Datasheet for ABIN7554278

Junctophilin 2 Protein (JPH2) (AA 1-696) (His tag)

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Overview

Quantity:	1 mg
Target:	Junctophilin 2 (JPH2)
Protein Characteristics:	AA 1-696
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Junctophilin 2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat JPH2 Protein expressed in mammalien cells.
Sequence:	MSGGRFDFDD GGAYCGGWEG GKAHGHGLCT GPKGQGEYSG SWNFGFEVAG VYTWPSGNTF EGYWSQGKRH GLGIETKGRW LYKGEWTHGF KGRYGIRQSS SSGAKYEGTW NNGLQDGYGT ETYADGGTYQ GQFTNGMRHG YGVRQSVPYG MAVVVRSPLR TSLSSLRSEH SNGTVAPDSP ASPASDGPAL PSPAIPRGGF ALSLLANAEA AARAPKGGGL FQRGALLGKL RRAESRTSVG SQRSRVSFLK SDLSSGASDA ASTASLGEAA EGADEAAPFE ADIDATTTET YMGEWKNDKR SGFGVSERSS GLRYEGEWLD NLRHGYGCTT LPDGHREEGK YRHNVLVKDT KRRMLQLKSN KVRQKVEHSV EGAQRAAAIA RQKAEIAASR TSHAKAKAEA AEQAALAANQ ESNIARTLAR ELAPDFYQPG PEYQKRRLLQ EILENSESLL EPPDRGAGAA GLPQPPRESP QLHERETPRP EGGSPSPAGT PPQPKRPRPG VSKDGLLSPG AWNGEPSGEG SRSVTPSEGA GRRSPARPAT ERMAIEALQA PPAPSREPEV ALYQGYHSYA VRTTPPEPPP FEDQPEPEVS GSESAPSSPA TAPLQAPTLR GPEPARETPA KLEPKPIIPK AEPRAKARKT EARGLTKAGA KKKARKEAAL

Product Details

	AAEAEVEVEE VPNTILICMV ILLNIGLAIL FVHLLT **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	Junctophilin 2 (JPH2)
Alternative Name:	JPH2 (JPH2 Products)
Background:	Junctophilin-2 (JP-2) (Junctophilin type 2) [Cleaved into: Junctophilin-2 N-terminal fragment (JP2NT)],FUNCTION: [Junctophilin-2]: Membrane-binding protein that provides a structural bridge between the plasma membrane and the sarcoplasmic reticulum and is required for normal excitation-contraction coupling in cardiomyocytes (PubMed:20095964). Provides a structural foundation for functional cross-talk between the cell surface and intracellular Ca(2+) release channels by maintaining the 12-15 nm gap between the sarcolemma and the sarcoplasmic reticulum membranes in the cardiac dyads (By similarity). Necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine receptor-mediated calcium ion release (By similarity). Contributes to the construction of skeletal muscle

Target Details

	triad junctions (By similarity). {ECO:0000250|UniProtKB:Q9ET78, ECO:0000269|PubMed:20095964}., FUNCTION: [Junctophilin-2 N-terminal fragment]: Transcription repressor required to safeguard against the deleterious effects of cardiac stress. Generated following cleavage of the Junctophilin-2 chain by calpain in response to cardiac stress in cardiomyocytes. Following cleavage and release from the membrane, translocates to the nucleus, binds DNA and represses expression of genes implicated in cell growth and differentiation, hypertrophy, inflammation and fibrosis. Modifies the transcription profile and thereby attenuates pathological remodeling in response to cardiac stress. Probably acts by competing with MEF2 transcription factors and TATA-binding proteins. {ECO:0000250|UniProtKB:Q9ET78}.
Molecular Weight:	74.2 kDa
UniProt:	Q9BR39

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months