

Datasheet for ABIN7581840
anti-CALHM2 antibody (Extracellular)



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Overview

Quantity:	50 µL
Target:	CALHM2
Binding Specificity:	AA 133-146, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CALHM2 antibody is un-conjugated
Application:	Western Blotting (WB), Live Cell Imaging (LCI), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (IHC)

Product Details

Purpose:	A Rabbit Polyclonal antibody to CALHM2 (extracellular)
Immunogen:	(C)SEFVDPSSLTAGDK, corresponding to amino acid residues 133 - 146 of mouse CALHM2
Sequence:	(C)SEFVDPSSLT AGDK
Isotype:	IgG
Specificity:	Extracellular, 2nd loop.
Predicted Reactivity:	Rat - 13 out of 14 amino acid residues identical Human - 11 out of 14 amino acid residues identical
Characteristics:	Anti-CALHM2 (extracellular) Antibody (ABIN7581840) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in western blot,

Product Details

immunohistochemistry and flow cytometry applications. It has been designed to recognize CALHM2 from mouse, rat and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target:	CALHM2
Alternative Name:	CALHM2 (CALHM2 Products)
Background:	<p>Calcium homeostasis modulator protein 2, Protein FAM26B, FAM26B, Calcium homeostasis modulator protein 2 (CALHM2) is a member of the CALHM channel family, a group of transmembrane proteins that play essential roles in calcium ion transport and homeostasis. The CALHM family consist in humans of six members: CALHM1 to CALHM6.1 CALHM2 functions as a calcium-permeable ion channel. It allows calcium ions to pass through the cell membrane in response to specific stimuli, such as changes in membrane potential or extracellular calcium concentration.2,3 CALHM2 is composed of 323 amino acids and assembles as an undecamer with each protomer containing a large N-terminal transmembrane (TM) domain with 4 TM helices, an intracellular C-terminal domain, and a small extracellular linker region. 2,3 CALHMs permeate ions and ATP in a voltage-dependent manner to modulate neuronal excitability. CALHM2 has been shown to accommodate lipids in its hydrophobic channel in order to regulate channel function.2,3 Ion and ATP permeation by CALHM proteins play a role in the physiology of cognition, depression, gustatory signaling, and the pathology of Alzheimer's disease. Specifically, CALHM2 expression was increased in Alzheimer's disease (AD) patients and in an AD model in mice. Knockout of CALHM2 improved Aβ plaque deposition, reduced neuroinflammation, and improved cognitive impairment in an AD mice model.4 Moreover, microglial CALHM2 may have a central role in both chronic inflammatory diseases (like AD) and in acute inflammatory reactions and neuroinflammation.4</p>
Gene ID:	72691
UniProt:	Q8VEC4

Application Details

Application Notes:	Antigen preadsorption control: 1 μ g peptide per 1 μ g antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:300 Application Dilutions Western blot wb: 1:200
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C, -20 °C
Storage Comment:	<p>Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.</p> <p>Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).</p>