

CALHM1/FAM26C Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7399a**Specification**

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q8IU99](#)**CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 255022**Other Names**

Calcium homeostasis modulator protein 1, Protein FAM26C, CALHM1, FAM26C

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7399a](/products/AP7399a) was selected from the N-term region of human CALHM1/FAM26C. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Protein Information**Name** CALHM1 ([HGNC:23494](#))**Synonyms** FAM26C**Function**

Pore-forming subunit of a voltage-gated ion channel required for sensory perception of sweet, bitter and umami tastes (By similarity). 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 (By similarity). Together with CALHM3, forms a fast-activating voltage-gated ATP-release channel in type II taste bud cells (TBCs) (By similarity). 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](http://www.uniprot.org/citations/22711817), PubMed: [23300080](http://www.uniprot.org/citations/23300080)). 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 (PubMed:23345406). Triggers endoplasmic reticulum stress by reducing the calcium content of the endoplasmic reticulum (PubMed:21574960). May indirectly control amyloid precursor protein (APP) proteolysis and aggregated amyloid-beta (A β) peptides levels in a Ca^{2+} dependent manner (PubMed:18585350).

Cellular Location

Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:D3Z291}. Note=Colocalizes with HSPA5 at the endoplasmic reticulum (PubMed:18585350). Localizes to the basolateral membrane of epithelial cells including taste cells (By similarity) {ECO:0000250|UniProtKB:D3Z291, ECO:0000269|PubMed:18585350}

Tissue Location

Predominantly expressed in adult brain. Detected also in retinoic acid-differentiated SH-SY5Y cells. Specifically expressed in circumvallate taste bud cells

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Images

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - Background

CALHM1 is a cerebral Ca^{2+} channel that controls processing of amyloid-beta (A β) precursor protein.

CALHM1/FAM26C Antibody (N-term) Blocking Peptide - References

Beecham,G.W., Ann. Hum. Genet. 73 (PT 3), 379-381 (2009)Sleegers,K., Hum. Mutat. 30 (4), E570-E574 (2009)Bertram,L., Cell 135 (6), 993-994 (2008)Dreses-Werringloer,U., Cell 133 (7), 1149-1161 (2008)