

Anti-EGFR Antibody
Mouse Monoclonal Antibody
Catalog # AH13186**Specification****Anti-EGFR Antibody - Product Information**

Application	IHC-P, IF, FC
Primary Accession	P00533
Other Accession	488293
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Calculated MW	134277

Anti-EGFR Antibody - Additional Information**Gene ID** 1956**Other Names**

ErbB1; ERBB1; Errp; HER1; mENA; PIG61; Proto-oncogene c-ErbB-1; Receptor Tyrosine Protein Kinase; ErbB1; Urogastrone; wa2; Wa5

Application Note

IHC-P~N/A
IF~1:50~200
FC~1:10~50

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1mg/ml.

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Anti-EGFR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-EGFR Antibody - Protein Information**Name** EGFR ([HGNC:3236](#))**Synonyms** ERBB, ERBB1, HER1**Function**Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed:<http://www.uniprot.org/citations/10805725> target="_blank">10805725, PubMed:<a

[>27153536](http://www.uniprot.org/citations/27153536), PubMed:>2790960, PubMed:>35538033). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:>12297049, PubMed:>15611079, PubMed:>17909029, PubMed:>20837704, PubMed:>27153536, PubMed:>2790960, PubMed:>7679104, PubMed:>8144591, PubMed:>9419975). Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules (PubMed:>27153536). May also activate the NF-kappa-B signaling cascade (PubMed:>11116146). Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling (PubMed:>11602604). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:>11483589). Positively regulates cell migration via interaction with CDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration (PubMed:>20462955). Plays a role in enhancing learning and memory performance (By similarity). Plays a role in mammalian pain signaling (long-lasting hypersensitivity) (By similarity).

Cellular Location

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. Note=In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER (PubMed:17909029, PubMed:20674546). Endocytosed upon activation by ligand (PubMed:17182860, PubMed:17909029, PubMed:27153536, PubMed:2790960). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:20551055)

Tissue Location

Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

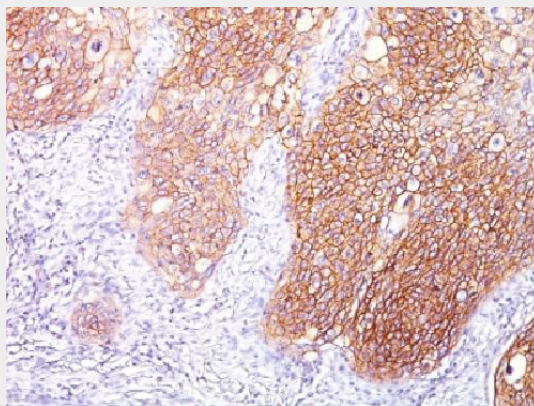
Anti-EGFR Antibody - Protocols

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

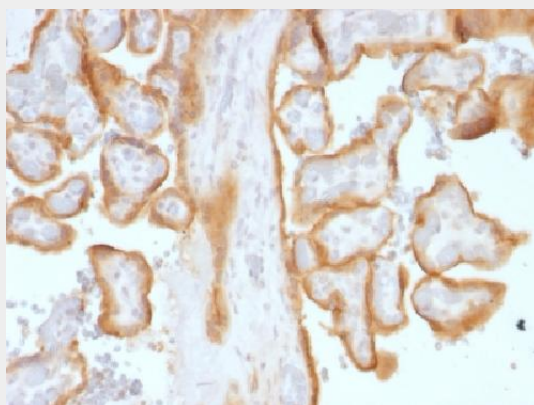
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EGFR Antibody - Images



Formalin-fixed, paraffin-embedded human Lung SCC stained with EGFR Monoclonal Antibody (GFR/1667).



Formalin-fixed, paraffin-embedded human Lung SCC stained with EGFR Monoclonal Antibody (GFR/1667).

Anti-EGFR Antibody - Background

This MAb recognizes a protein of 170kDa, identified as EGFR. EGFR is type I receptor tyrosine kinase with sequence homology to erbB-1, -2, -3 -4 or HER-1, -2, -3 -4. It binds to Epidermal Growth Factor (EGF), Transforming Growth Factor- α (TGF- α), Heparin-binding EGF (HB-EGF), amphiregulin, betacellulin and epiregulin. EGFR is overexpressed in tumors of breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. It is predominantly present in squamous cell carcinomas.