
TMEM38B Antibody

Subcategory: Rabbit Polyclonal Antibody

Cat. No.: 254189

Unit: 0.1 mg

Description:

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.

Isotype: Rabbit Ig

Applications: E, WB, IHC

Species Reactivity: H, M, R

Format: Each vial contains 0.1 ml IgG in PBS pH 7.4 with 0.02% sodium azide. Antibody was purified by immunogen affinity chromatography.

Alternate Names: TMEM38B; Transmembrane protein 38B; TRIC-B; TRICB; trimeric cation channel type B

Accession No.: NP_060582

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within human TMEM38B.

Application Notes: E: 1:500-1:1,000; WB: 1:100-1:500; IHC: 1:100-1:500

Storage: Store at -20°C. Minimize freeze-thaw cycles.

Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.