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# EREG

Catalog # PVGS1120

## Product Information

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| **Primary Accession** | O14944 |
| **Species** | Human |
| **Sequence** | Val60-Leu108 |
| **Purity** | > 97% as analyzed by SDS-PAGE<br>> 97% as analyzed by HPLC |
| **Endotoxin Level** | |
| **Biological Activity** | Fully biologically active when compared to standard. The $ED_{50}$ as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 2.0 ng/ml, corresponding to a specific activity of > $5.0 \times 10^5$ IU/mg. |
| **Expression System** | E. coli |
| **Theoretical Molecular Weight** | 5.6 kDa |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4. |
| **Reconstitution** | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. |
| **Storage & Stability** | Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles. |

## Additional Information

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| **Gene ID** | 2069 |
| **Other Names** | Proepiregulin, Epiregulin, EPR, EREG |
| **Target Background** | Epiregulin is a member of the EGF family of growth factors which includes, among others, epidermal growth factor (EGF), transforming growth factor (TGF)-alpha, amphiregulin (ARG), HB (heparin-binding)-EGF, betacellulin, and the various heregulins. It is expressed mainly in the placenta and peripheral blood leukocytes and in certain carcinomas of the bladder, lung, kidney and colon. Epiregulin stimulates the proliferation of keratinocytes, hepatocytes, fibroblasts and vascular smooth muscle cells. It also inhibits the growth of several tumor-derived epithelial cell lines. Human Epiregulin is initially synthesized as a glycosylated 19.0 kDa transmembrane precursor protein, which is processed by proteolytic cleavage to produce a 6.0 kDa mature secreted sequence. |

## Protein Information

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| **Name** | EREG |
| **Function** | Ligand of the EGF receptor/EGFR and ERBB4. Stimulates EGFR and ERBB4 tyrosine phosphorylation (PubMed:9419975). Contributes to inflammation, wound healing, tissue repair, and oocyte maturation by regulating angiogenesis and vascular remodeling and by stimulating cell proliferation (PubMed:24631357). |
| **Cellular Location** | [Epiregulin]: Secreted, extracellular space |
| **Tissue Location** | In normal adults, expressed predominantly in the placenta and peripheral blood leukocytes. High levels were detected in carcinomas of the bladder, lung, kidney and colon |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.