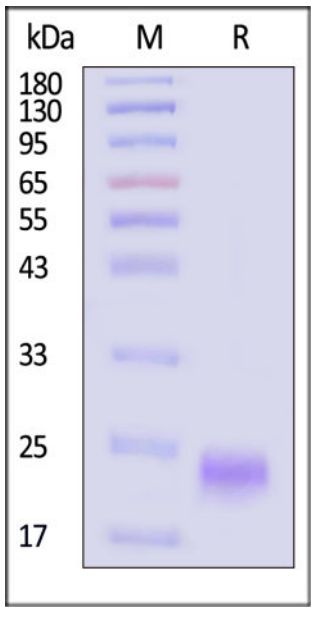
This product is stable after storage at:

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

ACRO Quality Management System

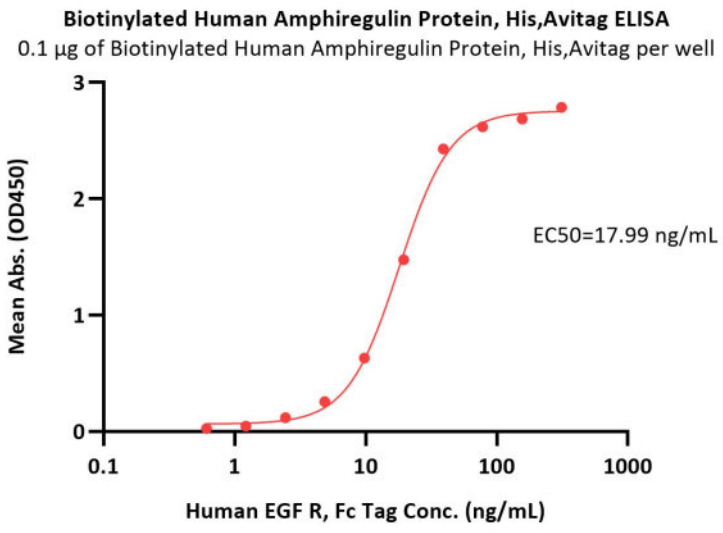
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



Biotinylated Human Amphiregulin Protein, His,Avitag 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).

Bioactivity-ELISA



Immobilized Biotinylated Human Amphiregulin Protein, His,Avitag (Cat. No. AMN-H82Q3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human EGF R, Fc Tag (Cat. No. EGR-H5252) with a linear range of 0.6-39 ng/mL (QC tested).

Background

Amphiregulin (AREG) is a transmembrane glycoprotein belonging to the epidermal growth factor (EGF) family. Initially expressed as a membrane-bound precursor, it undergoes proteolytic cleavage to release a soluble functional ligand. AREG acts primarily by binding to the epidermal growth factor receptor (EGFR/HER1), activating downstream signaling pathways such as MAPK/ERK and PI3K/Akt to promote cell proliferation, survival, and differentiation. Physiologically, it plays vital roles in tissue repair, inflammation, and immune regulation.