

#### EGF Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12878c

#### Specification

# EGF Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region

WB, IHC-P,E <u>P01133</u> <u>NP\_001954.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 690-720

# EGF Antibody (Center) - 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~~1:2000 IHC-P~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

# EGF Antibody (Center) - 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.

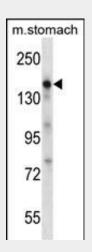
Tissue Location

Expressed in kidney, salivary gland, cerebrum and prostate.

# EGF Antibody (Center) - Protocols

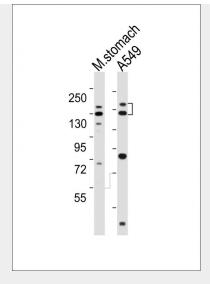
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- EGF Antibody (Center) Images

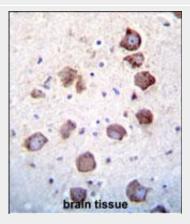


EGF Antibody (Center) (Cat. #AP12878c) western blot analysis in mouse stomach tissue lysates (35ug/lane).This demonstrates the EGF antibody detected the EGF protein (arrow).

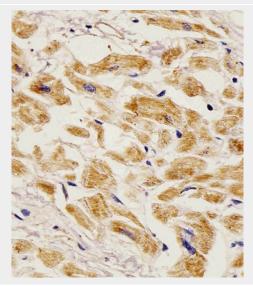




All lanes : Anti-EGF Antibody (Center) at 1:2000 dilution Lane 1: M.stomach tissue lysates Lane 2: A549 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 134 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

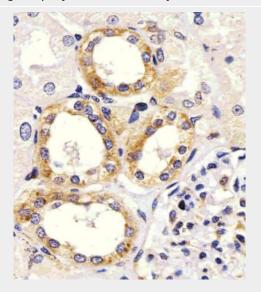


EGF Antibody (Center) (Cat. #AP12878c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of EGF Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.





AP12878c staining EGF in Human heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP12878c staining EGF in Human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

#### EGF Antibody (Center) - 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.

# EGF Antibody (Center) - 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)

#### **EGF** Antibody (Center) - 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.