

# Recombinant Human EGF, 1-51a.a.

### Information

Gene ID	1950	
Accession #	P01133	
Alternate Names		
Source	Yeast	
M.Wt	Approximately 6.0 kDa, a single glycosylated polypeptide chain containing 51 amino acids.	
AA Sequence	NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW E	
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	- 12 months from date of receipt, -20 to -70 °C as supplied.	
	<ul> <li>- 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>- 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>	
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.	
Biological 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 0.1 ng/m corresponding to a specific activity of > 1.0 × 107 IU/mg.	
Shipping Condition	Gel pack.	
Handling	Centrifuge the vial prior to opening.	
Usage	For Research Use Only! Not to be used in humans.	

## Components and Storage

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Components	100 µg	500 μg
Recombinant Human EGF, 1-51a.a.	100 µg	500 μg

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- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

### Quality Control

Purity	> 98 % by SDS-PAGE and HPLC analyses.	P goden to go o treatment
Endotoxin	Less than 0.1 EU/μg of rHuEGF, 1-51a.a. as	determined by LAL method.

#### Description

Epidermal Growth Factor (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. Human EGF was isolated from urine based on its inhibitory effect on gastric secretion and named urogastrone, accordingly. 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. Mature human EGF shares 70 % a.a. sequence identity with mature mouse and rat EGF







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