Datasheet for ABIN7552398

ATP2B2 Protein (AA 1-1243) (His tag)

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Overview

Quantity:	1 mg
Target:	ATP2B2
Protein Characteristics:	AA 1-1243
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP2B2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ATP2B2 Protein expressed in mammalian cells.
Sequence:	MGDMTNSDFY SKNQRNESSH GGEFGCTMEE LRSLMELRGT EAVVKIKETY GDTEAICRRL KTSPVEGLPG TAPDLEKRKQ IFGQNFIPPK KPKTFLQLVW EALQDVTLII LEIAAIISLG LSFYHPPGEG NEGCATAQGG AEDEGEAEAG WIEGAAILLS VICVVLVTAF NDWSKEKQFR GLQSRIEQEQ KFTVVRAGQV VQIPVAEIVV GDIAQVKYGD LLPADGLFIQ GNDLKIDESS LTGESDQVRK SVDKDPMLLS GTHVMEGSGR MLVTAVGVNS QTGIIFTLLG AGGEEEEKKD KKGVKKGDGL QLPAADGAAA SNAADSANAS LVNGKMQDGN VDASQSKAKQ QDGAAAMEMQ PLKSAEGGDA DDRKKASMHK KEKSVLQGKL TKLAVQIGKA GLVMSAITVI ILVLYFTVDT FVVNKKPWLP ECTPVYVQYF VKFFIIGVTV LVVAVPEGLP LAVTISLAYS VKKMMKDNNL VRHLDACETM GNATAICSDK TGTLTTNRMT VVQAYVGDVH YKEIPDPSSI NTKTMELLIN AIAINSAYTT KILPPEKEGA LPRQVGNKTE CGLLGFVLDL KQDYEPVRSQ MPEEKLYKVY TFNSVRKSMS TVIKLPDESF RMYSKGASEI VLKKCCKILN GAGEPRVFRP RDRDEMVKKV IEPMACDGLR TICVAYRDFP SSPEPDWDNE NDILNELTCI CVVGIEDPVR PEVPEAIRKC

Product Details

	QRAGITVRMV TGDNINTARA IAIKCGIIHP GEDFLCLEGK EFNRRIRNEK GEIEQERIDK IWPKLRVLAR SSPTDKHTLV KGIIDSTHTE QRQVVAVTGD GTNDGPALKK ADVGFAMGIA GTDVAKEASD IILTDDNFSS IVKAVMWGRN VYDSISKFLQ FQLTVNVVAV IVAFTGACIT QDSPLKAVQM LWVNLIMDTF ASLALATEPP TETLLLRKPY GRNKPLISRT MMKNILGHAV YQLALIFTLL FVGEKMFQID SGRNAPLHSP PSEHYTIIFN TFVMMQLFNE INARKIHGER NVFDGIFRNP IFCTIVLGTF AIQIVIVQFG GKPFSCSPLQ LDQWMWCIFI GLGELVWGQV IATIPTSRLK FLKEAGRLTQ KEEIPEEELN EDVEEIDHAE RELRRGQILW FRGLNRIQTQ IRVVKAFRSS LYEGLEKPES RTSIHNFMAH PEFRIEDSQP HIPLIDDTDL EEDAALKQNS SPPSSLNKNN SAIDSGINLT TDTSKSATSS SPGSPIHSLE TSL **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	ATP2B2

Target Details

Alternative Name:	ATP2B2 (ATP2B2 Products)
Background:	Plasma membrane calcium-transporting ATPase 2 (PMCA2) (EC 7.2.2.10) (Plasma membrane calcium ATPase isoform 2) (Plasma membrane calcium pump isoform 2),FUNCTION: ATP-driven Ca(2+) ion pump involved in the maintenance of basal intracellular Ca(2+) levels in specialized cells of cerebellar circuit and vestibular and cochlear systems (PubMed:17234811, PubMed:15829536). Uses ATP as an energy source to transport cytosolic Ca(2+) ions across the plasma membrane to the extracellular compartment (PubMed:17234811, PubMed:15829536). Has fast activation and Ca(2+) clearance rate suited to control fast neuronal Ca(2+) dynamics. At parallel fiber to Purkinje neuron synapse, mediates presynaptic Ca(2+) efflux in response to climbing fiber-induced Ca(2+) rise. Provides for fast return of Ca(2+) concentrations back to their resting levels, ultimately contributing to long-term depression induction and motor learning (By similarity). Plays an essential role in hearing and balance (PubMed:17234811, PubMed:15829536). In cochlear hair cells, shuttles Ca(2+) ions from stereocilia to the endolymph and dissipates Ca(2+) transients generated by the opening of the mechanoelectrical transduction channels. Regulates Ca(2+) levels in the vestibular system, where it contributes to the formation of otoconia (PubMed:17234811, PubMed:15829536). In non-excitable cells, regulates Ca(2+) signaling through spatial control of Ca(2+) ions extrusion and dissipation of Ca(2+) transients generated by store-operated channels (PubMed:25690014). In lactating mammary gland, allows for the high content of Ca(2+) ions in the milk (By similarity). {ECO:0000250|UniProtKB:Q9R0K7, ECO:0000269|PubMed:15829536, ECO:0000269|PubMed:17234811, ECO:0000269|PubMed:25690014}.
Molecular Weight:	136.9 kDa
UniProt:	Q01814
Pathways:	Sensory Perception of Sound, Regulation of Cell Size, Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	We expect the protein to work for functional studies. 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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

