

Product datasheet for TP509803

OriGene Technologies, Inc.

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Egfr (NM_007912) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse epidermal growth factor receptor (Egfr), with C-terminal

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR209803 representing NM_007912 Clone or AA Sequence: Red=Cloning site Green=Tags(s)

MRPSGTARTTLLVLLTALCAAGGALEEKKVCQGTSNRLTQLGTFEDHFLSLQRMYNNCEVVLGNLEITYV QRNYDLSFLKTIQEVAGYVLIALNTVERIPLENLQIIRGNALYENTYALAILSNYGTNRTGLRELPMRNL QEILIGAVRFSNNPILCNMDTIQWRDIVQNVFMSNMSMDLQSHPSSCPKCDPSCPNGSCWGGGEENCQKL TKIICAQQCSHRCRGRSPSDCCHNQCAAGCTGPRESDCLVCQKFQDEATCKDTCPPLMLYNPTTYQMDVN PEGKYSFGATCVKKCPRNYVVTDHGSCVRACGPDYYEVEEDGIRKCKKCDGPCRKVCNGIGIGEFKDTLS INATNIKHFKYCTAISGDLHILPVAFKGDSFTRTPPLDPRELEILKTVKEITGFLLIQAWPDNWTDLHAF ENLEIIRGRTKQHGQFSLAVVGLNITSLGLRSLKEISDGDVIISGNRNLCYANTINWKKLFGTPNQKTKI MNNRAEKDCKAVNHVCNPLCSSEGCWGPEPRDCVSCQNVSRGRECVEKCNILEGEPREFVENSECIQCHP ECLPQAMNITCTGRGPDNCIQCAHYIDGPHCVKTCPAGIMGENNTLVWKYADANNVCHLCHANCTYGCAG

PGLQGCEVWPSGYVQWQWILKTFWI

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 73.4 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.





Egfr (NM_007912) Mouse Recombinant Protein - TP509803

RefSeq: NP 031938

Locus ID: 13649 Q9WVF5 **UniProt ID:** RefSeq Size: 2678

11 9.41 cM Cytogenetics:

RefSeq ORF: 1965

Synonyms: 9030024J15Rik; AI552599; Erbb; Errb1; Errp; wa-2; wa2; Wa5

Summary: Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling

cascades to convert extracellular cues into appropriate cellular responses (PubMed:8404850).

Known ligands include EGF, TGFA/TGF-alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homoand/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. 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. Also phosphorylates MUC1 and increases its interaction with

SRC and CTNNB1/beta-catenin (By similarity). Plays a role in enhancing learning and memory

performance (PubMed:20639532).[UniProtKB/Swiss-Prot Function]