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# EGF

Catalog # PVGS1291

## Product Information

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| **Primary Accession** | P07522 |
| **Species** | Rat |
| **Sequence** | MNSNTGCPPS YDGYCLNGGV CMYVESVDRY VCNCVIGYIG ERCQHRDLRW WKLR |
| **Purity** | > 95% by SDS-PAGE analysis. |
| **Endotoxin Level** | |
| **Formulation** | Lyophilized after extensive dialysis against PBS. |
| **Reconstitution** | Reconstituted in dd$H_2O$ at 100 □g/mL. |

## Additional Information

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| **Gene ID** | 25313 |
| **Other Names** | Pro-epidermal growth factor, EGF, Epidermal growth factor, Egf |
| **Target 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 intracellular targets, such as phospholipase Cγ 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.<br>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 and is obtained by proprietary chromatographic techniques at . |

## Protein Information

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| **Name** | Egf |
| **Function** | 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 (By |

similarity).

**Cellular Location** Membrane; Single-pass type I membrane protein.