

# EGF Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12878c

## **Product Information**

Application Primary Accession	WB, IHC-P, E <u>P01133</u>
Other Accession	<u>NP_001954.2</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16555
Calculated MW	133994
Antigen Region	690-720

#### **Additional Information**

Gene ID	1950
Other Names	Pro-epidermal growth factor, EGF, Epidermal growth factor, Urogastrone, EGF
Target/Specificity	This EGF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 690-720 amino acids from the Central region of human EGF.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EGF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	EGF
Function	EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6.

	Can induce neurite outgrowth in motoneurons of the pond snail Lymnaea stagnalis in vitro (PubMed: <u>10964941</u> ).
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Expressed in kidney, salivary gland, cerebrum and prostate.

#### Background

This gene encodes a member of the epidermal growth factor superfamily. The encoded protein is synthesized as a large precursor molecule that is proteolytically cleaved to generate the 53-amino acid epidermal growth factor peptide. This protein acts a potent mitogenic factor that plays an important role in the growth, proliferation and differentiation of numerous cell types. This protein acts by binding the high affinity cell surface receptor, epidermal growth factor receptor. Defects in this gene are the cause of hypomagnesemia type 4. Dysregulation of this gene has been associated with the growth and progression of certain cancers. Alternate splicing results in multiple transcript variants.

## References

de Diesbach, M.T., et al. Exp. Cell Res. 316(19):3239-3253(2010) Xu, Z., et al. Biochem. Biophys. Res. Commun. 401(3):376-381(2010) Lupien, M., et al. Genes Dev. 24(19):2219-2227(2010) Hommel, U., et al. J. Mol. Biol. 227(1):271-282(1992) Hernandez-Sotomayor, S.M., et al. J. Membr. Biol. 128(2):81-89(1992)

#### Images



All lanes: Anti-EGF Antibody (Center) at 1:2000 dilution + MDA-MB-468 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 150 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

# Citations

- An elemental diet protects mouse salivary glands from 5-fluorouracil-induced atrophy\_
- MiR-29b/Sp1/FUT4 axis modulates the malignancy of leukemia stem cells by regulating fucosylation via Wnt/β-catenin pathway in acute myeloid leukemia.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.