

### **EREG Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4798b

## **Specification**

## **EREG Antibody (C-term) - Product Information**

Application WB, IHC-P, FC,E

Primary Accession
Reactivity
Human
Host
Clonality
Isotype
Antigen Region

O14944
Human
Rabbit
Polyclonal
Rabbit IgG
A137-165

## **EREG Antibody (C-term) - Additional Information**

**Gene ID 2069** 

#### **Other Names**

Proepiregulin, Epiregulin, EPR, EREG

## Target/Specificity

This EREG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-165 amino acids from the C-terminal region of human EREG.

#### **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~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**

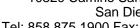
EREG Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **EREG Antibody (C-term) - Protein Information**

### **Name EREG**

Function Ligand of the EGF receptor/EGFR and ERBB4. Stimulates EGFR and ERBB4 tyrosine







phosphorylation (PubMed: 9419975). Contributes to inflammation, wound healing, tissue repair, and oocyte maturation by regulating angiogenesis and vascular remodeling and by stimulating cell proliferation (PubMed:24631357).

#### **Cellular Location**

[Epiregulin]: Secreted, extracellular space

#### **Tissue Location**

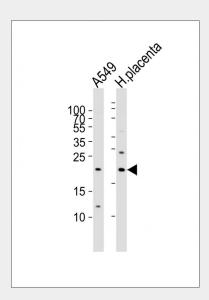
In normal adults, expressed predominantly in the placenta and peripheral blood leukocytes. High levels were detected in carcinomas of the bladder, lung, kidney and colon

# **EREG Antibody (C-term) - Protocols**

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

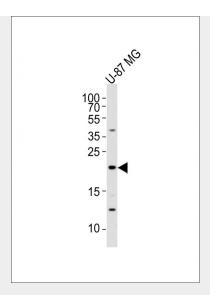
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **EREG Antibody (C-term) - Images**

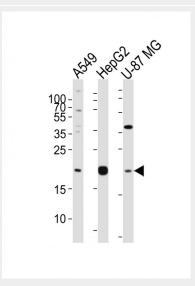


All lanes: Anti-EREG Antibody (C-term) at 1:1000 dilution Lane 1: A549 whole cell lysates Lane 2: human placenta lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



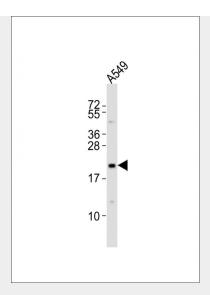


Anti-EREG Antibody (C-term)at 1:2000 dilution  $\pm$  U-87 MG whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

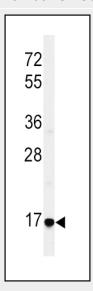


Western blot analysis of lysates from A549, HepG2, U-87 MG cell line (from left to right), using EREG Antibody (C-term)(Cat. #AP4798b). AP4798b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.





Anti-EREG Antibody (C-term)at 1:2000 dilution + 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 : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

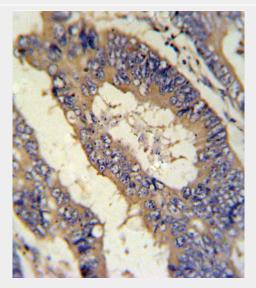


Western blot analysis of EREG Antibody (C-term) (Cat. #AP4798b) in HepG2 cell line lysates (35ug/lane). EREG (arrow) was detected using the purified Pab.



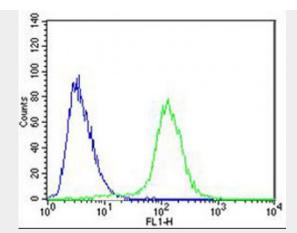


AP4798b staining EREG in Human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). 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.



EREG Antibody (C-term) (Cat. #AP4798b) IHC analysis in formalin fixed and paraffin embedded colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the EREG Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





Overlay histogram showing Hela cells stained with AP4798b (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP4798b, 1:25 dilution) for 60 min at  $37^{\circ}$ C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at  $37^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 ( $1\mu$ g/1x10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.

# **EREG Antibody (C-term) - Background**

EREG is a member of the epidermal growth factor family. EREG can function as a ligand of EGFR (epidermal growth factor receptor), as well as a ligand of most members of the ERBB (v-erb-b2 oncogene homolog) family of tyrosine-kinase receptors.

## **EREG Antibody (C-term) - References**

Ben-Ami, I., et al. Hum. Reprod. 24(1):176-184(2009) Cho, M.C., et al. Biochem. Biophys. Res. Commun. 377(3):832-837(2008) Lasky-Su, J., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (8), 1345-1354 (2008)