

## Product datasheet for **MC209033**

### Ngfr (NM\_033217) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ngfr (NM_033217) Mouse Untagged Clone
Tag:	Tag Free
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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**Fully Sequenced ORF:** >MC209033 representing NM\_033217  
 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGGAGGGCAGGTGCTGCCTGCACGCCATGGACCGGTGCGCCTGCTGCTGCTGCTGCTGCTGCTT  
 TAGGGGTGTCCTTTGGAGGTGCCAAGGAGACATGTTCCACAGGCATGTACACCCACAGTGGAGAGTGCTG  
 CAAAGCCTGCAACCTGGGCGAAGGTGTGGCCAGCCTTGCAGGAGCCAACCAGACCGTGTGTGAACCTGTC  
 CTGGACAGTGTACGTTCTCTGACGTGGTGTGAGCGCCACCGAGCCGTGCAAGCCGTGCACCGAGTGCCTGG  
 GCCTGCAGAGTATGTCGCTCCCTGTGTGGAGGCAGACGATGCCGTGTGCCGATGCTCCTATGGCTACTA  
 CCAGGACGAGGAGACTGGCCGCTGCGAGGCTTGCAGCGTGTGCGGGGTGGGCTCAGGACTCGTGTCTCC  
 TGCCAGGACAAACAGAACACAGTGTGTGAAGAGTGCCAGAGGGCACATACTCAGATGAAGCCAACCACG  
 TGGACCCGTGCCTACCCTGCACGGTGTGCGAGGACACTGAGCGCCAGTTACGCGAGTGCACGCCCTGGGC  
 TGACGCCGAATGCGAGGAGATCCCTGGCCGATGGATCACAAAGGTCTACGCCCCCGGAGGGCTCTGACGTC  
 ACAACACCCAGCACCCAGGAGCCGAGGCACCTCCAGAGCGAGACCTCATAGCCAGCACAGTGGCCGATA  
 CGGTGACCACTGTGATGGGCAGCTCCCAGCCTGTAGTGACCCGAGGCACCGCTGACAACCTCATTCTGT  
 CTATTGCTCCATCTTGGCTGCTGTGTTGTGGCCTTGTGGCCTATATTGCTTTCAAGAGATGGAACAGC  
 TGCAAGCAAAATAACAAGGAGCCAACAGCCGGCCGGTGAACCAGACACCCACCAGAGGGAGAGAAAAC  
 TGCACAGCGACAGCGGCATCTCTGTGGACAGCCAGAGCCTGCACGACCAGCAGACCCACACACAGACTGC  
 CTCAGGCCAAGCCCTCAAGGGTGTGGCAACCTCTACAGTAGCCTGCCCTGACCAAGCGTGAGGAGGTC  
 GAGAAGTGTCTCAATGGTGACACCTGGCGACATCTGCGAGCGAGCTGGGCTACCAGCCGGAGCATATAG  
 ACTCCTTTACCCACGAGGCCTGCCAGTCCGAGCCCTGCTGGCCAGCTGGGGTGGCCAGGACAGCGCGAC  
 GCTCGATGCCCTTTTAGCCGCCCTGCGACGCATCCAGAGAGCTGACATTGTGGAGAGCCTGTGACAGCGAG  
 TCCACTGCCACGTCCCCTGTGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-MluI

**ACCN:** NM\_033217

**Insert 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](mailto: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](#)

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [BC038365](#), [AAH38365](#)

**RefSeq Size:** 3441 bp

**RefSeq ORF:** 1284 bp

**Locus ID:** 18053

**UniProt ID:** [Q9Z0W1](#)

**Cytogenetics:** 11 59.01 cM

**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 (proNT3) 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]