Recombinant Human EGF / Epidermal Growth Factor, Animal Free & Carrier Free

Cat #: C-CYP335

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

Epidermal growth factor (EGF) stimulates cell growth and differentiation by binding to its receptor, EGFR. Human EGF is a 6-kDa protein with 53 amino acid residues and three intramolecular disulfide bonds. EGF is present in various body fluids, including blood, milk, urine, saliva, seminal fluid, pancreatic juice, cerebrospinal fluid, and amniotic fluid. Biological activities ascribed to EGF include epithelial development, angiogenesis, inhibition of gastric acid secretion, fibroblast proliferation, and colony formation of epidermal cells in culture.

Product Information

Source: *Escherichia Coli*.

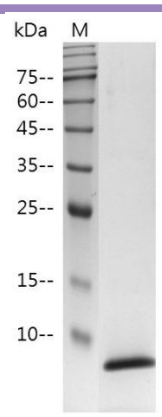
Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce 3T3 cells proliferation. The ED50 for this effect is 0.05-0.12 ng/mL. The specific activity of recombinant human EGF is approximately >1.4 x10^6 IU/mg.

Endotoxin: <0.1EU per 1μg of the protein by the LAL method.

Amino acid sequence: MNSDSECPLSHDGYCLHDGVCMYIEALDKYACNCVVGYIGERCQYRDLKWWELR with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant human EGF

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H_2O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 μg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.