

TMEM38A Antibody
Catalog # ASC11030**Specification**

TMEM38A Antibody - Product Information

Application	WB, IF
Primary Accession	Q9H6F2
Other Accession	AAH01195 , 12654711
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	TMEM38A antibody can be used for detection of TMEM38A by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.

TMEM38A Antibody - Additional Information

Gene ID	79041
Target/Specificity	
TMEM38A;	

Reconstitution & Storage

TMEM38A antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

TMEM38A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TMEM38A Antibody - Protein Information

Name TMEM38A

Function

Monovalent cation channel required for maintenance of rapid intracellular calcium release. May act as a potassium counter-ion channel that functions in synchronization with calcium release from intracellular stores.

Cellular Location

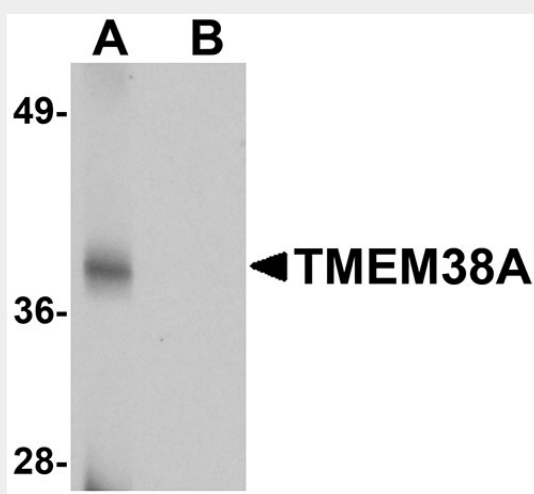
Sarcoplasmic reticulum membrane {ECO:0000250|UniProtKB:A5A6S6}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A5A6S6}. Nucleus membrane {ECO:0000250|UniProtKB:A5A6S6}

TMEM38A Antibody - Protocols

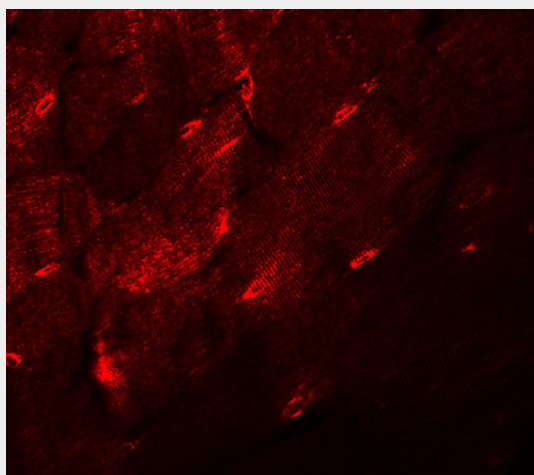
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TMEM38A Antibody - Images



Western blot analysis of TMEM38A in rat skeletal muscle tissue lysate with TMEM38A antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of TMEM38A in mouse skeletal muscle tissue with TMEM38A antibody at 20 μ g/mL.

TMEM38A Antibody - Background

TMEM38A Antibody: TMEM38A and TMEM38B are two recently identified trimeric intracellular cation (TRIC) channel subtypes. TMEM38A is preferentially expressed in excitable tissues such as

striated muscle and brain and localizes to the sarcoplasmic reticulum (SR) in muscle tissues. Mice deficient in both TMEM38A and TMEM38B suffer embryonic cardiac failure; the cardiac myocytes display severe dysfunction in SR Ca^{2+} handling, weakened Ca^{2+} release, and reduced K^{+} permeability indicating that the TRIC cation channels are likely to act as counter-ion channels that function in synchronization with Ca^{2+} release from intracellular stores. Other experiments have shown that TMEM38A and TMEM38B can act with junctophilin proteins to support efficient ryanodine receptor-mediated Ca^{2+} release in muscle cells.

TMEM38A Antibody - References

Yazawa M, Ferrante C, Feng J, et al. TRIC channels are essential for Ca^{2+} handling in intracellular stores. *Nature* 2007; 448:78-82.

Yamakazi D, Yamakazi T, and Takeshima H. New molecular components supporting ryanodine receptor-mediated Ca^{2+} release: roles of junctophilin and TRIC channel in embryonic cardiocytes. *Pharmacol. Ther.* 2009; 121:265-72.