



Recombinant Human EGFR (C-6His)

Catalog #	EPT097
Expression Host	Human Cells
DESCRIPTION	Recombinant Human Epidermal Growth Factor Receptor is produced by our Mammalian expression system and the target gene encoding Leu25-Ser645 is expressed with a 6His tag at the C-terminus.
Accession	P00533
Synonyms	Epidermal growth factor receptor; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1; EGFR;ERBB; ERBB1; HER1
Mol Mass	69.6 KDa
AP Mol Mass	90-120 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.





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 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

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 glycoproteins 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.

SDS-PAGE

