## **Elabscience**®

### Recombinant Phospho-EGF Receptor (Tyr1068) Monoclonal Antibody

### catalog number: AN300009L

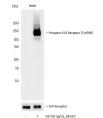
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

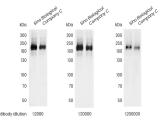
| Description  |  |
|--------------|--|
| Reactivity   | Human  |
| Immunogen    | A synthetic peptide corresponding to the residues around Tyr1068 of Human            |
|              | Phospho-EGF Receptor   |
| Host         | Rabbit   |
| Is otype     | IgG  |
| Clone        | 2B12   |
| Purification | Protein A  |
| Buffer       | 10 mM sodium HEPES, 150 mM NaCl, 100 $\mu$ g/mL protein protectant, 50% glycerol, pH |
|              | 7.5  |

Applications WB

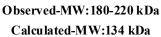
| Recommended    | Dilution |
|----------------|----------|
| 1:1000-1:10000 |          |

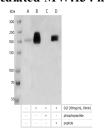
#### Data





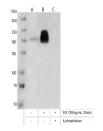
Western blot analysis of extracts from serum-starved Hela, untreated (-) or treated with EGF (Cat: PKSH031641)(10 ng/mL, 30min) using Phospho-EGF Receptor (Tyr1068) Monoclonal Antibody at 1:2000 dilution (upper), or Anti-EGFR Monoclonal Antibody at 1:2000 dilution (lower).





Western blot analysis of extracts from serum-starved Hela, treated with EGF (Cat: PKSH031641) (10 ng/mL, 30 min), using Phospho-EGF Receptor (Tyr1068) Monoclonal Antibody and other brands' antibodies (company C) at dilution of 1:2000, 1:20000 and 1:200000.

#### Observed-MW:180-220 kDa Calculated-MW:134 kDa



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Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with EGF (Cat: PKSH031641)(10 ng/mL, 30min), without peptide (line B) or antigen-specific phosphopeptide (line C) or antigen-specific peptide (line D) using Phospho-EGF Receptor (Tyr1068) Monoclonal Antibody at 1:5000 dilution.

> Observed-MW:180-220 kDa Calculated-MW:134 kDa

Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with EGF (Cat: PKSH031641)(10 ng/mL, 30min; +); treated with calyculin A and λphosphatase (line C) using Phospho-EGF Receptor (Tyr1068) Monoclonal Antibody at 1:5000 dilution.

> Observed-MW: 180-220 kDa Calculated-MW:134 kDa

| Preparation & Storage |  |
|-----------------------|--|
| Storage               | This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles. |
| Shipping              | Ice bag  |
| Background            |  |

The epidermal growth factor receptor (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 that have an extracellular domain which contains two cysteine-rich domains separated by a spacer region that is involved in ligand binding, and a cytoplasmic domain which has a membrane-proximal tyrosine kinase domain and a C-terminal tail with multiple tyrosine autophosphorylation sites. The human EGFR gene encodes a 1210 amino acid (aa) residue precursor with a 24 aa putative signal peptide, a 621 aa extracellular domain, a 23 aa transmembrane domain, and a 542 aa cytoplasmic domain. EGFR has been shown to bind a subset of the EGF family ligands, including EGF, amphiregulin, TGF-alpha, betacellulin, epiregulin, heparin-binding EGF and neuregulin-2 alpha in the absence of a co-receptor. Ligand binding induces EGFR homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGFR can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGFR signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGFR signaling has also been shown to play a role in carcinogenesis.