

Anti-TMEM43 Rabbit Monoclonal Antibody

Catalog # ABO16494

Product Information

Application	WB, IHC
Primary Accession	Q9BTV4
Host	Rabbit
Isotype	IgG
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.

Additional Information

Gene ID	79188
Other Names	Transmembrane protein 43, Protein LUMA, TMEM43
Calculated MW	44876
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Source	Eukaryota
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.
Clone Names	Clone: 30T30
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.

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 A- and 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.

Images

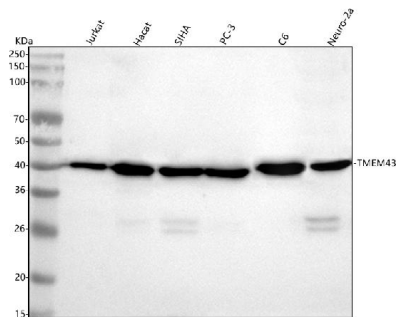


Figure 1. Western blot analysis of TMEM43 using anti-TMEM43 antibody (M05893).

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. The expected band size for TMEM43 is at 45 kDa.

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