



# Recombinant Protein Technical Manual

**Recombinant Human EGFR/ErbB1 Protein (aa 25-645, Fc Tag)(Active)**  
RPES3165

## Product Data:

**Product SKU:** RPES3165

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P00533

## Protein Information:

**Molecular Mass:** 95.7 kDa

**AP Molecular Mass:** 130 kDa

**Tag:** C-Fc

**Bio-activity:** Immobilized Human EGF(Cat: PKSH033687) at 10µg/ml(100 µl/well) can bind Human EGFR-Fc.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Epidermal growth factor receptor; EGFR; Proto-oncogene c-ErbB; Receptortyrosine-protein kinase erbB; EGFR

## Immunogen Information:

**Sequence:** Leu25-Ser645

## Background:

EGFR is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling.