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Product datasheet for TA329062

Tmem38a 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:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DNHGAPHGMGLGTQHS, corresponding to amino acid residues 259-274 of rat (Accession A6ZIQ8). Intracellular, C-terminus.
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 38a
Database Link:	NP_001093645 Entrez Gene 74166 MouseEntrez Gene 306327 Rat A6ZIQ8

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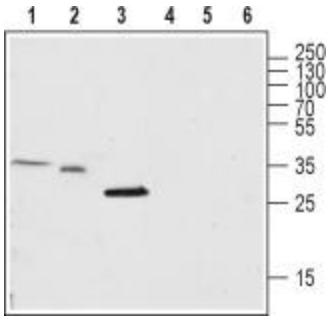
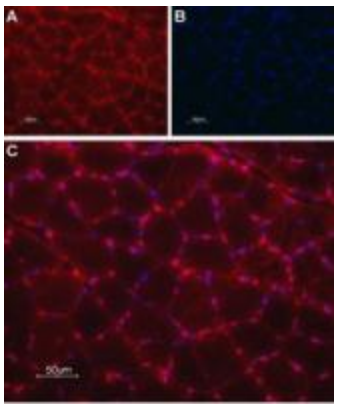
Background: Intracellular Ca2+ levels are important in proper cellular functions and have prominent roles in various cell signaling pathways and are crucial for muscle contractions. Indeed, an important step leading to muscle contraction is the massive release of Ca2+ ions from the endoplasmic /sarcoplasmic reticulum (ER/SR) to the cytosol. A battery of results suggest that specific K+ channels are important to counteract the Ca2+ outflow in order to neutralize the negative potential created by the movement of Ca2+ 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 homotrimerizarion. 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: MGC3169; TRIC-A; TRICA

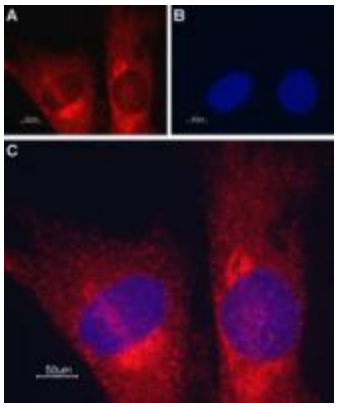
Product images:



Western blot analysis of rat brain lysate (lanes 1 and 4) and mouse brain membrane (lanes 2 and 5) and skeletal muscle (lanes 3 and 6): 1-3. Anti-TRIC-A antibody, (1:200). 4-6. Anti-TRIC-A antibody, preincubated with the control peptide antigen.



Expression of TRIC-A in rat skeletal muscle. Immunohistochemical staining of paraffin-embedded rat skeletal muscle sections using Anti-TRIC-A antibody, followed by goat anti-rabbit-AlexaFluor-594 secondary antibody. A. TRIC-A labeling (red) appears in the edges of the muscle fibers, where the endomysium is present. B. Nuclear staining using DAPI as the counterstain. C. Merged images of A and B.



Expression of TRIC-A 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-A 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.