

## 32-3002: EGFR Sf9 Recombinant Protein

**Alternative Name :** Epidermal growth factor receptor, EC 2.7.10.1, Receptor tyrosine-protein kinase ErbB-1, ERBB, mENA, ERBB1, EGFR.

### Description

Source : Baculovirus infected Sf9 cells. EGFR Human Recombinant encoding a.a. 672-1210 expressed in Baculovirus infected Sf9 cells, fused with a GST-tag at N-terminus with thrombin cleavage sites, having a molecular weight of 89,171 Dalton. EGFR is purified by proprietary chromatographic techniques. The epidermal growth factor receptor (EGF R) subfamily of receptor tyrosine kinases comprises four members: EGF R (also known as HER1, ErbB1 or ErbB), ErbB2 (Neu, HER-2), ErbB3 (HER-3), and ErbB4 (HER-4). All family members are type I transmembrane glycoprotein that has 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 EGF R 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. EGF R has been shown to bind a subset of the EGF family ligands, including EGF, amphiregulin, TGF $\beta$ , betacellulin, epiregulin, heparin-binding EGF and neuregulin-2 in the absence of a co-receptor. Ligand binding induces EGF R homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGF R can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGF R signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGF R signaling has also been shown to play a role in carcinogenesis.

### Product Info

**Amount :** 5  $\mu$ g  
**Content :** EGFR in 50mM HEPES pH 7.5, 100mM NaCl, 5mM DTT, 15mM reduced glutathione and 20% glycerol.  
**Storage condition :** Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months. Please avoid freeze-thaw cycles.

### Application Note

Determination of Km value by Filter binding assay MAFC membrane.