

Anti-TMEM43 Rabbit Monoclonal Antibody

Catalog # ABO16494

Specification

Anti-TMEM43 Rabbit Monoclonal Antibody - Product Information

Application WB, IHC **Primary Accession** Q9BTV4 Host Rabbit Isotype laG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-TMEM43 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

Anti-TMEM43 Rabbit Monoclonal Antibody - Additional Information

Gene ID 79188

Other Names Transmembrane protein 43, Protein LUMA, TMEM43

Calculated MW 45 kDa KDa

Application Details WB 1:500-1:2000
HC 1:50-1:200

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human TMEM43

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-TMEM43 Rabbit Monoclonal Antibody - Protein Information

Name TMEM43



Function

May have an important role in maintaining nuclear envelope structure by organizing protein complexes at the inner nuclear membrane. Required for retaining emerin at the inner nuclear membrane (By similarity). Plays a role in the modulation of innate immune signaling through the cGAS-STING pathway by interacting with RNF26 (PubMed:32614325). In addition, functions as a critical signaling component in mediating NF-kappa-B activation by acting downstream of EGFR and upstream of CARD10 (PubMed:27991920). Contributes to passive conductance current in cochlear glia-like supporting cells, mediated by gap junctions and necessary for hearing and speech discrimination (PubMed:34050020).

Cellular Location

Endoplasmic reticulum membrane. Nucleus inner membrane; Multi-pass membrane protein. Cell membrane Note=Retained in the inner nuclear membrane through interaction with EMD and Aand B-lamins. The N- and C-termini are oriented towards the nucleoplasm. The majority of the hydrophilic domain resides in the endoplasmic reticulum lumen (By similarity).

Tissue Location

Highest expression in placenta. Also found at lower levels in heart, ovary, spleen, small intestine, thymus, prostate and testis.

Anti-TMEM43 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-TMEM43 Rabbit Monoclonal Antibody - Images



Figure 1. Western blot analysis of TMEM43 using anti-TMEM43 antibody (M05893).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving



gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hacat whole cell lysates,

Lane 3: human SiHa whole cell lysates,

Lane 4: human PC-3 whole cell lysates,

Lane 5: rat C6 whole cell lysates,

Lane 6: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TMEM43 antigen affinity purified monoclonal antibody (Catalog # M05893) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TMEM43 at approximately 45 kDa.