

TMEM33 Antibody (Internal) Rabbit Polyclonal Antibody Catalog # ALS11014

Specification

TMEM33 Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P57088</u> Human, Monkey, Pig, Horse, Bovine, Dog Rabbit Polyclonal 28kDa KDa

TMEM33 Antibody (Internal) - Additional Information

Gene ID 55161

Other Names Transmembrane protein 33, Protein DB83, TMEM33, DB83

Target/Specificity Human TMEM33. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions TMEM33 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TMEM33 Antibody (Internal) - Protein Information

Name TMEM33

Synonyms DB83

Function

Acts as a regulator of the tubular endoplasmic reticulum (ER) network by modulating intracellular calcium homeostasis. Mechanistically, stimulates PKD2 calcium-dependent activity (By similarity). Suppresses the RTN3/4-induced formation of the ER tubules (PubMed:25612671). Positively regulates PERK-mediated and IRE1-mediated unfolded protein response signaling (PubMed:26268696). Plays an essential role in VEGF-mediated release of Ca(2+) from ER stores during angiogenesis (PubMed:30760708). Also 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). Participates in lipid metabolism by acting as a downstream effector of the pyruvate kinase/PKM. Forms a complex with RNF5 to facilitate polyubiquitination and subsequent degradation of SCAP on the ER membrane (PubMed:34487377).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Melanosome. Nucleus envelope. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Co-localizes with RTN4 at the ER sheets.

Tissue Location

Prostate cancer and several cancer cell lines (at protein level). Widely expressed. Expressed at higher levels in endocrine-resistant breast cancer cells as compared to endocrine- sensitive breast cancer cells. Expressed at higher levels in early recurrence breast cancer tissues as compared to non-recurrent breast tumors.

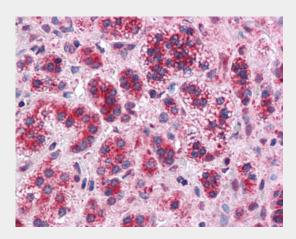
Volume 50 μl

TMEM33 Antibody (Internal) - Protocols

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

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

TMEM33 Antibody (Internal) - Images



Anti-TMEM33 antibody ALS11014 IHC of human adrenal. TMEM33 Antibody (Internal) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.



Chi A., et al.J. Proteome Res. 5:3135-3144(2006). Burkard T.R., et al.BMC Syst. Biol. 5:17-17(2011).