Datasheet for ABIN7548375

HVCN1 Protein (AA 1-273) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	HVCN1
Protein Characteristics:	AA 1-273
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HVCN1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant HVCN1 Protein expressed in mammalian cells.
Sequence:	MATWDEKAVT RRAKVAPAER MSKFLRHFTV VGDDYHAWNI NYKKWENEEE EEEEEQPPPT PVSGEEGRAA APDVAPAPGP APRAPLDFRG MLRKLFSSHR FQVIIICLVV LDALLVLAEL ILDLKIIQPD KNNYAAMVFH YMSITILVFF MMEIIFKLFV FRLEFFHHKF EILDAVVVVV SFILDIVLLF QEHQFEALGL LILLRLWRVA RIINGIIISV KTRSERQLLR LKQMNVQLAA KIQHLEFSCS EKEQEIERLN KLLRQHGLLG EVN **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.

Product Details

- 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:	HVCN1
Alternative Name:	HVCN1 (HVCN1 Products)
Background:	Voltage-gated hydrogen channel 1 (Hydrogen voltage-gated channel 1) (HV1) (Voltage sensor domain-only protein),FUNCTION: Voltage-gated proton-selective channel that conducts outward proton currents in response to intracellular acidification. Lacks a canonical ion-channel pore domain and mediates proton permeability via its voltage sensor domain (PubMed:16554753, PubMed:20037153, PubMed:20548053, PubMed:22020278, PubMed:27859356, PubMed:30478045, PubMed:37669933). Appears to play a dominant role in regulation of CO2/HCO3(-)/H(+) equilibrium in sperm flagellum. Prevents the acidification resulting from HCO3(-) synthesis and thus sustains high HCO3(-) levels inside sperm for capacitation (PubMed:30478045, PubMed:37669933, PubMed:20144758). Provides for proton efflux that compensates for electron charge generated by NADPH oxidase activity either in the extracellular or phagosomal compartments, thus enabling the production of high levels of bactericidal reactive oxygen species during the respiratory burst (PubMed:20037153, PubMed:30478045). Opens when the pH of airway surface liquid exceeds 7 and contributes to respiratory epithelial acid secretion to maintain pH in the mucosa (PubMed:20548053). {ECO:0000269|PubMed:16554753, ECO:0000269|PubMed:20037153,

Target Details

	ECO:0000269|PubMed:20144758, ECO:0000269|PubMed:20548053, ECO:0000269|PubMed:22020278, ECO:0000269|PubMed:27859356, ECO:0000269|PubMed:30478045, ECO:0000269|PubMed:37669933}.
Molecular Weight:	31.7 kDa
UniProt:	Q96D96
Pathways:	Proton Transport

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

