

Product datasheet for **RR201485**

Manf (NM_001108183) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Manf (NM_001108183) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Manf
Synonyms: Armet
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR201485 representing NM_001108183
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTGGGCTACGCGGGCTGGCGGTAGCGCTGGCCCTGAGCGTTCTGCCTGACAGTCGGGCGCTACGGC
CAGGCGACTGCGAAGTTTGTATTTCTTATCTGGGAGATTTTACCAGGACCTCAAAGACAGGGATGTCAC
ATTTTCACCAGCCACTATTGAAGAAGAAGCTTATAAAGTTCTGCCGGAAGCAAGAGGCAAAGAAAATCGG
TTGTGCTACTACATTGGAGCCACAGATGATGCCGCCACCAAGATCATCAATGAGGTATCGAAGCCTCTGG
CCCACCATATCCCTGTGGAGAAGATCTGTGAGAAGCTGAAGAAGAAGACAGCCAGATCTGCGAGCTAAA
ATACGGTGAGTGTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR201485 representing NM_001108183
Red=Cloning site Green=Tags(s)

MWATRGLAVALALSVPDSRALRPGDCEVCISYLGRFYQDLKDRDVTFSPTAIEEELIKFCREARGKENR
LCYYIGATDDAATKIINEVSKPLAHHIPVEKICEKLLKKKDSQICELKYGECD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

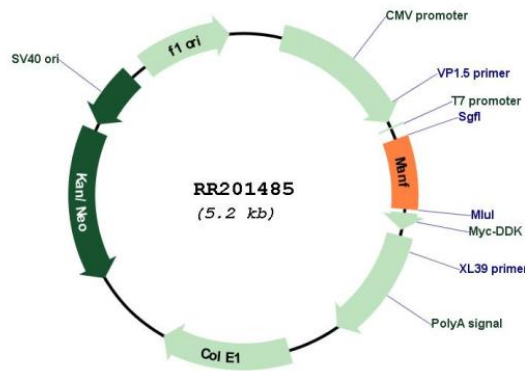


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Cloning Scheme:



Plasmid Map:



ACCN:

NM_001108183

ORF Size:

366 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:	<u>NM_001108183.1</u> , <u>NP_001101653.1</u>
RefSeq Size:	550 bp
RefSeq ORF:	369 bp
Locus ID:	315989
Cytogenetics:	8q32
MW:	13.8 kDa
Gene Summary:	Selectively promotes the survival of dopaminergic neurons of the ventral mid-brain (By similarity). Modulates GABAergic transmission to the dopaminergic neurons of the substantia nigra (PubMed:16462600). Enhances spontaneous, as well as evoked, GABAergic inhibitory postsynaptic currents in dopaminergic neurons (PubMed:16462600). Inhibits cell proliferation and endoplasmic reticulum (ER) stress-induced cell death (By similarity). Retained in the ER/sarcoplasmic reticulum (SR) through association with the endoplasmic reticulum chaperone protein HSPA5 under normal conditions (By similarity). Up-regulated and secreted by the ER/SR in response to ER stress and hypoxia (By similarity). Following secretion by the ER/SR, directly binds to 3-O-sulfogalactosylceramide, a lipid sulfatide in the outer cell membrane of target cells (By similarity). Sulfatide binding promotes its cellular uptake by endocytosis, and is required for its role in alleviating ER stress and cell toxicity under hypoxic and ER stress conditions (By similarity).[UniProtKB/Swiss-Prot Function]