

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

AREG (Amphiregulin) is an EGF related growth factor containing 6 conserved cysteine residues, which form 3 intramolecular disulfide bonds essential for biological activity. It was originally isolated from the MCF-7 human breast carcinoma cell line and is expressed in numerous carcinoma cell lines, as well as the epithelial cells of various human tissues including colon, stomach, breast, ovary, and kidney. AREG participates in autocrine signaling and binds to an EGF/TGF- α receptor, stimulating growth of keratinocytes, epithelial cells and some fibroblasts. It also inhibits the growth of certain carcinoma cell lines. It is synthesized as a transmembrane protein and the ectodomain is cleaved by a protease to release the mature protein. Overexpression of AREG produces a cutaneous phenotype resembling psoriasis.

Catalog Number	1150-11
Product Name	AREG, Human Recombinant Human Amphiregulin Amphiregulin B (AREGB) Schwannoma-derived Growth Factor (SDGF)
Source	<i>Escherichia coli</i>
MW	~11.3 kDa (98 amino acids)
Sequence	SVRVEQVVKP PQNKTESENT SDKPKRKKKG GKNKGKRRNR KKKNPCNAEF QNFCIHGECK YIEHLEAVTC KCQQEYFGER CGEKSMKTHS MIDSSLSK
Accession Number	P15514
Purity	>95% by SDS-PAGE and HPLC analyses
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 between 5-10 ng/ml.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.