

Product Datasheet

Product Name Recombinant Mouse Epidermal Growth Factor

Cata No CB500228

Source Escherichia Coli.

Synonyms 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 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 53 amino acids including 3 intramolecular disulfide-bonds and having a molecular mass of 6 kDa. The EGF is purified by proprietary chromatographic techniques.

Purity

Greater than 97.0% as determined by:

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

Specific Activity

The ED50, calculated by the dose-dependant proliferation of murine BALB/c 3T3 cells (measured by 3 H-thymidine uptake) is < 0.1 ng/ml.

Storage

Lyophilized Epidermal Growth Factor Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstituti on 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.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution containing 1x PBS pH-7.4.

It is recommended to reconstitute the lyophilized Epidermal Growth Factor in sterile $18M\Omega$ -cm H_2O not less than $100\mu g/ml$, which can then be further diluted to other aqueous solutions.