

EGFR Antibody (aa1166-1180)
Rabbit Polyclonal Antibody
Catalog # ALS11518**Specification**

EGFR Antibody (aa1166-1180) - Product Information

Application	IHC, WB
Primary Accession	P00533
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134kDa KDa

EGFR Antibody (aa1166-1180) - Additional Information**Gene ID** 1956**Other Names**

Epidermal growth factor receptor, 2.7.10.1, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, EGFR, ERBB, ERBB1, HER1

Target/Specificity

Peptide synthesized using conventional technology. The sequence of the epitope is: NH₂-C-S-L-D-N-P-D-Y-Q-Q-D-F-F-P-K-E-COOH and corresponds to amino acids 1166-1180 of the EGFR molecule. This maps to a region near the carboxy-terminus which is identi ...

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

EGFR Antibody (aa1166-1180) is for research use only and not for use in diagnostic or therapeutic procedures.

EGFR Antibody (aa1166-1180) - 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:2790960, PubMed:10805725, PubMed:27153536). Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin- binding EGF (PubMed:2790960, PubMed:7679104).

target="_blank">7679104, PubMed:8144591, PubMed:9419975, PubMed:15611079, PubMed:12297049, PubMed:27153536, PubMed:20837704, PubMed:17909029). 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: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)

Tissue Location

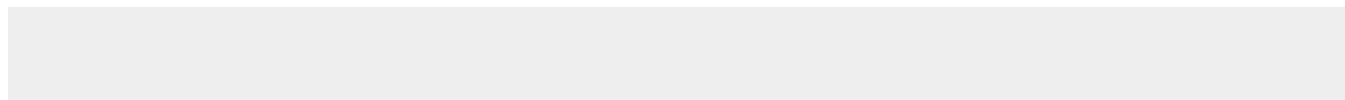
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

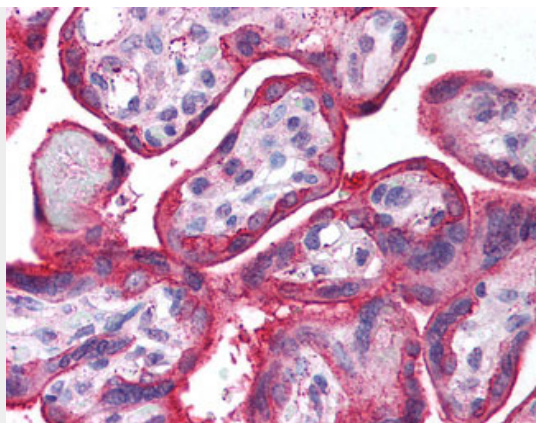
EGFR Antibody (aa1166-1180) - Protocols

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

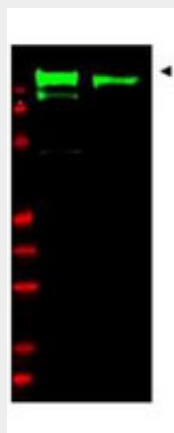
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EGFR Antibody (aa1166-1180) - Images





Anti-EGFR antibody IHC of human placenta.



Western Blot - Anti-EGFR Antibody.

EGFR Antibody (aa1166-1180) - Background

Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. 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. May also activate the NF-kappa-B signaling cascade. 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. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin.

EGFR Antibody (aa1166-1180) - References

- Ullrich A.,et al.Nature 309:418-425(1984).
- Ilekis J.V.,et al.Mol. Reprod. Dev. 41:149-156(1995).
- Reiter J.L.,et al.Nucleic Acids Res. 24:4050-4056(1996).
- Ilekis J.V.,et al.Gynecol. Oncol. 65:36-41(1997).
- Reiter J.L.,et al.Genomics 71:1-20(2001).