

# TMC6 (M-220): sc-98494

## 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/>

## CHROMOSOMAL LOCATION

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

## SOURCE

TMC6 (M-220) is a rabbit polyclonal antibody raised against amino acids 361-580 mapping within an internal region of TMC6 of mouse origin.

## PRODUCT

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

## STORAGE

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

## APPLICATIONS

TMC6 (M-220) is recommended for detection of TMC6 of mouse, rat and, to a lesser extent, human 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).

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.

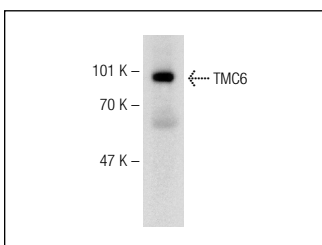
Molecular Weight (observed) of TMC6: 90/100 kDa.

Positive Controls: F9 cell lysate: sc-2245 or mouse liver extract: sc-2256.

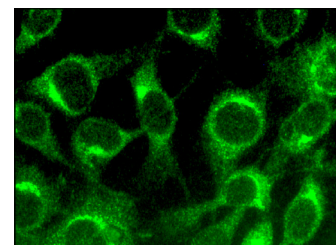
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TMC6 (M-220): sc-98494. Western blot analysis of TMC6 expression in mouse liver tissue extract.



TMC6 (M-220): sc-98494. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

## RESEARCH USE

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

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Try **TMC6 (H-10): sc-376679**, our highly recommended monoclonal alternative to TMC6 (M-220).