

Datasheet for ABIN7552156
ANO1 Protein (AA 1-986) (His tag)



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Overview

Quantity:	1 mg
Target:	ANO1
Protein Characteristics:	AA 1-986
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ANO1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ANO1 Protein expressed in mammalian cells.
Sequence:	<pre>MRVNEKYSTL PAEDRSVHII NICAIEDIGY LPSEGTLNLS LSVDPDAECK YGLYFRDGRR KVDYILVYHH KRPSGNRTL VRRVQHSDTPS GARSVKQDHP LPGKGASLDA GSGEPPMDYH EDDKRFRREE YEGNLLEAGL ELERDEDTKI HGVGVFKIHA PWNVLCREAE FLKLMPTKK MYHINETRGL LKKINSVLQK ITDPIQPKVA EHRPQTMKRL SYPFSREKQH LFDLSDKDSF FDSKTRSTIV YEILKRTTCT KAKYSMGITS LLANGVYAAA YPLHDGDYNG ENVEFNDRKL LYEEWARYGV FYKYQPIDL V RKYFGEKIGL YFAWLGVYTQ MLIPASIVGI IVFLYGCATM DENIPSMEMC DQRHNITMCP LCDKTCSYWK MSSACATARA SHLFDNPATV FFSVFMALWA ATFMEHWKWK QMRLNYRWDL TGFEETEEAV KDHPRAEYEA RVLEKSLKKE SRNKEKRRHI PEESTNKWKQ RVKTAMAGVK LTDKVKLTWR DRFPAYLTNL VSIIFMIAVT FAIVLGVIIY RISMAAALAM NSSPSVRSNI RVTVTATAVI INLVWILLD EVYGCJARWL TKIEVPKTEK SFEERLIFKA FLLKFVNSYT PIFYVAFFKG RFGVGRPGDYV YIFRSFRMEE CAPGGCLMEL CIQLSIIMLG KQLIQNNLFE IGIPKMKKLI RYLKCLKQSP PDHEECVCRK QRYEVDYNLE</pre>

Product Details

PFAGLTPEYM EMIIQFGFVT LFFVASFPLAP LFALLNIIIE IRLDAKKFVT ELRRPVAVRA
KDIGIWYNIL RGIGKLAVII NAFVISFTSD FIPRLVLYLM YSKNGTMHGF VNHTLSSFNV
SDFQNGTAPN DPLDLGYEVQ ICRYKDYREP PWSENKYDIS KDFWAVLAAR LAFVIVFQNL
VMFMSDFVDW VIPDIPKDIS QQIHKEKVLM VELFMREEQD KQQLLETWME KERQKDEPPC
NHHNTKACPD SLGSPAPSHA YHGGVL **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: ANO1

Alternative Name: ANO1 ([ANO1 Products](#))

Background: Anoctamin-1 (Discovered on gastrointestinal stromal tumors protein 1) (Oral cancer overexpressed protein 2) (Transmembrane protein 16A) (Tumor-amplified and overexpressed sequence 2),FUNCTION: Calcium-activated chloride channel (CaCC) (PubMed:20056604, PubMed:22178883, PubMed:22946059, PubMed:32487539). Plays a role in transepithelial

Target Details

anion transport and smooth muscle contraction. Required for the normal functioning of the interstitial cells of Cajal (ICCs) which generate electrical pacemaker activity in gastrointestinal smooth muscles. Acts as a major contributor to basal and stimulated chloride conductance in airway epithelial cells and plays an important role in tracheal cartilage development. Required for CFTR activation by enhancing endoplasmic reticulum Ca(2+) store release and is also required for CFTR membrane expression (PubMed:28963502). Required for basal and ATP-dependent mucus secretion in airways and intestine, probably by controlling exocytosis of mucus-filled granules by providing Ca(2+) to an apical signaling compartment (By similarity). Contributes to airway mucus expression induced by interleukins IL3 and IL8 and by the asthma-associated protein CLCA1 and is required for expression of mucin MUC5AC (PubMed:33026825). However, was shown in another study not to be required for MUC5AC expression (PubMed:31732694). Plays a role in the propagation of Ca(2+) waves in Kolliker's organ in the cochlea and contributes to the refinement of auditory brainstem circuitries prior to hearing onset (By similarity). In vomeronasal sensory neurons, modulates spontaneous firing patterns in the absence of stimuli as well as the firing pattern of pheromone-evoked activity (By similarity). Responsible for calcium-activated chloride channel activity in type I taste cells of the vallate papillae (By similarity). Acts as a heat sensor in nociceptive neurons (By similarity). In dorsal root ganglion neurons, plays a role in mediating non-histaminergic Mas-related G-protein coupled receptor (MRGPR)-dependent itching, acting as a downstream effector of MRGPRs (By similarity). In the developing brain, required for the Ca(2+)-dependent process extension of radial glial cells (By similarity). {ECO:0000250|UniProtKB:Q8BHY3, ECO:0000269|PubMed:20056604, ECO:0000269|PubMed:22178883, ECO:0000269|PubMed:22946059, ECO:0000269|PubMed:28963502, ECO:0000269|PubMed:31732694, ECO:0000269|PubMed:32487539, ECO:0000269|PubMed:33026825}., FUNCTION: [Isoform 4]: Calcium-activated chloride channel (CaCC). Contributes to calcium-activated chloride secretion in human sweat gland epithelial cells. Shows increased basal chloride permeability and decreased Ca(2+)-induced chloride permeability. {ECO:0000269|PubMed:25220078}., FUNCTION: [Isoform 5]: Calcium-activated chloride channel (CaCC). Shows increased sensitivity to intracellular Ca(2+). {ECO:0000269|PubMed:26359375}.

Molecular Weight: 114.1 kDa

UniProt: [Q5XXA6](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for

Application Details

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
