

Product datasheet for RC207133

Myotrophin (MTPN) (NM_145808) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myotrophin (MTPN) (NM_145808) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myotrophin
Synonyms:	GCDP; V-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207133 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGCGACAAGGAGTTCATGTGGGCCCTGAAAAACGGAGACTTGGATGAGGTGAAAGACTATGTGGCCA
AGGGAGAAGATGTCAACCGGACACTAGAAGGTGGAAGGAACTCTTCATTATGCAGCAGATTGTGGGCA
GCTTGAAATCCTGGAATTTCTGCTGCTGAAAGGAGCAGATTAATGCTCCAGATAAACATCATATTACT
CCTCTTCTGTCTGCTGTCTATGAGGGTCATGTTTCCTGTGTGAAATTGCTTCTGTCAAAGGGTGCTGATA
AGACTGTGAAAGGCCAGATGGACTGACCGCCTTTGAAGCCACTGACAACCAGGCAATCAAAGCTTCTCT
CCAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC207133 protein sequence Red=Cloning site Green=Tags(s)
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MCDKEFMWALKNGDLDEVKDYVAKGEDVNRTLLEGRKPLHYAADCGQLEILEFLLLKGADINAPDKHHIT
PLLSAVYEGHVSCVKLLLSKGADKTVKGPDLTAFEATDNQAIKALLQ

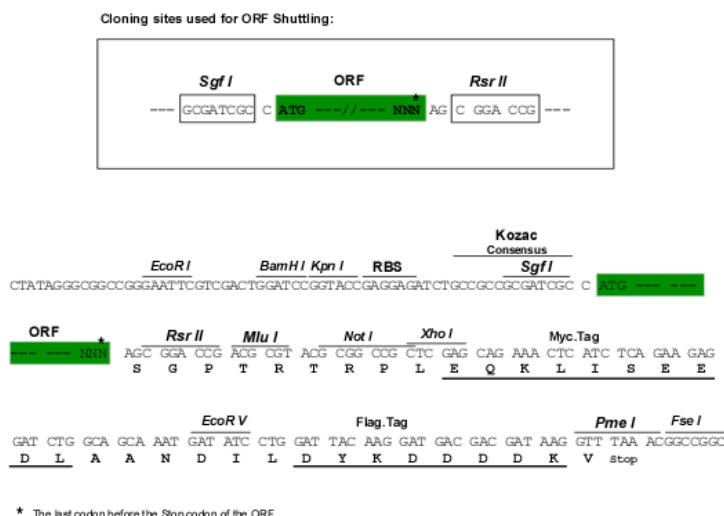
SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6615_g07.zip

Restriction Sites: SgfI-RsrII


[View online »](#)

Cloning Scheme:



ACCN: NM_145808

ORF Size: 354 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:

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: [NM_145808.4](#)

RefSeq Size: 3900 bp

RefSeq ORF: 357 bp

Locus ID: 136319

UniProt ID: [P58546](#)

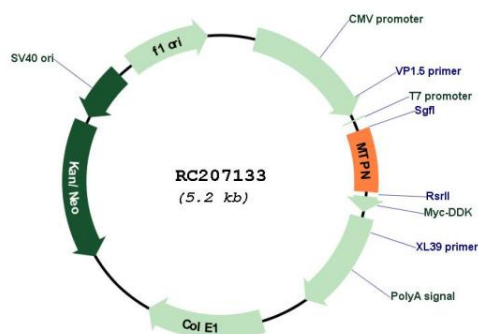
Cytogenetics: 7q33

Domains: ANK

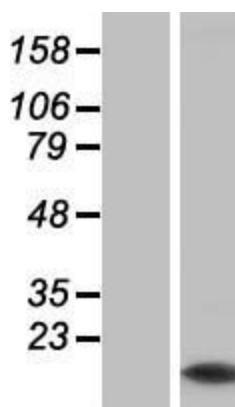
MW: 12.9 kDa

Gene Summary: The transcript produced from this gene is bi-cistronic and can encode both myotrophin and leucine zipper protein 6. The myotrophin protein is associated with cardiac hypertrophy, where it is involved in the conversion of NFkappa B p50-p65 heterodimers to p50-p50 and p65-p65 homodimers. This protein also has a potential function in cerebellar morphogenesis, and it may be involved in the differentiation of cerebellar neurons, particularly of granule cells. A cryptic ORF at the 3' end of this transcript uses a novel internal ribosome entry site and a non-AUG translation initiation codon to produce leucine zipper protein 6, a 6.4 kDa tumor antigen that is associated with myeloproliferative disease. [provided by RefSeq, Jul 2008]

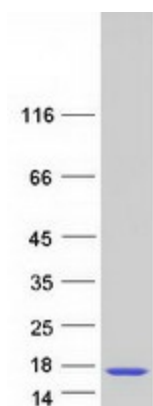
Product images:



Circular map for RC207133



Western blot validation of overexpression lysate (Cat# [LY407860]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207133 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MTPN protein (Cat# [TP307133]). The protein was produced from HEK293T cells transfected with MTPN cDNA clone (Cat# RC207133) using MegaTran 2.0 (Cat# [TT210002]).