

GRF-10544 Recombinant Human Epidermal Growth Factor

Size: 500 ug

Synonyms: Urogastrone, URG, EGF.

Introduction: Epidermal growth factor has a profound effect on the differentiation of specific cells

in vivo and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin. The EGF precursor is believed to exist as a membrane-bound molecule which is proteolytically cleaved to generate the 53-amino acid peptide hormone that stimulates cells to divide. EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in

cell culture.

Description: Epidermal Growth Factor Human Recombinant produced in E.Coli is a single, non-

glycosylated, polypeptide chain containing 53 amino acids and having a molecular mass of 6.2kDa. The EGF is purified by proprietary chromatographic techniques.

Source: Escherichia Coli.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation The protein was lyophilized from a concentrated (1mg/ml) solution containing PBS

pH-7.4.

Solubility It is recommended to reconstitute the lyophilized Epidermal Growth Factor in sterile

18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other

aqueous solutions.

Stability: Lyophilized Epidermal Growth Factor Recombinant although stable at room

temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution EGF should be stored at 4°C between 2-7 days and for future use

below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or

BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 98.0% as determined by:

(a) Analysis by HPLC(b) Analysis by SDS-PAGE

Amino acid sequence: NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYRDLKWW

ELR.

Biological Activity: The ED₅₀ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is

less than 0.1 ng/ml, corresponding to a specific activity of >1.0x10⁷ IU/mg.

Web-site: www.immunologicalsciences.com; E-Mail: info@immunologicalsciences.com