

## EGFR (PT0520R) PT® Rabbit mAb

CatalogNo: YM8344

Recombinant KD/KO Validated 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat,

#### Applications

- WB, IHC, IF, IP, ELISA

#### MW

- 134kD (Calculated)  
175kD (Observed)

#### Isotype

- IgG, Kappa

### 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

### 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

### Basic Information

#### Clonality

Monoclonal

#### Clone Number

PT0520R

### Immunogen Information

#### Specificity

Endogenous

## | Target Information

**Gene name** EGFR ERBB ERBB1 HER1

**Protein Name** Epidermal growth factor receptor

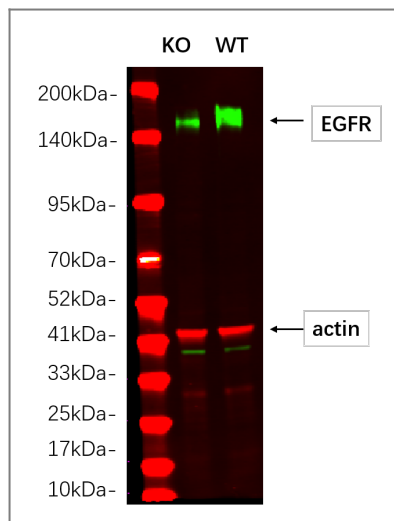
| Organism | Gene ID                 | UniProt ID               |
|----------|-------------------------|--------------------------|
| Human    | <a href="#">1956</a> ;  | <a href="#">P00533</a> ; |
| Mouse    | <a href="#">13649</a> ; | <a href="#">Q01279</a> ; |

**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.

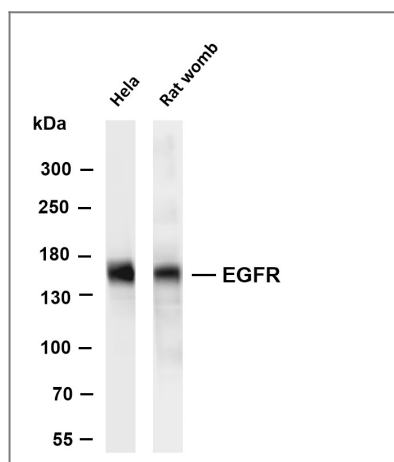
**Tissue specificity** Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

**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.,

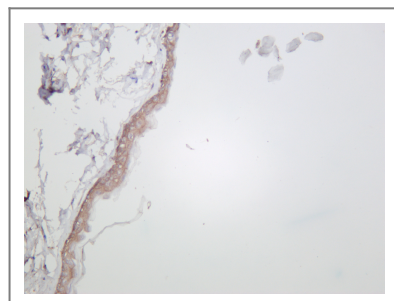
## | Validation Data



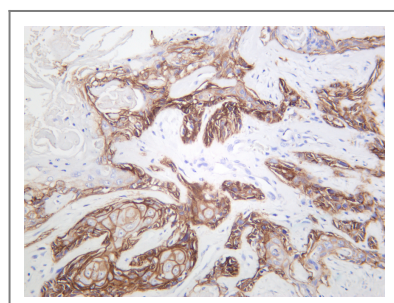
Western blot analysis of lysates from HCT116 WT and knockout cell , (Green) primary antibody was diluted at 1:5000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) (Immunoway:YM3028) antibody was diluted at 1:5000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



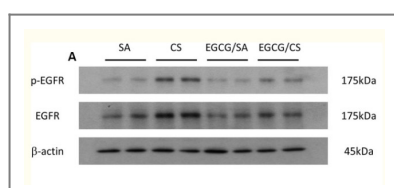
Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-EGFR antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Rat womb Predicted band size: 134kDa Observed band size: 175kDa



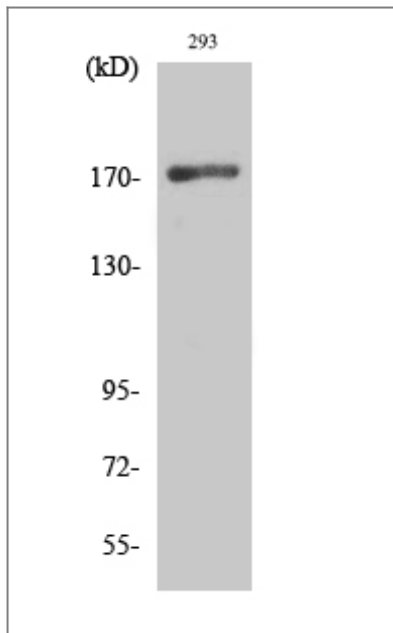
Mouse skin was stained with anti-EGFR rabbit antibody



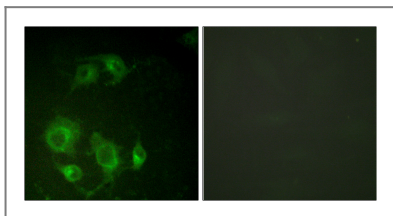
Human cutaneous squamous cell carcinoma was stained with anti-EGFR rabbit antibody



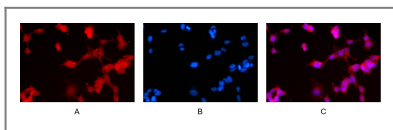
Liang, Yingmin, et al. "(-)-Epigallocatechin-3-gallate Reduces Cigarette Smoke-Induced Airway Neutrophilic Inflammation and Mucin Hypersecretion in Rats." *Frontiers in pharmacology*8 (2017): 618.



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

## Contact information

Orders: order.cn@immunoway.com  
 Support: support.cn@immunoway.com  
 Telephone: 400-8787-807(China)  
 Website: <http://www.immunoway.com.cn>  
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



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**PT® Rabbit mAb**

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