

Instruction Manual

Catalog Number	C-60182
Description	Recombinant Human Epidermal Growth Factor (rHu EGF) is a polypeptide growth factor, which stimulates the proliferation of a wide range of epidermal and epithelial cells. It was initially discovered in mouse submaxillary glands and was originally isolated from urine based on its ability to inhibit gastric secretion and called urogastrone. EGF exerts a wide variety of biological effects including the promotion of proliferation and differentiation of mesenchymal and epithelial cells. rHu EGF produced in Pichia is a single, glycosylated polypeptide chain of 51 amino acids and a molecular mass of 6 kDa.
Quantity	500 µg
Molecular Mass	6 kDa
Specific Activity	>1 x 10 ⁷ IU/mg
Source	Pichia pastoris
Purity	Greater than 95% (determined by SDS-PAGE and RP-HPLC analysis).
Endotoxin Level	< 0.1 ng per µg of rHu EGF (1EU/µg).
Biological Activity	Recombinant Human Epidermal Growth Factor is fully biologically active when compared to standards. The ED ₅₀ , calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells (measured by 3H-thymidine uptake), is less than 0.1 ng/ml corresponding to a specific activity of >1 x 10 ⁷ Units/mg.
Formulation	White lyophilized (freeze-dried) powder. Recombinant EGF was lyophilized from a sterile-filtered, concentrated (1 mg/ml) protein solution containing 25 mM sodium bicarbonate (pH 7.5) and 150 mM sodium chloride.
Reconstitution	Please Note: Always centrifuge product briefly before opening vial. The lyophilized protein should be reconstituted in sterile, ultra-pure water to a concentration of 0.1 - 1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at -20 C° for future use.
Storage & Stability	The lyophilized protein, though stable at room temperature for up to 3 weeks, is best stored desiccated at -20°C. Reconstituted rHu EGF should be used immediately or stored long-term in undiluted working aliquots at -20°C. For long-term storage it is recommended to add a carrier protein (0.1% endotoxin-free HSA or BSA; e.g. Cat.No. C-69500A). Avoid repeated freeze-thaw cycles.

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