



EGFR

Rabbit Monoclonal antibody(Mab)
Catalog # AD80192

Specification

EGFR - Product info

Application IHC-P
Primary Accession P00533
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 (HGNC:3236), ERBB, ERBB1, HER1

Dilution

IHC-P~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

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 ERBB, ERBB1, HER1

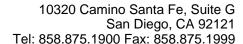
Function

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:<u>2790960</u>, PubMed:<u>7679104</u>, PubMed:<u>8144591</u>, PubMed:<u>9419975</u>,





Cellular Location

Tissue Location

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 Cytomety

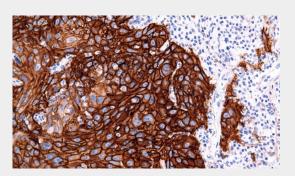
PubMed: 15611079, PubMed: 12297049, PubMed: 27153536, PubMed: 20837704). Ligand binding triggers receptor homoand/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling 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 cancerassociated fibroblasts (CAF) (PubMed:20551055) Ubiquitously expressed, Isoform 2 is also

expressed in ovarian cancers.

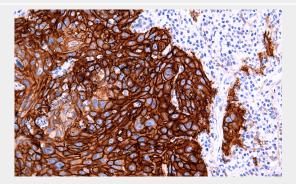


• <u>Cell Culture</u>

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. AmpSeeTM Detection Systems ABCepta: AR005 was used as the secondary antibody.