

Product Information

MemDX™ Membrane Protein Human RYR3 (Ryanodine receptor 3) Full Length

Cat. No.: **MPC1068K**

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

This product is a 552 kDa Human RYR3 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

RYR3

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

552 kDa

TMD

7

Sequence

MAEGGEGGEDEIQFLRTEDEVVLQCIATIHKEQRKFCLAAEGLGNRLCFL
EPTSEAKYIPPDLCVCNFVLEQSLSVRALQEMLANTGENGGEGAAQGGGH
RTLTYGHAVLLRHSFSGMYLTCLTTSRSQTDKLAFDVGLREHATGEACWW
TIHPASKQRSEGEKVRIGDDLILVSVSSERYLHLSVSNQNIQVDASFMQT
LWNVHPTCSGSSIEEGYLLGGHVVRFLFHGHDECLTIPSTDQND SQHRRIF
YEAGGAGTRARSLWRVEPLRISWGSNIRWGQAFRLRHLLTTGHYALTED
QGLILQDRAKSDTKSTAFSFRASKELKEKLDSSHKRDI EGMGVPEIKYGD
SVCVQHIASGLWVTYKAQDAKTSRLGPLKRKVILHQEGHMDDGLTLQRC
QREESQAARIIRNTALFSQFVSGNNRTAAPITLPIEEVLQTLQDLIAYF
QPPEEEMRHEDKQNKLRSLKNRQNL FKEEGMLALVLNCIDRLNVYNSVAH
FAGIAREESGMAWKEILNLLYKLLAALIRGNRN NCAQFSNNLDWLISKLD
RLESSSGILEVLHCILTESPEALNLIAEGHIKSIISLLDKHGRNHKVLDI
LCSLCLCNGVAVRANQNLCNDLLPRNLLLQTRLINDVTSIRPNIFLG
AEGSAQYKKWYFELIIDQVDPFLTAEPHLRVGWASSSGYAPYPGGGEGW
GGNGVGDDLYSYGFDGLHLWSGRIPRAVASINQHLLRSDDV VSCCLDLGV
PSISFRINGQPVQGMFENFNTDGLFFPVMSFSAGVKVRFLMGGRHGEFKF
LPPSGYAPCYEALLPKEKMRLEPVKEYKRDADGIRDLLGTTQFLSQASFI
PCPVDTSQVILPPHLEKIRDRLAENIHELWGMNKIELGWTFGKIRDDNKR
QHPCLVEFSKLPETEKNYNLQMSTETLKTLLALGCHIAHVNPAAEEDLKK
VKLPKNYMMNSNGYKPAPLDLSDVKLLPPQEILVDKLAENAHNVWAKDRIK
QGWTYGIQQDLKNKRNPRLVPYALLDERTKKS NRDSLREAVRTFVGYGYN

IEPSDQELADSAVEKVSIDKIRFFRVERSYAVRSGKWYFEFEVVTGGDMR
VGWARPGCRPDVELGADDQAFVFEGNRGQRWHQGSYFGRTWQPGDVVGC
MINLDDASMITLNGELLITNKGSELAADYEIENGFPICCLGLSQIGR
MNLGTDASTFKFYTMCGLQEGFEPFAVNMNRDVAWWSKRLPTFVNVPKD
HPHIEVMRIDGTMDSPCLKVTHKTFGTQNSNADMIYCRLSMPVECHSSF
SHSPCLDSEAFQKRKQMQEILSHTTTQCYAIRIFAGQDPSCVWVGWVTP
DYHLYSEKFDLKNCTVTVTLGDERGRVHESVKRSNCYMWVGGDIVASSQ
RSNRSNVDLEIGCLVDL AMGMLSFSANGKELGTCYQVEPNTKVFPVFLQ
PTSTSLFQFELGKLKNAMPLSAAIFRSEEKNPVPQCPRLDVQTIQPVW
SRMPNSFLKVETERVSRHGWVWVQCLEPLQMMALHIPEENRCVDILELCE
QEDLMRFHYHTLRLYSACVCLGNSRVAYALCSHVDLSQLFYAIDNKYLP
LLRSGFYDLLISIHLSAKERKLMKNEYIIPITSTTRNIRLFPDESKRH
GLPGVGLRTCLKPGFRFSTPCFVVTGEDHQKQSPLESLRTKALSMLT
EAVQCSGAHIRDPVGGSVFQFVPVCLKLIGTLLVMGVFDDDDVRQILLI
DPSVFGESAGTEEGAEKEEVTQVEEKAVEAGEKAGKEAPVKGLLQTRLP
ESVKLQMCCELLSYLDCCELQHRVEAIVAFGDIYVSKLQANQKFRYNELMQ
ALNMSAALTARKTKEFRSPPEEQINMLLNFLQGENCPCPEEIREELYDFH
EDLLHCGVPLEEEEEEEEDTSWTGKLCALVYKIKGPPKPEKEQPTEEEE
RCPTTLKELISQTMICWAQEDQIQDSELVRMMFNLLRRQYDSIGELLQAL
RKTYTISHTSVSDTINLLAALGQIRSLLSVRMGKEEELLMINGLGDIMNN
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CRISRQNKAMFEHLSYLLNSSVGLASPSMRGSTPLDVAASSVMDNNEL
ALSLEEPDLEKVVTYLAGCGLQSCPMLLAKGYPDVGWNPPIEGERYLSFLR
FAVFNSESVENASVVKLLIRRECEFGPALRGEGGNLLAAMQGAIKI
SENPAIDLPSQGYKREVSTGDDDEEEIEVHMGNAIMSFYSALIDLLGRCA
PEMHLIQTGKGAEAIRSILRSLVPTEDLVGIISPLKLPSLNKDGSVSE
PDMAANFCPDHKAPMVLFLDRVYGIKDQTFLLHLEVGFLPDLRASASLD
TVSLSTTEAALALNRYICSAVLPLLTRCAPLFAHTEHCTSLIDSTLQTIY
RLSKGRSLTKAQRDTIEECCLAICNHLRPSMLQQLLRRLVFDVPQLNECY
KMPLKLLTNHYEQCWKYYCLPSGWGSYGLAVEEELHLEKLFWGIFDLSL
HKKYDPDLFRMALPCLSAIAGALPPDYLDTRITATLEKQISVDADGNFDP
KPINTMNFSLPEKLEYIVTKYAEHSHDKWACDKSQSGWKYGISLDENVKT
HPLIRPFKLTLEKEKEIYRWPARESLKTMALVGVWTVERTKEGEALVQORE
NEKLRSVSQANQGNSSYPAPLDLSNVVLSRELQGMVEVVAENYHNIWAKK
KKLELESKGGGSHPLLVPYDTLTAKEKFKDREKAQDLFKFLQVNGIIVSR
GMKDMELDASSMEKRFAYKFLKKILKYVDSAQEFIAHLEAIVSSGKTEKS
PRDQEIKFFAKVLLPLVDQYFTSHCLYFLSSPLKPLSSSGYASHKEKEMV
AGLFCKLAALVRHRISLFGSDSTTMVSCLHILAQTLDTRTVMKSGSELVK
AGLRAFFENAAEDLEKTSENLKLKGFTHSRTQIKGVSQININYTTVALLPI
LTSIFEHVTQHFGMDLLLDVQISCYHILCSLYSLGTGKNIYVERQRP
LGECLASLAAIPVAFLEPTLNRYNPLSVFNTKTPRERSILGMPDTEDEM
CPDIPQLEGLMKEINDLAESGARYTEMPHVIEVILPMLCNLYSYWWERGP
ENLPPSTGPCCTKVTSHELILGNILKIINNLLGIDEASWMKRIAVYAQ
PIISKARPDLLRSHFIPTLEKLLKKAVKTVQEEELKADGKGDTEAEALL
ILDEFVLCDRLYAFYPMILIRYVDNNRSNWLKSPDADSDQLFRMVAEVI
LWCKSHNFKREEQNFVQNEINNLAFLTGDSKSKMSKAMQVKSGGQDQER
KKTKRGRDLYSIQTSILVAALKKMLPIGLNMCTPGDQELISLAKSRYSHR
DTDEEVREHLRNHLQEKSDPAVKWQLNLYKDVLKSEEPFNPEKTVER
VQRISAASFHLEQVEQPLRSKKAHVHKLKSKQRKRAVVACFRMAPLYNLP
RHRSINLFLHGYQRFWIEETEYSFEEKLVQDLAKSPKVEEEEEETEKP
DPLHQIILYFSRNALTERSKLEDDPLYTSYSSMMAKSCQSGEDEEEDEK
EKTFEKEMEKQKTLYQARLHERGAAEMVLQMSASKGEMSPMVVETLK
LGAILNGGNAGVQKMLDYRLEKKGADAGFFQSLSGLMQSCSVLDLNAFER
QNAEGLGMVTEEGTLVYRERGEKVLQNDFTDLFRFLQLLCEGHNSDF
QNFLRTQMGNNTTVNVIISTVDYLLRLQESISDFYWYYSKDIIDESGQH
NFSKALAVTKQIFNSLTEYIQGPCIGNQQSLAHSRLWDAVVGFHVFANM
QMKLSQDSSQIELLKELLDLLQDMVVMLLSLLEGNVVNGTIGKQMVDTLV
ESSTNVEMILKFFDMFLKLDLTSSDTFKEYDPDGKGIISKKEFKKAMEG
QKQYTQSEIDFLLSCAEADENDMFNYVDFVDRFHEPAKDIFGNVAVLLTN
LSEHMPNDSRLKCLDPAESVLNYFEPYLGRIEIMGGAKKIERVYFEISE
SSRTQWEKPQVKESKRQFIFDVVNEGGEQEKMELFVNFCEDTIFEMQLAS
QISESDSADRPEEEEEDEESSYVLEIAGEEEEEEDGSLEPASAFAMACASVK
RNVTDFLKRATLKNLRKQYRNVKMTAKELVKVLSFFWMLFVGLFQLLF
TILGGIFQILWSTVFGGLVEGAKNIRVTILGDMPTDQFGIHDDTMEA
ERAEVMEPGITTELVHFVKEKGDTDIMSDFLGLHPKKEGSLKHGPEVGL
GDLSEIIGKDEPPTLESTVQKKRKAQAAMKAANEAEKGVESEKADMEDG

EKEDKDKEEEQAEYLWTEVTKKKKRRRCGQKVEKPEAFTANFFKGLEIYQT
KLLHYLARNFYNLRFALFVAFAINFILLFYKVTEEPLEEETEDVANLWN
SFNDEEEEEAMVFFVLQESTGYMAPTLRALAIHTIISLVCVVGYCLKV
PLVVFVKREKEIARKLEFDGLYTEQPSDDIKGQWDRLVINTPSFPNNYW
DKFVKRKVINKYGDLYGAERIAELLGLDKNALDFSPVEETKAEAASLVSW
LSSIDMKYHIWKLGVVFTDNSFLYLAWYTTMSVLGHYNNFFFAHLLDIA
MGFKTLRTLSSVTHNGKQLVLTVGLLAVVVYLYTVVAFNFFRKFYNKSE
DDDEPDMKCDDMMTCYLFHMYVGVVRAGGGIGDEIEDPAGDPYEMYRIVFD
ITFFFFVIVILLAIQGLIIDAFGELRDQQEQVREDMETKCFICGIGNDY
FDTTPHGFETHLQEHNLANYLFFLMYLINKDETEHTGQESYVWKMYQER
CWDFFPAGDCFRKQYEDQLG

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

RYR3

Full Name

Ryanodine receptor 3

Introduction

The protein encoded by this gene is a ryanodine receptor, which functions to release calcium from intracellular storage for use in many cellular processes. For example, the encoded protein is involved in skeletal muscle contraction by releasing calcium from the sarcoplasmic reticulum followed by depolarization of T-tubules. Two transcript variants encoding different isoforms have been found for this gene.

Alternative Names

RYR3; RYR-3; brain ryanodine receptor-calcium release channel; brain-type ryanodine receptor; type 3 ryanodine receptor; RyR3; HBRR; Ryanodine receptor 3

Gene ID

[6263](#)

UniProt ID

[Q15413](#)