

TMC6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14212a

Product Information

Application	WB, E
Primary Accession	Q7Z403
Other Accession	NP_009198.4 , NP_001120670.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34148
Calculated MW	90045
Antigen Region	160-188

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 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	TMC6 (HGNC:18021)
Function	Acts as a regulatory protein involved in the regulation of numerous cellular processes (PubMed: 18158319 , PubMed: 30068544 , PubMed: 32917726). Together with its homolog TMC8/EVER2, forms a complex with CIB1 in

lymphocytes and keratinocytes where TMC6 and TMC8 stabilize CIB1 and reciprocally (PubMed:[30068544](#), PubMed:[32917726](#)). Together with TMC8, also forms a complex with and activates zinc transporter ZNT1 at the ER membrane of keratinocytes, thereby facilitating zinc uptake into the ER (PubMed:[18158319](#)). Down-regulates the activity of transcription factors induced by zinc and cytokines (PubMed:[18158319](#)). 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}

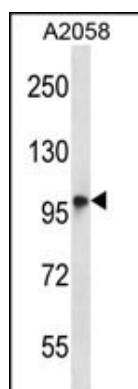
Background

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.

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)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.