

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

EGF (Epidermal Growth Factor) is a family of growth factors that are derived from membrane-anchored precursors. The family is characterized by the presence of at least one “EGF-like domain” (characterized by the presence of three disulfide bonds, formed from 6 conserved cysteine residues) in their extracellular domain. EGF was originally discovered as an activity that induced early eyelid opening, incisor eruption, hair growth inhibition and stunting of growth when injected into newborn mice. Additionally, EGF has been shown to inhibit gastric secretion, is involved in wound healing and signals through a receptor known as c-erbB (a class I tyrosine kinase receptor).

Catalog Number	1550-04
Product Name	EGF, Rat Recombinant Rat Epidermal Growth Factor EGF HMGF (Human Milk Growth Factor) PGF (Prostatic Growth Factor)
Source	<i>Escherichia coli</i>
MW	~6.2 kDa (54 amino acid)
Sequence	NSNTGCPPSY DGYCLNGGVC MYVESVDYRV CNCVIGYIGE RCQHRDLRWW KLR
Accession Number	P07522
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 0.1 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁷ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.