

Product datasheet for RC209825

MTX2 (NM_006554) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTX2 (NM_006554) 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:	>RC209825 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCTCTAGTGGCGGAAGCCTTCGTCTCCAGATTGCAGCTGCAGAACCTTGGCCTGAAAATGCTACAT
TATATCAGCAATTGAAAGGGGAGCAAATTTACTTTCTGACAATGCAGCTTCTCTGCAGTGCAGGCCTT
TTTGCAAATGTGTAAGTGCCTATCAAAGTAGTTGTAGGGCAAATGCAGAAATATATGTCTCCATCTGGT
AAAGTACCTTTTATTCATGTGGGAAATCAAGTAGTATCAGAACTTGGTCCAATAGTCCAATTTGTTAAAG
CCAAGGGCATTCTTCTTAGTGATGGGCTGGAGGAAGTCCAAAAAGCAGAAATGAAAGCTTACATGGAATT
AGTCAACAATATGCTGTTGACTGCAGAGCTGTATCTTCAGTGGTGTGATGAAGCTACAGTAGGGGAGATC
ACTCATGCTAGGTATGGATCTCCTTACCCTTGGCCTCTGAATCATATTTGGCCTATCAAAAACAGTGGG
AAGTCAAACGTAAGATGAAAGCTATTGGATGGGGAAAGAAGACTCTGGACCAGGTCTTAGAGGATGTAGA
CCAGTGTGTCAAGCTCTCTCAAAGACTGGGAACACAACCGTATTTCTTCAATAAGCAGCCTACTGAA
CTTGACGCACTGGTATTTGGCCATCTATACACCATTCTTACCACACAATTGACAAATGATGAACTTTCTG
AGAAGGTGAAAACATAGCAACCTCCTTGCTTCTGTAGGAGAATTGAACAGCACTATTTGAAGATCG
TGGTAAAGGCAGGCTGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC209825 protein sequence
 Red=Cloning site Green=Tags(s)

MSLVAEAFVSQIAAAEPWPENATLYQQLKGEQILLSDNAASLAVQAF LQMCNLP IKVVCRANA EYMSPSG
 KVPFIHVG NQVVSEL GPIVQFVKAKGHS LSGLEEVQKAEMKAYMEL VNNMLLTAEL YLQWCDEATVGEI
 THARYGSPYPWPLNHILAYQKQWEVKRKMKAIGWGKKTLDQVLEDVDQCCQALSQR LGTQPYFFNKQPT E
 LDALVFGHLYTILTTQLTND ELSKVKNYSNLLAF CRRIEQH YFEDRKGGR LS

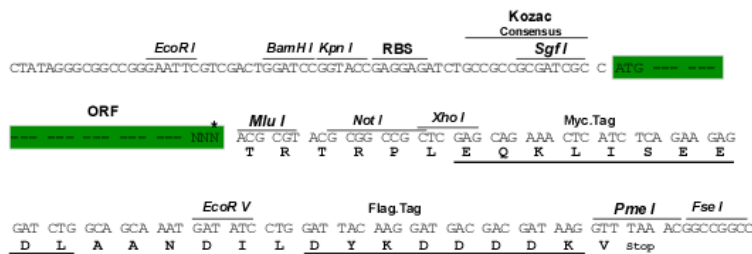
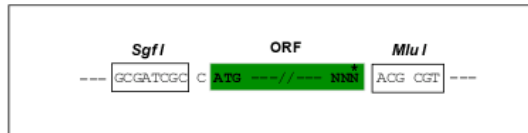
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6530_g11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006554

ORF Size: 789 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.

RefSeq: [NM_006554.5](#)

RefSeq Size: 1399 bp

RefSeq ORF: 792 bp

Locus ID: 10651

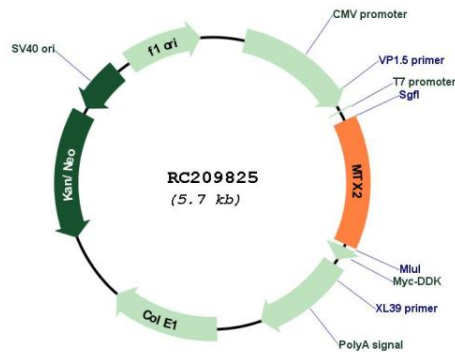
UniProt ID: [O75431](#)

Cytogenetics: 2q31.1

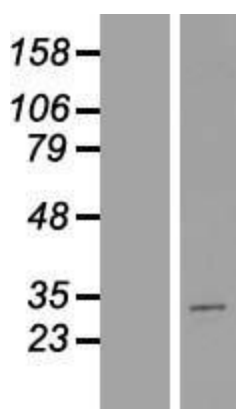
MW: 29.8 kDa

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 RC209825



Western blot validation of overexpression lysate (Cat# [LY416569]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209825 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).