



Synonym

EGF,URG,HOMG4

Source

Human EGF Protein, His Tag, premium grade(EGF-H52H3) is expressed from human 293 cells (HEK293). It contains AA Asn 971 - Arg 1023 (Accession # [P01133-1](#)).

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

Poly-his EGF(Asn 971 - Arg 1023)
P01133-1

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

The protein has a calculated MW of 8.3 kDa. The protein migrates as 10-11 kDa 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

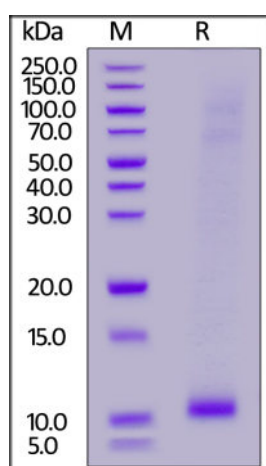
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

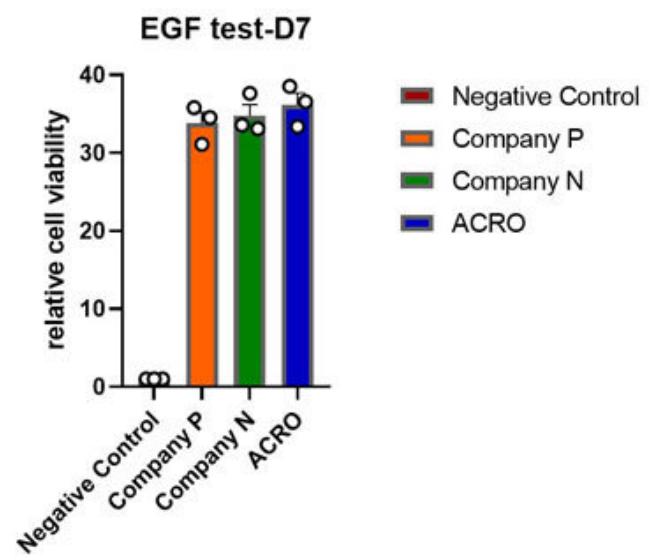
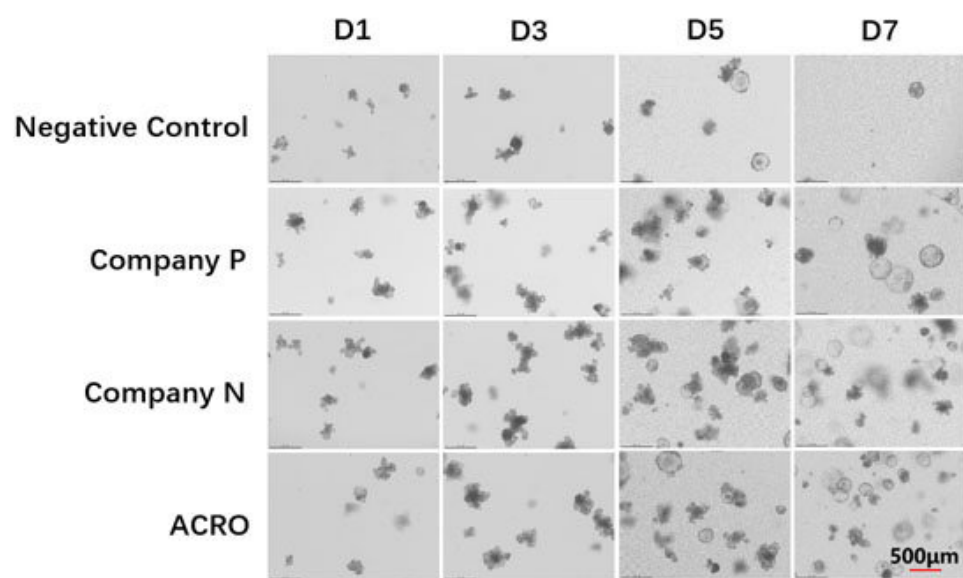


Human EGF Protein, His Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

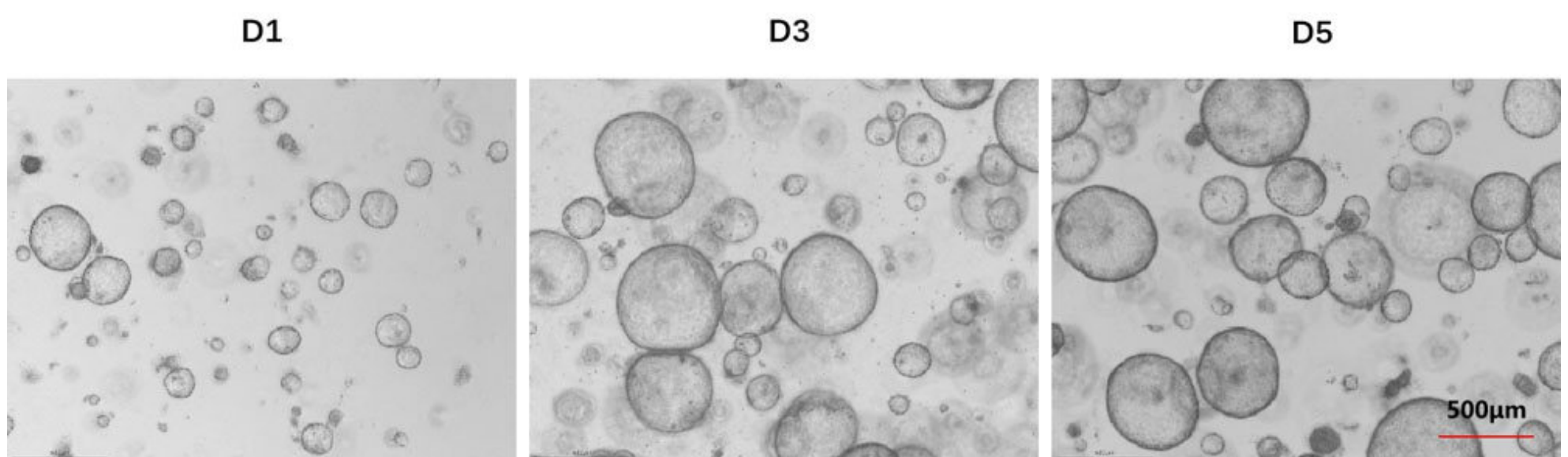
Bioactivity-Organoid Culture

Discounts, Gifts,
and more!





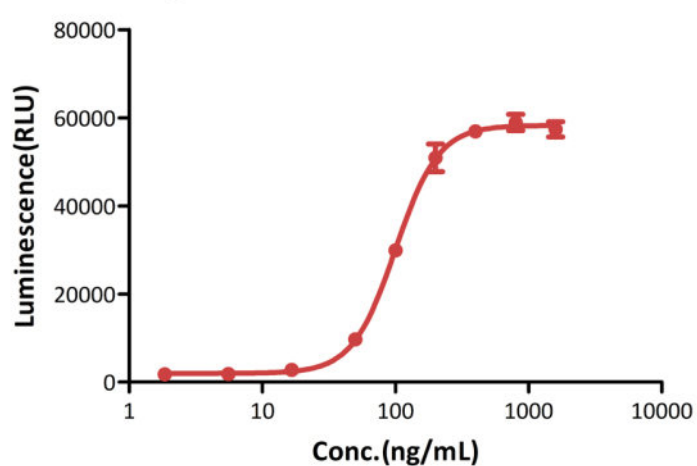
EGF (Cat. No. EGF-H52H3) maintains intestinal organoid growth well through multiple passages and long-term culture, comparable to competing companies. The organoids showed good budding morphology.



Human EGF (Cat. No. EGF-H52H3), Noggin (Cat. No. NON-H5257), R-spondin1 (Cat. No. RS6-H4220), FGF7 (Cat. No. FG7-H52H5), FGF10 (Cat. No. FG0-H5145), HGF (Cat. No. HGF-H52H3) actively support liver ductal organoid growth.

Bioactivity-Bioactivity CELL BASE

Human EGF Protein, His Tag, premium grade stimulates proliferation of 293F-STAT3-EGFR-24 cells



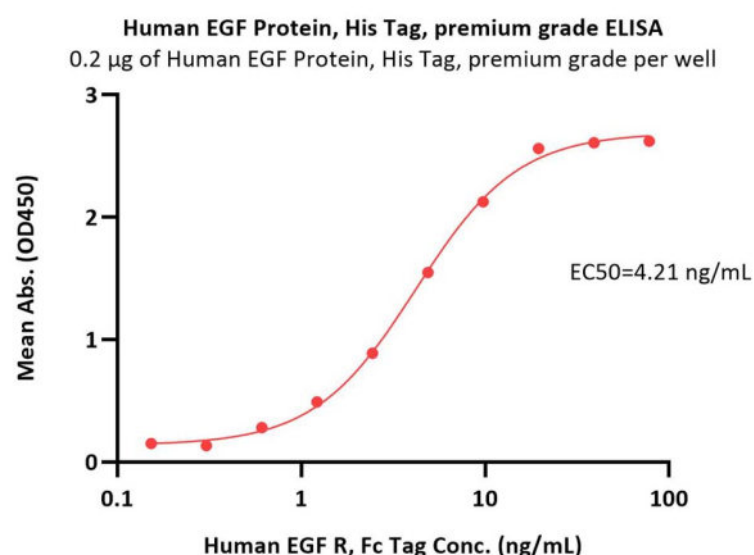
Human EGF Protein, His Tag, premium grade (Cat. No. EGF-H52H3) stimulates proliferation of 293F-STAT3-EGFR-24 cells. The specific activity of Human EGF Protein, His Tag, premium grade is $>8.00 \times 10^5$ IU/mg, which is calibrated against human growth factor EGF WHO International Standard (NIBSC code: 91/530) (QC tested).

Discounts, Gifts, and more!





Bioactivity-ELISA



Immobilized Human EGF Protein, His Tag, premium grade (Cat. No. EGF-H52H3) at 2 µg/mL (100 µL/well) can bind Human EGF R, Fc Tag (Cat. No. EGR-H5252) with a linear range of 0.2-5 ng/mL (QC tested).

Background

Human epidermal growth factor (EGF) is also known as HOMG4 and URG, and is a growth factor that plays an important role in the regulation of cell growth, proliferation, and differentiation by binding to its receptor EGFR. Epidermal growth factor can be found in human platelets, macrophages, urine, saliva, milk, and plasma. EGF is the founding member of the EGF-family of proteins. Members of this protein family have highly similar structural and functional characteristics. All family members contain one or more repeats of the conserved amino acid sequence. The biological effects of salivary EGF include healing of oral and gastroesophageal ulcers, inhibition of gastric acid secretion, stimulation of D synthesis as well as mucosal protection from intraluminal injurious factors such as gastric acid, bile acids, pepsin, and trypsin and to physical, chemical and bacterial agents. Because of the increased risk of cancer by EGF, inhibiting it decreases cancer risk.

Clinical and Translational Updates

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and more!

