

Product datasheet for **RC202959**

OPA3 (NM_025136) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OPA3 (NM_025136) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: OPA3
Synonyms: MGA3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202959 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGTGGGCGGTTCCCTATGGCGAAGCTGCTATACTTGGGCATCCGGCAGGTCAAGCCGCTTG
CCAACCGTATTAAGGAGGCCGCCGCGAAGCGAGTCTTCAAGACCTATATCTGCCTCCCGCCGGCTCA
ACTGTATCACTGGGTGGAGATGCGGACCAAGATGCGCATCATGGGCTTCCGGGGCAGGTCAAGCCG
CTGAACGAGGAGGCCGCGCAGCTGGGCGCAGAGCTGCTGGGCGAAGCCACCATTTTCATCGTGGCG
GCGGCTGCCTAGTCTGGAGTACTGGCGCCACCGGCGCAGCAGCGCCACAAGGAGGAGGAGCAGCGTGC
TGCTGGAACGCGCTGCGGGACGAGGTGGGCCACCTGGCGCTGGCGCTGGAAGCGCTGCAGGCGCAGGTG
CAGGCGCGCGCCACAGGGCGCCCTGGAGGAAGTGCACAGAGCTGCAAGAGGTGCGCGCCAGCTCT
GCAATCCCGCGCGGTCCGCTTCCACGCGAGTGCCTGCGTCCAAGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202959 protein sequence
Red=Cloning site Green=Tags(s)

MVVGAFPMAKLLYLGIQVSKPLANRIKEAARRSEFFKTYICLPPAQLYHWVEMRTKMRIMGFRGTVIKPL
LNEEAAELGAELLGEATIFIVGGGCLVLEYWRHQQRHKEEQRAAWNALRDEVGHLALALEALQAQV
QAAPPQGALEELRTELQEVRAQLCNPGRSASHAVPASKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6411_h06.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_025136

ORF Size: 537 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_025136.1](#), [NP_079412.1](#)

RefSeq Size: 7889 bp

RefSeq ORF: 540 bp

Locus ID: 80207

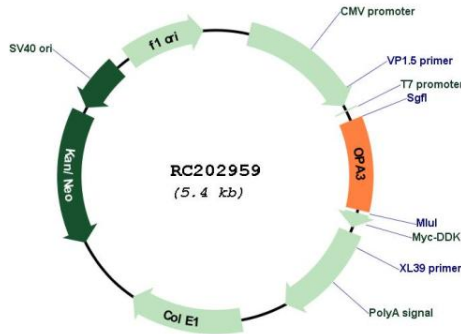
UniProt ID: [Q9H6K4](#)

Cytogenetics: 19q13.32

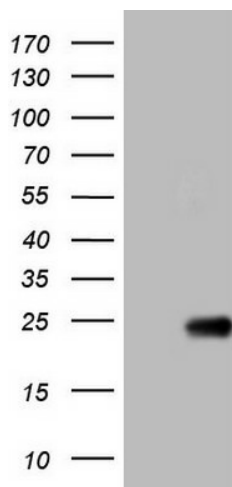
MW: 20 kDa

Gene Summary: The mouse ortholog of this protein co-purifies with the mitochondrial inner membrane. Mutations in this gene have been shown to result in 3-methylglutaconic aciduria type III and autosomal dominant optic atrophy and cataract. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

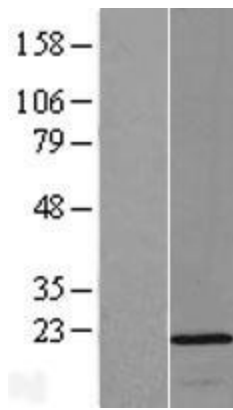
Product images:



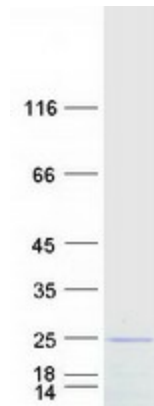
Circular map for RC202959



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY OPA3 (Cat# RC202959, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OPA3 (Cat# [TA809426])(1:2000). Positive lysates [LY410876] (100ug) and [LC410876] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410876]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202959 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OPA3 protein (Cat# [TP302959]). The protein was produced from HEK293T cells transfected with OPA3 cDNA clone (Cat# RC202959) using MegaTran 2.0 (Cat# [TT210002]).