

Recombinant Human EGFR protein, Avi/His-tagged, Biotinylated

Cat. No. EGFR-287H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human EGFR Protein (25-645aa), was expressed in HEK293 with C-terminal Avi tag and His tag.
Species	Human
Source	HEK293
ProteinLength	25-645 aa
Description	The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer. The type III EGF deletion-mutant receptor (EGFRvIII) is the most common mutation and was first identified in primary human glioblastoma tumors; EGFR gene amplification is correlated with the structural rearrangement of the gene. The EGFRvIII gene has an in-frame deletion of 801 base pairs, corresponding to exons 2–7 in the mRNA, resulting in the deletion of amino acids 30-297 in the extracellular domain and the generation of a glycine at the fusion point
Predicted N Terminal	Leu 25

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Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Molecular Mass	Has a calculated MW of 41.3 kDa. As a result of glycosylation, The protein migrates as 60-70 kDa under reducing (R) condition and 60-70 kDa under non-reducing (NR) condition on SDS-PAGE gel.
AA Sequence	LEEKKGNYVVTDHGSCVRACGADSYEMEEDGVRKCKKCEGPCRKVCNGIGIGEFK DSLSINATNIKHFKNCTSIGDLHILPVAFRGDSFTHTPPLDPQELDILKTVKEITGFLLI QAWPENRTDLHAFENLEIRGRTKQHGGQFSLAVVSLNITSLGLRSLKEISDGDVIISGN KNLCYANTINWKKLFGTSGQKTKIISNRGENSCKATGQVCHALCSPEGCWGPEPRD CVSCRNVSRGRECVDKCNLLEGEPREFVENSECIQCHPECLPQAMNITCTGRGPD NCIQCAHYIDGPHCVKTCAPAGVMGENNTLVWKYADAGHVCHLCHPNCTYGCTGPG LEGCPTNGPKIPSGLNDIFEAQKIEWHEHHHHHH
Endotoxin	Less than 1.0 EU per µg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. No activity loss is observed after storage at: 4-8 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 200 µg/mL in sterile deionized water.
Conjugation	Biotin

GENE INFORMATION

Gene Name	EGFR epidermal growth factor receptor [Homo sapiens]
Official Symbol	EGFR
Synonyms	EGFR; epidermal growth factor receptor; epidermal growth factor receptor (avian erythroblastic leukemia viral (v erb b) oncogene homolog) , ERBB; ERBB1; erythroblastic leukemia viral (v erb b) oncogene homolog (avian); proto-oncogene c-ErbB-1; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; receptor tyrosine-protein kinase erbB-1; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog; ERBB; HER1; mENA; PIG61;
Gene ID	1956
mRNA Refseq	NM_005228
Protein Refseq	NP_005219
MIM	131550
UniProt ID	P00533
Chromosome Location	7p12
Pathway	Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Arf6 signaling events, organism-specific biosystem; Axon guidance, organism-specific biosystem; Bladder cancer, organism-specific biosystem;

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Function

ATP binding; MAPK/ERK kinase kinase activity; actin filament binding; double-stranded DNA binding; enzyme binding; epidermal growth factor-activated receptor activity; epidermal growth factor-activated receptor activity; identical protein binding; contributes_to nitric-oxide synthase regulator activity; nucleotide binding; protein binding; protein heterodimerization activity; protein phosphatase binding; protein tyrosine kinase activity; protein tyrosine kinase activity; protein tyrosine kinase activity; receptor activity; receptor signaling protein tyrosine kinase activity; signal transducer activity; transmembrane receptor protein tyrosine kinase activity; transmembrane receptor protein tyrosine kinase activity; transmembrane signaling receptor activity;

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