

Product datasheet for **MG226160**

Egfr (NM_207655) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Egfr (NM_207655) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Egfr
Synonyms:	9030024J15Rik; AI552599; Erbb; Errb1; Errp; wa-2; wa2; Wa5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226160 representing NM_207655 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGACCCTCAGGGACCGGAGAACCACACTGCTGGTGTGCTGACCGCCTCTGCGCCGAGGTGGG
CGTTGGAGGAAAAGAAAGTCTGCCAAGGCACAAGTAACAGGCTCACCCAAGTGGGCACTTTTGAAGACCA
CTTTCTGAGCCTGCAGAGGATGTACAACAAGTGAAGTGGTCTTGGGAACTTGGAAATACCTATGTG
CAAAGGAATTACGACCTTCTCTTAAAGACCATCCAGGAGGTGCCGGCTATGTCCTCATTGCCCTCA
ACACCGTGGAGAGAATCCCTTTGGAGAAGTGCAGATCATCAGGGGAAATGCTCTTTATGAAAACACCTA
TGCCCTTAGCCATCCTGTCCAATATGGGACAAACAGAAGTGGGCTTAGGGAACTGCCATGCGGAACTTA
CAGGAAATCCTGATTGGTGTGCGATTGAGCAACAACCCATCCTCTGCAATATGGATACTATCCAGT
GGAGGGACATCGTCCAAAACGCTTTATGAGCAACATGCAATGGACTTACAGAGCCATCCGAGCAGTTG
CCCCAAATGTGATCCAAGCTGTCCCAATGGAAGCTGTGGGGAGGAGGAGGAGAACTGCCAGAAATG
ACCAAAATCATCTGTGCCAGCAATGTTCCCATCGCTGTGCTGGCAGGTCCCCAGTGACTGCTGCCACA
GGCCACATGCAAAGACACCTGCCACCCTCATGCTGTACAACCCACCACCTATCAGATGGATGCAAC
CCTGAAGGGAAGTACAGCTTTGGTGCACCTGTGTGAAGAAGTGCCTCCGAAAGTACGTTGGTGCAGATC
ATGGCTCATGTGTCAGCCTGTGGCCTGACTACTACGAAGTGAAGAAGATGGCATCCGCAAGTGTA
AAAATGTGATGGCCCTGTGCGAAAGTTTGAATGGCATAGGCATTGGTGAATTTAAAGACACACTCTCC
ATAAATGCTACAAACATCAAACCTTCAAATACTGCACTGCCATCAGCGGGACCTTACATCCTGCCAG
TGGCCTTTAAGGGGATTCTTTCACGCGCACTCCTCCTAGACCCACGAGAAGTAAAGAAATCTAAAAAC
CGTAAAGGAAATAACAGGCTTTTGTGATTGAGGCTTGGCTGATAACTGGACTGACCTCCATGCTTTC
GAGAACCTAGAAATAATACGTGGCAGAACAAAGCAACATGGTCAGTTTTCTTTGGCGGCTGTTGGCTGA
ACATCACATCACTGGGCTGCGTCCCTCAAGGAGATCAGTGATGGGGATGTGATCATTTCTGAAAACCG
AAATTTGTGCTACGCAACACAATAAAGTGAAGAACTCTTCGGACACCCAATCAGAAAACCAAAATC



[View online »](#)

ATGAACAACAGAGCTGAGAAAGACTGCAAGGCCGTGAACCACGTCTGCAATCCTTTATGCTCCTCGGAAG
GCTGCTGGGGCCCTGAGCCCAGGGACTGTGTCTCTGCCAGAATGTGAGCAGAGGGAGGGAGTGCCTGGA
GAAATGCAACATCCTGGAGGGGGAACCAAGGGAGTTTGTGAAAAATCTGAATGCATCCAGTGCCATCCA
GAATGTCTGCCCCAGGCCATGAACATCACCTGTACAGGCAGGGGACCAGACAACCTGCATCCAGTGTGCC
ACTACATTGATGGCCACACTGTGTCAAGACCTGCCAGCTGGCATCATGGGAGAGAACAACACTCTGGT
CTGGAAGTATGCAGATGCCAATAATGTCTGCCACCTATGCCACGCCAAGTGTACCTATGGATGTGCTGGG
CCAGGCTTCAAGGATGTGAAGTGTGGCCATCTGGGCCAAAGATACCATCTATTGCCACTGGGATTGTGG
GTGGCCTCCTCTCATAGTGGTGGTGGCCCTTGGGATTGGCCTATTCATGCGAAGACGTACATTGTTCCG
AAAGCGTACACTACGCCCGCTGCTTCAAGAGAGAGAGCTCGTGGAACCTCTCACACCCAGCGGAGAGCT
CCAAACCAAGCCCACTTGAGGATATTAAGGAAACAGAATTCAAAAAGATCAAAGTTCTGGGTTCCGGGAG
CATTTGGCACAGTGTATAAGGTCTCTGGATCCCAGAAGGTGAGAAAAGTAAAAATCCCGTGGCCATCAA
GGAGTTAAGAGAAGCCACATCTCCAAAAGCCAACAAGAATCCTTGACGAAGCCTATGTGATGGCTAGT
GTGGACAACCCTCATGTATGCCGCCTCTGGGCATCTGTCTGACCTCCACTGTCCAGCTCATTACACAGC
TCATGCCCTACGGTTGCCTCCTGGACTACGTCCGAGAACAAGGACAACATTGGCTCCCAGTACCTCCT
CAACTGGTGTGTGAGATTGCAAAGGGCATGAACTACCTGGAAGATCGGGCTTTGGTGCACCGTGACTTG
GCAGCCAGGAATGTACTGGTGAAGACACCACAGCATGTCAAGATCACAGATTTTGGGCTGGCCAACTGC
TTGGTGCTGAAGAGAAAAGATATCATGCCGAGGGGGGCAAAGTGCCTATCAAGTGGATGGCTTTGGAATC
AATTTTACACCGAATTTATACACACCAAAGTGTGTCTGGAGCTATGGTGTCACTGTGTGGGAACTGATG
ACCTTTGGGTCCAAGCCTTATGATGGAATCCCAGCAAGTGACATCTCATCCATCCTAGAGAAAGGAGAGC
GCCTTCCACAGCCACCTATCTGCACCATCGATGTCTACATGATCATGGTCAAGTGTGGATGATAGATGC
TGATAGCCGCCAAAAGTCCGAGAGTTGATTCTTGAATTCTCCAAAATGGCCCGAGACCCACAGCGCTAC
CTTGTTATCCAGGGGATGAAAGAATGCATTTGCCAAGCCCTACAGACTCCAACCTTTACCGAGCCCTGA
TGGATGAAGAGGACATGGAGGATGTAGTTGATGCTGATGAGTATCTTATCCACAGCAAGGCTTCTTCAA
CAGCCCGTCCACGTGAGGACTCCCTCTTGAGTTCTCTGAGTGCAACTAGCAACAATTCCACTGTGGCT
TGCATTAATAGAAATGGGAGCTGCCGTGTCAAAGAAGACGCCTTCTTGCAGCGGTACAGTCCGACCCCA
CAGGTGCTGTAACAGAGGACAACATAGATGACGCATTCTCCCTGTACCTGAATATGTAACCAATCTGT
TCCAAGAGGCCAGCAGGCTCTGTGCAGAACCTGTCTATCACAATCAGCCCTGCATCCAGCTCCTGGA
AGAGACCTGCATTATCAAAATCCCACAGCAATGCAGTGGGCAACCCTGAGTATCTCAACACTGCCAGC
CTACCTGTCTCAGTAGTGGTTTAAACAGCCCTGCACTCTGGATCCAGAAAGGCAGTACCAAATGAGCCT
AGACAACCCTGACTACCAGCAGGACTTCTTCCCAAGGAAACCAAGCCAAATGGCATATTTAAGGGCCCC
ACAGCTGAAAATGCAGAGTACCTACGGGTGGCACCTCCAAGCAGTGAGTTTATTGGAGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226160 representing NM_207655
 Red=Cloning site Green=Tags(s)

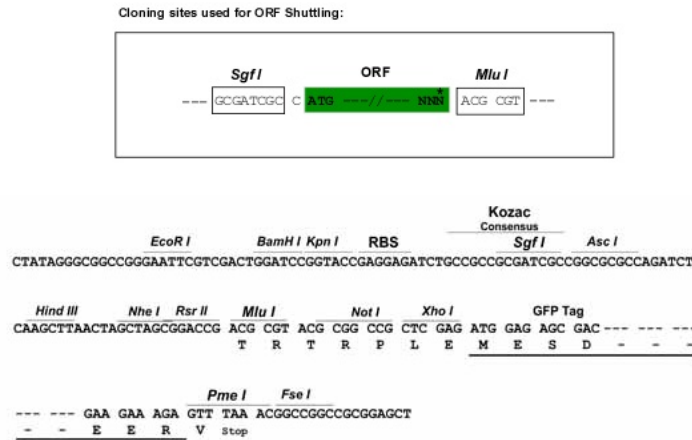
MRPSGTARTTLLVLLTALCAAGGALEEKVKCQGTSNRLTQLGTFEDHFLSLQRMYNNCEVVLGNLEITYV
 QRNYDL SFLKTIQEVAGYVLI ALNTVERIPL ENLQIIRGNALYENTYALAILSNYGTNR TGLRELPMRNL
 QEILIGAVRF SNNPILCNMDTIQWRDIVQNVFMSNM SMDLQSHPS SPCPKDCP SCNGSCWGGGEENCQKL
 TKIICAQQCSHRCRGRSPSDCCHNQCAAGCTGPRES DCLVCQKFQDEATCKDTC PPLMLYNPTTYQMDVN
 PEGKYSFGATCVKKCP RNYVVTDHGSCVRACGPDYVEEEDGIRKCKKCDGPCRKVCNGIGIGEFKDTLS
 INATNIKHFKYCTAISGDLHILPVAFKGSFTRTPPLDPRELEILKTVKEITGFLLIQAWPDNWTDLHAF
 ENLEIIRGR TKQH GQFSLAVVGLNITSLGLRSLKEISDGDV IISGNRNL CYANTINWKKLFGTPNQTKI
 MNNRAEKDCKAVNHVCNPLCSSEGCWGP EPRDCVSCQNVSRG RECVEKCNILEGEPREFVENSECIQCHP
 ECLPQAMNITCTGRGPDNCIQCAHYIDGPHCVKTC PAGINGENNTLVW KYADANNVCHLCHANCTYGCAG
 PGLQGCEVWPSGPKIPSIATGIVGGLL FIVVVALGIGL FMRRRHIVRKRTL RRLQLERELVEPLTPSGEA
 PNQAHLRILKETEFKKIKVLGSGAFGT VYKGLWIPEGEKVIPVAIKELREATSPKANKEILDEAYVMAS
 VDNPHVCRLLGICLTSTVQLITQLMPY GCLLDYVREHKDNI GSQYLLNWCVQIAKGMNYLED RRLVHRDL
 AARNVLVKTPQHVKITDFGLAKLLGAE EKEYHAEGGKVP IKWMALESILHRIYTHQSDVWSYGVTVWELM
 TFGSKPYDGIPASDISSILEKGERLPQPPICTIDVY MIMVKCWMIDADSRPKFRELILEFSKMARDPQRY
 LVIQGDERMHLPSPTDSNFYRALMDEEDMEDVVD ADEYLIPQGGFFNSPSTSRTPLLSSLSATSNNSTVA
 CINRNGSCRVKEDAF LQRYSSDPTGAVTEDNIDDAFLPVPEYV NQSVPKRPAGSVQNPVYHNQPLHPAPG
 RDLHYQNPHSNAVGNPEYLN TAQPTCLSSGFNSPALW IQKGS HQMSLDNPDYQQDFFPKETKPNGIFKGP
 TAENAEYLRVAPPSSEFIGA

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1153_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

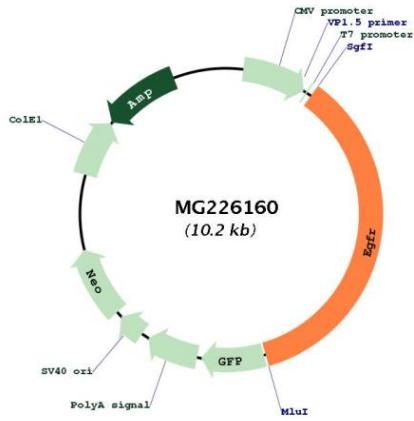


ACCN: NM_207655

ORF Size: 3630 bp

OTI Disclaimer:	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:	<ol style="list-style-type: none">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_207655.2 , NP_997538.1
RefSeq Size:	5983 bp
RefSeq ORF:	3633 bp
Locus ID:	13649
UniProt ID:	Q01279
Cytogenetics:	11 9.41 cM
Gene 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 homo- and/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]

Product images:



Circular map for MG226160