

Datasheet for ABIN129666

anti-EGFR antibody (AA 1175-1200)**2** Images**1** Publication[Go to Product page](#)

Overview

| | |
|----------------------|--|
| Quantity: | 100 µg |
| Target: | EGFR |
| Binding Specificity: | AA 1175-1200 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), ELISA, Immunohistochemistry (IHC) |

Product Details

| | |
|-----------------------------|--|
| Purpose: | EGFR Antibody |
| Immunogen: | <p>Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminus near amino acids 1175-1200 of human EGFR protein.</p> <p>Immunogen Type: Conjugated Peptide</p> |
| Isotype: | IgG |
| Cross-Reactivity (Details): | EGFR Antibody is directed against human epidermal growth factor receptor (EGFR) and is useful in determining its presence in ELISA and western blotting experiments. This antibody can detect EGFR from human, mouse and rat sources. |
| Characteristics: | Synonyms: rabbit anti-EGFR antibody, Epidermal growth factor receptor antibody, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, erbb 1, Erbb-1, Erbb1, HER1 antibody |

Product Details

Sterility: Sterile filtered

Target Details

Target: EGFR

Alternative Name: EGFR ([EGFR Products](#))

Background: Background: Anti-EGFR Antibody is ideal for Western Blotting, ELISA and IHC. EGFR is a transmembrane glycoprotein that is a member of a family of protein tyrosine kinases crucial in maintaining a normal balance in cell growth and development. Growth factor receptors are involved not only in promoting the proliferation of normal cells but also in the aberrant growth of many types of human tumors. For example, the epidermal growth factor receptor (EGFR) is mutated and/or overexpressed in many common solid human squamous cell carcinomas including breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. Over-expression of the EGFR gene occurs in carcinomas with and without gene amplification. EGFR and erbB-2 are particularly important in breast cancer because increased production or activation has been associated with poor prognosis. EGFR belongs to a family of growth factor receptors, which also includes ErbB-2/HER-2/neu, ErbB-3/HER-3/neu and ErbB-4/HER-4neu. EGFR can heterodimerize with each of the members of this family.

Gene ID: 1956, 29725609

UniProt: [P00533](#)

Pathways: [NF-kappaB Signaling](#), [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Stem Cell Maintenance](#), [Hepatitis C](#), [Positive Regulation of Response to DNA Damage Stimulus](#), [Interaction of EGFR with phospholipase C-gamma](#), [Thromboxane A2 Receptor Signaling](#), [EGFR Downregulation](#), [S100 Proteins](#)

Application Details

Application Notes: Immunohistochemistry Dilution: User Optimized

Application Note: This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 170 kDa in size corresponding to EGFR protein by western blotting in the appropriate cell lysate or extract. This antibody detects both non-phosphorylated and phosphorylated EGFR at residue Y1197.

Western Blot Dilution: 1:500 - 1:5,000

ELISA Dilution: 1:8,000 - 1:32,000

Application Details

Other: User Optimized

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01 % (w/v) Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store Anti-EGFR at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiry Date: 12 months

Publications

Product cited in: Dong, Saunders, Silasi-Mansat, Yu, Zhu, Lupu, Towner, Dong, Chen: "Therapeutic efficacy of a synthetic epsin mimetic peptide in glioma tumor model: uncovering multiple mechanisms beyond the VEGF-associated tumor angiogenesis." in: **Journal of neuro-oncology**, Vol. 138, Issue 1, pp. 17-27, (2019) ([PubMed](#)).



Western Blotting

Image 1. Western Blot of Rabbit anti-EGFR antibody. Marker: Opal Pre-stained ladder . Lane 1: HEK293 lysate . Lane 2: HeLa Lysate . Lane 3: MCF-7 Lysate . Lane 4: Jurkat Lysate . Lane 5: A431 Lysate . Lane 6: A549 Lysate . Lane 7: LNCap Lysate . Lane 8: MOLT-4 Lysate . Lane 9: Ramos Lysate . Lane 10: Raji Lysate . Lane 11: A-172 Lysate . Lane 12: NIH/3T3 Lysate . Load: 35 µg per lane. Primary antibody: EGFR antibody at 1ug/mL overnight at 4C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS for 30 min at RT. Predicted/Observed size: 170kDa for EGFR.



Western Blotting

Image 2. Western blot using Affinity Purified anti-EGFR antibody shows detection of a band at ~170 kDa (lane 1) corresponding to human EGFR present in unstimulated (lane 1) and EGF (50 ng/ml for 15 min) stimulated (lane 2) A431 whole cell lysates (arrowhead). Approximately 30 µg of lysate was separated on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocell-ulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,000. Reaction occurred overnight at 4° C followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). IRDye800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.