# EGF
# Recombinant Human Epidermal Growth Factor

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|---|---|---|---|
| **Catalog No.** | CRE100A | **Quantity:** | 100 µg |
| | CRE100B | | 0.5 mg |
| | CRE100C | | 1.0 mg |

**Alternate Names:** Beta-urogastrone, Urogastrone, EGF-URO, HMGF, PGF, URG

**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 trans-membrane domain. The membrane EGF precursor is capable of binding to the EGF receptor and was reported to be biologically active.

**UniProt ID:** P01133

**Gene ID:** 1950

**Source:** *E. coli*

**Molecular Weight:** 6.2 kDa (53 aa)

**Formulation:** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)

**Purity:** ≥ 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:** ≤ 1EU/µg as determined by kinetic LAL analysis

**Biological Activity:** ≤ 100 pg/ml, determined by a cell proliferation assay using mouse Balb/c 3T3.

**Specific Activity:** ≥ $1.0 \times 10^7$ U/mg
The specific activity of Human EGF is approximately 1.3 x 10^3 IU/µg, which is calibrated against recombinant human EGF WHO International Standard (NIBSC code: 91/530).

**Amino Acid Sequence:** NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW ELR

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

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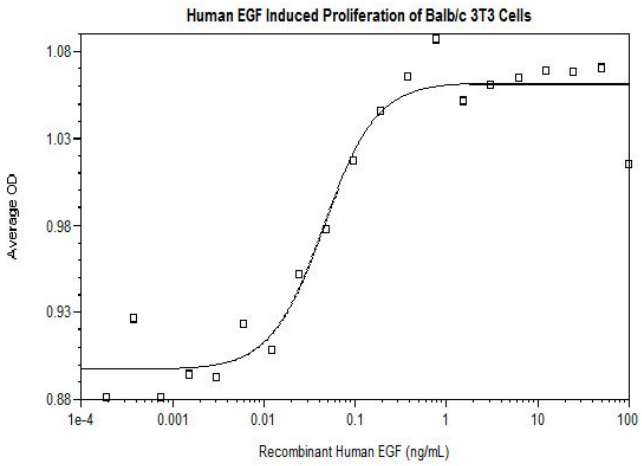
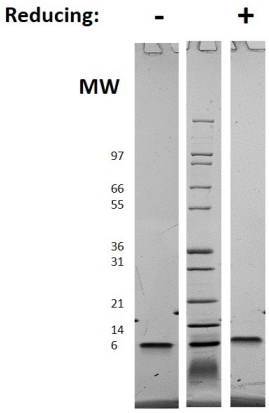
**Storage & Stability:** Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
**Avoid repeated freeze-thaw cycles.**




**Human EGF**
Figure: 1 ug of protein run under (+) reducing and (-) non-reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human EGF is predicted to have a MW of 6.2 kDa.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

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