

## Amphiregulin Ab-2

### Rabbit Polyclonal Antibody

**Cat. #RB-258-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 1.0mg/ml)** (Purified Ab with BSA and Azide)

**Cat. #RB-258-P1ABX or -PABX (0.5ml or 1.0ml at 1.0mg/ml)** (Purified Ab without BSA and Azide)

**Cat. #RB-258-PCL (0.1ml)** (Positive Control for Western Blot)

**Description:** Amphiregulin (AR) binds to EGF-Receptor (EGFR) with lower affinity than EGF. The mature secreted form AR is an 84-amino acid residue glycosylated polypeptide growth regulator, which is generated by proteolytic processing of a 252-amino acid transmembrane precursor. Seven different polypeptide ligands, which derive from distinct genes, are capable of binding to the extracellular domain of EGFR. These ligands include EGF, TGF $\alpha$ , AR, HB-EGF, cripto-1, epiregulin, and betacellulin. All of these growth factors contain a characteristic EGF-like domain which is defined by 6 evenly spaced cysteine residues that generate 3 loops through the formation of disulfide bonds. AR protein has been localized by immunohistochemistry to the epithelium of the colon, stomach, pancreas, breast, and placenta. AR is reportedly overexpressed in human cancers of breast, colon, stomach, and pancreas.

**Mol. Wt. of Antigen:** 18.5-22.5kDa

**Epitope:** aa 26-44

**Species Reactivity:** Human and Mouse. Others not tested.

**Immunogen:** A synthetic 19-mer peptide, corresponding to aa 26-44 from the secreted amphiregulin of human origin.

### Applications and Suggested Dilutions:

- Immunoprecipitation (Native verified)  
(Use Protein A) (Ab 10 $\mu$ g/mg protein lysate)
- Western Blotting (Ab 5 $\mu$ g/ml for 2hrs at RT)

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** HT29, LS174T cells.

**Cellular Localization:** Cytoplasmic and/or nuclear

**Supplied As:** IgG purified from rabbit anti-serum by Protein A chromatography. Prepared at 1mg/ml in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09%

sodium azide. Also available without BSA and azide at 1mg/ml,

**Storage and Stability:** Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

### Key References:

1. Johnson G R, et al. (1992) J Cell Biol 118:741-751
2. Johnson G R, et al. (1993) J Biol Chem 268:18835-18843
3. Johnson G R and Wong L. (1994) J Biol Chem 269: 27149-27154
4. Martinez-Lacaci I et al. (1995) Endocrinology, 136:3983-3992
5. Lucia Schuger; et al. (1996) Development, 122:1759-1767.

### Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

### Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

### For Research Use Only

