



Recombinant Hamster Epidermal Growth Factor (rcEGF)

Catalog #185-04

Description

Epidermal Growth Factor (EGF) is a small, mitogenic polypeptide that plays a central role in inducing cell growth, proliferation, differentiation, and survival. The full length EGF protein (EGF precursor) contains nine EGF domains and nine LDLR class B repeats. The mature protein is much smaller, about 53 aa, and is generated by proteolytic cleavage of the EGF domain proximal to the transmembrane region. EGF exerts its biological effects by binding to the epidermal growth factor receptor (EGFR), inducing the dimerization of the EGF receptor to activate downstream protein tyrosine kinase signaling pathway. EGF is well conserved across mammals with mature hamster EGF 85% identical to mature human EGF and about 80% to mature mouse and rat EGFs.

Specifications

Synonyms:	Urogastrone, URG
AA Sequence:	NSNPGCPPSHDGYCLHGGVCMYVEAVDSYACN CIVGYVGERCQHRDLRWWELR
Source:	<i>Escherichia coli</i>
Molecular Weight:	6 kDa, a single non-glycosylated polypeptide chain containing 53 amino acids
Purity	> 95%

Quality Control

Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)
Sterility	No microorganisms
Physical Appearance:	White powder

Formulation

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

Rev. 0

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

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