



# EGFR (phospho Tyr1172) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-12973                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>                   | EGFR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human EGFR around the phosphorylation site of Tyr1172. AA range:1139-1188                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>                 | Phospho-EGFR (Y1172) Polyclonal Antibody detects endogenous levels of EGFR protein only when phosphorylated at Y1172.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>                    | EGFR;Epidermal growth factor receptor;ERBB;ERBB1;HER1;Proto-oncogene c-ErbB-1;Receptor tyrosine-protein kinase erbB-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Observed Band</b>               | 175kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Calculated Molecular Weight</b> | 175kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cell Pathway</b>                | 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. |
| <b>Tissue Specificity</b>          | 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 stimu

## Background

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, Jun 2016],

## matters needing attention

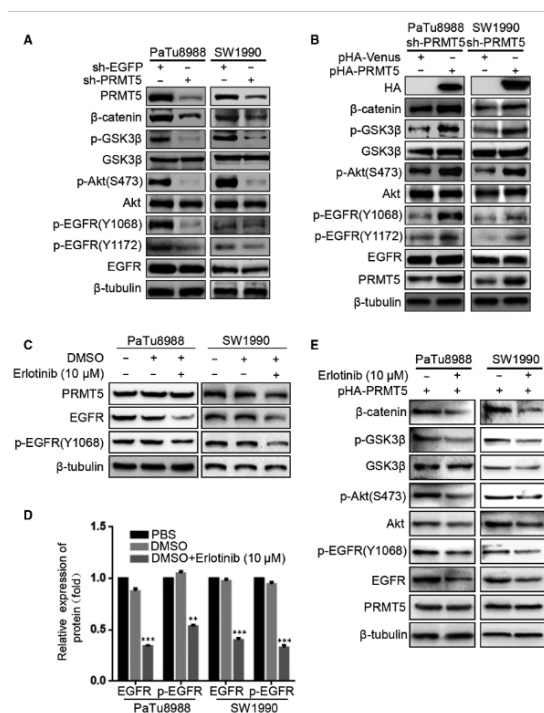
Avoid repeated freezing and thawing!

## Usage suggestions

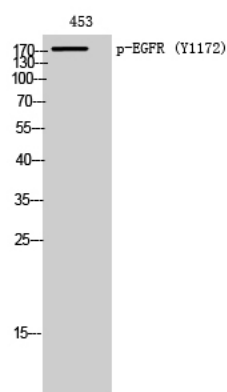
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



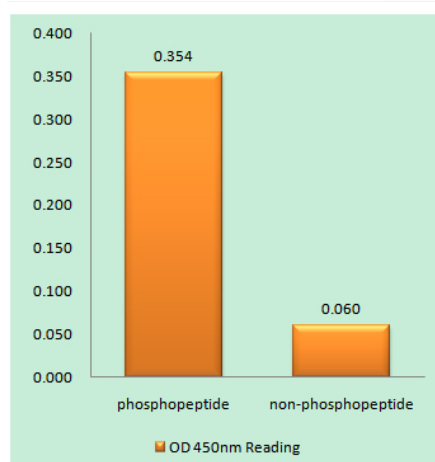
## Products Images



Ge, Lu, et al. "PRMT5 promotes epithelial - mesenchymal transition via EGFR β catenin axis in pancreatic cancer cells." Journal of cellular and molecular medicine 24.2 (2020): 1969-1979.



Western Blot analysis of 453 cells using Phospho-EGFR (Y1172) Polyclonal Antibody diluted at 1:2000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using EGFR (Phospho-Tyr1172) Antibody



Western blot analysis of lysates from A431 cells treated with EGF 40  $\mu$ M 10', using EGFR (Phospho-Tyr1172) Antibody. The lane on the right is blocked with the phospho peptide.

