10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

EGFR Antibody (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM7628a

Specification

EGFR Antibody (Ascites) - Product Information

Application	**WB,E**
Primary Accession	P00533
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1κ**

EGFR Antibody (Ascites) - Additional Information

Gene ID 1956

Other Names
Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, EGFR, ERBB, ERBB1, HER1

Target/Specificity
Purified His-tagged EGFR protein(Fragment) was used to produced this monoclonal antibody.

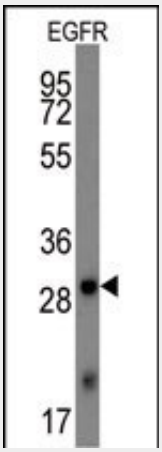
Dilution
WB~~1:2000

Format
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

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 (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

EGFR Antibody (Ascites) - Protein Information



Western blot analysis of anti-EGFR Monoclonal Antibody (Cat.#AM7628a) by EGFR recombinant protein (Fragment). EGFR (Fragment) protein (arrow) was detected using the ascites Mab. (1:2000)

EGFR Antibody (Ascites) - Background

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. Multiple alternatively spliced transcript variants that encode different protein isoforms have been found for this gene.

EGFR Antibody (Ascites) - References

Complex Mutations in the Epidermal Growth Factor Receptor Gene in Non-small Cell Lung Cancer. Hata A, et al. J Thorac Oncol, 2010 Aug 30. PMID 20808254. EGFR signaling is differentially activated in patient-derived glioblastoma stem cells. Howard BM, et al. J

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

Exp Ther Oncol, 2010. PMID 20734923. [EGFR Mutations Detection in Non-small Cell Lung Cancer Tissues by Real-time PCR and DNA Sequencing.] Li Y, et al. Zhongguo Fei Ai Za Zhi, 2009 Dec 20. PMID 20723379. [Detection and Its Clinical Significance of EGFR Gene Mutation and Gene Amplification in 187 Patients with Non-small Cell Lung Cancer.] Liu H, et al. Zhongguo Fei Ai Za Zhi, 2009 Dec 20. PMID 20723374. Effect of gefitinib on the survival of patients with recurrence of lung adenocarcinoma after surgery: A retrospective case-matching cohort study. Katayama T, et al. Surg Oncol, 2010 Aug 10. PMID 20705455.

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 Antibody (Ascites) - 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

EGFR Antibody (Ascites) - Citations

- Acidic mammalian chitinase is secreted via an ADAM17/epidermal growth factor receptor-dependent pathway and stimulates chemokine production by pulmonary epithelial cells.