

TMEM38B Antibody

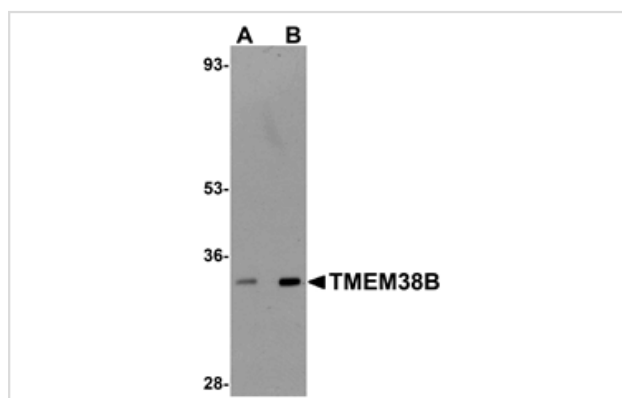
Catalog No: #25019

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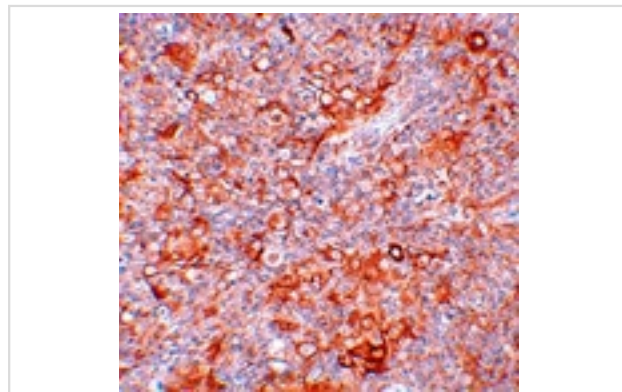
Description

Product Name	TMEM38B Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 17 amino acid peptide from near the carboxy terminus of human TMEM38B.
Target Name	TMEM38B
Other Names	Transmembrane protein 38B, TRIC-B, TRICB, trimeric cation channel type B
Accession No.	Swiss-Prot:Q9NVV0Gene ID:55151
Uniprot	Q9NVV0
GeneID	55151;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for 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.

Images



Western blot analysis of TMEM38B in rat thymus tissue lysate with TMEM38B antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of TMEM38B in mouse thymus tissue with TMEM38B antibody at 5 ug/mL.

Background

TMEM38A and TMEM38B are two recently identified trimeric intracellular cation (TRIC) channel subtypes. TMEM38B is expressed in most mammalian tissues, while TMEM38A is preferentially expressed in excitable tissues such as striated muscle and brain. Mice deficient in both TMEM38A and TMEM38B suffer embryonic cardiac failure; the cardiac myocytes display severe dysfunction in SR Ca²⁺ handling, weakened Ca²⁺ release, and reduced K⁺ permeability indicating that the TRIC cation channels are likely to act as counter-ion channels that function in synchronization with Ca²⁺ release from intracellular stores. Mice that were lacking only TMEM38B however, die shortly after birth due to respiratory failure and have lungs exhibiting severe histological defect and ultrastructural abnormalities in their alveolar type II epithelial cells, indicating that TMEM38B are essential for perinatal lung maturation. Other experiments have shown that TMEM38A and TMEM38B can act with junctophilin proteins to support efficient ryanodine receptor-mediated Ca²⁺ release in muscle cells.

Note: This product is for in vitro research use only