

EGFR polyclonal antibody

Catalog # PAB10223 Size 250 uL

Applications

Western Blot (Cell lysate)

Western blot using EGFR polyclonal antibody (Cat # PAB10223) shows detection of a band at ~170 KDa corresponding to human EGFR present in unstimulated (Lane 1) and EGF (50 ng/mL for 15 min) stimulated (Lane 2) A-431 whole cell lysates (arrowhead).

Approximately 30 ug of lysate was resolved on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocellulose.

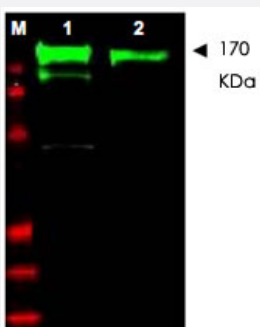
After blocking, the membrane was probed with the primary antibody diluted to 1:1,000.

Reaction occurred overnight at 4°C followed by washes and reaction with a 1:10,000 dilution of IRDye® 800 conjugated Gt-a-Rabbit IgG (H&L) MX10 for 45 min at room temperature (800 nm channel, green).

Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red).

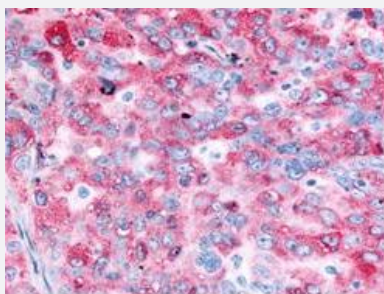
IRDye® 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

IRDye is a trademark of LI-COR, Inc.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining with EGFR polyclonal antibody (Cat # PAB10223) was diluted to 2.5 ug/mL detect EGFR in human ovarian cancer tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.



Immunoprecipitation

Combined immunoprecipitation and immunoblot using EGFR polyclonal antibody (Cat # PAB10223).

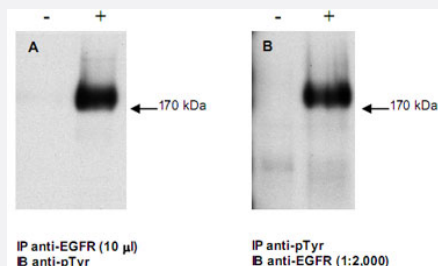
Lysates were prepared from GN4 rat liver epithelial cells both with (+) EGF treatment for 15' at 100 ng/mL and without (-) the addition of EGF.

The combination of immunoprecipitation and immunoblotting was performed using the EGFR polyclonal antibody (Cat # PAB10223) for immunoprecipitation (10 uL) followed by immunoblot detection using an anti-phosphotyrosine antibody (Panel A).

This was repeated in reverse order using a 1:2000 dilution of EGFR polyclonal antibody for immunoblot (Panel B).

Visualization occurred using an ECL system.

Film exposure was approximately 1'.



Specification

Product Description Rabbit polyclonal antibody raised against synthetic peptide of EGFR.

Immunogen A synthetic peptide corresponding to C-terminus of human EGFR.

Host Rabbit

Reactivity Human, Mouse, Rat

Form Liquid

Quality Control Testing Antibody Reactive Against Synthetic Peptide.

Recommend Usage
ELISA (1:10000-1:50000)
Western Blot (1:1000-1:10000)
Immunoprecipitation (10 ul)
The optimal working dilution should be determined by the end user.

Storage Buffer In antiserum (0.01% sodium azide)

Storage Instruction
Store at 4°C. For long term storage store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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● Enzyme-linked Immunoabsorbent Assay

Gene Info — EGFR

Entrez GeneID [1956](#)

Protein Accession# [P00533;NP_005219](#)

Gene Name EGFR

Gene Alias ERBB, ERBB1, HER1, PIG61, mENA

Gene Description epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian)

Omim ID [131550 211980](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. [provided by RefSeq]

Other Designations

avian erythroblastic leukemia viral (v-erb-b) oncogene homolog|cell growth inhibiting protein 40|cell proliferation-inducing protein 61|epidermal growth factor receptor

Publication Reference

- [The EGF receptor provides an essential survival signal for SOS-dependent skin tumor development.](#)

Sibilia M, Fleischmann A, Behrens A, Stingl L, Carroll J, Watt FM, Schlessinger J, Wagner EF.
Cell 2000 Jul; 102(2):211.

Application: WB-Ce, Mouse, Keratinocytes

- [Role of epidermal growth factor receptor and STAT-3 activation in autonomous proliferation of SUM-102PT human breast cancer cells.](#)

Sartor CI, Dziubinski ML, Yu CL, Jove R, Ethier SP.
Cancer Research 1997 Mar; 57(5):978.

Application: WB-Ce, Human, SUM-102PT cells

- [Occurrence of epidermal growth factor receptors in benign and malignant ovarian tumors and normal ovarian tissues: an immunohistochemical study.](#)

Henzen-Logmans SC, van der Burg ME, Foekens JA, Berns PM, Brussee R, Fieret JH, Klijn JG, Chadha S, Rodenburg CJ.
Journal of Cancer Research and Clinical Oncology 1992 Apr; 118(4):303.

Application: IHC, Human, Ovarian

Pathway

- [Adherens junction](#)
- [Bladder cancer](#)
- [Calcium signaling pathway](#)
- [Colorectal cancer](#)
- [Cytokine-cytokine receptor interaction](#)

- [Dorso-ventral axis formation](#)
- [Endocytosis](#)
- [Endometrial cancer](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)

Disease

- [Adenocarcinoma](#)
- [Anus Neoplasms](#)
- [Asthma](#)
- [Astrocytoma](#)
- [Atherosclerosis](#)
- [Barrett Esophagus](#)
- [Bile Duct Neoplasms](#)
- [Biliary Tract Neoplasms](#)

- [Bipolar Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
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- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Central Nervous System Neoplasms](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Cholangiocarcinoma](#)
- [Chromosome Aberrations](#)
- [Chromosome Deletion](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cocarcinogenesis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Cystadenocarcinoma](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)

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- [Drug Toxicity](#)
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- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
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- [Genetic Predisposition to Disease](#)
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- [Lymphatic Metastasis](#)
- [Mental Disorders](#)

- [Mouth Neoplasms](#)
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- [Polycystic Kidney](#)
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- [Prostate cancer](#)
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- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Skin Neoplasms](#)
- [Small Cell Lung Carcinoma](#)

- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tongue Neoplasms](#)
- [Tonsillar Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Calculi](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Viremia](#)
- [Werner syndrome](#)