

Product datasheet for TP727183

OriGene Technologies, Inc.

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EGFR Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant Human Epidermal Growth Factor Receptor/EGFR/ErbB1/HER1 (C-6His)

Species: Human

Expression cDNA Clone

or AA Sequence:

Leu25-Ser645

Tag: C-His

Buffer: Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

Note: 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.

Stability: 12 months from date of despatch

Locus ID: 1956 **UniProt ID:** P00533

Summary: 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.

