

Datasheet for ABIN7558365

Otopetrin 1 Protein (OTOP1) (AA 1-600) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Otopetrin 1 (OTOP1)
Protein Characteristics:	AA 1-600
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Otopetrin 1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Otop1 Protein expressed in mammalian cells.
Sequence:	MPGGPGAPSS PAASSGSSRA APSGIAACPL SPPPLARGSP QASGPRRGAS VPQKLAETLS SQYGLNVFVA GLLFLLAWAV HATGVGKSDL LCVLTALMLL QLLWMLWYVG RSYMQRRLIR PKDTHAGARW LRGSITLFAF ITVVLGCLKV AYFIGFSECL SATEGVFPVT HAVHTLLQVY FLWGHAKDII MSFKTLERFG VIHSVFTNLL LWANSVLNES KHLNEHKER LITLGFGNIT IVLDDHTPQC NCTPPALCSA LSHGIYYLYP FNIEYQILAS TMLYVLWKNI GRRVDSSQHQ KMQCRFDGVL VGSVLGLTVL AATIAVVVVY MIHIGRSKSK SESALIMFYI YAITVLLLMG AAGLVGSIWIY RVDEKSLDES KNPARKLDVD LLVATGSGSW LLSWGSILAI ACAETRPPYT WYNLPYSVLV IVEKYVQNIF IIESVHLEPE GVPEDVRTLR VVTVCSSAEA ALAASTLGSQ GMAQDGSPAV NGNLCLQQRG GKEDQESGWE GATGTTRCLD FLQGGMKRRL LRNITAFLLF CNISLWIPPA FGCRPEYDNG LEEIVFGFEP WIIIVNLAMP FSIFYRMHAA AALFEVYCKI 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

Product Details

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: Otopetrin 1 (OTOP1)

Alternative Name: Otop1 ([OTOP1 Products](#))

Background: Proton channel OTOP1 (Otopetrin-1),FUNCTION: Proton-selective channel that specifically transports protons into cells (PubMed:29371428). Proton channel activity is only weakly-sensitive to voltage (PubMed:29371428). Proton-selective channel activity is probably required in cell types that use changes in intracellular pH for cell signaling or to regulate biochemical or developmental processes (PubMed:29371428). In the vestibular system of the inner ear, required for the formation and function of otoconia, which are calcium carbonate crystals that sense gravity and acceleration (PubMed:12651873). Probably acts by maintaining the pH appropriate for formation of otoconia (PubMed:29371428). Regulates purinergic control of intracellular calcium in vestibular supporting cells (PubMed:17606897, PubMed:20554841). May be involved in sour taste perception in sour taste cells by mediating entry of protons within

Target Details

the cytosol (PubMed:29371428). Also involved in energy metabolism, by reducing adipose tissue inflammation and protecting from obesity-induced metabolic dysfunction (PubMed:24379350). {ECO:0000269|PubMed:12651873, ECO:0000269|PubMed:17606897, ECO:0000269|PubMed:20554841, ECO:0000269|PubMed:24379350, ECO:0000269|PubMed:29371428}.

Molecular Weight: 65.8 kDa

UniProt: [Q80VM9](#)

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 Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months