

**EGFR**  
**Rabbit Monoclonal antibody(Mab)**  
**Catalog # AD80192**

## Specification

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### EGFR - Product info

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

### EGFR - Additional info

Gene ID	1956
Gene Name	EGFR

#### 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))>HGNC:3236</a>), ERBB, ERBB1, HER1

#### Dilution

IHC-P~~Ready-to-use  
IHC~~Ready-to-use

#### Storage

**This product is stored at 2-8 °C, please use it within the expiration date.**

#### Precautions

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

### EGFR - Protein Information

**Name** EGFR ([HGNC:3236](#))

**Synonyms**  
**Function**

**ERBB, ERBB1, HER1**  
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](#),

Cellular Location

PubMed:[15611079](#), PubMed:[12297049](#), PubMed:[27153536](#), PubMed:[20837704](#)). 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](#)). Plays a role in enhancing learning and memory performance (By similarity).

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](#)). Endocytosed upon activation by ligand (PubMed:[2790960](#), PubMed:[17182860](#), PubMed:[27153536](#)). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:[20551055](#))

Tissue Location

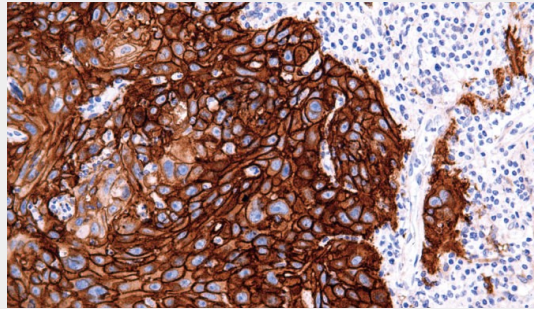
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

### EGFR - Protocols

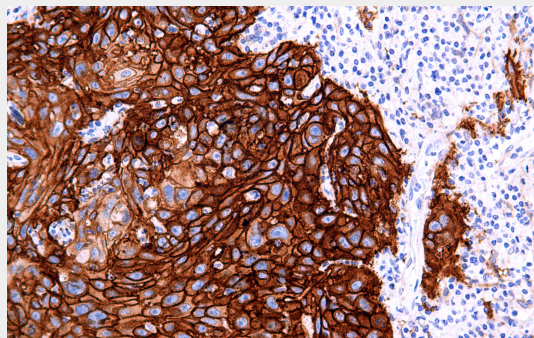
Provided below are standard protocols that you may find useful for product applications.

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

- [Cell Culture](#)

**EGFR - Images**

Lung squamous cell carcinoma



Immunohistochemical analysis of paraffin-embedded human lung squamous carcinoma tissue using AD80192 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.