

Goat Anti-EGFR Antibody (internal region)
Purified Goat Polyclonal Antibody
Catalog # AF4270a**Specification**

Goat Anti-EGFR Antibody (internal region) - Product Information

Application	WB, E
Primary Accession	P00533
Other Accession	NP_005219.2
Reactivity	Human
Predicted	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5
Calculated MW	134277

Goat Anti-EGFR Antibody (internal region) - Additional Information**Gene ID** 1956**Other Names**

EGFR; epidermal growth factor receptor; erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian ; HGNC:3236; ERBB; ERBB1; mENA ; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog; epidermal growth factor receptor; epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog); truncated epidermal growth factor receptor

Dilution

WB~~1:1000
E~~N/A

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Peptide with sequence C-QKGSHQISLDNPD, from the internal region of the protein sequence according to NP_005219.2.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-EGFR Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EGFR Antibody (internal region) - 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:[>10805725](http://www.uniprot.org/citations/10805725), PubMed:[>27153536](http://www.uniprot.org/citations/27153536), PubMed:[>2790960](http://www.uniprot.org/citations/2790960), PubMed:[>35538033](http://www.uniprot.org/citations/35538033)). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:[>12297049](http://www.uniprot.org/citations/12297049), PubMed:[>15611079](http://www.uniprot.org/citations/15611079), PubMed:[>17909029](http://www.uniprot.org/citations/17909029), PubMed:[>20837704](http://www.uniprot.org/citations/20837704), PubMed:[>27153536](http://www.uniprot.org/citations/27153536), PubMed:[>2790960](http://www.uniprot.org/citations/2790960), PubMed:[>7679104](http://www.uniprot.org/citations/7679104), PubMed:[>8144591](http://www.uniprot.org/citations/8144591), PubMed:[>9419975](http://www.uniprot.org/citations/9419975)). 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](http://www.uniprot.org/citations/27153536)). May also activate the NF-kappa-B signaling cascade (PubMed:[>11116146](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11602604)). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:[>11483589](http://www.uniprot.org/citations/11483589)). Positively regulates cell migration via interaction with CDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration (PubMed:[>20462955](http://www.uniprot.org/citations/20462955)). Plays a role in enhancing learning and memory performance (By similarity). Plays a role in mammalian pain signaling (long-lasting hypersensitivity) (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:17909029, PubMed:20674546). Endocytosed upon activation by ligand (PubMed:17182860, PubMed:17909029, PubMed:27153536, PubMed:2790960). 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.

Goat Anti-EGFR Antibody (internal region) - 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](#)

Goat Anti-EGFR Antibody (internal region) - Images



AF4270a (0.1 µg/ml) staining of HeLa lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-EGFR Antibody (internal region) - References

Clinical and biological features associated with epidermal growth factor receptor gene mutations in lung cancers. Shigematsu H, Lin L, Takahashi T, Nomura M, Suzuki M, Wistuba II, Fong KM, Lee H, Toyooka S, Shimizu N, Fujisawa T, Feng Z, Roth JA, Herz J, Minna JD, Gazdar AF. J Natl Cancer Inst. 2005 Mar 2;97(5):339-46.