

Product datasheet for **MR226206**

Ngfr (NM_033217) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ngfr (NM_033217) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ngfr
Synonyms:	LNGFR; p75; p75NGFR; p75NTR; Tnfrsf16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

 >MR226206 representing NM_033217
 Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

 ATGAGGAGGGCAGGTGCTGCCTGCAGCGCCATGGACCGGCTGCGCCTGCTGCTGCTGCTGCTGCTC
 TAGGGGTGTCCTTTGGAGGTGCCAAGGAGACATGTTCCACAGGCATGTACACCCACAGTGGAGAGTCTG
 CAAAGCCTGCAACCTGGGCGAAGGTGTGGCCAGCCTTGCAGGAGCCAACAGACCGTGTGTGAACCTGCG
 CTGGACAGTGTACGTTCTCTGACGTGGTGTGAGCGCCACCGAGCCGTGCAAGCCGTGCACCGAGTGCCTGG
 GCCTGCAGAGTATGTCCGCTCCCTGTGTGGAGGCAGACGATGCCGTGTGCCGATGCTCCTATGGCTACTA
 CCAGGACGAGGAGACTGGCCGCTGCGAGGCTTGCAGCGTGTGCGGGTGGGCTCAGGACTCGTGTCTCC
 TGCCAGGACAAACAGAACACAGTGTGTGAAGAGTCCCCAGAGGGCACATACTCAGATGAAGCCAACACAG
 TGGACCCGTGCCTACCCTGCACGGTGTGCGAGGACACTGAGCGCCAGTTACGCGAGTGCACGCCCTGGG
 TGACGCCGAATGCGAGGAGATCCCTGGCCGATGGATCACAAAGTCTACGCCCGGAGGGCTCTGACGTC
 ACAACACCCAGCACCCAGGAGCCGAGGACCTCCAGAGCGAGACCTCATAGCCAGCACAGTGGCCGATA
 CGGTGACCACTGTGATGGGCGAGCTCCAGCCTGTAGTGACCCGAGGCACCGCTGACAACCTCATTCTGT
 CTATTGCTCCATCTTGGCTGCTGTGTTGTGGCCTTGTGGCCTATATTGCTTTCAAGAGATGGAACAGC
 TGCAAGCAAAATAACAAGGAGCCAACAGCCGGCCGGTGAACAGACACCCCCACAGAGGGAGAGAAAAC
 TGCACAGCGACAGCGGCATCTCTGTGGACAGCCAGAGCCTGCACGACCAGCAGACCCACACACAGACTGC
 CTCAGGCCAAGCCCTCAAGGGTGTGGCAACCTTACAGTAGCCTGCCCTGACCAAGCGTGAGGAGGTC
 GAGAAGCTGCTCAATGGTGTACACCTGGCGACATCTGCCAGGCGAGCTGGGCTACCAGCCGGAGCATATAG
 ACTCCTTTACCACAGGCCTGCCAGTCCGAGCCCTGCTGGCCAGCTGGGGTGCCAGGACAGCGCGAC
 GCTCGATGCCCTTTAGCCGCCCTGCGACGCATCCAGAGAGCTGACATTGTGGAGAGCCTGTGACGCGAG
 TCCACTGCCACGTCCCCTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

 >MR226206 representing NM_033217
 Red=Cloning site Green=Tags(s)

 MRRAGAACSAMDRLRLLLLLLLLLVSFVGGAKETCSTGMYTHSGECCACNLGEGVAQPCGANQTVCEPC
 LDSVTFSDVVSATEPCKPCTECLGLQSMSAPCVEADAVCRCSYGYQQDEETGRCEACSVCGVSGSLVFS
 CQDKQNTVCEEPEGTYSDEANHVDPCLPCTVCDTERQLRECTPWADAECEEIPGRWITRSTPPEGSDV
 TTPSTQEPEAPPERDLIASTVADTVTTVMGSSQPVVTRGTADNLIIPVYCSILAAVVGLVAYIAFKRWNS
 CKQNKQGANSRPVNQTPPEGEKLSHDSGIVSDSQSLHDQQHTHTQTASGQALKGDNLVSSLPLTKREEV
 EKLLNGDTWRHLAAGELGYQPEHIDSF THEACPVRALLASWGAQDSATLDALLAALRRIQRADIVESLCSE
 STATSPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:
https://cdn.origene.com/chromatograms/ja2475_e04.zip
Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_033217

ORF Size: 1284 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).

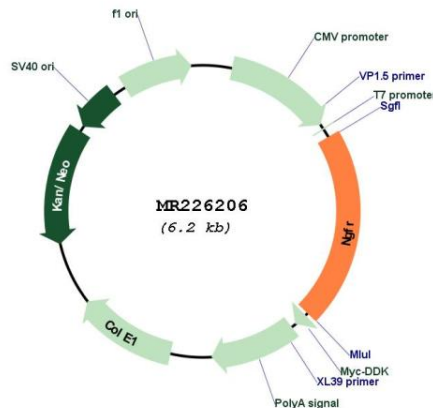
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_033217.3](#), [NP_150086.2](#)

RefSeq Size: 3409 bp
 RefSeq ORF: 1284 bp
 Locus ID: 18053
 UniProt ID: [Q9Z0W1](#)
 Cytogenetics: 11 59.01 cM
 MW: 45.6 kDa

Gene Summary: Low affinity neurotrophin receptor which can bind to mature NGF, BDNF, NTF3, and NTF4 (PubMed:11559852, PubMed:1317267). Forms a heterodimeric receptor with SORCS2 that binds the precursor forms of NGF (proNGF), BDNF (proBDNF) and NTF3 (proNTF3) with high affinity, and has much lower affinity for mature NGF and BDNF (PubMed:22155786, PubMed:24908487, PubMed:27457814). Plays an important role in differentiation and survival of specific neuronal populations during development (PubMed:1317267, PubMed:11559852). Can mediate cell survival as well as cell death of neural cells (PubMed:1317267, PubMed:11559852, PubMed:24908487). The heterodimeric receptor formed with SORCS2 plays a role in proBDNF-dependent synaptic plasticity, in hippocampal long term depression (LTD) and long term potentiation (LTP) (PubMed:27457814). Plays a role in the inactivation of RHOA (By similarity). Plays a role in the regulation of the translocation of GLUT4 to the cell surface in adipocytes and skeletal muscle cells in response to insulin, probably by regulating RAB31 activity, and thereby contributes to the regulation of insulin-dependent glucose uptake (PubMed:22460790). Necessary for the circadian oscillation of the clock genes ARNTL/BMAL1, PER1, PER2 and NR1D1 in the suprachiasmatic nucleus (SCN) of the brain and in liver and of the genes involved in glucose and lipid metabolism in the liver (PubMed:23785138). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226206