



## Product Datasheet

<b>Product Name</b>	Recombinant Human Epidermal Growth Factor
<b>Cata No</b>	CB500119
<b>Source</b>	Escherichia Coli.
<b>Synonyms</b>	Urogastrone, URG, EGF

### 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.

### Purity

Greater than 98.0% as determined by:

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

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution containing PBS pH7.4.

### Solubility

It is recommended to reconstitute the lyophilized in sterile water 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.

### Biological Activity

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

**\* For Non-Clinical Research Use Only \***