



Product Datasheet

Product Name	Epiregulin Human Recombinant
Cata No	CB501343
Source	<i>Escherichia Coli.</i>
Synonyms	EREG, Epiregulin, ER.

Description

Epiregulin is part of the EGF family. Epiregulin functions as a ligand of EGFR, as well as a ligand of most members of the ERBB (v-erb-b2 oncogene homolog) family of tyrosine-kinase receptors. Epiregulin is expressed mostly in the placenta and peripheral blood leukocytes and in specific carcinomas of the bladder, lung, kidney and colon. Epiregulin stimulates the proliferation of keratinocytes, hepatocytes, fibroblasts and vascular smooth muscle cells. Epiregulin 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. Epiregulin Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 50 amino acids and having a molecular mass of 6 kDa. Epiregulin is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

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.

Purity

Greater than 97.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

Epiregulin was lyophilized from 0.5mg/ml solution containing 20mM PBS buffer pH-7.4 containing 130mM sodium chloride.

Reconstitution

It is recommended to reconstitute the lyophilized Epiregulin in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Epiregulin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Epiregulin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

MVAQVSITKC SSDMNGYCLH GQCIYLVDMSS
QNYCRCEVGY TGVRCEHFFL

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