

# TMC6 (H-10): sc-376679



The Power to Question

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

TMC6 (H-10) is a mouse monoclonal antibody raised against amino acids 311-420 mapping within an internal region of TMC6 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TMC6 (H-10) is available conjugated to agarose (sc-376679 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376679 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376679 PE), fluorescein (sc-376679 FITC), Alexa Fluor® 488 (sc-376679 AF488), Alexa Fluor® 546 (sc-376679 AF546), Alexa Fluor® 594 (sc-376679 AF594) or Alexa Fluor® 647 (sc-376679 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376679 AF680) or Alexa Fluor® 790 (sc-376679 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

TMC6 (H-10) is recommended for detection of TMC6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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.

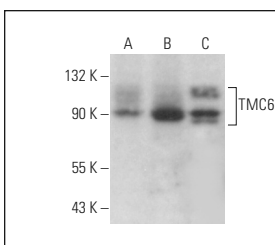
Molecular Weight (observed) of TMC6: 50/70/98 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, NAMALWA cell lysate: sc-2234 or TMC6 (h2): 293T Lysate: sc-115346.

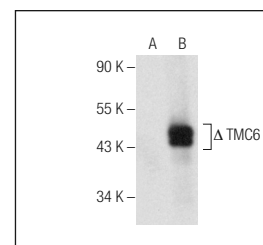
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



TMC6 (H-10): sc-376679. Western blot analysis of TMC6 expression in BJAB (A), NAMALWA (B) and RAW 264.7 (C) whole cell lysates.



TMC6 (H-10): sc-376679. Western blot analysis of TMC6 expression in non-transfected: sc-117752 (A) and truncated human TMC6 transfected: sc-115346 (B) 293T whole cell lysates.

## STORAGE

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

## RESEARCH USE

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

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