invitrogen

Recombinant Human Epidermal Growth Factor (EGF)

Cat. No.: 13247-051 **Size: 100 µg**
Store at -20°C.

Description:
Recombinant Human Epidermal Growth Factor, from *E.coli*, is a 6.2 kDa protein containing 53 amino-acid residues. It is a polypeptide growth factor which stimulates the proliferation of a wide range of epidermal and epithelial cells (1-4). For most *in vitro* applications, EGF exerts its biological activity in the concentration range of 0.5 to 25 ng/ml. Recombinant Human EGF is provided as a lyophilized protein obtained from a membrane-filtered (0.22 µm) solution of distilled water with no additives.

Directions for Use:

1. Reconstitute in distilled water, aqueous buffers or 10 mM acetic acid to a concentration of 1 µg/µl. **Note: Do not store in glass;** store in polypropylene vial**.** Store at -20°C reconstituted for up to six months. Avoid repeated freeze-thaw cycles.

2. The reconstituted solution can be further diluted in distilled water or aqueous buffers to working concentration.

   Note: To avoid adsorptive loss, dilute solutions should be supplemented with Bovine Serum Albumin (BSA) at a concentration of not less than 0.1%.

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Quality Control:

- Purity: ≥98% (by SDS-PAGE)
- Endotoxin: < 0.1 ng/μg of EGF
- Biological Activity: ED_{50} ≤2 ng/ml (determined by dose-dependent stimulation of thymidine uptake by BALB/c 3T3)
- Specific Activity: $\geq 5 \times 10^5$ units/mg

References:

1. Cohen, S. (1960) *Proc. Natl. Acad. Sci. 46*, 302.
2. Levi-Montalcini, R. *et al*. (1960) *Ann. Rev. Acad. Sci. 85*, 324.
3. Savage, C.R. (1973) *J. Biol. Chem. 247*, 7612.
4. Messing, E.M. *et al*. (1987) *Cancer, Res. 47*, 2230.