



## Recombinant Human Epiregulin

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

|                  |                            |
|------------------|----------------------------|
| <b>Cat.-no.:</b> | <b>100-336S</b>            |
| Size:            | 5 µg                       |
| Lot. No.:        | According to product label |

### Sequence

MVAQVSITKC SSDMNGYCLH GQCIYLVDMs QNYRCREVGy  
TGVRCHEFFL

### Database References

|                        |           |
|------------------------|-----------|
| <b>Protein RefSeq:</b> | NP_001423 |
| <b>Uniprot ID:</b>     | O14944    |
| <b>mRNA RefSeq:</b>    | NM_001432 |

## Scientific Background

|                        |          |
|------------------------|----------|
| <b>Gene-ID (NCBI):</b> | 2069     |
| <b>Synonyms:</b>       | EREG; ER |

Epiregulin is an EGF related growth factor that binds specifically to EGFR (ErbB1) and ErbB4, but not ErbB2 or ErbB3. 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. Recombinant human Epiregulin is a 5.6 kDa monomeric protein, containing 50 amino residues, which corresponds to the mature secreted Epiregulin sequence.

## Product Specifications

|                               |                                    |
|-------------------------------|------------------------------------|
| <b>Expressed in</b>           | E. coli                            |
| <b>Purity</b>                 | 98% by SDS-PAGE & HPLC analyses    |
| <b>Structural Information</b> | monomeric                          |
| <b>Endotoxin level</b>        | < 0.1 ng /µg of protein (<1EU/µg). |
| <b>Formulation</b>            | lyophilized                        |
| <b>Length (aa):</b>           | 50                                 |
| <b>MW:</b>                    | 5.6 kDa                            |

**Biological Activity:** The ED50 was determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells is  $\leq 2.0$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^5$  units/mg.



**AVOID REPEATED FREEZE AND THAW CYCLES!**