cell culture reagents

## Datasheet

# Epidermal Growth Factor

## Human Recombinant

| Product | Description | Catalogue-No. | Size |
|---|---|---|---|
| **EGF** | **Epidermal growth factor, human recombinant** | **CB-1101001**<br>**CB-1101002**<br>**CB-1101003** | **100 µg**<br>**500 µg**<br>**1 mg** |

**Product description**
Synonyms: Urogastrone
Epidermal growth factor (EGF) 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 fibroblasts in cell culture. EGF 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

**Solubility and storage conditions**
It is recommended to reconstitute the lyophilized EGF in sterile distilled water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Lyophilized EGF although stable at room temperature for 3 weeks, should be stored desiccated below -20° C. Upon reconstitution EGF should be stored at 2-8° C up to 7 days and for future use below -20° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles

**Composition**
The protein was lyophilized from a concentrated (1 mg/ml) solution containing PBS pH 7.4. 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% (1 mg/ml) solution. 2. Analysis by RP-HPLC, using a calibrated solution of EGF as a reference standard.
Purity: > 98% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.
Biological activity: the ED50, calculated by the dose-dependent proliferation of murine BALB/c 3T3 cells (measured by 3H-thymidine uptake) is < 0.1 ng/ml corresponding to a specific activity of 1 x 10,000,000 U/mg.
Amino acid sequence: NSDSECPLSH DGYCLHDGVC MYIEALDKYA CNCVVGYIGE RCQYR DLKWW ELR

**Suitability**
FOR RESEARCH USE ONLY!
Not approved for human or animal diagnostic or therapeutic procedures.

**Technical Support**
Additional information will be available on our website: www.pan-biotech.com
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05/2014