OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC206820

ME1 (NM_002395) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ME1 (NM_002395) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ME1
Synonyms:	HUMNDME; MES
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206820 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCGAAGCCCCCCGTCGCCGCCACACCCATCAGCGCGGCTACCTGCTGACACGGAACCCTCACC
TCAACAAGGACTTGGCCTTTACCCTGGAAGAGAGACAGCAATTGAACATTCATGGATTGTTGCCACCTTC
CTTCAACAGTCAGGAGATCCAGGTTCTTAGAGTAGTAAAAAATTTCGAGCATCTGAACTCTGACTTTGAC
AGGTATCTTCTCTTAATGGATCTCCAAGATAGAAATGAAAAACTCTTTTATAGAGTGCTGACATCTGACA
TTGAGAAATTCATGCCTATTGTTTATACTCCCACTGTGGGTCTGGCTTGCCAACAATATAGTTTGGTGTT
TCGGAAGCCAAGAGGTCTCTTTATTACTATCCACGATCGAGGGCATATTGCTTCAGTTCTCAATGCATGG
CCAGAAGATGTCATCAAGGCCATTGTGGTGACTGATGGAGAGCGTATTCTTGGCTTGGGAGACCTTGGCT
GTAATGGAATGGGCATCCCTGTGGGTAAATTGGCTCTATATACAGCTTGCGGAGGGATGAATCCTCAAGA
ATGTCTGCCTGTCATTCTGGATGTGGGAACCGAAAATGAGGAGTTACTTAAAGATCCACTCTACATTGGA
CTACGGCAGAGAAGAGTAAGAGGTTCTGAATATGATGATTTTTTGGACGAATTCATGGAGGCAGTTTCTT
CCAAGTATGGCATGAATTGCCTTATTCAGTTTGAAGATTTTGCCAATGTGAATGCATTTCGTCTCCTGAA
CAAGTATCGAAACCAGTATTGCACATTCAATGATGATATTCAAGGAACAGCATCTGTTGCAGTTGCAGGT
CTCCTTGCAGCTCTTCGAATAACCAAGAACAAACTGTCTGATCAAACAATACTATTCCAAGGAGCTGGAG
AGGCTGCCCTAGGGATTGCACACCTGATTGTGATGGCCTTGGAAAAAGAAGGTTTACCAAAAGAGAAAGC
CATCAAAAAGATATGGCTGGTTGATTCAAAAGGATTAATAGTTAAGGGACGTGCTTCCTTAACACAAGAG
AAAGAGAAGTTTGCCCATGAACATGAAGAAATGAAGAACCTAGAAGCCATTGTTCAAGAAATAAAACCAA
CTGCCCTCATAGGAGTTGCTGCAATTGGTGGTGCATTCTCAGAACAAATTCTCAAAGATATGGCTGCCTT
CAATGAACGGCCTATTATTTTTGCTTTGAGTAATCCAACTAGCAAAGCAGAATGTTCTGCAGAGCAGTGC
TACAAAATAACCAAGGGACGTGCAATTTTTGCCAGTGGCAGTCCTTTTGATCCAGTCACTCTTCCAAATG
GACAGACCCTATATCCTGGCCAAGGCAACAATTCCTATGTGTTCCCTGGAGTTGCTCTTGGTGTTGTGGC
GTGTGGATTGAGGCAGATCACAGATAATATTTTCCTCACTACTGCTGAGGTTATAGCTCAGCAAGTGTCA
GATAAACACTTGGAAGAGGGTCGGCTTTATCCTCCTTTGAATACCATTAGAGATGTTTCTCTGAAAATTG
CAGAAAAGATTGTGAAAGATGCATACCAAGAAAAGACAGCCACAGTTTATCCTGAACCGCAAAACAAAGA
AGCATTTGTCCGCTCCCAGATGTATAGTACTGATTATGACCAGATTCTACCTGATTGTTATTCTTGGCCT
GAAGAGGTGCAGAAAATACAGACCAAAGTTGACCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206820 protein sequence
Red=Cloning site Green=Tags(s)

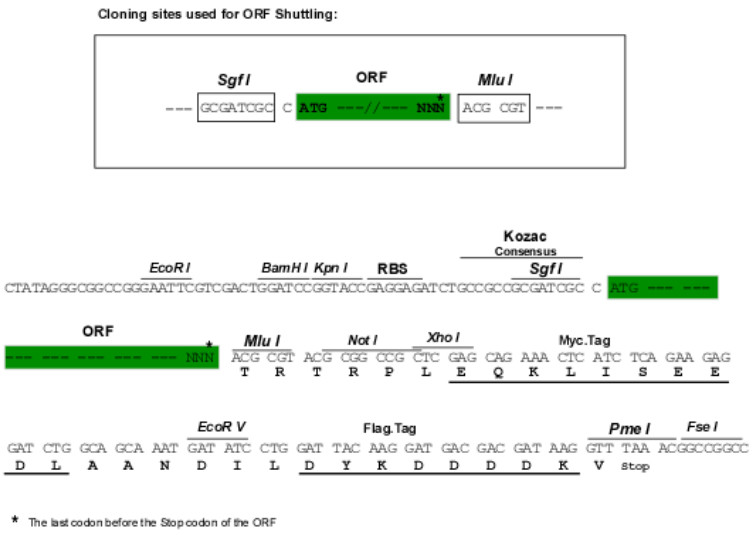
MEPEAPRRRHTHQRGYLLTRNPHLNKDLAFTLEERQQLNIHGLLPPSFNSQEIQVLRVVKNFEHLNSDFD
RYLLLMDLQDRNEKLFYRVLTSDIEKFMPIVYTPTVGLACQQYSLVFRKPRGLFITIHDRGHIASVLNAW
PEDVIKAIVVTDGERILGLGDLGCNGMGIPVGKLALYTACGGMNPQECLPVILDVGTENEELLKDPLYIG
LRQRRVRGSEYDDFLDEFMEAVSSKYGMNCLIQFEDFANVNAFRLLNKYRNQYCTFNDDIQGTASVAVAG
LLAALRITKNKLSDQTILFQGAGEAALGIAHLIVMALEKEGLPKEKAIKKIWLVDSKGLIVKGRASLTQE
KEKFAHEHEEMKNLEAIVQEIKPTALIGVAAIGGAFSEQILKDMAAFNERPIIFALSNPTSKAECSAEQC
YKITKGRAIFASGSPFDPVTLPNGQTLYPGQGNNSYVFPGVALGVVACGLRQITDNIFLTTAEVIAQQVS
DKHLEEGRLYPPLNTIRDVSLKIAEKIVKDAYQEKTATVYPEPQNKEAFVRSQMYSTDYDQILPDCYSWP
EEVQKIQTKVDQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6162_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002395

ORF Size: 1716 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

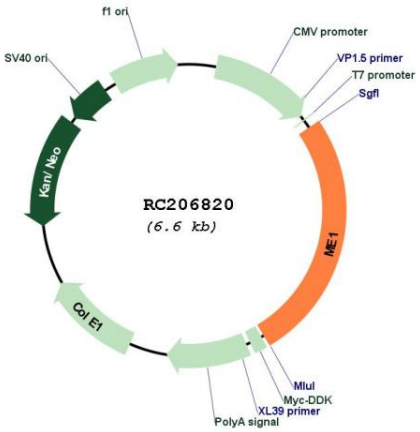
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

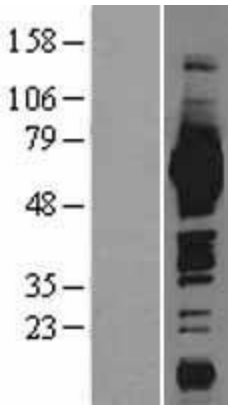
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_002395.6
RefSeq Size:	3519 bp
RefSeq ORF:	1719 bp
Locus ID:	4199
UniProt ID:	P48163
Cytogenetics:	6q14.2
Domains:	malic
Protein Pathways:	Metabolic pathways, PPAR signaling pathway, Pyruvate metabolism
MW:	64.1 kDa
Gene Summary:	This gene encodes a cytosolic, NADP-dependent enzyme that generates NADPH for fatty acid biosynthesis. The activity of this enzyme, the reversible oxidative decarboxylation of malate, links the glycolytic and citric acid cycles. The regulation of expression for this gene is complex. Increased expression can result from elevated levels of thyroid hormones or by higher proportions of carbohydrates in the diet. [provided by RefSeq, Jul 2008]

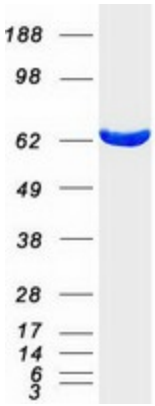
Product images:



Circular map for RC206820



Western blot validation of overexpression lysate (Cat# [LY400854]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206820 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ME1 protein (Cat# [TP306820]). The protein was produced from HEK293T cells transfected with ME1 cDNA clone (Cat# RC206820) using MegaTran 2.0 (Cat# [TT210002]).