

## Product datasheet for **MR210248**

### **Abcb8 (NM\_029020) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Abcb8 (NM_029020) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abcb8
Synonyms:	4833412N02Rik; AA409895
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>MR210248 representing NM\_029020  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGTTGGTGCCTTATTTTCGGTTCGGAATCCGGGTGGCCAGTTCAGGATGGTCGCTACAATCCCTGC  
GCTTCCAGACGTTCTCTGCCGCCAGGTCCCTCAGATGACCGGCTCAGCTCACACCTCTGCCGACTGTAGC  
CCAGCTCCGTGTACAGCTCCGGGCTCACCTCCCTCGAGCCCCACCAGTTCCTCACTGGAGCCCTCTGCC  
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CACTATGTGAGGCCAAAGAGTCCCTCTGCCAGCCACACGTGCCCCAGAGCTGCGCTTAAATTGGAA  
GCTCTTCTGGCATTTCCTCACCCACCTGCTGGCCTTGGGGCAGCCATTGTGCTGCGCTTAGGTGCG  
GCACTAGTGAATGTGCAGATCCCCTTGTCTGGGCCAGCTGGTGGAGATTGTCGCCAAGTACACGAGGG  
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GCACTGTGGTTGGTGGAGGGGGACAACCTTGTCTGGTGGCCAGAAGCAGCGCCTAGCCATCGCAGGTGC  
CCTCATCAAGCAGCCACAGTGTGATCCTGGACGAGGCCACCAGTGCCTAGATGCAGAATCCGAGAGG  
GTGGTACAGGAGGCCCTGGACCGGGCCAGTGTGGCCGACCGTGTGGTTCATTGCCACCGGCTTAGTA  
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ACTCCTTAAAAAGGGGGCTCTATTAGAGCTTATCCGGAGACAAACCTGGACGCCTCACTGACCTCA  
ACCCCTCTGCAGAGAAGCTGAAGACCCAAAAGCTGCCAGTCCAAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR210248 representing NM\_029020  
Red=Cloning site Green=Tags(s)

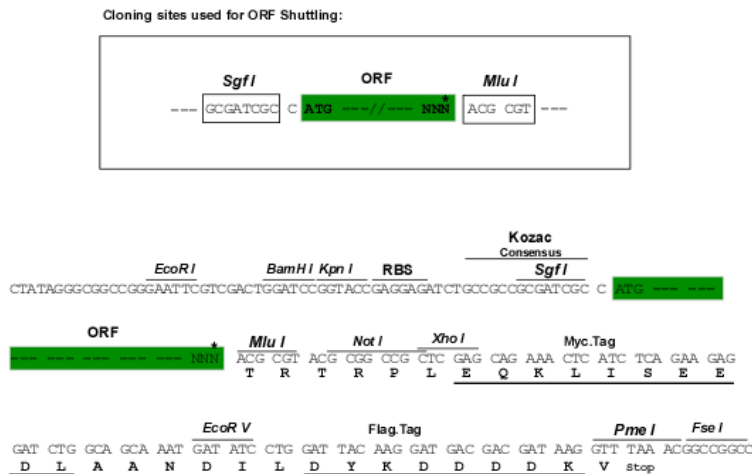
MLVHLFRFGIRGGVPVPGWSLQSLRFQTFSAARSSDDRLSSHLLRTVAQLRVQLRAHLPRAPPASHWSPSA  
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 ALVNVQIPLLLGQLVEIVAKYTRDHMGFSVSESRLKLSVQLLLL YGVQGLLTFGYLVLLSHIGERMAMDMR  
 KALFSSLLRQDIAFFDAKKTGQLVSRLTTDVQEFKSSFKLVISQGLRSCQVIGSLVLSMLSPRLTLM  
 AVVTPALMGVGTLMGSLRKLRSQCQEIQARATGVADALGNVRTVRAFAMEKREERYQAELESCCKA  
 EELGRGIALFQGLSNIAFNCMVLGTLF IGGSVAGQQLKGGDLMSFLVASQTVQRSMASLSVLFQVVVRG  
 LSAGARVFEYMALSPVIPLTGGYCIPNKDIRGSITFQNVTFSYPCRPGFNVLKDFTLKLPSGKIVALVGQ  
 SGGGKTTVASLLERFYDPEAGSVTLDGHLRRLNPSWLRGQVIGFISQEPVLFATTIMENIRFGKLDASD  
 EEVYTAAREANAHEFISFPDGYSTVVGERTT LSGGQKQRLAIARALIKQPTVLILDEATSALDAESER  
 VVQEALDRASAGRTVLVIAHRLSTVRAAHSIIVMANGQVCEAGTHELLKKGGLYSELIRRQTLASLTS  
 TPPAEKPEDPKSCQSKA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9013\\_f05.zip](https://cdn.origene.com/chromatograms/mm9013_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_029020

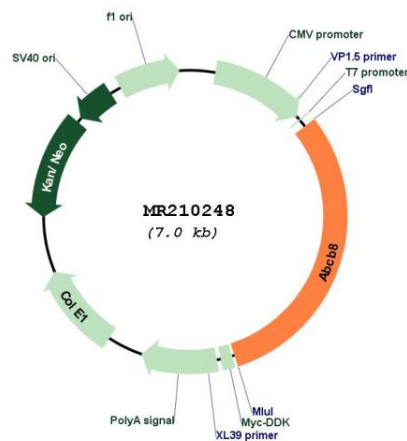
**ORF Size:** 2151 bp

**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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_029020.3</a></u>
<b>RefSeq Size:</b>	2962 bp
<b>RefSeq ORF:</b>	2154 bp
<b>Locus ID:</b>	74610
<b>UniProt ID:</b>	<u><a href="#">Q9CXJ4</a></u>
<b>Cytogenetics:</b>	5 A3
<b>MW:</b>	78.4 kDa
<b>Gene Summary:</b>	ATP-binding subunit of the mitochondrial potassium channel located in the mitochondrial inner membrane (By similarity). Together with CCDC51/MITOK, forms a protein complex localized in the mitochondria that mediates ATP-dependent potassium currents across the inner membrane (that is, mitoK(ATP) channel) (By similarity). Plays a role in mitochondrial iron transport (PubMed:22375032). Required for maintenance of normal cardiac function, possibly by influencing mitochondrial iron export and regulating the maturation of cytosolic iron sulfur cluster-containing enzymes (PubMed:22375032).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR210248