

**EG546729 antibody - C-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI12416****Specification**

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**EG546729 antibody - C-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">D3Z291</a>
Other Accession	<a href="#">NM_001081271</a> , <a href="#">NP_001074740</a>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39kDa kDa

**EG546729 antibody - C-terminal region - Additional Information****Gene ID** 546729

Alias Symbol	<b>EG546729</b>
<b>Other Names</b>	
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.

**EG546729 antibody - C-terminal region - Protein Information****Name** Calhm1 {ECO:0000312|MGI:MGI:3643383}**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:<a href="http://www.uniprot.org/citations/23467090" target="\_blank">23467090</a>). 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:<a href="http://www.uniprot.org/citations/23467090" target="\_blank">23467090</a>). Together with CALHM3, forms a fast-activating voltage-gated

ATP-release channel in type II taste bud cells (TBCs) (PubMed:<a href="http://www.uniprot.org/citations/29681531" target="\_blank">29681531</a>). Acts both as a voltage-gated and calcium-activated ion channel: mediates neuronal excitability in response to changes in extracellular Ca(2+) concentration (PubMed:<a href="http://www.uniprot.org/citations/22711817" target="\_blank">22711817</a>). 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:<a href="http://www.uniprot.org/citations/22711817" target="\_blank">22711817</a>). 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 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

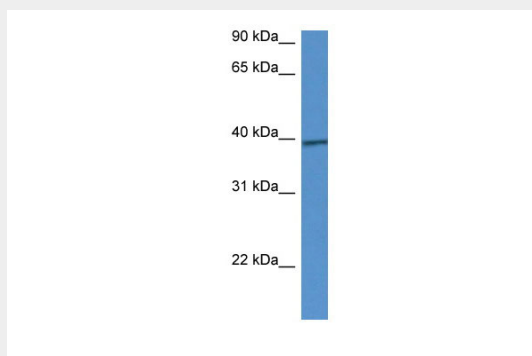
Specifically expressed in type II taste bud cells. Not expressed in brain.

### EG546729 antibody - C-terminal region - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### EG546729 antibody - C-terminal region - Images



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