

TMC6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14212a

Specification

TMC6 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q7Z403</u> NP_009198.4, NP_001120670.1 Human Rabbit Polyclonal Rabbit IgG 90045 160-188

TMC6 Antibody (N-term) - Additional Information

Gene ID 11322

Other Names

Transmembrane channel-like protein 6, Epidermodysplasia verruciformis protein 1, Protein LAK-4, TMC6, EVER1, EVIN1

Target/Specificity

This TMC6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 160-188 amino acids from the N-terminal region of human TMC6.

Dilution WB~~1:1000

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

TMC6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TMC6 Antibody (N-term) - Protein Information

Name TMC6 (<u>HGNC:18021</u>)

Function Acts as a regulatory protein involved in the regulation of numerous cellular processes



(PubMed:<u>18158319</u>, PubMed:<u>30068544</u>, PubMed:<u>32917726</u>). Together with its homolog TMC8/EVER2, forms a complex with CIB1 in lymphocytes and keratynocytes where TMC6 and TMC8 stabilize CIB1 and reciprocally (PubMed:<u>30068544</u>, PubMed:<u>32917726</u>). Together with TMC8, also forms a complex with and activates zinc transporter ZNT1 at the ER membrane of keratynocytes, thereby facilitating zinc uptake into the ER (PubMed:<u>18158319</u>). Down-regulates the activity of transcription factors induced by zinc and cytokines (PubMed:<u>18158319</u>). Also plays a role in thermal sensation by inhibiting the M-channel (KCNQ2-KCNQ3 channel) current in primary sensory neurons (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Nucleus membrane; Multi-pass membrane protein. Note=Localizes to the ER, Golgi and nucleus membranes in keratinocytes.

Tissue Location

Expressed in placenta, prostate, testis, activated T-lymphocytes and lymphokine-activated killer (LAK) lymphocytes {ECO:0000269|PubMed:12906855, ECO:0000269|Ref.3}

TMC6 Antibody (N-term) - Protocols

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

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

TMC6 Antibody (N-term) - Images



TMC6 Antibody (N-term) (Cat. #AP14212a) western blot analysis in A2058 cell line lysates (35ug/lane).This demonstrates the TMC6 antibody detected the TMC6 protein (arrow).

TMC6 Antibody (N-term) - Background

Epidermodysplasia verruciformis (EV) is an autosomal recessive dermatosis characterized by abnormal susceptibility to



human papillomaviruses (HPVs) and a high rate of progression to squamous cell carcinoma on sun-exposed skin. EV is caused by mutations in either of two adjacent genes located on chromosome 17q25.3. Both of these genes encode integral membrane proteins that localize to the endoplasmic reticulum and are predicted to form transmembrane channels. This gene encodes a transmembrane channel-like protein with 10 transmembrane domains and 2 leucine zipper motifs.

TMC6 Antibody (N-term) - References

McDermott, D.F., et al. Pediatr Dermatol 26(3):306-310(2009) Lazarczyk, M., et al. J. Exp. Med. 205(1):35-42(2008) Zuo, Y.G., et al. J. Dermatol. Sci. 44(3):153-159(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Donfack, J., et al. Int. J. Pediatr. Otorhinolaryngol. 70(7):1235-1240(2006)