

**Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR)
Recombinant Antibody
Catalog # APR10896**

Specification

Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) - Product Information

Application	FC, E, FTA
Primary Accession	P00533
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	145.54 KDa

Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) - Additional Information

Target/Specificity

ERBB1 / EGFR / HER1

Endotoxin

< 0.001EU/ µg,determined by LAL method.

Conjugation

Unconjugated

Expression system

CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) - 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:<<http://www.uniprot.org/citations/12297049>, PubMed:<<http://www.uniprot.org/citations/15611079>, PubMed:<<http://www.uniprot.org/citations/17909029>, PubMed:<<http://www.uniprot.org/citations/20837704>, PubMed:<<http://www.uniprot.org/citations/27153536>, PubMed:<<http://www.uniprot.org/citations/2790960>, PubMed:<<http://www.uniprot.org/citations/7679104>, PubMed:<<http://www.uniprot.org/citations/8144591>, PubMed:<<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:<<http://www.uniprot.org/citations/27153536>). May also activate the NF-kappa-B signaling cascade (PubMed:<<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:<<http://www.uniprot.org/citations/11602604>). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:<<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:<<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

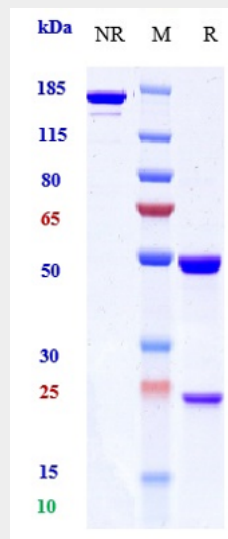
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) - Protocols

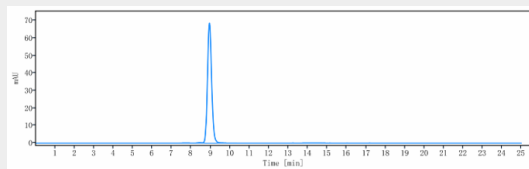
Provided below are standard protocols that you may find useful for product applications.

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

Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) - Images



Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-ERBB1 / EGFR / HER1 Reference Antibody (Regeneron patent anti-EGFR) is more than 99.32% ,determined by SEC-HPLC.