EREG
Recombinant Human Epiregulin

Catalog No.	CSI20123A	**Quantity:**	5 µg
	CSI20123B		25 µg
	CSI20123C		1.0 mg

Alternate Names: ER, EREG

Description: 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.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Gene ID: 2069

Source: *E. coli*

Molecular Weight: Approximately 6.0 KDa, a single non-glycosylated polypeptide chain containing 50 amino acids.

Formulation: Lyophilized from a sterile filtered solution of 20 mM PBS, pH 7.4 + 130 mM NaCl.

Purity: >97% by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1EU/µg of rHuEREG as determined by LAL method.

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by the dose-dependent stimulation of the proliferation of mouse Balb/3T3 cells is ≤ 2.0 ng/ml.

Specific Activity: ≥ 5×10^5 units/mg

Amino Acid Sequence: MVAQVSITKC SSDMNGYCLH GQCIYLVDMS QNYCRCEVGY TGVRCEHFFL

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

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