

Rabbit EGFR Polyclonal Antibody | anti-EGFR antibody

EGFR Antibody (N-term)

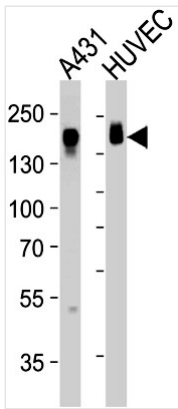
CATALOG # AAA287827	HOST Rabbit	REACTIVITY Human (Predicted Reactivity: Chicken, Mouse)	APPLICATIONS Western Blot, Immunohistochemistry, ELISA
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PRODUCT SYNONYMS

EGFR; Polyclonal Antibody; EGFR Antibody (N-term); Epidermal growth factor receptor; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1; ERBB; ERBB1; HER1; anti-EGFR antibody

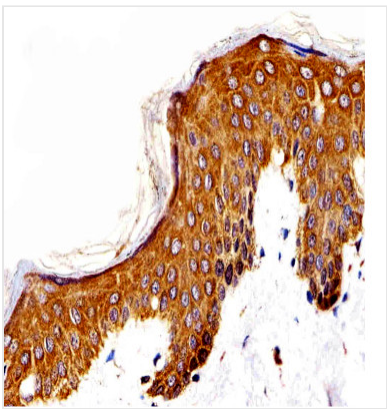
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Chicken, Mouse)
Clonality	Polyclonal
Isotype	IgG
Specificity	This EGFR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 259-287 amino acids from the N-terminal region of human EGFR.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	259-287
Sequence Length	628
Applicable Applications for anti-EGFR antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
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: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed: , PubMed:). 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:). 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:). Plays a role in enhancing learning and memory performance (By similarity).
Preparation and 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.



WB (Western Blot)

Western blot analysis of lysates from A431, HUVEC cell line (from left to right), using EGFR Antibody (N-term). AAA287827 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.



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded H. skin section using EGFR Antibody (N-term). AAA287827 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

ADDITIONAL INFORMATION

Related Product Information for anti-EGFR antibody	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.
Product Categories/Family for anti-EGFR antibody	Crown Antibodies; Cancer; Signal Transduction
References	Abdallah, R.T., et al. J. Biol. Chem. 285(45):35206-35215(2010) Lu, C., et al. Mol. Cell. Biol. 30(22):5432-5443(2010) Rosell, R., et al. Ann. N. Y. Acad. Sci. 1210, 45-52 (2010) : Hata, A., et al. J Thorac Oncol 5(10):1524-1528(2010) Aguirre, A., et al. Nature 467(7313):323-327(2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	29725609
NCBI GeneID	1956
NCBI Accession #	NP_005219.2; NP_958439.1; NP_958440.1; NP_958441.1
NCBI GenBank Nucleotide #	NM_005228.3
UniProt Accession #	P00533; O00688; O00732; P06268; Q14225; Q68GS5; Q92795; Q9BZS2; Q9GZX1; Q9H2C9; Q9H3C9; Q9UMD7
NCBI Official Full Name	epidermal growth factor receptor isoform a
NCBI Official Synonym Full Names	epidermal growth factor receptor
NCBI Official Symbol	EGFR
NCBI Official Synonym Symbols	ERBB; HER1; mENA; ERBB1; PIG61; NISBD2
NCBI Protein Information	epidermal growth factor receptor
UniProt Protein Name	Epidermal growth factor receptor
UniProt Gene Name	EGFR
UniProt Synonym Gene Names	ERBB; ERBB1; HER1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/egfr-antibody-western-blot-immunohistochemistry-elisa/287827>