

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Amphiregulin in ELISAs and Western Blots. In sandwich immunoassays, less than 1% cross-reactivity with recombinant human Amphiregulin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Amphiregulin Ser94-Lys191 Accession # P31955
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Amphiregulin (AR), also known as Schwannoma-derived growth factor (SDGF), is a member of the epidermal growth factor (EGF) family of growth factors which includes, AR, EGF, transforming growth factor- α (TGF- α), heparin binding EGF-like growth factor (HB-EGF), betacellulin (BTC), epiregulin, and the neuregulins-1 through -4. All EGF family members are synthesized as type I transmembrane precursors and contain one or several EGF domains in their extracellular region. The bioactive form of the proteins is released by proteolytic cleavage. The ErbB family of receptors that includes ErbB1-B4, mediates the biological activities of the EGF family ligands. AR was originally isolated from the conditioned media of PMA-treated MCF-7 human breast carcinoma cell line. AR mRNA expression can be detected in numerous carcinoma cell lines and in the epithelial cells of various human tissues including colon, stomach, breast, ovary and kidney. AR stimulates the proliferation of keratinocytes, mammary epithelial cells, fibroblasts, astrocytes and glial cells. AR is also a growth inhibitor for certain tumor cells. The gene for AR has been mapped to human chromosome 4q13-q21 and mouse chromosome 5. Human and mouse AR cDNA encode 252 and 248 amino acid residue type I membrane proteins, respectively. The two proteins share approximately 69% sequence identity. Mouse AR also shares 81% amino acid sequence homology with rat AR. Several secreted isoforms of AR that vary in length and/or glycosylation level can be found in cell conditioned media. The 98 amino acid residue recombinant AR has better receptor binding and biological activity than the C-terminal truncated forms of the protein.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.