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Product Information

Amphiregulin, human
recombinant, expressed in *E. coli*

Catalog Number **A7080**
Storage Temperature –20 °C

Product Description

Recombinant human amphiregulin (AR) is produced by a DNA sequence encoding a 98 amino acid residue form of mature human amphiregulin corresponding to amino acid residues 101-198 expressed in *E. coli*.[1] It has a predicted molecular mass of ~11 kDa.

Amphiregulin is a glycoprotein produced in response to treatment of the human breast carcinoma cell line MCF-7 with phorbol-12-myristate-13-acetate (PMA). Phorbol-12-myristate-13-acetate is a potent tumor promoter and protein kinase C activator.[2] Amphiregulin is a member of the EGF family of cytokine, which is comprised of EGF, TGF-α, HB-EGF, and heregulin. Amphiregulin stimulates the proliferation of mouse and human keratinocytes, mammary epithelial cells, and fibroblasts.

This product is lyophilized from a 0.2 μm filtered solution of phosphate buffered saline, pH 7.4, containing 5 mg of bovine serum albumin.

The activity of recombinant human amphiregulin is measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells.[3]

Purity: ≥97% (SDS-PAGE, silver stain)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial by adding sterile phosphate buffered saline containing 0.1% HSA or BSA to a concentration of no less than 10 μg/mL.

Storage/Stability

Store the product at –20 °C.

After reconstitution, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –70 °C or –20 °C. Repeated freezing and thawing is not recommended. Do not store in a frost-free freezer.

References

1. Plowman, G.D., et al., Mol. Cell. Biol., **10**, 1969 (1990).
2. Shoyab, M., et al., Proc. Natl. Acad. Sci. USA, **85**, 6528 (1988).
3. Marquardt, H., et al., Science, **223**, 1079 (1984).

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