

Epidermal Growth Factor Receptor (EGFR) Active Protein | EGFR active protein

Active Epidermal Growth Factor Receptor (EGFR)

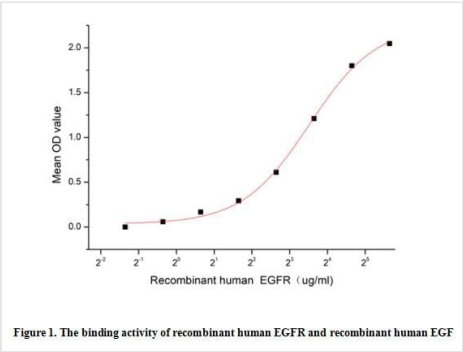
CATALOG # AAA161774	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Epidermal Growth Factor Receptor (EGFR); Active Epidermal Growth Factor Receptor (EGFR); Epidermal Growth Factor Receptor; EGFR active protein (eukaryotic; 293F cell); Human; ErbB-1; ErbB1; ER1; ERB-B1; MENA; HER1; Erythroblastic Leukemia Viral(v-Erb-B)oncogene Homolog; Avian; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-14; EGFR active protein

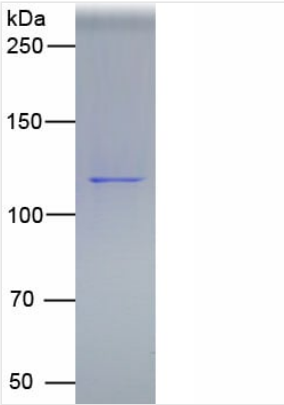
PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Leu25~Ser6 45
Applicable Applications for EGFR active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Eukaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.5
Research Area	CD & Adhesion molecule, Tumor immunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

The epidermal growth factor receptor (EGFR) is a growth factor receptor that induces cell differentiation and proliferation upon activation through the binding of one of its ligands. The receptor is located at the cell surface, where the binding of a ligand activates a tyrosine kinase in the intracellular region of the receptor. This tyrosine kinase phosphorylates a number of intracellular substrates that activates pathways leading to cell growth, DNA synthesis and the expression of oncogenes such as fos and jun. Epidermal growth factor (EGF) family peptides are ligands for the EGF receptor (EGFR), thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human EGFR and recombinant human EGF. Briefly, biotin-linked EGFR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to EGF-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human EGFR and recombinant human EGF was shown in Figure 1, the EC50 for this effect is 11.46 ug/mL.



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for EGFR active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	29725609
NCBI GeneID	1956
NCBI Accession #	NP_005219.2
NCBI GenBank Nucleotide #	NM_005228.3
UniProt Accession #	P00533; O00688; O00732; P06268; Q14225; Q68GS5; Q92795; Q9BZS2; Q9GZX1; Q9H2C9; Q9H3C9; Q9UMD7
Molecular Weight	134,277 Da
NCBI Official Full Name	epidermal growth factor receptor isoform a
NCBI Official Synonym Full Names	epidermal growth factor receptor
NCBI Official Symbol	EGFR
NCBI Official Synonym Symbols	ERBB; HER1; mENA; ERBB1; PIG61
NCBI Protein Information	epidermal growth factor receptor; 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
UniProt Protein Name	Epidermal growth factor receptor
UniProt Gene Name	EGFR

UniProt Synonym Gene Names	ERBB; ERBB1; HER1
UniProt Entry Name	EGFR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/293f-active-protein/epidermal-growth-factor-receptor-egfr/161774>