

Product datasheet for **RC201461**

BRP44L (MPC1) (NM_016098) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: BRP44L (MPC1) (NM_016098) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MPC1
Synonyms: BRP44L; CGI-129; MPYCD; SLC54A1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC201461 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGGCGCGTTGGTGCGAAAGCGGGGACTATGTCCGAAGCAAGGATTTCCGGGACTACCTCATGA
GTACGCACTTCTGGGGCCAGTAGCCAAGTGGGGTCTTCCATTGCTGCCATCAATGATGAAAAAGTC
TCCAGAGATTATCAGTGGGCGGATGACATTTGCCCTCTGTTGCTATTCTTTGACATTCATGAGATTTGCC
TACAAGGTACAGCCTCGAACTGGCTTCTGTTGCATGCCACGCAACAAATGAAGTAGCCAGCTCATCC
AGGGAGGGCGGCTTATCAAACACGAGATGACTAAAACGGCATCTGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201461 protein sequence
Red=Cloning site Green=Tags(s)

MAGALVRKAADYVRSKDFRDYLMSTHFWGPVANWGLPIAAINDMKKSPEIISGRMTFALCCYSLTFMRFA
YKVQPRNWLLFACHATNEVAQLIQGGRLIKHEMTKTASA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

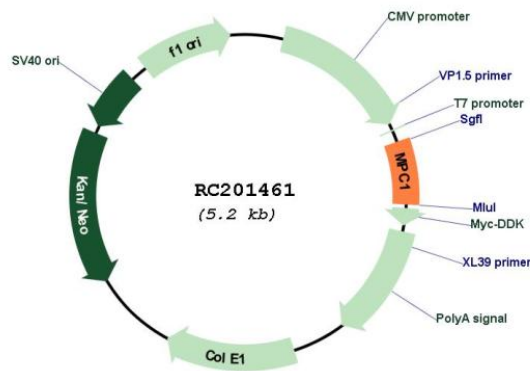
Chromatograms: https://cdn.origene.com/chromatograms/mk6300_h10.zip

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:

Plasmid Map:


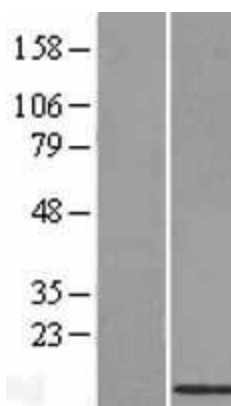
ACCN: NM_016098

ORF Size: 327 bp

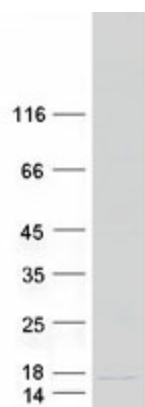
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_016098.4</u>
RefSeq Size:	977 bp
RefSeq ORF:	330 bp
Locus ID:	51660
UniProt ID:	<u>Q9Y5U8</u>
Cytogenetics:	6q27
Domains:	UPF0041
MW:	12.3 kDa
Gene Summary:	The protein encoded by this gene is part of an MPC1/MPC2 heterodimer that is responsible for transporting pyruvate into mitochondria. The encoded protein is found in the inner mitochondrial membrane. Defects in this gene are a cause of mitochondrial pyruvate carrier deficiency. Several transcript variants, some protein coding and one non-protein coding, have been found for this gene. [provided by RefSeq, Aug 2012]

Product images:



Western blot validation of overexpression lysate (Cat# [LY414188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201461 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MPC1 protein (Cat# [TP301461]). The protein was produced from HEK293T cells transfected with MPC1 cDNA clone (Cat# RC201461) using MegaTran 2.0 (Cat# [TT210002]).