Recombinant Human Epidermal Growth Factor (rh EGF)

Synonyms: Urogastrone, URG

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 of some fibroblasts in cell culture.

Description: Recombinant Human EGF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 54 amino acids and having a molecular mass of 6353 Dalton. The rh EGF is purified by proprietary chromatographic techniques

Source: Escherichia Coli.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: lyophilized from a concentrated (2,13mg/ml) solution containing PBS, pH 7.4 The aliquots/sample sizes of 1µg contain Trehalose 5% (w/vol) for better recovery.

Solubility: It is recommended to reconstitute the lyophilized rh EGF in sterile H20 not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh EGF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh 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 SDS-PAGE

Amino acid Sequence: MNSDSECPLSH HDGYCLHDGV CMYIEALDKY ACNCVVGYIG ERCQYRDLKW WELR

Biological Activity: The biological activity tested by receptor driven reporter gene expression in Ba/F3 (rh EGFR hybrid tranfectants) is < 0.1 ng/ml, corresponding to a specific activity of >1 x 10^7 Units/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

small	100 µg	Cat.N°	11343406M
medium	500 µg	Cat.N°	11343407M

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, <u>info@immunotools.com</u> www.immunotools.com