

EGFR-S1026 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5436a

Specification

EGFR-S1026 Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P00533
Other Accession	NP_958440.1 , NP_005219.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	134277
Antigen Region	1004-1033

EGFR-S1026 Antibody (C-term) - 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

This EGFR-S1026 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1004-1033 amino acids from the C-terminal region of human EGFR-S1026.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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-S1026 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EGFR-S1026 Antibody (C-term) - 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](#), PubMed:[27153536](#), PubMed:[2790960](#), PubMed:[35538033](#)). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:[12297049](#), PubMed:[15611079](#), PubMed:[17909029](#), PubMed:[20837704](#), PubMed:[27153536](#), PubMed:[2790960](#), PubMed:[7679104](#), PubMed:[8144591](#), PubMed:[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](#)). 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). 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](#))

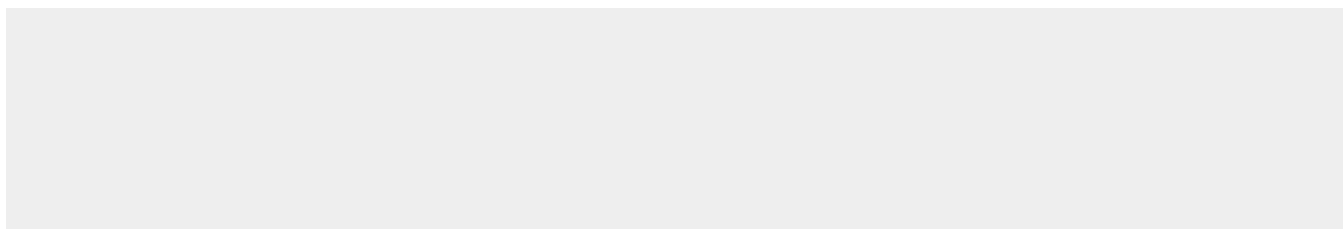
Tissue Location

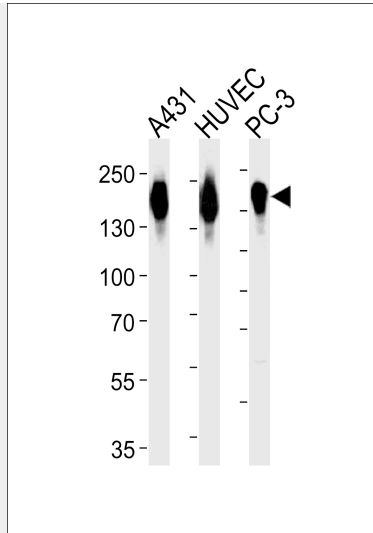
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

EGFR-S1026 Antibody (C-term) - Protocols

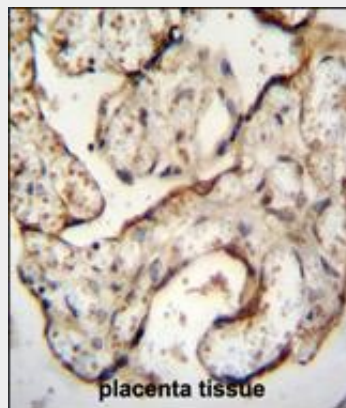
Provided below are standard protocols that you may find useful for product applications.

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

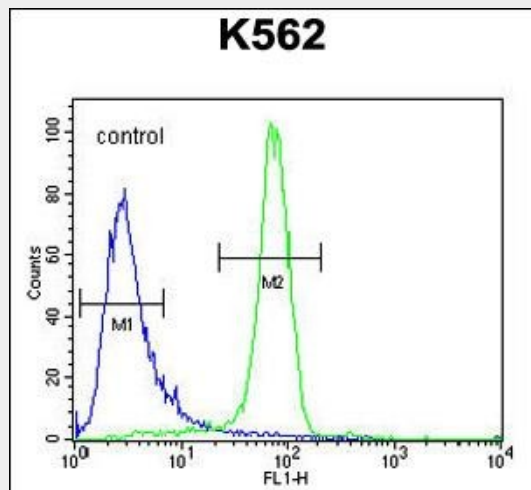
EGFR-S1026 Antibody (C-term) - Images



Western blot analysis of lysates from A431, HUVEC, PC-3 cell line (from left to right), using EGFR Antibody (pS1026)(Cat. #AP5436a). AP5436a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



EGFR-S1026 Antibody (C-term) (Cat. #AP5436a) immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the EGFR-S1026 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



EGFR-S1026 Antibody (C-term) (Cat. #AP5436a) flow cytometric analysis of K562 cells (right

histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EGFR-S1026 Antibody (C-term) - 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.

EGFR-S1026 Antibody (C-term) - References

Perez, C.A., et al. J. Urol. 183(5):2062-2069(2010)
Koumakpayi, I.H., et al. Br. J. Cancer 102(7):1163-1173(2010)
Cortot, A.B., et al. Cancer (2010) In press :
Lee, Y.J., et al. J. Cancer Res. Clin. Oncol. (2010) In press :
Kawahara, A., et al. Hum. Pathol. (2010) In press :
Wu, S.L., et al. Mol. Cell Proteomics 5(9):1610-1627(2006)
Wu, S.L., et al. J. Proteome Res. 4(4):1155-1170(2005)
Abe, Y., et al. J. Biol. Chem. 273(18):11150-11157(1998)
Li, W., et al. Mol. Cell. Biol. 12(12):5824-5833(1992)
Krieg, J., et al. J. Biol. Chem. 267(27):19258-19265(1992)
Lowenstein, E.J., et al. Cell 70(3):431-442(1992)
Chi, D.D., et al. Hum. Mol. Genet. 1 (2), 135 (1992) :
Countaway, J.L., et al. J. Biol. Chem. 267(2):1129-1140(1992)