Datasheet for ABIN2017754

EGF Protein (AA 974-1026)

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Overview

Quantity:	100 µg
Target:	EGF
Protein Characteristics:	AA 974-1026
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50 < 0.08 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 1.25x 10^7 units/mg. AA 974-1026, expressed with an N-terminal Met.
Purity:	> 95 % by SDS-PAGE analysis.
Endotoxin Level:	< 0.2 EU/µg, determined by LAL method.

Target Details

Target:	EGF
Abstract:	EGF Products
Background:	Epidermal Growth Factor (EGF) is a cytokine with 53 amino acids, originally found in mouse submaxillary gland. EGF binds to EGF receptors, ErbB1 and B4, and causes them to be dimerized and phosphorylated. The dimerized and phosphorylated EGFR can bind to several

Target Details

	intracellular targets, such as phospholipase Cgamma and Ras-GTPase-acting protein, and achieve a series of cascade reactions. EGF is involved in the regulation of cell proliferation and differentiation, and is up-regulated during wound healing, accelerating reepitheliazation and increasing tensile strength. It also stimulates neurite outgrowth and increases the uptake of dopamine in the central nervous system. On the other hand, EGF is up-regulated in the glioma cancer, and related to the length of survivals of the patients.Recombinant rat Epidermal Growth Factor (rrEGF) produced in E. coli is a single non-glycosylated polypeptide chain containing 54 amino acids. A fully biologically active molecule, rrEGF has a molecular mass of 6.3 kDa analyzed by reducing SDS-PAGE. Synonyms: Epidermal Growth Factor, Urogastrone, URG
Molecular Weight:	6.3 kDa, observed by reducing SDS-PAGE.
UniProt:	P07522
Pathways:	NF-kappaB Signaling, RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Protein targeting to Nucleus, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling, EGFR Downregulation

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstituted in ddH2O at 100 µg/mL.
Buffer:	Lyophilized after extensive dialysis against PBS.
Storage:	-80 °C
Storage Comment:	Lyophilized recombinant rat Epidermal Growth Factor (rrEGF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rrEGF should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.
Expiry Date:	6 months