



Recombinant Human Epidermal Growth Factor (rhEGF)

Catalog #105-04

Description

EGF was originally discovered in crude preparations of nerve growth factor prepared from mouse submaxillary glands as an activity that induced early eyelid opening, incisor eruption, hair growth inhibition, and stunting of growth when injected into newborn mice. EGF is prototypic of a family of growth factors that are derived from membrane-anchored precursors. All members of this family are characterized by the presence of at least one EGF structural unit (defined by the presence of a conserved 6 cysteine motif that forms three disulfide bonds) in their extracellular domain. EGF is initially synthesized as a 130 kDa precursor transmembrane protein containing 9 EGF units. The mature soluble EGF sequence corresponds to the EGF unit located proximal to the transmembrane domain. The membrane EGF precursor is capable of binding to the EGF receptor and was reported to be biologically active.

Specifications

Synonyms:	Urogastrone, URG
AA Sequence:	SNSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVG YIGE RCQYRDLKWW ELR
Source:	<i>Escherichia coli</i>
Molecular Weight:	6.2 kDa, a single non-glycosylated polypeptide chain containing 54 amino acids
Purity	> 95%

Quality Control

Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)
Sterility	No microorganisms
Physical Appearance:	Light yellow to white powder

Formulation

Rev. 1

Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4 with Dextran as protectant.

Reconstitution

Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Shipping and Storage

Gel pack. Upon receipt, store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage

rhEGF is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.