

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human EGFR when phosphorylated at Y1197 in Western blots.               |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Rat IgG <sub>2B</sub> Clone # 869201                                 |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                      |
| <b>Immunogen</b>                                                                                                                                                                                        | Phosphopeptide containing the human EGFR Y1197 site                             |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

#### 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

EGF receptor, also known as ErbB1, is an approximately 160 kDa transmembrane receptor tyrosine kinase that binds multiple EGF family proteins. Ligand binding induces EGFR homodimerization or heterodimerization with ErbB2, 3, or 4 as well as activation of its kinase domain and phosphorylation within the cytoplasmic domain. Phosphorylation of Tyr869 by Src is important for full activation of the receptor. Phosphorylation of Tyr1197 by MAP kinases contributes to EGFR interaction with PIK3C2B. EGFR signaling regulates multiple biological functions including cell proliferation, differentiation, motility, and apoptosis. Three additional alternative splice forms lack the transmembrane and cytoplasmic domains. Within the ECD, human EGFR shares 88% aa sequence identity with mouse and rat EGFR.

#### PRODUCT SPECIFIC NOTICES

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