

Datasheet for ABIN7581992
anti-TMEM150C antibody (Extracellular)



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Overview

Quantity:	50 µL
Target:	TMEM150C
Binding Specificity:	AA 33-50, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TMEM150C antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (IHC), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal antibody to TMEM150C/Tentonin 3 (extracellular).
Immunogen:	(C)EDDKILPLNSAARKSGVK, corresponding to amino acid residues 33 - 50 of rat TMEM150C
Sequence:	(C)EDDKILPLNS AARKSGVK
Isotype:	IgG
Specificity:	Extracellular, 1st loop.
Predicted Reactivity:	Mouse - 17 out of 18 amino acid residues identical Human - 16 out of 18 amino acid residues identical
Characteristics:	Anti-TMEM150C/Tentonin 3 (extracellular) Antibody (ABIN7581992) is a highly specific antibody directed against an extracellular epitope of the rat protein. The antibody can be used in

Product Details

western blot and immunohistochemistry applications. It has been designed to recognize TMEM150C from mouse, rat and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: TMEM150C

Alternative Name: TMEM150C ([TMEM150C Products](#))

Background: Transmembrane Protein 150C, TTN3, Transmembrane protein 150C (TMEM150C) also known as Tentonin-3 (TTN3), is a small protein composed of 249 amino acids comprising six transmembrane domains. TMEM150C which was first thought to be a mechanosensitive ion channel that confers a relatively slow inactivating current in proprioceptive neurons in mouse dorsal root ganglion (DRG)¹. Later studies, however, showed that the mechanosensitive currents attributed to TMEM150C in different cell setups, could be attributed to the presence of endogenous Piezo1 channels². Although, some controversy still remains, it is generally accepted that TMEM150C does not form a mechanosensitive channel per se, but rather it functions as a general regulator or sensor, of mechanosensitive channels like Piezo1, Piezo2 and TREK1 (K2P2.1)^{2,3}. TMEM150C has also been described in the aortic arch and nodose ganglia neurons, where it is involved in the mechanotransduction of arterial pressure to electrical signals in baroreceptors. Dysregulation of TMEM150C alters the sensitivity of the baroreflex, a cardiovascular reflex that is essential for blood pressure homeostasis, leading to diseases such as hypertension, stroke, and heart failure⁴. Furthermore, recent evidence suggests that TMEM150C functions as a stretch-activated cation channel in pancreatic β cells, contributing to insulin secretion induced by high glucose levels and hypotonicity. Whether TMEM150C functions in this context as a stretch activated channel itself or whether it functions in conjunction with other proposed stretch-activated channels like TRPV4 or TRPV2, remains to be seen^{3,5}.

Gene ID: 360916

UniProt: [B5DFH9](#)

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

Application Details

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>