



# Human Epidermal Growth Factor (aa 53) (DAG300)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Recombinant Human Epidermal Growth Factor is a single, non-glycosylated, polypeptide chain containing 53 amino acids and having a molecular weight of 6,222 Da, was expressed in E. coli. The sequence of the first five N-terminal amino acids was determined to be
<b>Antigen Description</b>	Epidermal growth factor or EGF is a growth factor that plays an important role in the regulation of cell growth, proliferation, and differentiation by binding to its receptor EGFR. Human EGF is a 6045-Da protein with 53 amino acid residues and three intramolecular disulfide bonds. EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6.
<b>Species</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	The ED <sub>50</sub> calculated by the dose-dependent 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 x 10 <sup>7</sup> Units/mg. Each laboratory should determine an optimum working titer for use.
<b>Format</b>	Purified, Lyophilized. Reconstitute using sterile deionized water to a concentration 100 µg/ml. Further dilutions can be made in other aqueous buffers.
<b>Concentration</b>	1 mg/ml (OD <sub>280nm</sub> , E <sub>0.1%</sub> = 2.858) (prior to lyophilization)
<b>Buffer</b>	Lyophilized from 10 mM Phosphate buffer, pH 7.4
<b>Preservative</b>	None
<b>Storage</b>	2-8°C short term, -20°C long term

# BACKGROUND

Introduction	EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6.
Keywords	EGF; epidermal growth factor; epidermal growth factor (beta urogastrone); pro-epidermal growth factor; beta-urogastrone; URG; HOMG4;