Mouse EGFR Alexa Fluor® 350-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1280U
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse EGFR in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant human (rh) EGFR and less than 5% cross-reactivity with rhErbB2, rhErbB3, and rhErbB4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse EGFR Leu25-Ser647 Accession # Q9EP98
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The EGFR subfamily of receptor tyrosine kinases comprises four members: EGFR (also known as Her1, ErbB1, or ErbB), ErbB2 (Neu, Her2), ErbB3 (Her3), and ErbB4 (Her4). All family members are type I transmembrane glycoproteins. They contain an extracellular ligand binding domain containing two cysteine-rich domains and a cytoplasmic domain containing a membrane-proximal tyrosine kinase domain followed by multiple tyrosine autophosphorylation sites (1, 2). The mouse EGFR cDNA encodes a 1210 amino acid (aa) precursor with a 24 aa signal peptide, a 623 aa extracellular domain (ECD), a 23 aa transmembrane segment, and a 540 aa cytoplasmic domain (3). Soluble receptors consisting of the extracellular ligand binding domain are generated by alternate splicing in human and mouse (4-6). Within the ECD, mouse EGFR shares 88% and 93% aa sequence identity with human and rat EGFR, respectively. It shares 44-48% aa sequence identity with the ECD of mouse ErbB2, ErbB3, and ErbB4. EGFR binds a subset of the EGF family ligands, including EGF, amphiregulin, TGF-α, betacellulin, epiregulin, HB-EGF, and epigen (1, 2). Ligand binding induces EGFR homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, heterodimerization tyrosine phosphorylation and cell signaling (7-11). EGFR can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGFR signaling regulates multiple biological functions including cell proliferation, differentiation, motility, and apoptosis (12, 13). EGFR is over-expressed in a wide variety of tumors and is the target of several anti-cancer drugs (14).

PRODUCT SPECIFIC NOTICES

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