

Product Information

MemDX™ Membrane Protein Human ITPR2 (Inositol 1,4,5-trisphosphate receptor type 2)

Full Length

Cat. No.: **MPC1043K**

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

This product is a 308 kDa Human ITPR2 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

ITPR2

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

308 kDa

TMD

6

Sequence

MTEKMSSFLYIGDIVSLYAEGSVNGFISTLGLVDDRCVHPEAGDLANPP
KKFRDCLFKVCPMNRYSQKQYWKAKQAKQGNHTEAALLKKLQHAAELEQ
KQNESENKKLLGEIVKYSNVIQLLHIKSNKYLTVNKRLPALLEKNAMRVS
LDAAGNEGSWFYIHPFWKLRSEGDNIIVVGDKVVLMPVNAGQPLHASNIEL
LDNPGCKEVNAVNCNTSWKITLFMKYSSYREDVLKGGDVVRLFHAEQEKF
LTCDEYEKKQHIFLRTTLRQSATSATSSKALWEIEVVHHDPCRGGAGQWN
SLFRFKHLATGNYLAAELNPDYRDAQNEGKNVRDGVPPTSKKKRQAGEKI
MYTLVSVPHGNDIASLFELDATTQRADCLVPRNSYVRLRHLCTNTWVTS
TSIPIDTDEERPVMKIGTCQTKEDKEAFAIVSVPLSEVRDLDFANDANK
VLATTVKKLENGTITQNERRFVTKLLEDLIFFVADVPNNGQEVLDVVITK
PNRERQKLMREQNILAQVFGILKAPFKEKAGEGSMLRLEDLGDQRYAPYK
YMLRLCYRVLRRHSQQDYRKNQEYIAKNFCVMQSQIGYDILAEDTITALLH
NNRKLLEKHITAKEIETFVSLRRNREPRFLDYLSDLCSNTTAIPVTQE
LICKFMLSPGNADILIQTKVSMQADNPMESSILSDDIDDEEVWLYWIDS
NKEPHGKAIRHLAQEAKEGTADLEVLTYRYQLNLFARMCLDRQYLAIN
QISTQLSVDLILRCVSDESPLFDLRASFCRLMLMHVDRDPQESVVPVRY
ARLWTEIPTKITIHEYDSITDSSRNDMKRKFALTMEFVEEYLKEVVNQPF
PFGDKKKNKLTFEVHLARNLIYFGFYSELLRLTRTLLAILDIVQAPM
SSYFERLSKFQDGGNNVMRTIHGVGEMMTQMVLRSRGSIFPMSVPDVPSSI

HPSKQGSPTHEHEDVTVMDTKLKIIILQFILSVRLDYRISYMLSIYKKEF
GEDNDNAETSASGSPDTLLPSAIVPDIDEIAAQAETMFAGRKEKNPVQLD
DEGGRTFLRVLHLIMHDYPPLLSGALQLLFKHFSQRAEVLQAFKQVQLL
VSNQDQVDNYKQIKADLDQLRLTVEKSELWVEKSSNYENGEIGESQVKGGE
EPIEESNILSPVQDGTKKPQIDSNKSNYRIVKEILIRLSKLCVQNKKCR
NQHQRLLLKNMGAHSVVDLLQIPYEKNDEKMNEVMNLAHTFLQNFRCGNP
QNQVLLHKHLNLFLLTPGLLEAETMRHIFMNNYHLCNEISERVVQHVFHCI
ETHGRHVEYLRFLQTIVKADGKYVKKCQDMVMTELINGGEDVLIFYNDRA
SFPILLHMMCSERDRGDESGPLAYHITLVELLAECTEGKNVYTEIKCNSL
LPLDDIVRVVTHDDCIPEVKIAYVNFVNHCVVDTEVEMKEIYTSNHIWKL
FENFLVDMARVCNTTTDRKHADIFLEKCVTESIMNIVSGFFNSPFSDNST
SLQTHQPVFQILLQSAFRIYNCTWPNPAQKASVESCIRTLAEVAKNRGIA
IPVDLDSQVNTLFMKSHSNMVQRAAMGWRLSARSGPRFKEALGGPAWDYR
NIIKLQDVVASLEHQFSPMMQAEFSVLVDVLYSPELLFPEGSDARIRCG
AFMSKLINHTKKLMEKEEKLKILQTLREMLEKKDSFVEEGNTRLRKILL
NRYFKGDYSIGVNGHLGAYSKTAQVGGSFSGQSDKMGISMSDIQCLLD
KEGASELVIDVIVNTKNDRIFSEGIFLGIALLEGNTQTQYSFYQQLHEQ
KKSEKFFKVLVYDRMKAAQKEIRSTVTNTIDLGNKKRDDDNELMTSGPRM
RVRDSTLHLKEGMKGQLTEASSATSKAYCVYRREMDPEIDIMCTGPEAGN
TEEKSAEEVTMSPAIAIMQPILRFLQLLCENHNRELQNFLRNQNNKNTYN
LVCETLQFLDCICGSTTGGLGLLYINEKNVALVNQNLESLTEYCQGPC
HENQTCIATHESNGIDIIIALILNDINPLGKYRMDLVLQLKNNASKLLLA
IMESRHDSENAERILFNMRPRELVDVMKNAYNQGLECDHGDDEGGDDGVS
PKDVGHNIYILAHQLARHNKLLQQMLKPGSDPDEGDEALKYYANHTAQIE
IVRHDRTMEQIVFPVPNICEYLTRESKCRVFNTTERDEQGSKVNDFFQQT
EDLYNEMKWQKKIRNNPALFWFSRHISLWGSISFNLAVFINLAVALFYPF
GDDGDEGTLSPLFSVLLWIAVAICTSMLFFFSKPVGIRPFLVSIMLSIY
TIGLGPTLILLGAANLCNKIVFLVSFVGNRGTFTRGYRAVILDMAFLYHV
AYVLVCMLGLFVHEFFYSFLLFDLVYREETLLNVIKSVTRNGRSIILTAV
LALILVYLFISIIGFLFLKDDFTMEVDRLKNRTPVTGSHQVPTMTLTMMME
ACAKENCSP TIPASNTADEEYEDGIERTCDTLLMCIVTVLNQGLRNGGGV
GDVLRPSKDEPLFAARVVYDLLFYFIVIIIIVLNLIFGVIIDTFADLRSE
KQKKEEILKTTFCICGLERDKFDNKTVSFEEHIKSEHNMMWHYLYFIVLVK
VKDPTEYTGPESYVAQMIVEKNLDWFPRMRAMSLVSNEGDSEQNEIRSLQ
EKLESTMSLVKQLSGQLAELKEQMTEQRKNKQRLGFLGSNTPHVNHHMPP
H

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 -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

ITPR2

Full Name

Inositol 1,4,5-trisphosphate receptor type 2

Introduction

The protein encoded by this gene belongs to the inositol 1,4,5-trisphosphate receptor family, whose members are second messenger intracellular calcium release channels. These proteins mediate a rise in cytoplasmic calcium in response to receptor activated production of inositol triphosphate. Inositol triphosphate receptor-mediated signaling is involved in many processes including cell migration, cell division, smooth muscle contraction, and neuronal signaling. This protein is a type 2 receptor that consists of a cytoplasmic amino-terminus that binds inositol triphosphate, six membrane-spanning helices that contribute to the ion pore, and a short cytoplasmic carboxy-terminus. A mutation in this gene has been associated with anhidrosis, suggesting that intracellular calcium release mediated by this protein is required for eccrine sweat production.

Alternative Names

ITPR2; ANHD; IP3R2; CFAP48; INSP3R2; IP3 receptor; IP3R 2; cilia and flagella associated protein 48; type 2 InsP3 receptor; Type 2 inositol 1,4,5-trisphosphate receptor; IP3 receptor isoform 2; Inositol 1,4,5-trisphosphate receptor type 2

Gene ID

[3709](#)

UniProt ID

[Q14571](#)