

## ABCB8 Protein, Human (Cell-Free, His, SUMO)

<b>Cat. No.:</b>	HY-P702195
<b>Synonyms:</b>	Mitochondrial potassium channel ATP-binding subunit; ATP-binding cassette sub-family B member 8, mitochondrial; ABCB8; Mitochondrial ATP-binding cassette 1; M-ABC1; Mitochondrial sulfonylurea-receptor; MITOSUR
<b>Species:</b>	Human
<b>Source:</b>	E. coli Cell-free
<b>Accession:</b>	Q9NUT2 (G38-H693)
<b>Gene ID:</b>	11194
<b>Molecular Weight:</b>	87 kDa

### PROPERTIES

#### AA Sequence

G K T G Q L H K A E	G E Y S D G Y R S S	S L L R A V A H L R	S Q L W A H L P R A
P L A P R W S P S A	W C W V G G A L L G	P M V L S K H P H L	C L V A L C E A E E
A P P A S S T P H V	V G S R F N W K L F	W Q F L H P H L L V	L G V A V V L A L G
A A L V N V Q I P L	L L G Q L V E V V A	K Y T R D H V G S F	M T E S Q N L S T H
L L I L Y G V Q G L	L T F G Y L V L L S	H V G E R M A V D M	R R A L F S S L L R
Q D I T F F D A N K	T G Q L V S R L T T	D V Q E F K S S F K	L V I S Q G L R S C
T Q V A G C L V S L	S M L S T R L T L L	L M V A T P A L M G	V G T L M G S G L R
K L S R Q C Q E Q I	A R A M G V A D E A	L G N V R T V R A F	A M E Q R E E E R Y
G A E L E A C R C R	A E E L G R G I A L	F Q G L S N I A F N	C M V L G T L F I G
G S L V A G Q Q L T	G G D L M S F L V A	S Q T V Q R S M A N	L S V L F G Q V V R
G L S A G A R V F E	Y M A L N P C I P L	S G G C C V P K E Q	L R G S V T F Q N V
C F S Y P C R P G F	E V L K D F T L T L	P P G K I V A L V G	Q S G G G K T T V A
S L L E R F Y D P T	A G V V M L D G R D	L R T L D P S W L R	G Q V V G F I S Q E
P V L F G T T I M E	N I R F G K L E A S	D E E V Y T A A R E	A N A H E F I T S F
P E G Y N T V V G E	R G T T L S G G Q K	Q R L A I A R A L I	K Q P T V L I L D E
A T S A L D A E S E	R V V Q E A L D R A	S A G R T V L V I A	H R L S T V R G A H
C I V V M A D G R V	W E A G T H		

**Appearance** Lyophilized powder.

**Formulation** Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

**Endotoxin Level** <1 EU/µg, determined by LAL method.

**Reconstitution** It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Storage & Stability** Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

**Shipping**

Room temperature in continental US; may vary elsewhere.

**DESCRIPTION****Background**

ABCB8 is the ATP-binding subunit of the mitochondrial potassium channel situated in the mitochondrial inner membrane. Teaming up with CCDC51/MITOK, it forms a protein complex localized within the mitochondria, orchestrating ATP-dependent potassium currents across the inner membrane, known as the mitoK(ATP) channel. Beyond its role in channel activity, ABCB8 is implicated in mitochondrial iron transport. It is essential for preserving normal cardiac function, potentially influencing mitochondrial iron export and regulating the maturation of cytosolic iron-sulfur cluster-containing enzymes (By similarity). Notably, the channel activity is inhibited by ATP through the ABCB8/MITOSUR subunit.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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