

**EGFR-S1026 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5162**

**Specification**

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

Application	<b>FC, IHC-P, WB,E</b>
Primary Accession	<a href="#"><b>P00533</b></a>
Other Accession	<a href="#"><b>NP_958440.1</b></a> , <a href="#"><b>NP_005219.2</b></a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>H=134;M=135;Rat=137 KDa</b>
Isotype	<b>Rabbit IgG</b>
Antigen Source	<b>HUMAN</b>

**EGFR-S1026 Antibody (C-term) - Additional Information**

**Gene ID** 1956

**Antigen Region**

1004-1033

**Other Names**

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

**Dilution**

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

**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.

**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:<a href="http://www.uniprot.org/citations/10805725" target="\_blank">10805725</a>, PubMed:<a href="http://www.uniprot.org/citations/27153536" target="\_blank">27153536</a>, PubMed:<a href="http://www.uniprot.org/citations/2790960" target="\_blank">2790960</a>, PubMed:<a href="http://www.uniprot.org/citations/35538033" target="\_blank">35538033</a>). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed:<a href="http://www.uniprot.org/citations/12297049" target="\_blank">12297049</a>, PubMed:<a href="http://www.uniprot.org/citations/15611079" target="\_blank">15611079</a>, PubMed:<a href="http://www.uniprot.org/citations/17909029" target="\_blank">17909029</a>, PubMed:<a href="http://www.uniprot.org/citations/20837704" target="\_blank">20837704</a>, PubMed:<a href="http://www.uniprot.org/citations/27153536" target="\_blank">27153536</a>, PubMed:<a href="http://www.uniprot.org/citations/2790960" target="\_blank">2790960</a>, PubMed:<a href="http://www.uniprot.org/citations/7679104" target="\_blank">7679104</a>, PubMed:<a href="http://www.uniprot.org/citations/8144591" target="\_blank">8144591</a>, PubMed:<a href="http://www.uniprot.org/citations/9419975" target="\_blank">9419975</a>). 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:<a href="http://www.uniprot.org/citations/27153536" target="\_blank">27153536</a>). May also activate the NF-kappa-B signaling cascade (PubMed:<a href="http://www.uniprot.org/citations/11116146" target="\_blank">11116146</a>). 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:<a href="http://www.uniprot.org/citations/11602604" target="\_blank">11602604</a>). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:<a href="http://www.uniprot.org/citations/11483589" target="\_blank">11483589</a>). 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:<a href="http://www.uniprot.org/citations/20462955" target="\_blank">20462955</a>). 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

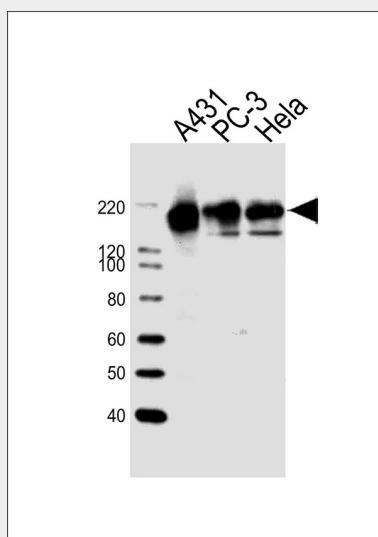
Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

## EGFR-S1026 Antibody (C-term) - Protocols

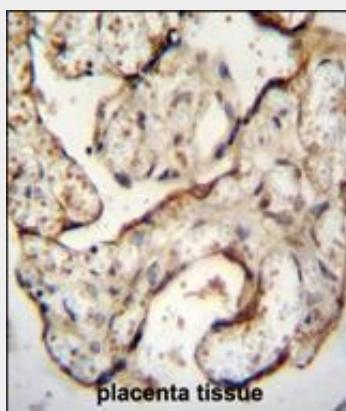
Provided below are standard protocols that you may find useful for product applications.

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

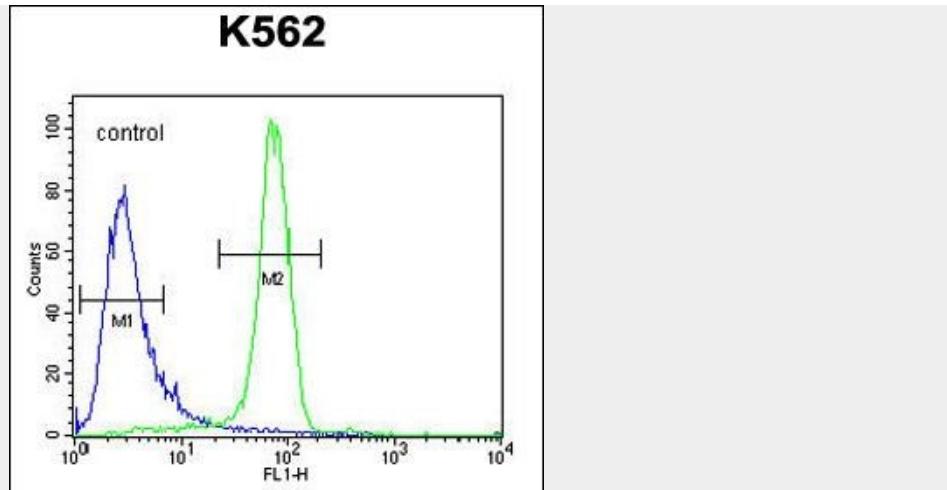
## EGFR-S1026 Antibody (C-term) - Images



Western blot analysis of lysates from A431,PC-3,HeLa cell line (from left to right), using EGFR Antibody (S1026)(Cat. #AW5162). AW5162 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



EGFR-S1026 Antibody (C-term) (Cat. #AW5162) 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. #AW5162) 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**

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