

EGFR Antibody

Rabbit Monoclonal Antibody (Mab)
Catalog # AD80192

Specification

EGFR Antibody - Product info

Application IHC
Primary Accession P00533
Reactivity Human
Host Rabbit
Clonality Monoclonal

Isotype IgG1 Calculated MW 134277

EGFR Antibody - 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, ERBB,

ERBB1, HER1

Dilution

IHC~~Ready-to-use

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 Antibody is**

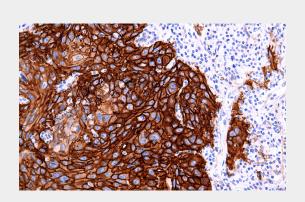
for research use only and not for use in diagnostic or therapeutic procedures.

EGFR Antibody - Protein Information

Name EGFR (HGNC:3236)

Synonyms ERBB, ERBB1,

HER1



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.



Function

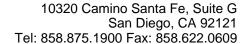
Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed: 2790960, PubMed: 10805725

PubMed:27153536). Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/hepari n-binding EGF (PubMed: 2790960, PubMed: 7679104, PubMed: 8144591, PubMed: 9419975, PubMed: 15611079

PubMed: 12297049

PubMed:27153536

PubMed: 20837704). Ligand binding triggers receptor homo- and/or heterodimerizatio n and autophosph orylation 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

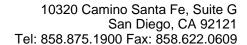




including the RAS-**RAF-MEK-ERK, PI3** kinase-AKT, **PLCgamma-PKC** and STATs modules (PubMe d:27153536). May also activate the NF-kappa-B signaling cascade (PubMe d:11116146). Also directly phosphorylates other proteins like RGS16, activating its **GTPase activity** and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling (PubMe d:11602604). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/ beta-catenin (PubMe d:11483589). Plays a role in enhancing learning and memory performance (By similarity). **Cell membrane:** Single- pass type I membrane

Cellular Location

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:2 0674546). **Endocytosed** upon activation by ligand (PubMed:2790960

, PubMed:1718286 0, PubMed:27153 536). Colocalized with GPER1 in the

nucleus of estrogen

agonist-induced

cancerassociated fibroblasts (CAF) (PubMed:2055105

5)

Tissue Location

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

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 Cytomety
- Cell Culture