SANTA CRUZ BIOTECHNOLOGY, INC.

# TMC6 (L-13): sc-109449

## BACKGROUND

TMC6 (transmembrane channel-like 6), also known as EVER1, EVIN1, EV1 or LAK-4P, is an 805 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and belongs to the transmembrane channel family. Expressed in testis, placenta and prostate, TMC6 exists as multiple alternatively spliced isoforms and, when defective, is associated with the pathogenesis of epidermodysplasia verruciformis (EV). EV is an autosomal recessive dermatosis that is characterized by an increased susceptibility to human papillomaviruses (HPVs) and an increased rate of squamous cell carcinoma in UV-exposed skin. The gene encoding TMC6 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

## REFERENCES


1. Ramoz, N., et al. 1999. A susceptibility locus for epidermodysplasia verruciformis, an abnormal predisposition to infection with the oncogenic human papillomavirus type 5, maps to chromosome 17qter in a region containing a psoriasis locus. J. Invest. Dermatol. 112: 259-263.
2. Ramoz, N., et al. 2000. Evidence for a nonallelic heterogeneity of epidermodysplasia verruciformis with two susceptibility loci mapped to chromosome regions 2p21-p24 and 17q25. J. Invest. Dermatol. 114: 1148-1153.
3. Keresztes, G., et al. 2003. TMC and EVER genes belong to a larger novel family, the TMC gene family encoding transmembrane proteins. BMC Genomics 4: 24.
4. Kurima, K., et al. 2003. Characterization of the transmembrane channel-like (TMC) gene family: functional clues from hearing loss and epidermodysplasia verruciformis. Genomics 82: 300-308.
5. Tate, G., et al. 2004. Novel mutations of EVER1/TMC6 gene in a Japanese patient with epidermodysplasia verruciformis. J. Hum. Genet. 49: 223-225.
6. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 605828. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Donfack, J., et al. 2006. Four mutations in epidermodysplasia verruciformis 1 (EVER1) gene are not contributors to susceptibility in RRP. Int. J. Pediatr. Otorhinolaryngol. 70: 1235-1240.
8. Lazarczyk, M., et al. 2008. Regulation of cellular zinc balance as a potential mechanism of EVER-mediated protection against pathogenesis by cutaneous oncogenic human papillomaviruses. J. Exp. Med. 205: 35-42.


## CHROMOSOMAL LOCATION

Genetic locus: TMC6 (human) mapping to 17q25.3; Tmc6 (mouse) mapping to 11 E2.

## SOURCE

TMC6 (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMC6 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109449 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMC6 (L-13) is recommended for detection of TMC6 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

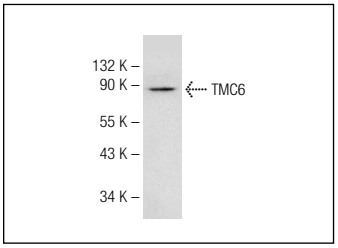
TMC6 (L-13) is also recommended for detection of TMC6 in additional species, including equine.

Suitable for use as control antibody for TMC6 siRNA (h): sc-94180, TMC6 siRNA (m): sc-154318, TMC6 shRNA Plasmid (h): sc-94180-SH, TMC6 shRNA Plasmid (m): sc-154318-SH, TMC6 shRNA (h) Lentiviral Particles: sc-94180-V and TMC6 shRNA (m) Lentiviral Particles: sc-154318-V.

Molecular Weight (predicted) of TMC6 isoforms: 90/50/43/32 kDa.

Molecular Weight (observed) of TMC6 isoforms: 90/100 kDa.

## DATA




TMC6 (L-13): sc-109449. Western blot analysis of TMC6 expression in F9 whole cell lysate.

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.