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EG546729 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12416

Product Information

Application	WB
Primary Accession	D3Z291
Other Accession	NM_001081271, NP_001074740
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38827

Additional Information

Gene ID	546729
Alias Symbol	EG546729
Other Names	Calcium homeostasis modulator protein 1, Calhm1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-EG546729 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	EG546729 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Calhm1 {ECO:0000303|PubMed:22711817, ECO:0000312|MGI:MGI:3643383}
Function	Pore-forming subunit of gustatory voltage-gated ion channels required for sensory perception of sweet, bitter and umami tastes (PubMed:23467090). With CALHM3 forms a fast-activating voltage-gated ATP-release channel in type II taste bud cells, ATP acting as a neurotransmitter to activate afferent neural gustatory pathways (PubMed:23467090, PubMed:29681531). Acts both as a voltage-gated and calcium-activated ion channel: mediates neuronal excitability in response to membrane depolarization and low extracellular Ca(2+) concentration. Has poor ion selectivity and forms a wide pore (around 14 Angstroms) that mediates permeation of small ions including Ca(2+), Na(+), K(+) and Cl(-), as well as larger ions such as ATP(4-) (PubMed:22711817,

PubMed:28734079, PubMed:29681531, PubMed:33788965). Mediates Ca(2+) influx and downstream activation of the ERK1 and ERK2 cascade in neurons (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 Ca(2+) dependent manner (By similarity).

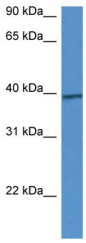
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8IU99}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8IU99}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8IU99}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8IU99}. Basolateral cell membrane; Multi-pass membrane protein Note=Localizes to the basolateral membrane of epithelial cells including taste cells (PubMed:30804437). Colocalizes with HSPA5 at the endoplasmic reticulum (By similarity). {ECO:0000250|UniProtKB:Q8IU99, ECO:0000269|PubMed:30804437}

Tissue Location

Specifically expressed in type II taste bud cells (at protein level). Not expressed in brain

Images



WB Suggested Anti-EG546729 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Intestine

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.