

## DESCRIPTION

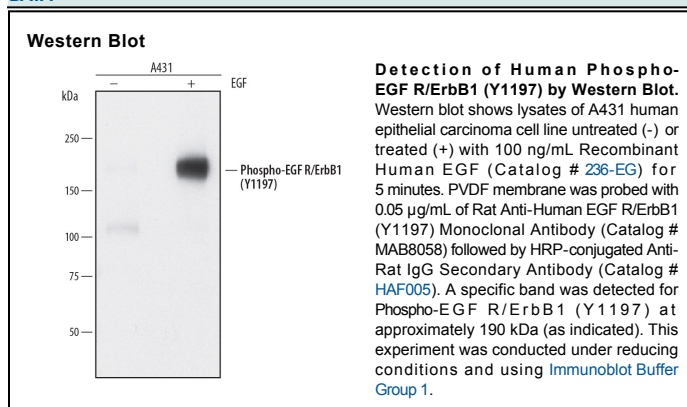
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human EGF R/ErbB1 (Y1197) in ELISAs and Western blots.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 869201
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Phosphopeptide containing the human EGF R/ErbB1 Y1197 site
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.05 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 EGF R 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 EGF R interaction with PIK3C2B. EGF R 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 EGF R shares 88% aa sequence identity with mouse and rat EGF R.