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Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity

EGF

Recombinant Human Epidermal Growth Factor, EGF, Endotoxin Free

Catalog No.	CRO507A	**Quantity:**	10 µg
	CRO507B		50 µg
	CRO507C		1 mg
	CRO507D		100 µg

Alternate Names: Pro-epidermal growth factor, Urogastrone

Description: Epidermal Growth Factor (EGF) is a potent growth factor that plays an important role in the regulation of cell growth, proliferation and differentiation. It stimulates the proliferation of various epidermal and epithelial cells. EGF has been shown to inhibit gastric secretion, promote colony formation of epidermal cells in culture and to be involved in wound healing. EGF is the prototype of a large family of EGF-like proteins, it signals through the c-erbB receptor. Recombinant human EGF is a globular protein with 3 intramolecular disulfide-bonds essential for biological activity. Approximately 70% homology is found between human EGF and EGF isolated from other species. The relative positions of the cysteine residues is conserved.

Gene ID: 1950

UniProtKB: P01133

Source: Recombinant Human EGF is produced in the endosperm of barley grain *Hordeum vulgare* and is void of any human or animal viral contaminants that could jeopardize stem cell culture.

Molecular Weight: Recombinant human EGF contains 53 aa and an N-terminal 6 aa His-tag for a predicted MW of 7 kDa, but migrates with and apparent MW of 9.5 kDa in SDS-PAGE

Formulation: Lyophilized from a sterile solution of PBS, pH 7.2

Purity: > 95% by SDS-PAGE gel analysis.

Endotoxin Level: Endotoxin level is less than 0.005 ng per µg (0.05 EU/µg) as measured by kinetic LAL assay.

MAT Assay: Purified recombinant human EGF carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.

Biological Activity: ED_{50} < 0.1 ng/ml, determined by the dose dependent proliferation of 3T3 cells.

Specific Activity: > 1.0×10^7 U/mg

Reconstitution: **Centrifuge vial prior to opening**. Reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please note that the addition of any carrier protein into this product may introduce endotoxin. Depending upon the particular application employed, this may be undesirable.**

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Storage & Stability: The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. **Avoid repeated freeze-thaw cycles.**

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

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