

## Epidermal Growth Factor, Human Recombinant

*Cell Culture Reagents-Growth Supplements*

**Catalogue Number:** CC102

**Description:** 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. 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 6222 Dalton. The EGF is purified by proprietary chromatographic techniques.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered Clear Solution.

**Formulation:** 1mg/ml solution with 0.1% BSA added as stabilizer.

**Stability:** EGF should be stored at 4°C between 2-7 days and for future use below -20°C. Please avoid freeze-thaw cycles.

**Suitability:** Cell culture tested

**Purity:** Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

**Biological Activity:** The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells (measured by 3H-thymidine uptake) is < 0.1 ng/ml corresponding to a specific activity of  $1 \times 10^7$  Units/mg.

**Protein content:** EGF quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 2.858 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of EGF as a Reference Standard.

**Amino acid sequence:**

NSDSECLSHDGYCLHDGVCMYIEALDKYACNCVVG YIGERCQYRDLKWWELR

Catalogue Number	Description	Protein Conc.	Pack Size
CC102-100UG	EGF	1mg/mL	100 uL
CC102-1MG	EGF	1mg/mL	1 mL

FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC AND THERAPEUTIC PROCEDURES



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