

## EG546729 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al12416

## **Specification**

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

Application WB
Primary Accession D3Z291

Other Accession NM 001081271, NP 001074740

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 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.

## EG546729 antibody - C-terminal region - 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:<a href="http://www.uniprot.org/citations/23467090" target="\_blank">23467090</a>). 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:<a href="http://www.uniprot.org/citations/23467090" target="\_blank">23467090</a>, 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 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:<a href="http://www.uniprot.org/citations/22711817" target="\_blank">22711817</a>, PubMed:<a href="http://www.uniprot.org/citations/28734079" target="\_blank">28734079</a>, PubMed:<a href="http://www.uniprot.org/citations/29681531" target="\_blank">29681531</a><a href="http://www.uniprot.org/citations/33788965" target="\_blank">33788965</a>). 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**

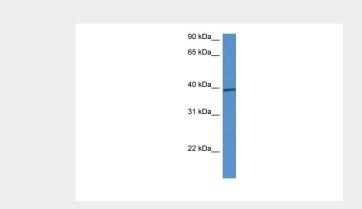
Specifically expressed in type II taste bud cells (at protein level). Not expressed in brain

# 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 Cytomety
- Cell Culture

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



WB Suggested Anti-EG546729 Antibody Titration: 1.0 µg/ml

Positive Control: Mouse Intestine