

Product datasheet for **RC217335**

EGFR (NM_201284) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EGFR (NM_201284) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EGFR
Synonyms:	ERBB; ERBB1; ERRP; HER1; mENA; NISBD2; PIG61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC217335 representing NM_201284
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCGACCCTCCGGGACGGCCGGGGCAGCGCTCCTGGCGTGCTGGCTGCGCTCTGCCCGCGAGTCCGG
 CTCTGGAGGAAAAGAAAGTTTGCCAAGGCACGAGTAACAAGCTCACGAGTTGGGCACTTTGAAGATCA
 TTTTCTCAGCCTCCAGAGGATGTCAATAACTGTGAGGTGGTCTTGGGAATTTGAAAATTACCTATGTG
 CAGAGGAATTATGATCTTCTCTTAAAGACCATCCAGGAGGTGGTGTATGTCTCATTGCCCTCA
 ACACAGTGGAGCGAATTCCTTTGAAAACCTGCAGATCATCAGAGGAAATATGTAACGAAAATTCCTA
 TGCCTTAGCAGTCTTATCTAACTATGATGCAAATAAAACCGGACTGAAGGAGCTGCCCATGAGAAATTA
 CAGGAAATCCTGCATGGCGCCGTGCGGTTACGCAACAACCCTGCCCTGTGCAACGTGGAGAGCATCCAGT
 GCGGGACATAGTCAGCAGTGACTTTCTCAGCAACATGTCGATGGACTTCCAGAACCACCTGGGCAGCTG
 CCAAAAGTGTGATCCAAGCTGTCCAATGGGAGCTGCTGGGGTGCAGGAGAGGAGAACTGCCAGAACTG
 ACCAAAATCATCTGTGCCAGCAGTGCTCCGGGCGCTGCCGTGGCAAGTCCCCCAGTGACTGCTGCCACA
 ACCAGTGTGCTGCAGGCTGCACAGGCCCCCGGGAGAGCGACTGCCTGGTCTGCCGCAAAATCCGAGACGA
 AGCCACGTGCAAGGACACCTGCCCCCACTCATGCTCTACAACCCACCAGTACCAGATGGATGTGAAC
 CCCGAGGGCAAAATACAGCTTTGGTGCCACCTGCGTGAAGAAGTGTCCCGTAATTATGTGGTGACAGATC
 ACGGCTCGTGCCTCCGAGCCTGTGGGGCCGACAGCTATGAGATGGAGGAAGACGGCGTCCGCAAGTGTA
 GAAGTGCAGGGCCCTTCCCGCAAAGTGTGAACGGAATAGGTATTGGTGAATTTAAAGACTCACTCTCC
 ATAAATGCTACGAATATTAACACTTCAAAAACCTGCACCTCCATCAGTGGCGATCTCCACATCCTGCCGG
 TGGCATTAGGGGTGACTCCTTACACATACTCCTCCTCTGGATCCACAGGAACTGGATATTCTGAAAAC
 CGTAAAGGAAATCACAGGGTTTTGCTGATTTCAGGCTTGGCCTGAAAACAGGACGGACCTCCATGCCTTT
 GAGAACCTAGAAATCATACGCGGCAGGACCAAGCAACATGGTCAGTTTTCTCTTGCACTGTCAGCCTGA
 ACATAACATCCTTGGGATTACGCTCCCTCAAGGAGATAAGTGATGGAGATGTGATAATTTAGGAAACAA
 AAATTTGTGCTATGCAAAACAATAAACTGGAAAAAACTGTTTGGGACCTCCGGTCAGAAAACAAAATT
 ATAAGCAACAGAGGTGAAAACAGCTGCAAGGCCACAGGCCAGGTCTGCCATGCCTTGTGCTCCCCGAGG
 GCTGCTGGGGCCCGAGCCAGGACTGCGTCTTGGCCGAATGTCAGCCGAGGCAGGGAATGCGTGGA
 CAAGTGAACCTTCTGGAGGGTGAAGCAAGGGAGTTTGGGAGAACTCTGAGTGCATACAGTGCCACCCA
 GAGTGCCTGCCTCAGGCCATGAACATCACCTGCACAGGACGGGGACCAGACAACGTATCCAGTGTGCC
 ACTACATTGACGGCCCCACTGCGTCAAGACCTGCCCGCAGGAGTCATGGGAGAAAACAACACCCTGGT
 CTGGAAGTACGCAGACGCCGGCCATGTGTGCCACCTGTGCCATCCAACTGCACCTACGGGCCAGGAAAT
 GAGAGTCTCAAAGCCATGTTATTCTGCCTTTTAAACTATCATCTGTAATCAAAGTAATGATGGCAGCG
 TGTCCCACCAGAGCGGGAGCCAGCTGCTCAGGAGTCATGCTTAGGATGGATCCCTTCTCTTCTGCCGTC
 AGAGTTTACAGTGGGTTGGGGTGGATGCAGCCACCTCCATGCCTGGCCTTCTGCATCTGTGATCATCAG
 GCCTCCTCCTGCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217335 representing NM_201284
Red=Cloning site Green=Tags(s)

MRPSGTAGAALLALLAALCPASRALEEKKVCQGTSNKL TQLGTFEDHFLSLQRMFNCEVVLGNLEITYV
 QRNYDLSFLKTIQEVAGYVLIALNTVERIPLNLQIIRGNMYYENSYALAVLSNYDANKTGLKELPMRNL
 QEILHGAVRFSNNPALCNVESIQWRDIVSSDFLSNMSMDFQNHLGSCQKCDPSCPNGSCWGAGEENCQKL
 TKIICAQQCSGRCRGKSPSDCCNHQCAAGCTGPRESDECLVCRKFRDEATCKDTCPPMLLYNPPTYQMDVN
 PEGKYSFGATCVKKCPRNYVVDHGSCVRACGADSYEMEEDGVRKCKKCEGPCRKVCNGIGIGEFKDSLS
 INATNIKHFKNCTISIGDLHILPVAFRGDSFHTPPLDPQELDILKTVKEITGFLLIQAWPENRDLHAF
 ENLEIIRGRKQHGQFSLAVVSLNITSLGLRSLKEISDGDVIIISGNKNLCYANTINWKKLFGTSGQKTKI
 ISNRGENSCKATGQVCHALCSPEGCWGPPEPRDCVSCRNVSRGECVDKCNLLEGEPPREFVENSEIQCHP
 ECLPQAMNITCTGRGPDNCIQCAHYIDGPHCVKTCPAGVMGENNTLVWKYADAGHVCHLCHPNCTYGPNG
 ESLKAMLFCLFKLSSCNQSDGVS HQSGSPAAQESCLGWIPSLLPSEFQLGWGGCSHLHAWPSASVIIT
 ASSCH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_201284

ORF Size: 2115 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_201284.1](#), [NP_958441.1](#)

RefSeq Size: 2865 bp

RefSeq ORF: 2118 bp

Locus ID: 1956

UniProt ID: [P00533](#)

Cytogenetics: 7p11.2

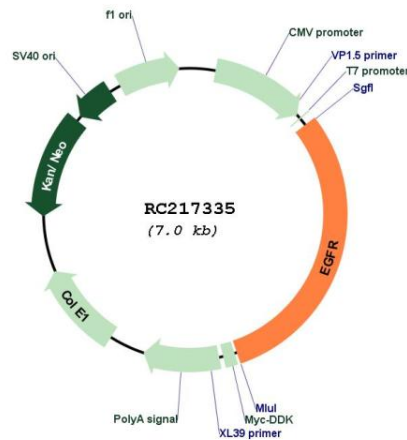
Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Secreted Protein, Stem cell relevant signaling - JAK/STAT signaling pathway, Transmembrane

Protein Pathways: Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-cytokine receptor interaction, Dorso-ventral axis formation, Endocytosis, Endometrial cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton

MW: 75 kDa

Gene Summary:

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor, thus inducing receptor dimerization and tyrosine autophosphorylation leading to cell proliferation. Mutations in this gene are associated with lung cancer. EGFR is a component of the cytokine storm which contributes to a severe form of Coronavirus Disease 2019 (COVID-19) resulting from infection with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). [provided by RefSeq, Jul 2020]

Product images:


Circular map for RC217335