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Product datasheet for RG205640

ABCG2 (NM_004827) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCG2 (NM_004827) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCG2
Synonyms:	ABC15; ABCP; BCRP; BCRP1; BMDP; CD338; CDw338; EST157481; GOUT1; MRX; MXR; MXR-1; MXR1; UAQTL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG205640 representing NM_004827
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTTCCAGTAATGTCGAAGTTTTTATCCCAGTGTCACAAGGAAACACCAATGGCTTCCCCGCGACAG
CTTCCAATGACCTGAAGGCATTTACTGAAGGAGCTGTGTTAAGTTTTCATAACATCTGCTATCGAGTAAA
ACTGAAGAGTGGCTTTCTACCTTGTCGAAAACCAGTTGAGAAAGAAATATTATCGAATATCAATGGGATC
ATGAAACCTGGTCTCAACGCCATCCTGGGACCCACAGGTGGAGGCAAATCTTCGTTATTAGATGTCTTAG
CTGCAAGGAAAGATCCAAGTGGATTATCTGGAGATGTTCTGATAAATGGAGCACCGCGACCTGCCAATTT
CAAATGTAATTCAGGTTACGTGGTACAAGATGATGTTGTGATGGGCACTCTGACGGTGAGAGAAAACTTA
CAGTTCTCAGCAGCTCTTCGGCTTGCAACAACTATGACGAATCATGAAAAAAACGAACGGATTAACAGGG
TCATTCAAGAGTTAGGTCTGGATAAAGTGGCAGACTCCAAGGTTGGAACTCAGTTTATCCGTGGTGTGTC
TGGAGGAGAAAGAAAAAGGACTAGTATAGGAATGGAGCTTATCACTGATCCTTCCATCTTGTTCTTGGAT
GAGCCTACAACTGGCTTAGACTCAAGCACAGCAAATGCTGTCCTTTTGCTCCTGAAAAGGATGTCTAAGC
AGGGACGAACAATCATCTTCTCCATTCATCAGCCTCGATATTCCATCTTCAAGTTGTTTGATAGCCTCAC
CTTATTGGCCTCAGGAAGACTTATGTTCCACGGGCCTGCTCAGGAGGCCTTGGGATACTTTGAATCAGCT
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CTGTGGCATTAAACAGAGAAGAAGACTTTAAAGCCACAGAGATCATAGAGCCTTCCAAGCAGGATAAGCC
ACTCATAGAAAAATTAGCGGAGATTTATGTCAACTCCTCCTTCTACAAAGAGACAAAAGCTGAATTACAT
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TCAGATCATTGTCACAGTCGTACTGGGACTGGTTATAGGTGCCATTTACTTTGGGCTAAAAAATGATTCT
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TGATGGTGGCTTATTCAGCCAGTTCCATGGCACTGGCCATAGCAGCAGGTCAGAGTGTGGTTTCTGTAGC
AACACTTCTCATGACCATCTGTTTTGTGTTTATGATGATTTTTTCAGGTCTGTTGGTCAATCTCACAACC
ATTGCATCTTGGCTGTCATGGCTTCAGTACTTCAGCATTCCACGATATGGATTTACGGCTTTGCAGCATA
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ATGTACTGGCGAAGAATATTTGGTAAAGCAGGGCATCGATCTCTCACCCTGGGGCTTGTGGAAGAATCAC
GTGGCCTTGGCTTGTATGATTGTTATTTTCCTCACAATTGCCTACCTGAAATTGTTATTTCTTAAAAAAT
ATTCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

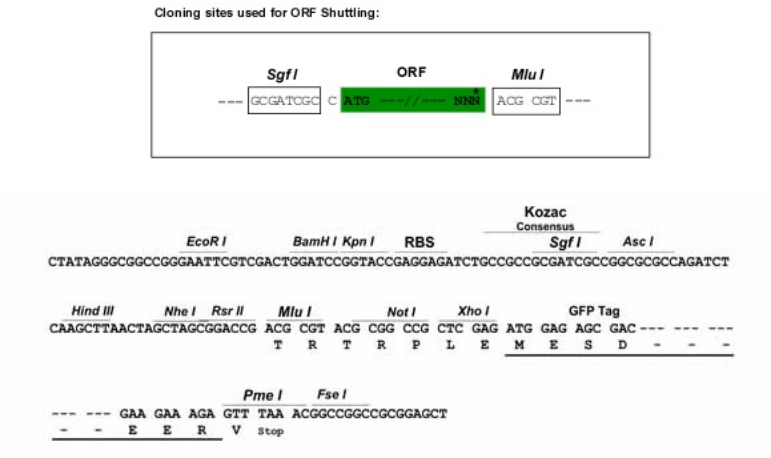
>RG205640 representing NM_004827
Red=Cloning site Green=Tags(s)

MSSSNVEVFIPVSQGNTNGFPATASNDLKAFTEGAVLSFHNICYRVKLKSGFLPCRKPVEKEILSNINGI
MKPGLNAILGPTGGGKSSLLDVLAARKDPSGLSGDVLINGAPRPANFKCNSGYVVQDDVVMGTLTVRENL
QFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGTQFIRGVSGGERKRTSIGMELITDPSILFLD
EPTTGLDSSTANAVLLLLKRMSKQGRTIIFSIHQPRYSIFKLFDSLTLLASGRLMFHGPAQEALGYFESA
GYHCEAYNNPADFFLDIINGDSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFYKETKAELH
QLSGGEKKKKITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKNDS
TGIQNRAGVLFFLTTNQCFSSVSAVELFVVEKKLFIHEYISGYYRVSSYFLGKLLSDLLPMRMLPSIIFT
CIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVVSVATLLMTICFVFMMIFSGLLVNLTT
IASWLSWLQYFSIPRYGFTALQHNEFLGQNFCPGLNATGNNPCNYATCTGEEYLVKQGIDLSPWGLWKNH
VALACMIVIFLTIAYLKLLFLKKYS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004827

ORF Size: 1965 bp

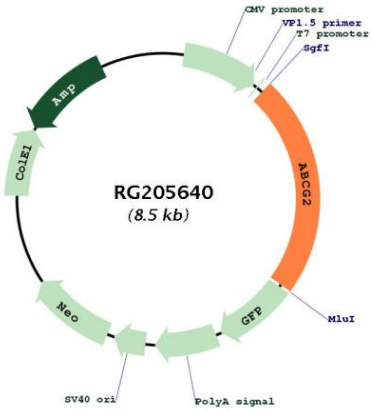
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004827.3
RefSeq Size:	4445 bp
RefSeq ORF:	1968 bp
Locus ID:	9429
UniProt ID:	Q9UNQ0
Cytogenetics:	4q22.1
Domains:	ABC_tran, AAA
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	ABC transporters
Gene Summary:	The membrane-associated protein encoded by this gene is included in 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 White subfamily. Alternatively referred to as a breast cancer resistance protein, this protein functions as a xenobiotic transporter which may play a major role in multi-drug resistance. It likely serves as a cellular defense mechanism in response to mitoxantrone and anthracycline exposure. Significant expression of this protein has been observed in the placenta, which may suggest a potential role for this molecule in placenta tissue. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

Product images:



Circular map for RG205640