

Product Information

MemDX™ Membrane Protein Human RYR2 (Ryanodine receptor 2) Full Length

Cat. No.: **MPC1067K**

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

This product is a 564.5 kDa Human RYR2 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

RYR2

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

564.5 kDa

TMD

6

Sequence

MADGGEGEDEIQFLRTDDEVVLQCTATIHKEQQKLCCLAAEGFGNRLCFLE
STSNSKNVPPDLSICTFVLEQSLSVRALQEMLANTVEKSEGQVDVEKWKF
MMKTAQGGGHRITLLYGHAILLRHSYSGMYLCCLSTSRSTDKLAFDVGLQ
EDTTGEACWWTIHPASKQRSEGEKVRVGGDDLILSVSSERYLHLSYGNGS
LHVDAAFQQTLSVAPISGSEAAQGYLIGGDVLRLLHGHMDECLTVPSG
EHGEEQRRTVHYEGGAVSVHARSLWRLETLRVAWSGSHIRWGQPFRLRHV
TTGKYLSLMEDKNLLMDKEKADVSTAFTRSSKEKLDVGVKEVDGMG
TSEIKYGDSVCYIQHVDLTGLWLTYSVDVKSVRMGSIQRKAIMHHEGHMD
DGISLSRSQHEESRTARVIRSTVFLFNRFIRGLDALSKKAKASTVDLPIE
SVSLSLQDLIGYFHPDEHLEHEDKQNRRLRALKNRQNLQFEEGMINLVLE
CIDRLHVSAAHFADVAGREAGESWKSILNSLYELLAALIRGNRKNCAQ
FSGSLDWLISRLERLEASSGILEVLHCVLVESPEALNIIKEGHIKSIISL
LDKHGRNHKVLDVLCCLCVCHGVAVRSNQHLICDNLLPGRDLLQTRLVN
HVSSMRPNIFLGVSEGSQYKKWYYELMVDHTEPFVTAETHLRVGWAST
EGYSPYPGGGEEWGGNGVGDDLFSYGFDGLHLWSGCIARTVSSPNQHLLR
TDDVISCLDLAPSISFRINGQPVGGMFENFNIDGLFFPVVSFSAGIKV
RFLLGGRHGFEKFLPPPGYAPCYEAVLPKEKLKVEHSREYKQERTYTRDL
LGPTVSLTQAAFTPIPVDTSQIVLPPHLERIREKLAENIHELWVMNKIEL
GWQYGPVRDDNKRQHPCLVFESKLPEQERNYNLQMSLETLLKLLALGCHV
GISDEHAEDKVKMKMLPKNYQLTSGYKPAPMDLSFIKLTSPSQEAMVDKLA
ENAHNVWARDIRIQGWTYGIQQDVKNRRNPRLVPYTLDDRTKSNKDSL

REAVRTLGLGYGNLEAPDQDHAARAEVCSGTGERFRIFRAEKTYAVKAGR
WYFETETVTAGDMRVGWSRPGCQPDQELGSDERAFDFGFKAQRWHQGNE
HYGRSWQAGDVVGCVMNEHTMMFTLNGEILLDDSGSELAFKDFDVGDG
FIPVCSLGVAAQVGRMNFVKDVLKYFTICGLQEGYEPFAVNTNRDITMW
LSKRLPQFLQVPSNHEHIEVTRIDGTIDSSPCLKVTQKSFGSQNSNTDIM
FYRLSMPICAEVFSKTAVAGGLPGAGLFGPKNDLEDYDADSDFEVLMKTA
HGHLVPDRVDKDEATKPEFNNHKDYAQEKPSRLKQRFLLRRTKPDYSTS
HSARLTEDVLADDRDDYDFLMQSTSTYYYSVRIFPGQEPANVWVGWITSDF
HQYDTGFDLDRVRTVTVLGDEKGVHESIKRSNCYMCAGESMSPGQGR
NNNGLEIGCVVDAASGLLTFIANGKELSTYYYQVEPSTKLFPVFAQATSP
NVFQFELGRIKNVMPLSAGLFKSEHKNPVPQCPRLHVQFLSHVLWSRMP
NQFLKVDVSRISERQGWLVQCLDPLQFMSLHIPEENRSVDILELTEQEEL
LKFHYHTLRLYSAVCALGNHRVAHALCSHVDEPQLLYAIENKYMPLGLLRA
GYDDLIDIHLSYATARLMNNNEYIVPMTEETKSITLFPDENKKHGLPG
IGLSTSLRPRMQFSSPSFVSISNECYQYSPEFPLDILKSKTIQMLTEAVK
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FKEAATPEEESDTLEKELSVDDAKLQGAGEEEAKGGKRPKEGLLQMKLPE
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LNMSAALTARKTKEFRSPPEEQINMLLNFKDDKSECPCPEEIRDQLLDFH
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ALPKTYTINGVSVEDTINLLASLGQIRSLLSVRMGKEEEKLMIRGLDIM
NNKVFYQHPNLMRALGMHETVMEVMVNVLGGESKEITPKMVANCCRFL
CYFCRISRQNKAMFDHLSYLLNESSVGLASPAMRGSTPLDVAAASVMDN
NELALALREPDLEKVVRYLAGCGLQSCQMLVSKGYPDIGWNPVEGERYLD
FLRFAVFCNGESVEENANVVVRLLIRRPECFGPALRGEGGNLLAAMEEA
IKIAEDPSRDGSPNSGSSKTLDTETEEEDDTIHMGNAMTFYSALIDLLG
RCAPEMHLIHAGKGEAIRSILRSIPLGLDVGVISIAFQMPTIAKDGN
VVEPDMSAGFCPDHKAAMVFLDRVYGIEVQDFLLHLEVGFLPDLRAAA
SLDTAALSATDMALALNRYLCTAVLPLLTRCAPLFAGTEHHASLIDSLH
TVYRLSKGCSLTKAQRDSIEVCLLSICGQLRPSMMQHLLRRLVFDVPLL
EHAKMPLKLLTNHYERCWKYYCLPGGWGNFGAASEEELHLSRKLFWGIFD
ALSQKKYEQELFKLALPCLSAVAGALPPDYMESNYVSMMEKQSSMDSEGN
FNPQPVDTSNITIEKLEYFINKYAEHSHDKWSMDKLANGWIYGEIYSDS
SKVQPLMKPYKLLSEKEKEIYRWPIKESLKTMLAWGWRIERTREGDSMAL
YNRTRRISQTSQVSVDAAHGYSPRAIDMSNVTLSRDLHAMAEMMAENYHN
IWAKKKKMELESKGGGNHPLLPYDTLTAKKAKDREKAQDILKFLQING
YAVSRGFKDLELDTSPSIEKRFAYSFLQQLIRYVDEAHQYILEFDGGSRGK
GEHFPYEQEIKFFAKVVLPLIDQYFKNHRLYFLSAASRPLCSGGHASNKE
KEMVTSLFCKLGLVLRHRLSLFGNDATSIVNCLHILGQTLDDARTVMKTGL
ESVKSALRAFLDNAAEDLEKTMENTLQGGQFTHTRNQPKGVTQIINYTTVA
LLPMLSSLFEHIGQHGFEDLILEDVQVSCYRILTSLYALGTSKSIYVER
QRSALGECLAFAAGAFPVAFLETHLDKHNIYSIYNTKSSRERAALSLPTN
VEDVCPNIPSLEKLMEEIVELAESGIRYTMHPHMEVILPMLCSYMSRWW
EHGPENNP ERAEMCCTALNSEHMTLLGNILKIIYNNLGIDEGAWMKRLA
VFSQPIINKVKPQLLKTHFLPLMEKLKKKAATVVSEEDHLKAEARGDMSE
AELLILDEFTTLARDLYAFYPLLIRFVDYNRAKWLKEPNPEAEELFRMVA
EVFIYWSKSHNFKREEQNFFVQNEINNMSFLITDTKSKMSKAAVSDQERK
KMKRKGDRYSMTSLIVAALKRLLPIGLNICAPGDQELIALAKNRFSLKD
TEDEVDRDIIRSNHILQGKLEDPARWQMALYKDLNRTDDTSDPEKTVER
VLDIANVLFHLEQSKSRVGRRHLYCLVEHPQRSKKAHVHKLKSKQRKRAVV
ACFRMAPLYNLPRHRAVNLFLQGYEKSWEIETEEHYFEDKLIEDLAKPGAE
PPEEDEGTRKRDPLHQLILLFRTALTEKCKLEEDFLY MAYADIMAKSCH
DEEDDDGEEEVKSFEKEMEKKQLLYQARLHDRGAAEMVLQTIASASKGE
TGPMVAATLKLGAAILNGNSTVQQKMLDYLKEKKDVGFFQSLAGLMQSC
SVLDLNAFERQNKAEGLMVTEEGSGEKVLQDDEFTCDLFRFLQLLCEGH
NSDFQNYLRTQTGNNTTVNIIISTVDYLLRVQESISDFYWYYSKGDVIDE
QGQRNFSKAIQVAKQVFNTLTEYIQGPCTGNQQSLAHSRLWDAVVGFLHV
FAHMQMKLSQDSSQIELLKELMDLQKDMVVMMLSMLEGNVNGTIGKQMV
DMLVSSNNVEMILKFFDMFLKLDLTSSDTFKEYDPDGKGVISKRDFHK
AMESHKHYTQSETFLLSCAETDENETLDYEEFVKRFHEPAKDIFGNVAV
LLTNLSEHMPNDTRLQTFLELAESVLNYFQPF LGRIEIMGSAKRIERYF
EISESSRTQWEKPQVKESKRQFIFDVVNEGGEKEKMELFVNFCEDTIFEM
QLAAQISESDLNERSANKEESEKERPEEQGPRMAFFSILTVRSALFALRY
NILTLMRMLSLKSLKKQMKVKKMTVKDMVTAFFSSYWSIFMTLLHFVAS
VFRGFFRIICSLLLGGSLVEGAKKIKVAELLANMPDPTQDEVRGDGEEGE

RKPLEAALPSEDLTKELTEESDLLSDIFGLDLKREGGQYKLIPHNPNAGLSDLMSNPVPMPEVQEKFQEQKAKEEEEEKEETKSEPEKAEGEDGEKEEKAKEDKGKQKLRLHHTHRYGEPEVPESAFWKKIAYQQKLLNYFARNFYNMRMLALFVAFAINFILLFYKVSTSSVVEGKELPTRSSSENAKVTSLDSSSHRIIAVHYVLEESSGYMEPTLRILAILHTVISFFCIIGYYCLKVPLVIFKREKEVARKLEFDGLYTEQPSEDDIKGQWDRVLINTQSFPNNYWDKFVKRKVMDKYGEFYGRDRISELLGMDKAALDFSDAREKKKPKKDSSLAVLNSIDVKYQMWKLGVVFTDNSFLYLAWYMTMSVLGHYNNFFFAAHLLDIAMGFKTLRTLSSVTHNGKQLVLTVGLLAVVVYLYTVVAFNFFRKFYNKSEDGDTDMKCDMLTCYMFHMYVGVVRAGGGIGDEIEDPAGDEYEIYRIIFDITFFFVIVILLAIQGLIIDAFGELRDQEQVKEDMETKCFICGIGNDYFDTVPHGFETHLTQEHNLANYLFFFLMYLINKDETEHTGQESYVWKMYQERCWEFFPAGDCFRKQYEDQLN

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

RYR2

Full Name

Ryanodine receptor 2

Introduction

This gene encodes a ryanodine receptor found in cardiac muscle sarcoplasmic reticulum. The encoded protein is one of the components of a calcium channel, composed of a tetramer of the ryanodine receptor proteins and a tetramer of FK506 binding protein 1B proteins, that supplies calcium to cardiac muscle. Mutations in this gene are associated with stress-induced polymorphic ventricular tachycardia and arrhythmogenic right ventricular dysplasia.

Alternative Names

RYR2; RyR; ARVC2; ARVD2; RYR-2; VTSIP; cardiac muscle ryanodine receptor-calcium release channel; cardiac-type ryanodine receptor; islet-type ryanodine receptor; kidney-type ryanodine receptor; ryanodine receptor 2 (cardiac); type 2 ryanodine receptor; Ryanodine receptor 2

Gene ID

[6262](#)

UniProt ID

