

Recombinant Human ABCB5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50007

Size: 10ug, 100ug

Protein Name: ATP-binding cassette sub-family B member 5 (ABCB5 P-gp) (P-glycoprotein ABCB5) (EC 7.6.2.2)

Synonym: ABCB5

UniProt ID: Q2M3G0

UniProt Link: www.uniprot.org/uniprotkb/Q2M3G0/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1257 AA

Molecular Weight: 139 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MENSERAEEMQENYQRNGTAAEQPKLRKEAVGSIEIFRFADGLDITLMILGILASLVNGACPLMPLV
LGEMSDNLISGCLVQTNTTNYQNCTQSQEKLNEDMTLLTLYYVGIGVAALIFGYIQISLWIITAARQTK
RIRKQFFHSVLAQDIGWFDSCDIGELNTRMTDDIDKISDGIGDKIALLFQNMSTFSIGLAVGLVKGWKL
TLVTLSTSPIMASAAACSRMVISLTSKELSAYSAGAVAAEVLSSIRTVIAFRAQEKELQRYTQNLKD
AKDFGIKRTIASKVSLGAVYFFMNGTYGLAFWYGTSLILNGEPGYTIGTVLAVFFSVIHSSYCIGAAMP
HFETFAIARGAAFHIFQVIDKKPSIDNFSTAGYKPESIEGTVEFKNVSFNYPSPRSIKILKGLNLRIKSGE
TVALVGLNGSGKSTVVQLLQRLYDPDDGFIMVDENDIRALNVRHYRDHIGVVSQEPVLFGTITISNNIK
YGRDDVTDEEMERAAREANAYDFIMEFPNKFNTLVGEKGAQMSGGQKQRIAIARALVRNPKILILDE
ATSALDSESKSAVQAALAKSKGRITIVVAHRLSTIRSADLIVTLKDGMLAEKGAAHMAKRGLYYS
LVMSQDIKKADEQMESMTYSTERKTNSLPLHSVKSISDFIDKAEESTQSKEISLPEVSLLKILKLNKP
EWPFFVLGTLASVLNGTVHPVFSIIFAKIITMFGNNDKTTLKHD AEIYSMIFVILGVICFVSYFMQGLFYG
RAGEILTMRLRHLAFKAMLYQDIWFDEKENSTGGLTTILADIAQIQGATGSRIGVLTQ NATNMGLSVI
ISFIYGWEMTFLILSIAPVLAVTGMIETAAMTG FANKDKQELKHAGKIA TEALENIRTIVSLTREKAFEQ
MYEEMLQTQHRNTSKKAQIIGSCYAFSHAFIYFAYAAGFRFGAYLIQAGRMTPEGMFIVFTAIAYGAM
AIGETLVLAPEYSKAKSGAAHLFALLEKKPNIDSRSQEGKKPDTCEGNLEFREVSFFYP CRPDVFILR
GLSLSIERGKTVAFVGSSGCGKSTSVQLLQRLYDPVQGVLF DGDVDAKELNVQWLRSQIAIVPQEPV
LFNCSIAENIAYGDNSRVPLDEIKEAANAANIHSFIEGLPEKYNTQVGLKGAQLSGGQKQRLAIARAL



LQKPKILLLLDEATSALDNDSEKVVQHALDKARTGRTCLVVTHRLSAIQNADLIVVLHNGKIKEQGTHQ
ELLRNRIYFKLVNAQSVQ

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant ATP-binding cassette sub-family B member 5 (ABCB5 P-gp) (P-glycoprotein ABCB5) (EC 7.6.2.2) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Energy-dependent efflux transporter responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:12960149, PubMed:15205344, PubMed:15899824, PubMed:22306008). Specifically present in limbal stem cells, where it plays a key role in corneal development and repair (By similarity).

Subcellular Localization: Cell membrane ; Multi-pass membrane protein .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.