

**TMEM43 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12618c****Specification**

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**TMEM43 Antibody (Center) Blocking peptide - Product Information**Primary Accession [Q9BTV4](#)**TMEM43 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 79188**Other Names**

Transmembrane protein 43, Protein LUMA, TMEM43

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**TMEM43 Antibody (Center) Blocking peptide - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**TMEM43 Antibody (Center) Blocking peptide - Images****TMEM43 Antibody (Center) Blocking peptide - 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 PPARgamma (an adipogenic transcription factor), which may explain the fibrofatty replacement of the myocardium, a characteristic pathological finding in ARVC.

**TMEM43 Antibody (Center) Blocking peptide - 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) :