

## EGFR (PT0520R) PT™ Rabbit mAb

CatalogNo: YM8344 **Recombinant** **R**  
**KD/KO Validated** **K**

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, IP, ELISA

#### MW

- 134kD (Calculated)
- 175kD (Observed)

#### Isotype

- IgG, Kappa

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

### Recommended Dilution Ratios

IHC 1:200-1:1000

WB 1:2000-1:10000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

### Basic Information

**Clonality** Monoclonal

**Clone Number** PT0520R

### Immunogen Information

**Specificity** Endogenous

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## | Target Information

**Gene name** EGFR ERBB ERBB1 HER1

**Protein Name** Epidermal growth factor receptor

Organism	Gene ID	UniProt ID
Human	<a href="#">1956</a> ;	<a href="#">P00533</a> ;
Mouse	<a href="#">13649</a> ;	<a href="#">Q01279</a> ;

**Cellular Localization**

Cell membrane ; Single-pass type I membrane protein . Endoplasmic reticulum membrane ; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Endosome . Endosome membrane. Nucleus . In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER (PubMed:20674546, PubMed:17909029). Endocytosed upon activation by ligand (PubMed:2790960, PubMed:17182860, PubMed:27153536, PubMed:17909029). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:20551055). .; [Isoform 2]: Secreted.

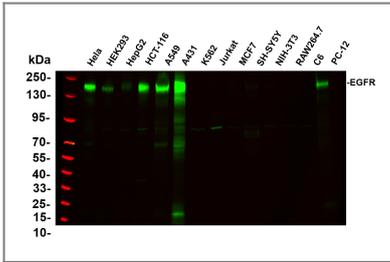
**Tissue specificity** Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

**Function**

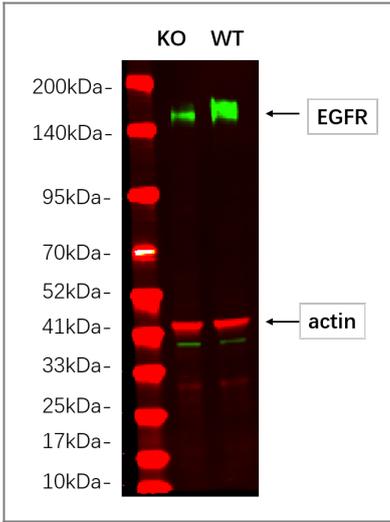
Catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,Disease:Defects in EGFR are associated with lung cancer [MIM:211980].,Function:Isoform 2/truncated isoform may act as an antagonist.,Function:Receptor for EGF, but also for other members of the EGF family, as TGF-alpha, amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30 and vaccinia virus growth factor. Is involved in the control of cell growth and differentiation. Phosphorylates MUC1 in breast cancer cells and increases the interaction of MUC1 with C-SRC and CTNNB1/beta-catenin.,miscellaneous:Binding of EGF to the receptor leads to dimerization, internalization of the EGF-receptor complex, induction of the tyrosine kinase activity, stimulation of cell DNA synthesis, and cell proliferation.,online information:EGFR entry,PTM:Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occur.,PTM:Phosphorylation of Ser-695 is partial and occurs only if Thr-693 is phosphorylated.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Binds RIPK1. CBL interacts with the autophosphorylated C-terminal tail of the EGF receptor. Part of a complex with ERBB2 and either PIK3C2A or PIK3C2B. The autophosphorylated form interacts with PIK3C2B, maybe indirectly. Interacts with PELP1. Binds MUC1.,tissue specificity:Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.,

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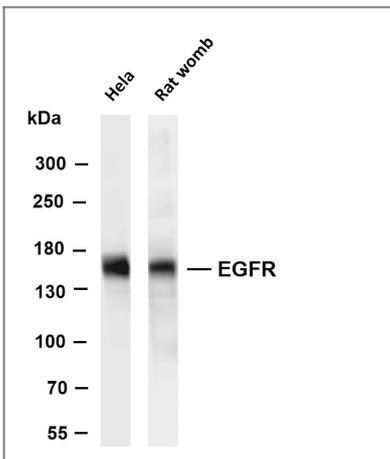
## | Validation Data



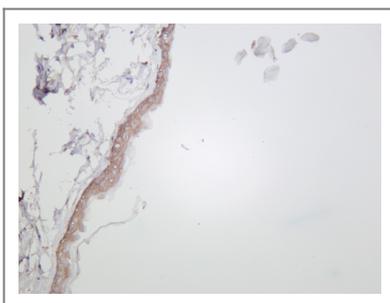
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: HeLa - Human cervical cancer Lane2: HEK293 - Human normal embryonic kidney Lane3: HepG2 - Human hepatocellular carcinoma Lane4: HCT-116 - Human colon cancer Lane5: A549 - Human lung adenocarcinoma Lane6: A431 - Human skin squamous cell carcinoma Lane7: K562 - Human chronic myeloid leukemia Lane8: Jurkat - Human acute T cell leukemia cells Lane9: MCF7 - Human breast cancer Lane10: SH-SY5Y - Human neuroblastoma cells Lane11: NIH-3T3 - NIH mouse fibroblasts Lane12: RAW264.7 - Mouse mononuclear macrophage leukemia cells Lane13: C6 - Rat glioma cells Lane14: PC-12 - Pheochromocytoma in rats Predicted band size: 130kDa Observed band size: 175kDa



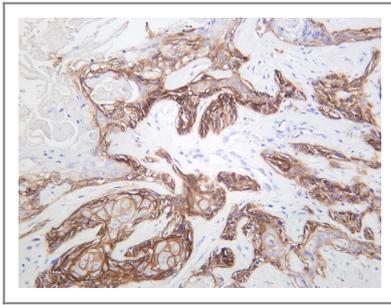
Western blot analysis of lysates from HCT116 WT and knockout cell , (Green) primary antibody was diluted at 1:5000, 4°over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) (Immunoway:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody(Immunoway:RS23710)was diluted at 1:10000, 37° 1hour.



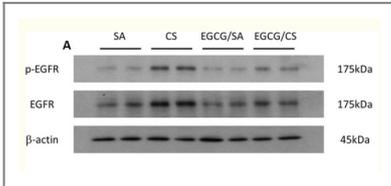
Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-EGFR antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Rat womb Predicted band size: 134kDa Observed band size: 175kDa



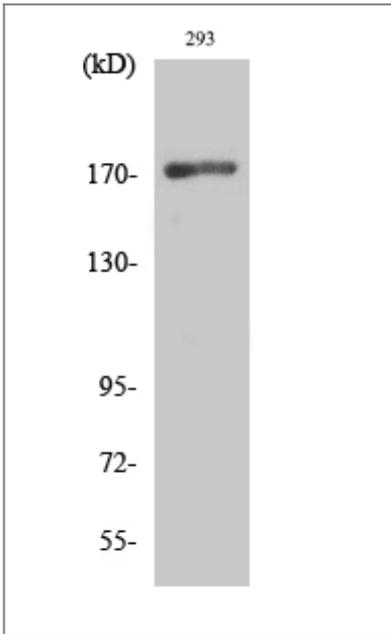
Mouse skin was stained with anti-EGFR rabbit antibody



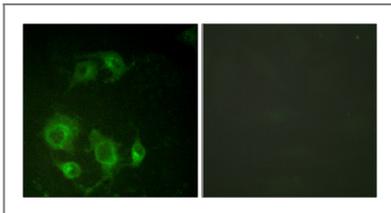
Human cutaneous squamous cell carcinoma was stained with anti-EGFR rabbit antibody



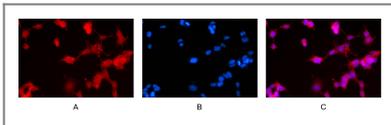
Liang, Yingmin, et al. "(-)-Epigallocatechin-3-gallate Reduces Cigarette Smoke-Induced Airway Neutrophilic Inflammation and Mucin Hypersecretion in Rats." *Frontiers in pharmacology*8 (2017): 618.



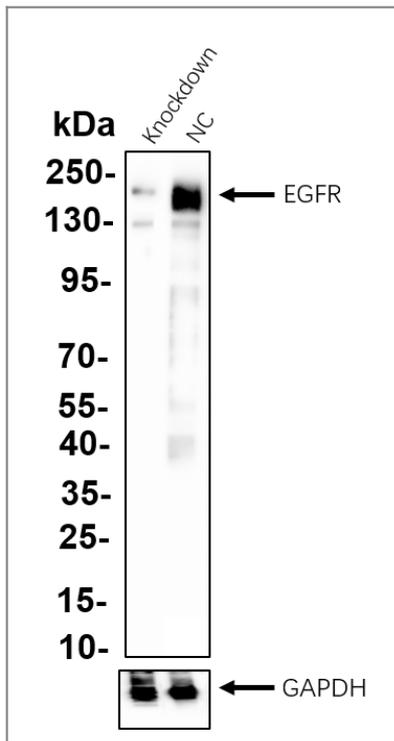
Western Blot analysis of various cells using EGFR Antibody diluted at 1:1000



Immunofluorescence analysis of HUVEC cells, using EGFR Antibody. The picture on the right is blocked with the synthesized peptide.



Immunofluorescence analysis of HEK293. Picture A: EGFR antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Western blot analysis of lysates from A431 WT and knockdown cell. Cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with EGFR PT0520R PT Rabbit mAb. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody.

## Contact information

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 Website: <http://www.immunoway.com>  
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Please scan the QR code to access additional product information:  
**EGFR (PT0520R)**  
**PT™ Rabbit mAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)