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TMEM43 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12618c

Specification

TMEM43 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9BTV4
Other Accession	Q5XIP9, Q9DBS1, NP_077310.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44876**
Antigen Region	**195-223**

TMEM43 Antibody (Center) - Additional Information

Gene ID 79188

Other Names
Transmembrane protein 43, Protein LUMA, TMEM43

Target/Specificity
This TMEM43 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 195-223 amino acids from the Central region of human TMEM43.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
TMEM43 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

TMEM43 Antibody (Center) - 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).

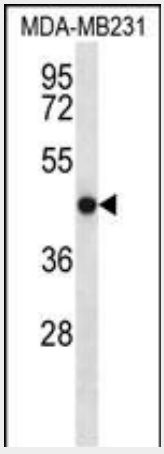
Tissue Location
Highest expression in placenta. Also found at lower levels in heart, ovary, spleen, small intestine, thymus, prostate and testis.

TMEM43 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TMEM43 Antibody (Center) - Images



TMEM43 Antibody (Center) (Cat. #AP12618c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the TMEM43 antibody detected the TMEM43 protein (arrow).

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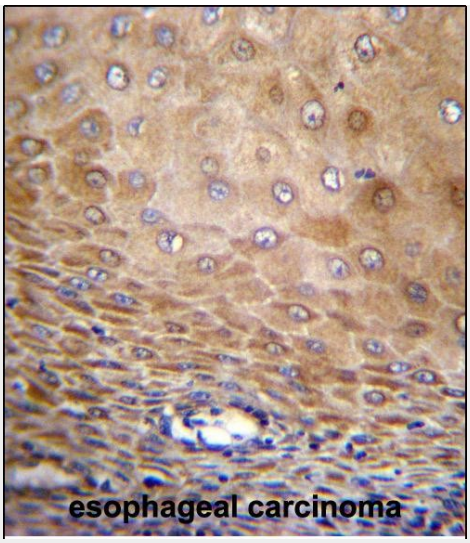

TMEM43 Antibody (Center) (Cat. #AP12618c)immunohistochemistry analysis in formalin fixed and paraffin embedded human esophageal carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TMEM43 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

TMEM43 Antibody (Center) - Background

This gene belongs to the TMEM43 family. Defects in this gene are the cause of familial arrhythmogenic right ventricular dysplasia type 5 (ARVD5), also known as arrhythmogenic right ventricular cardiomyopathy type 5 (ARVC5). Arrhythmogenic right ventricular dysplasia is an inherited disorder, often involving both ventricles, and is characterized by ventricular tachycardia, heart failure, sudden cardiac death, and fibrofatty replacement of cardiomyocytes. This gene contains a response element for PPAR gamma (an adipogenic transcription factor), which may explain the fibrofatty replacement of the myocardium, a characteristic pathological finding in ARVC.

TMEM43 Antibody (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Barahona-Dussault, C., et al. Clin. Genet. 77(1):37-48(2010)
Hodgkinson, K., et al. Genet. Med. 11(12):859-865(2009)
Merner, N.D., et al. Am. J. Hum. Genet. 82(4):809-821(2008)
Bengtsson, L., et al. J. Cell. Sci. 121 (PT 4), 536-548 (2008) :