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# KD-Validated Anti-Transmembrane Protein 43 Rabbit Monoclonal Antibody

**Rabbit monoclonal antibody**
**Catalog # AGI1741**

## Specification

### KD-Validated Anti-Transmembrane Protein 43 Rabbit Monoclonal Antibody - Product Information

| | |
|---|---|
| Application | **WB, FC** |
| Primary Accession | Q9BTV4 |
| Reactivity | **Rat, Human, Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **Predicted, 45 kDa , observed , 42 kDa KDa** |
| Gene Name | **TMEM43** |
| Aliases | **TMEM43; Transmembrane Protein 43; LUMA; DKFZp586G1919; MGC3222; ARVD5; Arrhythmogenic Right Ventricular Dysplasia 5; EDMD7; AUNA2; Protein LUMA; ARVC5; AUNA3; EDMD7** |
| Immunogen | **A synthesized peptide derived from human TMEM43** |

### KD-Validated Anti-Transmembrane Protein 43 Rabbit Monoclonal Antibody - Additional Information

Gene ID **79188**

**Other Names**
Transmembrane protein 43, Protein LUMA, TMEM43

### KD-Validated Anti-Transmembrane Protein 43 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:<a href="http://www.uniprot.org/citations/32614325" target="_blank">32614325</a>). In addition, functions as a critical signaling component in mediating NF-kappa-B activation by acting downstream of EGFR and upstream of CARD10 (PubMed:<a href="http://www.uniprot.org/citations/27991920" target="_blank">27991920</a>). Contributes to passive conductance current in cochlear glia-like supporting cells, mediated by gap junctions and necessary for hearing and speech discrimination (PubMed:<a href="http://www.uniprot.org/citations/34050020" target="_blank">34050020</a>).

**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).

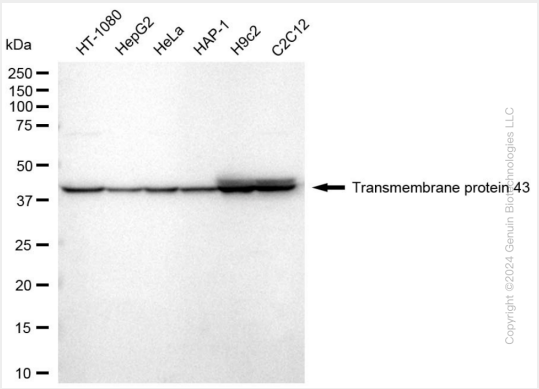
**Tissue Location**
Highest expression in placenta. Also found at lower levels in heart, ovary, spleen, small intestine, thymus, prostate and testis.

## KD-Validated Anti-Transmembrane Protein 43 Rabbit Monoclonal Antibody - Protocols

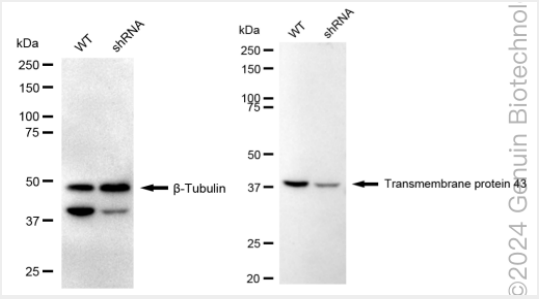
Provided below are standard protocols that you may find useful for product applications.

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

## KD-Validated Anti-Transmembrane Protein 43 Rabbit Monoclonal Antibody - Images




Western blotting analysis using anti-transmembrane protein 43 antibody (Cat#AGI1741). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-transmembrane protein 43 antibody (Cat#AGI1741, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.




Western blotting analysis using anti-Transmembrane protein 43 antibody (Cat#AGI1741). Transmembrane protein 43 expression in wild type (WT) and Transmembrane protein 43 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control.

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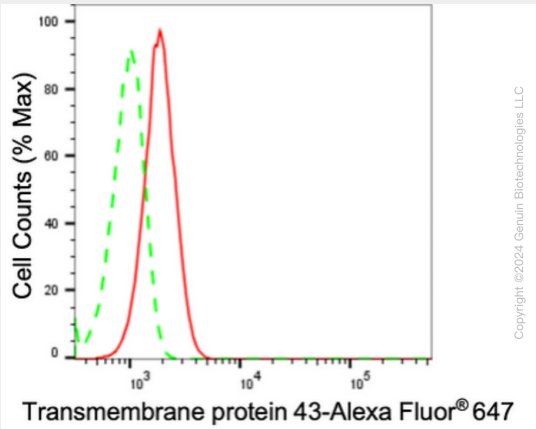


Flow cytometric analysis of Transmembrane protein 43 expression in C2C12 cells using anti-Transmembrane protein 43 antibody (Cat#AGI1741, 1□2,000). Green, isotype control; red, Transmembrane protein 43.