

EGFR
Rabbit Monoclonal Antibody (Mab)
Catalog # APA192

Specification

EGFR - Product Information

Application	IHC
Primary Accession	P00533
Host	Rabbit
Clonality	Monoclonal
Calculated MW	134277 Da

EGFR - Additional Information

Gene ID	1956
Gene Name	EGFR (HGNC:3236)

Other Names

Epidermal growth factor receptor, 2.7.10.1, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, EGFR (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=3236) target="_blank">HGNC:3236), ERBB, ERBB1, HER1

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

EGFR - 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 , 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 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).

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 - 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 - Images