

# Product Information

## **MemDX™ Membrane Protein Human TRPM6 (Transient receptor potential cation channel subfamily M member 6) Full Length**

Cat. No.: **MPC0967K**

This product is for research use only and is not intended for diagnostic use.

This product is a 231.7 kDa Human TRPM6 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

TRPM6

#### Protein Length

Full length

#### Protein Class

Transporter; Ion channel

#### Molecular Weight

231.7 kDa

#### TMD

6

#### Sequence

MKEQPVLRLQSQKSWIKGVFDKRECSTIIPSSKNPHRCTPVCQVCQNLI  
RCYCGRLIGDHAGIDYSWTISAAKGKESEQWSVEKHTTKSPTDTFGTINF  
QDGEHTHHAKYIRTSYDTKLDHLLHMLKEWKMEPKLVISVHGGIQNFT  
MPSKFKEIFSQGLVKA AETTGAWIITEGINTGVSKHVG DALKSHSSHSLR  
KIWTVGIPPWGV IENQRDLIGKDVVCLYQTL DNPLSKLTTLNSMHSFIL  
SDDGTVGKYGNEMKLRRNLEKYL SLQKIHC SR RQGVPV VGLVVEGGPNVI  
LSVWETVKDKDPVVVCEGTGRAADLLAFT HKHLADEGMLRPQVKEE IICM  
IQNTFNFSLKQSKHLFQILMECMVHRDCITIFDADSEEQQDLDLAIL TAL  
LKGTNLSASEQLNLAMAWDRVDI AKKHILIYE QHWKPDAL EQAMSDALVM  
DRVDFVKLLIEYGVNLHRFLTIPRLEELYNTKQGPTNTLLHHLVQDVKQH  
TLLSGYRITLIDIGLVVEYLIGRAYRSNYTRKHFRALYNNLYRKYKHQRH  
SSGNRNESAESTLHSQFIRTAQPYKFKEKSIVLHKS RKKSK EQNVSD DPE  
STGFLYPYNDLLVWAVLMKRQKMAMFFWQH GEEATVKAVIACILYRAMAH  
EAKESHMVDDASEELKNYSKQFGQLALDLLEKAFKQNERMAMTLLTYELR  
NWSNSTCLKLAVSGGLRPFVSH TCTQMLL TDMWMGRLKMRKNSWLKIIIS  
IILPPTILTLEFKS KAEMSHVPQSQDFQFMWYYSDQNASSSKESASVKEY  
DLERGHDEKLDENQHFGLES GHQHL PWTRKVYEFYSAPIVKFWFYTMAYL  
AFLMLFTYTVLVEMQPQPSVQE WLVS IYIFTNAIEVVREICISEPGKFTQ  
KVKVWISEYWNLTETVAIGLFSAGFVLRWGDPPFHTAGRLIYCIDII FWF

SRLLDFFAVNQHAGPYVTMIKMTANMFYIVIIMAILLSFGVARKAILS  
PKEPPSWSLARDIVFEPYWMIYGEVYAGEIDVCSSQPSCPPGSFLTPTFLQ  
AVYLFVQYIIMVNLLIAFFNNVYLDMESISNNLWKYNRYRYIMTYHEKPW  
LPPPLILLSHVGLLLRRLCCHRAHPDQEEGDVGLKLYLSKEDLKKLHDFE  
EQCVEKYFHEKMEDVNCSCERIRVTSEVTEMYFQLKEMNEKVSFIKDS  
LLSLDSQVGHQLDLSALTVDTLKVL SAVDTLQED EALLAKRKHSTCKKLP  
HSWSNVICAEVLGSMEIAGEKKYQYYSMPSSLLRSLAGGRHPPRVQRGAL  
LEITNSKREATNVRNDQERQETQSSIVVSGVSPNRQAHSKYGQFLLVPSN  
LKRVPFSAETVLP LSRPSVPDVLATEQDIQTEVLVHLTGQTPVSDWASV  
DEPKEKHEPIAHLLDGQDKAEQVLPTLSCTPEPMTMSSPLSQAKIMQTGG  
GYVNWAFSEGDETGVFSIKKKWQTCLPSTCDSDSSRSEQHQKQAQDSSLS  
DNSTRSAQSSECSEVGPWLQPNTSFWINPLRRYRPFARSHSFRFHKEEKL  
MKICKIKNLSGSSEIGQGAWVKAKMLTKDRRLSKKKKNTQGLQVPIITVN  
ACSQSDQLNPEPGENSISEEEYSKNWFTVSKFSHTGVEPYIHQKMKTKEI  
GQCAIQISDYLKQSQEDLSKNLWNSRSTNLNRNSLLKSSIGVDKISASL  
KSPQEPHHHYSAIERNLMLRSQTIPFTPVQLFAGEEITVYRLEESSPLN  
LDKSMSSWSQRGRAAMIQVLSREEMDGGLRKAMRVVSTWSEDDILKPGQV  
FIVKSFLPEVVRTWHKIFQESTVLHLCLREIQQRRAAQKLIYTFNQVKPQ  
TIPYTPRFLEVFLIYCHSANQWLTIEKYMTGEFRKYNNNNNGDEITPTNL  
EELMLAFSHWTYEYTRGELLVLDLQGVGENLTDPSVIKPEVKQSRGMVFG  
PANLGEDAIRNFIKHHHCNCCRLKLPDLKRNDYSPERINSTFGLEIKI  
ESAEPPARETGRNSPEDDMQL

## Product Description

### Expression Systems

HEK293

### Tag

Based on specific requirements

### Protein Format

Detergent or based on specific requirements

### Form

Liquid

### Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

## Target

### Target Protein

TRPM6

### Full Name

Transient receptor potential cation channel subfamily M member 6

### Introduction

This gene is predominantly expressed in the kidney and colon, and encodes a protein containing an ion channel domain and a protein kinase domain. It is crucial for magnesium homeostasis, and plays an essential role in epithelial magnesium transport and in the active magnesium absorption in the gut and kidney. Mutations in this gene are associated with hypomagnesemia with secondary hypocalcemia. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

### Alternative Names

HSH; HMGX; HOMG; CHAK2; HOMG1; transient receptor potential cation channel subfamily M member 6; channel kinase 2; melastatin-related TRP cation channel 6; TRPM6; Transient receptor potential cation channel subfamily M member 6

**Gene ID**

[140803](#)

**UniProt ID**

[Q9BX84](#)