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. Mature human EGF shares 70% amino acid sequence identity with mature mouse and rat EGF. Human EGF was isolated from urine based on its inhibitory effect on gastric secretion and is sometimes called urogastrone.

Catalog Number **Product Name**	**1150-04.** **EGF, Human.** Recombinant Human Epidermal Growth Factor EGF HMGF (Human Milk Growth Factor) PGF (Prostatic Growth Factor)
Source	*Escherichia coli*
MW	~6.2 kDa (53 amino acid)
Sequence	NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW ELR
Accession Number	P01133
Purity	>98% 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 1 ng/ml, corresponding to a specific activity of $>1.0\times10^6$ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	The lyophilized sample is stable at 2-8°C, but should be kept desiccated 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 for maximal stability. 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.