# EGFR/ErbB1/HER1 (C-6His), Human, Recombinant

**Cat. No. : PCK087**

## General Information

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| **Synonyms** | Epidermal Growth Factor Receptor;Proto-oncogene c-ErbB-1;Receptor tyrosine- Protein kinase erbB-1;EGFR;ERBB;ERBB1;HER1 |
| **Species** | Human |
| **Expression host** | Human Cells |
| **Sequence** | Leu25-Ser645 |
| **Accession** | P00533 |
| **Tag** | C-6His |
| **Mol mass** | 69.6 kDa |
| **Expiration date** | 12 months |
| **Bio activity** | Loaded Anti-Human EGFR mAb-Fc on Pro A Biosensor, can bind Recombinant Human EGFR-His with an affinity constant of 7.23 nM as determined in BLI assay. |

## Product feature

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| **Purity** | > 95% as determined by reducing SDS-PAGE. |
| **Endotoxin (EU/μg)** | < 0.1 |
| **Storage** | Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months. |
| **Shipping** | Ice bag |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 8% Sucrose, 50 mM Nacl, 0. 05% Tween80, pH 8.0. |
| **Reconstitution** | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |

## Background

The EGFR subfamily of Receptor tyrosine kinases is composed of EGFR, ErbB2, ErbB3 and ErbB4. The EGFR shares 43%-44% aa sequence identity with the ECD of human EGFR subfamily. All these family members are type I transmembrane glyco Proteins with an extracellular Ligand binding domain. The extracellular Ligand binding domain is containing two cysteine-rich domains separated by a spacer region and a cytoplasmic domain containing a membrane-proximal tyrosine kinase domain. Ligand binding could induce EGFR homodimerization and heterodimerization with ErbB2, resulting in cell signaling, heterodimerization tyrosine phosphorylation and kinase activation. It can bind EGF, amphiregulin, TGF-alpha, betacellulin, epiregulin, HB-EGF, epigen, and so on. Its signaling regulates multiple biological functions including cell proliferation, differentiation, motility, and apoptosis. EGFR can also be recruited to form heterodimers with the Ligand-activated ErbB3 or ErbB4. EGFR is overexpressed in different tumors. Several anti-cancer drugs use EGFR as target.