

**EGFR**  
**Rabbit Monoclonal Antibody (Mab)**  
**Catalog # APA192**

## Specification

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### EGFR - Product Information

Application	IHC
Primary Accession	<a href="#">P00533</a>
Host	Rabbit
Clonality	Monoclonal
Calculated MW	134277 Da

### EGFR - Additional Information

Gene ID	1956
Gene Name	EGFR ( <a href="#">HGNC:3236</a> )

#### 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](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=3236)) target="\_blank">HGNC:3236</a>), 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: <a href="#">2790960</a> , PubMed: <a href="#">10805725</a> , PubMed: <a href="#">27153536</a> ). Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin- binding EGF (PubMed: <a href="#">2790960</a> , PubMed: <a href="#">7679104</a> , PubMed: <a href="#">8144591</a> , PubMed: <a href="#">9419975</a> , PubMed: <a href="#">15611079</a> , PubMed: <a href="#">12297049</a> , PubMed: <a href="#">27153536</a> , PubMed: <a href="#">20837704</a> , PubMed: <a href="#">17909029</a> ). 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**