



SHANGHAI GENOMICS

# Recombinant Human Epidermal Growth Factor

**rHuEGF**

Catalog number: SG3110-05

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## *Specifications and Use*

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|----------------------------|---|
| <b>Source</b>              | <ul style="list-style-type: none"><li>● <i>Escherichia coli</i>.</li></ul>  |
| <b>Molecular Mass</b>      | <ul style="list-style-type: none"><li>● Approximately 6.2KDa (53 amino acids).</li></ul>  |
| <b>Purity</b>              | <ul style="list-style-type: none"><li>● <math>\geq 98\%</math> as determined by SDS-PAGE and HPLC analysis.</li></ul>   |
| <b>Expression</b>          | <ul style="list-style-type: none"><li>● Extracellular production, which enables the appropriate folding of 3D structure of rHuEGF</li></ul>   |
| <b>Biological Activity</b> | <ul style="list-style-type: none"><li>● ED<sub>50</sub> is 2.0 ng/ml, as determined by a proliferation assay stimulating <sup>3</sup>H-thymidine incorporation into BALB/c 3T3 fibroblasts. EGF is effective at 0.5 - 25 ng/ml for most <i>in vitro</i> applications.</li><li>● The corresponding specific activity is <math>\geq 5 \times 10^6</math> IU/mg.</li></ul> |
| <b>Endotoxin Level</b>     | <ul style="list-style-type: none"><li>● Less than 1EU/<math>\mu</math>g of rHuEGF as determined by LAL method.</li></ul>  |
| <b>Formulation</b>         | <ul style="list-style-type: none"><li>● Sterile filtered lyophilized (freeze-dried) powder</li></ul>  |
| <b>Solubility</b>          | <ul style="list-style-type: none"><li>● It is recommended to reconstitute the lyophilized rHuEGF in sterile ddH<sub>2</sub>O to prepare a stock solution of no less than 100 <math>\mu</math>g/ml of the cytokine.</li></ul>  |
| <b>Stability</b>           | <ul style="list-style-type: none"><li>● The lyophilized rHuEGF, though stable at room temperature, is best stored desiccated below 0°C.</li><li>● Reconstituted rHuEGF should be stored in working aliquots at -20°C.</li><li>● Avoid repeated freeze-thaw cycles.</li></ul>  |
| <b>Usage</b>               | <ul style="list-style-type: none"><li>● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE.</li></ul>   |

## ***Human Epidermal Growth Factor***

EGF is a small polypeptide with extensive biological activity in promoting cellular growth and differentiation of epithelial cells and fibroblasts. It not only can promote healing of epidermal and epithelial wound on various body surfaces, mucus membranes and cornea injuries, but can also regenerate the native tissue structure without scar formation, therefore greatly improve the quality of tissue repair. EGF has already found wide medical applications in wound healing of skin ulcers and cornea damages, repair of epithelial damages as occurred in stomach ulcers and non-typical pneumonia. It can also be supplemented in skincare products for reducing wrinkles and pigmented spots in aged and poorly nourished as well as photo-damaged skins.