

# Recombinant Human EGF, 51 a.a.

Catalog # FL170

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ $\mu$ g of rHuEGF,1-51a.a protein as determined by LAL method.
Expression System	Yeast-derived.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 1 ng/ml, corresponding to a specific activity of $\geq 1.0 \times 10^6$ IU/mg
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
Accession #	P01133 Asn971-Glu1021
Amino acid sequence	NSDSECLSHDGYCLHDGVCMYIEALDKYACNCVVG YIGERCQYRDLKWWE
Molecular weight	Approximately 6.0 kDa, a single glycosylated polypeptide chain containing 51 amino acids.
Synonyms	Epidermal Growth Factor, Urogastrone, URG
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$ . Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, $-20$ to $-70^\circ\text{C}$ as supplied. 1 month, $2$ to $8^\circ\text{C}$ under sterile conditions after reconstitution. 3 months, $-20$ to $-70^\circ\text{C}$ under sterile conditions after reconstitution.
Precautions	Recombinant Human EGF, 51 a.a. is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

Epidermal growth factor (EGF) is a protein that stimulates cell growth and differentiation by binding to its receptor, EGFR. It was originally discovered in the submaxillary glands of mice and in human urine, and then has been found in many human tissues. EGF stimulates the proliferation of various epidermal and epithelial cells, inhibits gastric secretion, and involves in wound healing. Mature human EGF shares 70% a.a. sequence identity with mature mouse and rat EGF. Recombinant human EGF,1-51a.a is a single non-glycosylated polypeptide chain containing 51 amino acids., there are 3 intramolecular disulfide bonds in the EGF polypeptide chain and the molecular weight of EGF is 6.0kDa.

