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For research use only

# **Amphiregulin, Human Recombinant**

**CATALOG #**: 7114-10 10 μg

7114-50 50 μg

ALTERNATE NAMES: AR, AREG, Colorectum cell-derived growth factor

(CRDGF)

SOURCE: E.coli

**PURITY:** ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 11.3 kDa

**ENDOTOXIN LEVEL:** < 0.1 ng/µg of protein (<1EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized

from 5 mM Sodium phosphate, pH 7.0.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at

-20°C to -80°C. Avoid repeated freezing and thawing

cycles.

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

#### 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. Recombinant human Amphiregulin is a 11.3 kDa glycoprotein consisting of 98 amino acid residues.

#### BIOLOGICAL ACTIVITY:

Determined by its ability to stimulate the proliferation of mouse Balb/c 3T3 cells. The expected ED $_{50}$  for this effect is 5-10 ng/ml.

## **AMINO ACID SEQUENCE:**

SVRVEQVVKP PQNKTESENT SDKPKRKKKG GKNGKNRRNR KKKNPCNAEF QNFCIHGECK YIEHLEAVTC KCQQEYFGER CGEKSMKTHS MIDSSLSK

## **RELATED PRODUCTS:**

- TGF-alpha, human recombinant (Cat. No. 4339-20, -100, -1000)
- TGF-alpha antibody (Cat. No. 5339-100)
- Human Cell<sup>exp</sup> Human Recombinant TGF-beta 2 (Cat # 6480-10, -50)
- Human Cell<sup>exp</sup> Human Recombinant TGF-beta 3 (Cat # 6481-10, -50)
- TGF-beta1, human recombinant (Cat. No. 4342-5, -50, -500)
- TGF-beta2, human recombinant (Cat. No. 4340-5, -50, -500)
- TGF-beta3, human recombinant (Cat. No. 4344-5, -50, -500)
- TGF-beta1 Antibody (Cat. No. 5559-100)
- TGF-beta2 Antibody (Cat. No. 5340-100)
- TGF-beta2 Antibody (Cat. No. 5343R-100)
- TGF-beta3 Antibody (Cat. No. 5344R-100)

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