

Product datasheet for **RC205693**

MTX2 (NM_001006635) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTX2 (NM_001006635) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MTX2
Synonyms:	MDPS; metaxin-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205693 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTATATAGCTGCAGAACCTTGGCCTGAAAAATGCTACATTATATCAGCAATTGAAAGGGGAGCAAATTT
TACTTTCTGACAATGCAGCTTCTTGCAGTGCAGGCCTTTTGCAAATGTGTAACCTGCCTATCAAAGT
AGTTTGTAGGGCAAATGCAGAAATATATGTCTCCATCTGGTAAAGTACCTTTTATTCATGTGGGAAATCAA
GTAGTATCAGAACTTGGTCCAATAGTCCAATTTGTTAAAGCCAAGGGCCATTCTCTAGTGATGGGCTGG
AGGAAGTCCAAAAGCAGAAATGAAAGCTTACATGGAATTAGTCAACAATATGCTGTTGACTGCAGAGCT
GTATCTTCAGTGGTGTGATGAAGCTACAGTAGGGGAGATCACTCATGCTAGGTATGGATCTCCTTACCCT
TGGCCTCTGAATCATATTTTGGCCTATCAAAAACAGTGGGAAGTCAAACGTAAGATGAAAGCTATTGGAT
GGGGAAAGAAGACTCTGGACCAGGTCTTAGAGGATGTAGACCAGTGCTGTCAAGCTCTCTCTCAAAGACT
GGGAACACAACCGTATTTCTTCAATAAGCAGCCTACTGAACTTGACGCACTGGTATTTGGCCATCTATAC
ACCATCTTACCACAAATTGACAAATGATGAACCTTCTGAGAAGGTGAAAACTATAGCAACCTCCTTG
CTTCTGTAGGAGAATTGAACAGCACTATTTTGAAGATCGTGGTAAAGGCAGGCTGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205693 protein sequence
 Red=Cloning site Green=Tags(s)

MYIAAEPWPENATLYQQLKGEQILLSDNAASLAVQAFLQMCNLPKVVCRANA EYMSPSGKVPF IHVGNQ
 VVSELGPVQFVKAKGHSLS DGLEEVQKAEMKAYMEL VNNMLL TAE LYLQWCDEATVGE ITHARYGSPYP
 WPLNHILAYQKQWEVKRKMKAIGWGKKTLDQVLEDVDQCCQALSQRLGTQPYFFNKQPTELDALVFGHLY
 TILTTQLTNDLSEKVKNYSNLLAFCRRIEQHYFEDRGKGRLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6427_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001006635

ORF Size: 759 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_001006635.3](#)

RefSeq Size: 1603 bp

RefSeq ORF: 762 bp

Locus ID: 10651

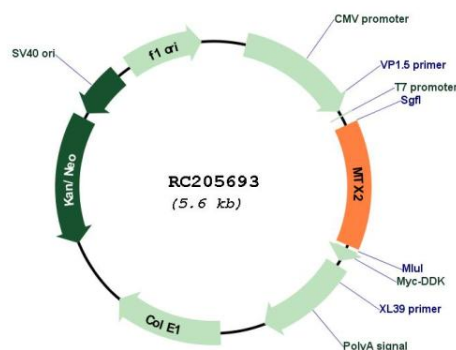
UniProt ID: [O75431](#)

Cytogenetics: 2q31.1

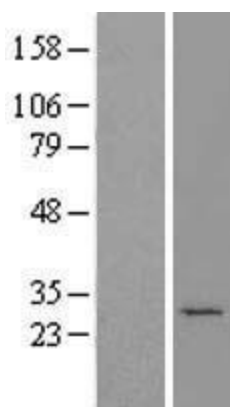
MW: 28.8 kDa

Gene Summary: The protein encoded by this gene is highly similar to the metaxin 2 protein from mouse, which has been shown to interact with the mitochondrial membrane protein metaxin 1. Because of this similarity, it is thought that the encoded protein is peripherally associated with the cytosolic face of the outer mitochondrial membrane, and that it is involved in the import of proteins into the mitochondrion. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 7. [provided by RefSeq, Jun 2009]

Product images:



Circular map for RC205693



Western blot validation of overexpression lysate (Cat# [LY423532]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205693 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).