

Product datasheet for **TA329060**

Tmem38b Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)GMKEVTRTWKIVG, corresponding to amino acid residues 116-126 of rat TRIC-B (Accession Q68FV1). Intracellular, cytoplasmic loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	transmembrane protein 38B
Database Link:	NP_001014213 Entrez Gene 52076 Mouse Entrez Gene 55151 Human Entrez Gene 362521 Rat Q68FV1

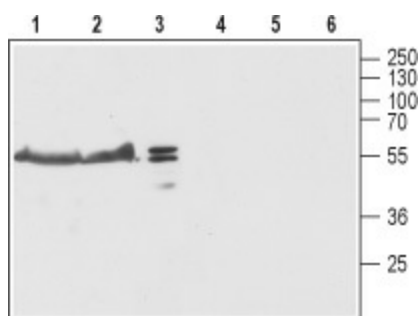
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Background:

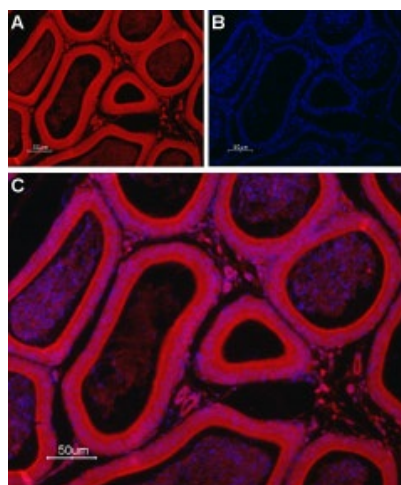
Intracellular Ca^{2+} levels are important in proper cellular functions and have prominent roles in various cell signaling pathways and are crucial for muscle contractions. Indeed, an important step leading to muscle contraction is the massive release of Ca^{2+} ions from the endoplasmic /sarcoplasmic reticulum (ER/SR) to the cytosol. A battery of results suggest that specific K^{+} channels are important to counteract the Ca^{2+} outflow in order to neutralize the negative potential created by the movement of Ca^{2+} ions. It is believed that TRIC channels are responsible for neutralizing this negative potential. Trimeric intracellular cation-specific (TRIC) channels are critical for proper management of intracellular stores. TRIC-A and TRIC-B both belong to this family and are both permeable to monovalent ions with a preference for K^{+} . Both channels are localized to the ER/SR membrane. Each TRIC subunit contains three transmembrane domains, a cytoplasmic C-terminus and a luminal N-terminus. Functional entities are formed by homotrimerization. The activity of TRIC-A is regulated by voltage whereas that of TRIC-B can be regulated by different mechanisms. Knock out studies of these channels have shown that TRIC-A knock mice are viable while those of TRIC-B die at the neonatal stage. TRIC-A is mostly expressed in excitable tissues like the brain and muscle while TRIC-B is ubiquitously expressed.

Synonyms:

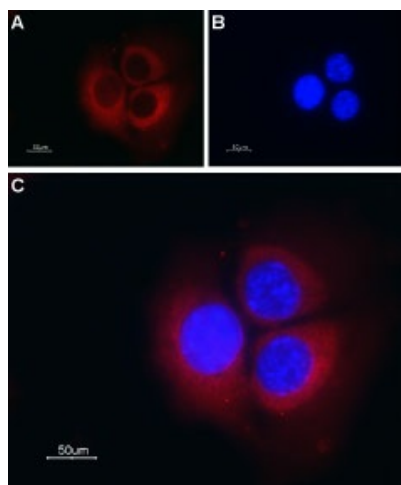
bA219P18.1; C9orf87; D4Ert89e; FLJ10493; TRIC-B; TRICB

Product images:


Western blot analysis of rat brain (lanes 1 and 4), mouse brain (lanes 2 and 5) and SH-SY5Y (lanes 3 and 6) lysates: 1-3. Anti-TRIC-B antibody, (1:200). 4-6. Anti-TRIC-B antibody, preincubated with the control peptide antigen.



Expression of TRIC-B in rat testis. Immunohistochemical staining of rat testis paraffin-embedded sections using Anti-TRIC-B antibody, followed by goat anti-rabbit-Alexa-Fluor-594 secondary antibody. A. TRIC-B labeling appears in the columnar principal epithelium of the epididymis and in the endothelium of the surrounding blood vessels. B. Nuclear staining using DAPI as the counterstain. C. Merged images of A and B.



Expression of TRIC-B in mouse muscle myoblast (C2C12) cell line. Immunocytochemical staining of mouse paraformaldehyde-fixed and permeabilized muscle myoblast (C2C12) cell line. A. Cells were stained with Anti-TRIC-B antibody, (1:200) followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). B. Nuclear staining using DAPI as the counterstain (blue). C. Merged images of panels A and B.