

**anti-EGFR antibody**  
Catalog # AP80111**Specification****anti-EGFR antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">P00533</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	134277 Da

**anti-EGFR antibody - Additional Information****Gene ID** 1956**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**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:[10805725](#), PubMed:[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 CCDC88A/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**