

Product datasheet for RC220035

VDAC2 (NM_003375) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	VDAC2 (NM_003375) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VDAC2
Synonyms:	POR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220035 representing NM_003375 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGACCCACGGACAGACTTGC GCGCGTCCAATGTGTATTCCATCATATGCTGACCTTGGCAAAG
CTGCCAGAGATATTTCAACAAAGGATTTGGTTTTGGTTGGTAAAAGTGGATGTGAAAACAAAGTCTTG
CAGTGGCGTGGAATTTCAACGTCGGTTCATCTAATACAGACTGGTAAAGTACTGGGACCTTGGAG
ACCAAATACAAGTGGTGTGAGTATGGTCTGACTTTCACAGAAAAGTGAACACTGATAAACTCTGGGAA
CAGAAATCGCAATTGAAGACCAGATTTGTCAAGTTTAAAAGTGAATTTGATACTACCTTCTCACAAA
CACAGGAAAGAAAAGTGGTAAAATCAAGTCTTCTTACAAGAGGGAGTGTATAAACCTTGGTTGTGATGTT
GACTTTGATTTTGTGGACCTGCAATCCATGGTTCAGCTGTCTTTGGTTATGAGGGCTGGCTTGGCTGGCT
ACCAGATGACCTTTGACAGTGCCAAATCAAAGCTGACAAGGAATAACTTTGACAGTGGGCTACAGGACTGG
GGACTTCCAGCTACACACTAATGTCAATGATGGGACAGAAATTTGGAGGATCAATTTATCAGAAAAGTTTGT
GAAGATCTTGACACTTCAGTAAACCTTGCTTGGACATCAGGTACCAACTGCACTCGTTTTGGCATTGCGAG
CTAAATATCAGTTGGATCCACTGCTTCCATTTCTGCAAAAAGTCAACAACTCTAGCTTAATTGGAGTAGG
CTATACTCAGACTCTGAGGCCTGGTGTGAAGCTTACACTCTGCTCTGGTAGATGGGAAGAGCATTAAAT
GCTGGAGGCCACAAGTTGGGCTCGCCCTGGAGTTGGAGGCT

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220035 representing NM_003375
Red=Cloning site Green=Tags(s)

MATHGQTCARPMCIPPSYADLGKAARDIFNKGFGFGLVKLDVTKSCSGVEFSTSGSNTDTGKVTGTLE
 TKYKWCEYGLTFTEKWNTDNTLGTEIAIEDQICQGLKLFDTTFSPNTGKKSGBKIKSSYKRECINL GCDV
 DFDFAGPAIHGSAVFGYEGWLAGYQMTFDSA KSKL TRNNF AVGYRTGDFQLHTNVNDGTEFGGSIYQKVC
 EDLDTSVNLAWTSGTNCTRFGIAAKYQLDPTASISAKVNNSSLIGVGYTQTLRPGVKLTL SALVDGKSIN
 AGGHKVGLALELEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6268_h11.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_003375

ORF Size: 882 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_003375.4](#)

RefSeq Size: 1522 bp

RefSeq ORF: 885 bp

Locus ID: 7417

UniProt ID: [P45880](#)

Cytogenetics: 10q22.2

Domains: Euk_porin

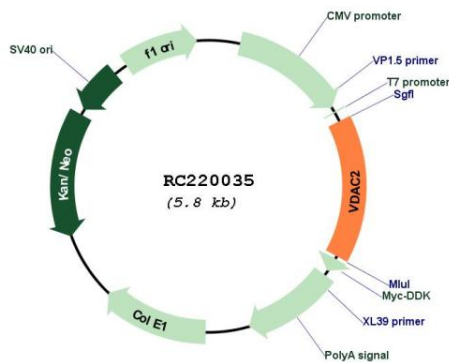
Protein Families: Druggable Genome, Ion Channels: Other

Protein Pathways: Calcium signaling pathway, Huntington's disease, Parkinson's disease

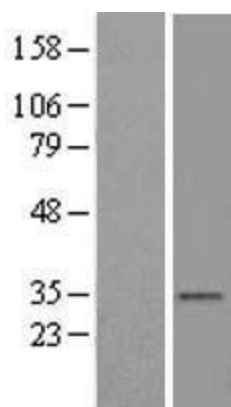
MW: 31.4 kDa

Gene Summary: This gene encodes a member of the voltage-dependent anion channel pore-forming family of proteins that are considered the main pathway for metabolite diffusion across the mitochondrial outer membrane. The encoded protein is also thought to be involved in the mitochondrial apoptotic pathway via regulation of BCL2-antagonist/killer 1 protein activity. Pseudogenes have been identified on chromosomes 1, 2, 12 and 21, and alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2010]

Product images:



Circular map for RC220035



Western blot validation of overexpression lysate (Cat# [LY418730]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220035 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).