

Product datasheet for **RC233012**

ABCG2 (NM_001257386) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ABCG2 (NM_001257386) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | ABCG2 |
| Synonyms: | ABC15; ABCP; BCRP; BCRP1; BMDP; CD338; CDw338; EST157481; GOUT1; MRX; MXR; MXR-1; MXR1; UAQTL1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC233012 representing NM_001257386
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCTCCAGTAATGTGCAAGTTTTATCCCAGTGTCAAGGAAACCAATGGCTTCCCCGCGACAG
 CTTCGAATGACCTGAAGGCATTTACTGAAGGAGCTGTGTTAAGTTTTCAACATCTGCTATCGAGTAAA
 ACTGAAGAGTGGCTTTCTACCTGTGCGAAAACAGTTGAGAAAAGAAATATTATCGAATATCAATGGGATC
 ATGAAACCTGGTCTCAACGCCATCTGGGACCCACAGGTGGAGGCAAATCTTCGTTATTAGATGTCTTAG
 CTGCAAGGAAAGATCCAAGTGGATTATCTGGAGATGTTCTGATAAATGGAGCACCAGGACCTGCCAATTT
 CAAATGTAATTCAGGTTACGTGGTACAAGATGATGTTGTGATGGGCACTCTGACGGTGAGAGAAAACCTA
 CAGTTCTCAGCAGCTCTTCGGCTGCAACAACATGACGAATCATGAAAAAACGAACGGATTAACAGGG
 TCATTCAAGAGTTAGGTCTGGATAAAGTGGCAGACTCCAAGTTGGAACCTAGTTTATCCGTGGTGTGTC
 TGGAGGAGAAAAGAAAAGGACTAGTATAGGAATGGAGCTTACTACTGATCCTTCCATCTTGTCTTGGAT
 GAGCCTACAACCTGGCTTAGACTCAAGCAGCAAAATGCTGTCCTTTTGGCTCTGAAAAGGATGTCTAAGC
 AGGGACGAACAATCATCTTCTCCATTCATCAGCCTCGATATTCATCTTCAAGTTGTTTGTAGCCTCAC
 CTTATTGGCCTCAGGAAGACTTATGTTCCACGGCCTGCTCAGGAGGCCTTGGGATACTTTGAATCAGCT
 GGTATCACTGTGAGGCCTATAATAACCCTGCAGACTTCTTCTGGACATCATTAAATGGAGATCCACTG
 CTGTGGCATTAAACAGAGAAGAAGACTTTAAAGCCACAGAGATCATAGAGCCTTCCAAGCAGGATAAGCC
 ACTCATAGAAAATTAGCGGAGATTTATGTCAACTCCTCCTTCTACAAGAGACAAAAGCTGAATTACAT
 CAATTTCCGGGGGTGAGAAGAAGAAGAAGATCACAGCTTCAAGGAGATCAGCTACACCACCTCTATAGC
 GTCATCAACTCAGATGGGTTTCCAAGCTTCATTCAAAAACCTGCTGGTAATCCCAGCCTCTATAGC
 TCAGATCATTGTACAGTCGACTGGGACTGGTTATAGGTGCCATTTACTTTGGGCTAAAAAATGATTCT
 ACTGGAATCCAGAACAGAGCTGGGGTCTCTTCTCTGACGACCAACCAGTGTTTCAGCAGTGTTTCAG
 CCGTGGAACTCTTGTGGTAGAGAAGAAGCTCTTCATACATGAATACATCAGCGGATACTACAGAGTGTC
 ATCTTATTTCTTGGAAAACCTGTTATCTGATTTATTACCCATGAGGATGTTACCAAGTATTATTTACC
 TGTATAGTGTACTTCATGTTAGGATTGAAGCCAAAGCAGATGCCTTCTTCGTTATGATGTTTACCCTTA
 TGATGGTGGCTTATTCAGCCAGTCCATGGCACTGGCCATAGCAGCAGGTGAGAGTGTGGTTTCTGTAGC
 AACACTTCTCATGACCATCTGTTTTGTGTTTATGATGGTCTGTTGGTCAATCTCACAAACCATTGCATCTT
 GGCTGTATGGCTTCAGTACTTACGATTCACGATATGGATTTACGGCTTTCAGCATAATGAATTTTT
 GGGACAAAACCTTCTGCCAGGACTCAATGCAACAGGAAACAATCCTTGTAACTATGCAACATGACTGGC
 GAAGAATATTTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC233012 representing NM_001257386
 Red=Cloning site Green=Tags(s)

MSSSNVEVFIPIVSGQNTNGFPATASNDLKAFTEGAVLSFHNICYRVKLSGFLPCRKPVEKEILSNINGI
 MKPGLNAILGPTGGGKSSLLDVLARKDPSGLSGDVLINGAPRANFKCNSGYVVDVVMGTLTVRENL
 QFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGTQFIRGVSGGERKRTSIGMELITDPSILFLD
 EPTTGLDSSSTANAVLLLLKRMSKQGRITIFSIHQPRYSIFKLFDSLTLASGRLMFHGPQAEALGYFESA
 GYHCEAYNNPADFFLDIINGDSTAVALNREEDFKATEIIEPSKQDKPLIEKLAIEIYVNSSFYKETAELH
 QLSGGEKKKKITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKNDS
 TGIQNRAGVLFLLTNNQCFSSVSAVELFVVEKLFIEHYISGYRVSSYFLGKLLSDLLPMRMLPSIIFT
 CIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLLMTICFVMMVCWSISQPLHL
 GCHGFSTSAFHMDLRLCSIMNFWDKTSAQDSMQQETILVTMQHVLAKNIW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001257386

ORF Size: 1833 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_001257386.2](#)

RefSeq Size: 4290 bp

RefSeq ORF: 1836 bp

Locus ID: 9429

UniProt ID: [Q9UNQ0](#)

Cytogenetics: 4q22.1

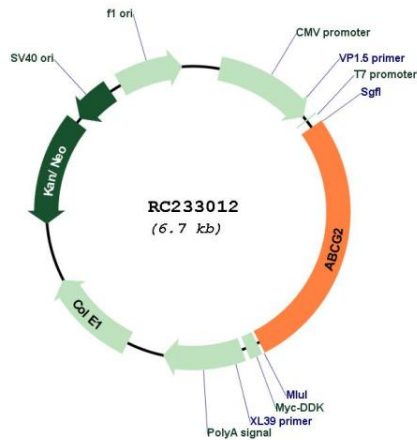
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: ABC transporters

MW: 67.9 kDa

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 RC233012