

### Datasheet for ABIN7549326

## Mucolipin 3 Protein (Mcoln3) (AA 1-553) (His tag)



#### Overview

Quantity:	1 mg
Target:	Mucolipin 3 (Mcoln3)
Protein Characteristics:	AA 1-553
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Mucolipin 3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

#### **Product Details**

Purpose:	Custom-made recombinat MCOLN3 Protein expressed in mammalien cells.
Sequence:	MADPEVVVSS CSSHEEENRC NFNQQTSPSE ELLLEDQMRR KLKFFFMNPC EKFWARGRKP
	WKLAIQILKI AMVTIQLVLF GLSNQMVVAF KEENTIAFKH LFLKGYMDRM DDTYAVYTQS
	DVYDQLIFAV NQYLQLYNVS VGNHAYENKG TKQSAMAICQ HFYKRGNIYP GNDTFDIDPE
	IETECFFVEP DEPFHIGTPA ENKLNLTLDF HRLLTVELQF KLKAINLQTV RHQELPDCYD
	FTLTITFDNK AHSGRIKISL DNDISIRECK DWHVSGSIQK NTHYMMIFDA FVILTCLVSL
	ILCIRSVIRG LQLQQEFVNF FLLHYKKEVS VSDQMEFVNG WYIMIIISDI LTIIGSILKM EIQAKSLTS\
	DVCSILLGTS TMLVWLGVIR YLGFFAKYNL LILTLQAALP NVIRFCCCAA MIYLGYCFCG
	WIVLGPYHDK FRSLNMVSEC LFSLINGDDM FATFAKMQQK SYLVWLFSRI YLYSFISLFI
	YMILSLFIAL ITDTYETIKQ YQQDGFPETE LRTFISECKD LPNSGKYRLE DDPPVSLFCC CKK
	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. > 90 % as determined by Bis-Tris Page, Western Blot Purity: custom-made Grade: **Target Details** Mucolipin 3 (Mcoln3) Target: Alternative Name: MCOLN3 (Mcoln3 Products) Background: Mucolipin-3 (Transient receptor potential channel mucolipin 3) (TRPML3),FUNCTION: Nonselective ligand-gated cation channel probably playing a role in the regulation of membrane trafficking events. Acts as a Ca(2+)-permeable cation channel with inwardly rectifying activity (PubMed:18369318, PubMed:19497048, PubMed:19522758, PubMed:19885840, PubMed:29106414). Mediates release of Ca(2+) from endosomes to the cytoplasm, contributes to endosomal acidification and is involved in the regulation of membrane trafficking and fusion in the endosomal pathway (PubMed:21245134). Does not seem to act as mechanosensory transduction channel in inner ear sensory hair cells. Proposed to play a critical role at the cochlear stereocilia ankle-link region during hair-bundle growth (By similarity). Involved in the

regulation of autophagy (PubMed:19522758). Through association with GABARAPL2 may be

involved in autophagosome formation possibly providing Ca(2+) for the fusion process (By

similarity). Through a possible and probably tissue-specific heteromerization with MCOLN1

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	may be at least in part involved in many lysosome-dependent cellular events
	(PubMed:19885840). Possible heteromeric ion channel assemblies with TRPV5 show
	pharmacological similarity with TRPML3 (PubMed:23469151).
	{ECO:0000250 UniProtKB:Q8R4F0, ECO:0000269 PubMed:18369318,
	ECO:0000269 PubMed:19497048, ECO:0000269 PubMed:19522758,
	ECO:0000269 PubMed:19885840, ECO:0000269 PubMed:20378547,
	ECO:0000269 PubMed:21245134, ECO:0000269 PubMed:23469151,
	ECO:0000269 PubMed:29106414, ECO:0000305}.
Molecular Weight:	64.2 kDa
UniProt:	Q8TDD5
Pathways:	Sensory Perception of Sound
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