

Product datasheet for RC223032

MRP4 (ABCC4) (NM_005845) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRP4 (ABCC4) (NM_005845) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRP4
Synonyms:	MOAT-B; MOATB; MRP4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223032 representing NM_005845 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGCTGCCGTGTACCAGGAGGTGAAGCCCAACCCGCTGCAGGACGCGAACATCTGCTCACGCGTGTCT
TCTGGTGGCTCAATCCCTTGTAAAATTGGCCATAAACGGAGATTAGAGGAAGATGATATGATTCAGT
GCTGCCAGAAGACCGCTCACAGCACCTTGAGAGGAGTTGCAAGGGTTCTGGGATAAAGAAGTTTAAAGA
GCTGAGAATGACGCACAGAAGCCTTCTTAAACAAGAGCAATCATAAAGTGTACTGGAATCTTATTTAG
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TAATTATTTGAAAATTATGATCCCATGGATTCTGTGGCTTTGAACACAGCGTACGCCTATGCCACGGTG
CTGACTTTTTGCACGCTCATTGCTATACTGCATCACTTATTTTTATCACGTTTCAGTGTGCTGGGA
TGAGGTTACGAGTAGCCATGTGCCATATGATTTATCGGAAGGCACTTCGTCTTAGTAACATGGCCATGGG
GAAGACAACCACAGGCCAGATAGTCAATCTGCTGTCCAATGATGTGAACAAGTTTGATCAGGTGACAGTG
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GTTCTCATCACTGAGGAGTAAACTGCAACTTTCACGGATGCCAGGATCAGGACCATGAATGAAGTTATA
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TCGGCCCCGTGGGAGCAGGGAAGTCATCACTGTTAAGTGCCGTGCTCGGGGAATTGGCCCAAGTCACGG
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AGTAATATTTTATTTGGGAAGAAATATGAAAAGGAACGATATGAAAAAGTCATAAAGGCTTGTGCTCTGA
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TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223032 representing NM_005845
 Red=Cloning site Green=Tags(s)

MLPVYQEVKPNPLQDANICSRVFFWLNPLFKIGHKRRLEEDDMYSVLPEDRSQHLGEELQGFWDKEVLR
 AENDAQKPSL TRAI IKCYWKS YLVLGIFLIEESAKVIQPIFLGKIINYFENYDPMDSVALNTAYAYATV
 LTFCTLILAILHHL YFYHVQCAGMRLRVAMCHMIYRKALRLSNMAMGKTTTGQIVNLLSNDVNKFDQVTV
 FLHFLWAGPLQAI AVTALLWMEIGISCLAGMAVLIILLPLQSCFGKLFSSLRSKTATFTDARIRTMNEVI
 TGIRIIKMYAWEKSFSNLITNLRKKEISKILRSSCLRGMNLASF SASKIIVFVTFTTYVLLGSVITASR
 YFVAVTLYGAVRLTVTLFFPSAIERVSEAIVSIRRIQTFLLLDEISQRNRQLPSDGKMMVHVQDFTA
 FWD KASETPTLQGLSFTVRPGELLAVVGPV GAGKSSLLSAVLGELAPSHGLVSVHGRIAYVSQQPWVFS
 GTLR SNILFGKYEKERYEKVIKACALKKDLQLLEDGDLTVIGDRGTTLSGGQKARVNLARAVYQDADI
 YLLDD PLSAVDAEVS RHLFELCICQILHEKITILVTHQLQYLKAASQILILKDGKMQKGTYTEFLKSG
 IDFGSL LKKDNEESEQPPVPGTPTLRNRTFSESSVWSQQSSRPSLKDGALESQDTENVPVTLSEENR
 SEGKVFQA YKNYFRAGAHWIVFIFLILLNTAAQVAVLQDWLWLSYWANKQSMLNVTVNGGGNVTEK
 LDNLNWLGIYSG LTVATVLFGIARSLLVFYVLVNSSQTLHNKMFESILKAPVLFDRNPIGRILNRF
 SKDIGHLDDLPLTF LDFIQTLQVVGVSVAVAIPWIAIPLVPLGIIFIFLRRYFLET SRDVKRLESTR
 SPVFSHLSSSLQG LWTIRAYKAEERCQELFDAHQDLHSEAWFLFLTTSRWFVRLDAICAMFVIVIA
 FGSLLAKTL DAGQVGLALSIALYALTMGMFQWCVRQSAEVENMMISVERVIEYTDLEKEAPWEYQK
 RPPPAWPHEGVIIFDNVNFMYPSPGGPLVLKHLTALIKSQEKVIGVGRGAGKSSLSALFRLSEPEG
 KIWIDKILTTEIGLHDLRKKMSIIPQEPVLFTGMRKNLDPFKEHTDEELWNALQEVQLKETIEDL
 PGKMDTELAESGSNFSVGQRQLVCLARAILRKNQILIIIDEATANVDPRTDELIQKKIREKFAHCT
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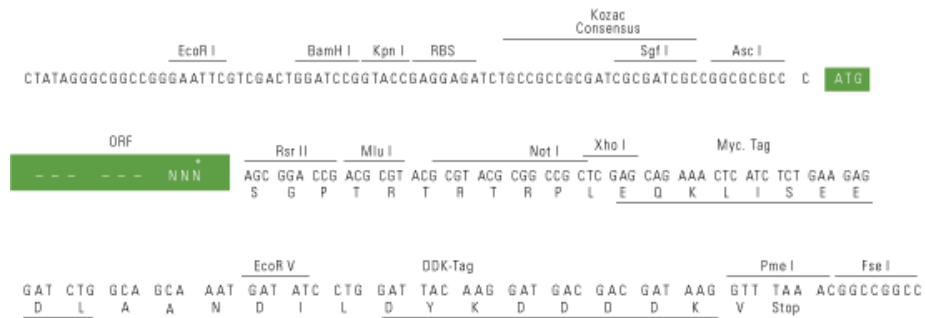
SGP TRRRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

AscI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005845

ORF Size: 3975 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_005845.2](#), [NP_005836.1](#)

RefSeq Size: 5871 bp

RefSeq ORF: 3978 bp

Locus ID: 10257

UniProt ID: [O15439](#)

Cytogenetics: 13q32.1

Domains: ABC_membrane, ABC_tran, AAA

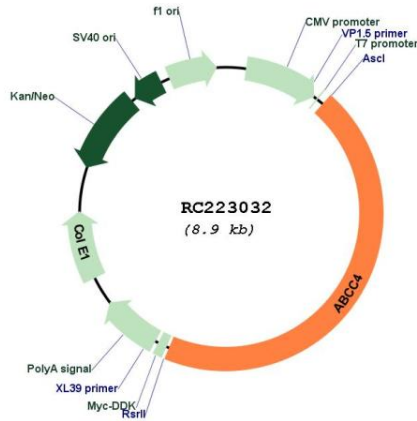
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: ABC transporters

MW: 149.3 kDa

Gene Summary:

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily which is involved in multi-drug resistance. This family member plays a role in cellular detoxification as a pump for its substrate, organic anions. It may also function in prostaglandin-mediated cAMP signaling in ciliogenesis. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Sep 2014]

Product images:


Circular map for RC223032