AREG
Recombinant Human Amphiregulin

Catalog No.	CS273A	**Quantity:**	10 µg
	CS273B		50 µg
	CS273C		1 mg

Alternate Names: AREG, Colorectum cell-derived growth factor, CRDGF, Schwannoma-derived growth factor, SDGF

Description: Amphiregulin is an EGF related growth factor that signals through the EGF/TGF-a receptor, and stimulates growth of keratinocytes, epithelial cells and some fibroblasts. Amphiregulin also inhibits the growth of certain carcinoma cell lines.
Synthesized as a transmembrane protein, Amphiregulin's extracellular domain is proteolytically processed to release the mature protein. There are 6 conserved cysteine residues, which form 3 intramolecular disulfide bonds essential for biological activity.

Gene ID: 374

UniProt ID: P15514

Source: *E. coli*

Molecular Weight: 10.1 kDa, (87 aa) monomer

Formulation: Lyophilized from a 0.2 µm filtered solution containing 10 mM sodium phosphate, pH 7.5.

Purity: >95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: $\leq$ 1 EU/µg determined by kinetic LAL analysis.

Biological Activity: $ED_{50} \leq 20$ ng/ml, determined by proliferation of murine 3T3 cells.

Specific Activity: $\geq 5.0 \times 10^4$ Units/mg.

Amino Acid Sequence: SVRVEQVVKP PQNKTESENT SDKPKRKKKG GKNGKNRRNR KKKNPCNAEF QNFCIHGECK YIEHLEAVTC KCQQEYFGER CGEKSMK

Reconstitution: **Centrifuged prior to opening**. Reconstitute in sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL.

Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.

Human Amphiregulin Induced Proliferation of 3T3 Cells

Average OD (490nm)

Human Amphiregulin (ng/ml) [log scale]

Reduced: − +

MW (kDa):
97
66
55
36
31
21
14
6
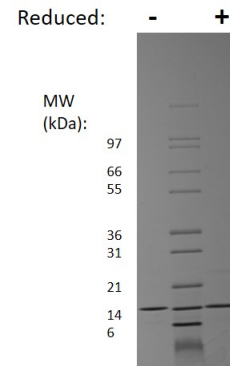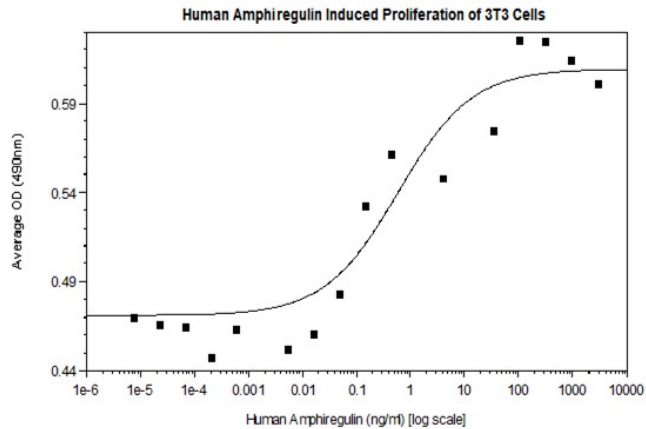
Human Amphiregulin Gel
Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human AREG has a predicted MW of 10.1 kDa.

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