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Product datasheet for RC217233

OPA1 (NM_130836) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OPA1 (NM_130836) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OPA1
Synonyms:	BERHS; largeG; MGM1; MTDPS14; NPG; NTG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217233 representing NM_130836
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGCGACTACGTCGGGCCGCTGTGGCCTGTGAGGTCTGCCAGTCTTTAGTGAAACACAGCTCTGGAA
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CAAATGGACCCTCATGGAAGGAGAACCATATTCGTTTTGACCAAAGTAGACCTGGCAGAGAAAAATGTAG
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Protein Sequence:

>RC217233 representing NM_130836
Red=Cloning site Green=Tags(s)

MWRLRRAAVACEVCQSLVKHSSGIKGSLPLQKLHLVSRSIYHSHHPTLKLQRPQLRTSFQQFSSLTNLPL
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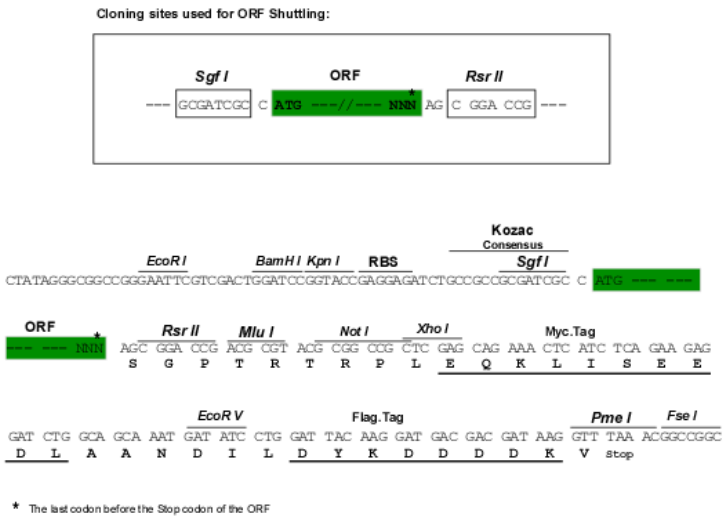
Chromatograms: https://cdn.origene.com/chromatograms/mk6625_b11.zip

Restriction Sites: SgfI-RsrII

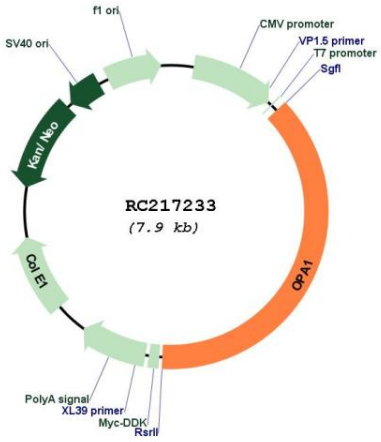
Cloning Scheme:



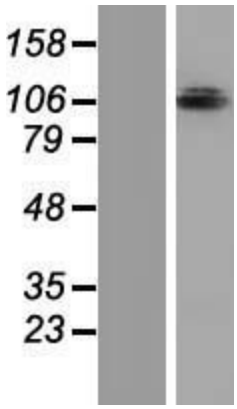
ACCN:	NM_130836
ORF Size:	1268 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_130836.3
RefSeq Size:	5975 bp
RefSeq ORF:	2994 bp

Locus ID:	4976
UniProt ID:	O60313
Cytogenetics:	3q29
MW:	115.7 kDa
Gene Summary:	The protein encoded by this gene is a nuclear-encoded mitochondrial protein with similarity to dynamin-related GTPases. The encoded protein localizes to the inner mitochondrial membrane and helps regulate mitochondrial stability and energy output. This protein also sequesters cytochrome c. Mutations in this gene have been associated with optic atrophy type 1, which is a dominantly inherited optic neuropathy resulting in progressive loss of visual acuity, leading in many cases to legal blindness. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RC217233



Western blot validation of overexpression lysate (Cat# [LY408911]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217233 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).