



Anti-human Amphiregulin/AREG

20151001BB

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	102-PA09S
Size:	100 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human Amphiregulin (Ser101-Lys198) derived from E. coli.

Target Background

Synonyms:	AREG, Colorectum cell-derived growth factor, CRDGF, AR
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Amphiregulin is an EGF related growth factor that signals through the EGF/TGF- α 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.

References

1. Zaiss DM et al, Immunity 17;42(2):216-26, 2015
2. Berasain C and Avila MA, Semin Cell Dev Biol 28:31-41, 2014
3. Busser B et al, Biochim Biophys Acta 1816(2):119-31, 2011
4. Willmarth NE and Ethier SP, J Mammary Gland Biol Neoplasia 13(2):171-9, 2008
5. McBryan J et al, J Mammary Gland Biol Neoplasia 13(2):159-69, 2008
6. Berasain C et al, Cancer Lett 28;254(1):30-41, 2007
7. Salomon DS et al, Breast Cancer Res Treat 33(2):103-14, 1995

Database References Antigen

Protein RefSeq:	NP_001648.1
Uniprot ID:	P15514
mRNA RefSeq:	NM_001657.2

Product Specifications

Species reactivity	human
Clone/Ab feature	rabbit IgG
Cross reactivity	n.d.
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	recombinant human Amphiregulin (RT #200-011)
Formulation	Lyophilized
Buffer	5 mM PBS, pH 7.2

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

Western Blot:	Use at 1-5 µg/ml
IF	Use at 2-10 µg/ml
IF/IHC	Use at 2-10 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-human Amphiregulin/AREG

Handling/Applications

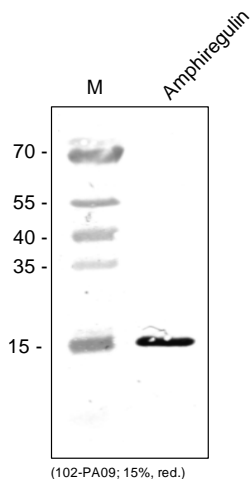


Figure 1: Western analysis of recombinant human Amphiregulin [Cat# 200-011] using a rabbit anti-human Amphiregulin polyclonal antibody.

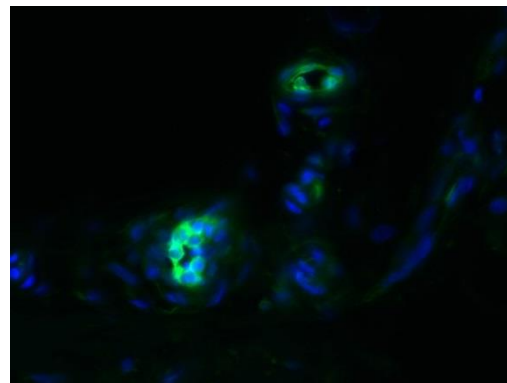


Figure 3: Immunofluorescence staining (cryo-sections) of vasa vasorum of a human lymphatic collector. (fixed 15 min in 4% PFA) with anti-human Amphiregulin (5µg/ml) [Cat# 102-PA09] and counter staining of nuclei with Dapi. [400X]

The experiment was performed by the research group of Prof. Dr. J. Wiltig and Dr. K. Butler, University Göttingen, Germany.

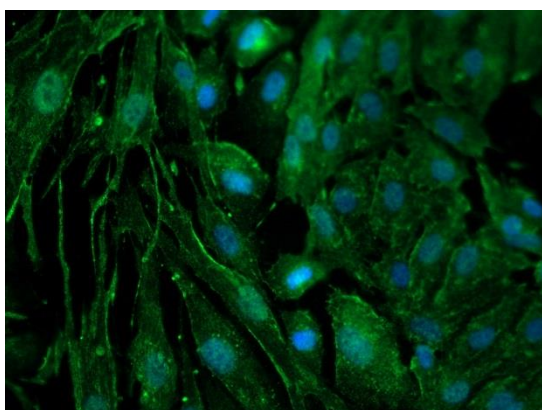


Figure 2: Immunofluorescence staining of human Amphiregulin in a mixture of primary human endothelial cells (HDLEC, HUVEC) and primary normal human dermal fibroblast (NHDF) with a polyclonal rabbit anti-human Amphiregulin antibody [Cat# 102-PA09]. Conjugated secondary antibody: donkey anti-rabbit ALEXA Flour 488 (1:600) [Dianova].

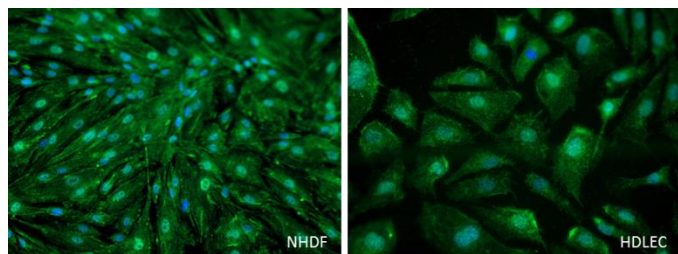


Figure 3: Immunofluorescence staining of human Amphiregulin in primary normal human dermal fibroblasts (NHDF) and primary human dermal lymphatic endothelial cells (HDLEC) with a polyclonal rabbit anti-human Amphiregulin antibody [Cat# 102-PA09]. Conjugated secondary antibody: donkey anti-rabbit ALEXA Flour 488 (1:600) [Dianova].