

Datasheet for ABIN7562102
CALHM1 Protein (AA 1-348) (His tag)



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Overview

Quantity:	1 mg
Target:	CALHM1
Protein Characteristics:	AA 1-348
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CALHM1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Calhm1 Protein expressed in mammalian cells.
Sequence:	MDKFRMIFQF LQSNQESFMN GICGIMALAS AQMYSAFDNF CPCLPGYNVV YSLGILLTPP LVLFLGLVM NNNISMLAEE WKRPAGRRRAK DPAVLRMFC SMAQRALIAP VVWVAVTLLD GKCFLCAFCT AVPVATLGNG SLVPGLPAPE LARLLARVPC PEIYDGNWLL AREVAVRYLR CISQALGWSF VLLTTLLAFV VRSVRPCFTQ VAFLKSKYWS HYIDIERKLF DETCTEHAHA FAKVCIQQFF EAMNHDLELG HTHGVLATAT ATATATEAVQ SPSDRTEEER EKLRGITDQG TMNRLTSHW KCKPPLRLGQ EAPLMSNGWA GGEPRPPRKE VATYFSKV 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:

Product Details

- 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)
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Grade:	custom-made
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Target Details

Target:	CALHM1
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Alternative Name:	Calhm1 (CALHM1 Products)
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Background:	Calcium homeostasis modulator protein 1,FUNCTION: Pore-forming subunit of a voltage-gated ion channel, also permeable to larger molecules including ATP, required for sensory perception of sweet, bitter and umami tastes (PubMed:23467090). Specifically present in type II taste bud cells, where it plays a central role in sweet, bitter and umami taste perception by inducing ATP release from the cell, ATP acting as a neurotransmitter to activate afferent neural gustatory pathways (PubMed:23467090). Together with CALHM3, forms a fast-activating voltage-gated ATP-release channel in type II taste bud cells (TBCs) (PubMed:29681531). Acts both as a voltage-gated and calcium-activated ion channel: mediates neuronal excitability in response to changes in extracellular Ca(2+) concentration (PubMed:22711817). Has poor ion selectivity and forms a wide pore (around 14 Angstroms) that mediates permeation of Ca(2+), Na(+) and K(+), as well as permeation of monovalent anions (PubMed:22711817). Acts as an activator of the ERK1 and ERK2 cascade (By similarity). Triggers endoplasmic reticulum stress by reducing the calcium content of the endoplasmic reticulum (By similarity). May indirectly control amyloid precursor protein (APP) proteolysis and aggregated amyloid-beta (Abeta) peptides levels in a
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Target Details

Ca(2+) dependent manner (By similarity). {ECO:0000250|UniProtKB:Q8IU99, ECO:0000269|PubMed:22711817, ECO:0000269|PubMed:23467090, ECO:0000269|PubMed:29681531}.

Molecular Weight: 38.8 kDa

UniProt: [D3Z291](#)

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