

## Product datasheet for **RG239326**

### **ABCB8 (NM\_001282292) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ABCB8 (NM_001282292) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCB8
Synonyms:	EST328128; M-ABC1; MABC1; MITOSUR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG239326 representing NM\_001282292.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGCTGGTGCATTTATTTTCGGGTCGGGATTTCGGGGTGGCCATTCCAGGCAGGCTGCTACCGCCCTC
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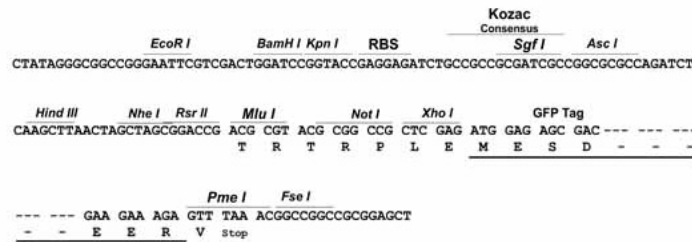
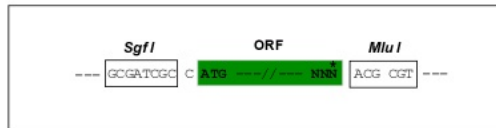
**Protein Sequence:** >Peptide sequence encoded by RG239326  
 Blue=ORF Red=Cloning site Green=Tag(s)

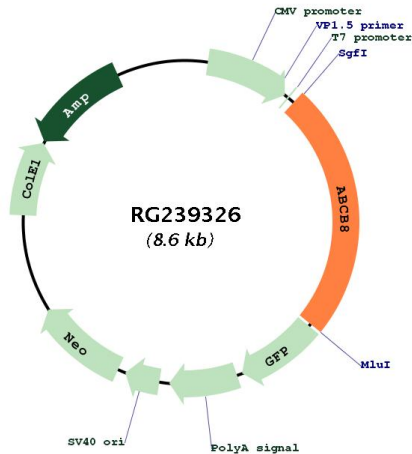
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 ACRCRAEELGRGIALFQGLSNI AFNCMLVGLTFIGGSLVAGQQLTGGDLMSFLVASQTVQRSMANLSVL  
 FGQVVRGLSAGARVFEYMALNPCIPLSGGCCVPKEQLRGSVTFQNVCFSYPCRPGFEVLKDFTLTLPFG  
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 RFGKLEASDEEVYTAAREANAHEFITSFPEGYNTVVGERTT LSGGQKQLAIARALIKQPTVILDEA  
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 HKS  
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 MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
 SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


<b>ACCN:</b>	NM_001282292
<b>ORF Size:</b>	2079 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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>RefSeq:</b>	<a href="#">NM_001282292.2</a>
<b>RefSeq Size:</b>	4609 bp
<b>RefSeq ORF:</b>	2082 bp
<b>Locus ID:</b>	11194
<b>UniProt ID:</b>	<a href="#">Q9NUT2</a>
<b>Cytogenetics:</b>	7q36.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	ABC transporters
<b>MW:</b>	75.8 kDa

**Gene Summary:**

This nuclear gene encodes a multi-pass membrane protein that is targeted to the mitochondrial inner membrane. The encoded protein is an ATP-dependent transporter that may mediate the passage of organic and inorganic molecules out of the mitochondria. Loss of function of the related gene in mouse results in a disruption of iron homeostasis between the mitochondria and cytosol. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]