



Technical Data Sheet

Recombinant Human Epiregulin (rHuEREG)

Human Epiregulin

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.

Catalog Number:	RC216-18
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 6.0 KDa, a single non-glycosylated polypeptide chain containing 50 amino acids.
Quantity:	5ug/25ug/1mg
AA Sequence:	MVAQVSITKC SSDMNGYCLH GQCIYLDMS QNYCRCEVG Y TGVRCEHFFL
Purity:	>97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED50 was determined by the dose-dependent stimulation of the proliferation of murine Balb/3T3 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^5$ units/mg.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated (0.5mg/ml) solution in 20mM PB, pH7.4, 130mM NaCl.
Endotoxin:	Less than 1EU/ μ g of rHuEREG as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.



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Storage:

This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.