

TMC8 (Y-12): sc-109092

BACKGROUND

Transmembrane channel-like protein 8 (TMC8), also known as Epidermodysplasia verruciformis protein 2 (EVER2), is a 726 amino acid member of the TMC family of proteins. Localized to the endoplasmic reticulum membrane, TMC8 is thought to form a transmembrane channel-like protein with eight predicted transmembrane domains and three leucine zipper motifs. Mutations in the genes encoding TMC8 and TMC6, another member of the TMC family, have been shown to cause epidermodysplasia verruciformis (EV), 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. Infection by HPVs lead to persistent wart-like or macular lesions. TMC8 is expressed in placenta, prostate and testis, and three named isoforms exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TMC8 (human) mapping to 17q25.3; Tmc8 (mouse) mapping to 11 E2.

SOURCE

TMC8 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMC8 of human origin.

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-109092 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMC8 (Y-12) is recommended for detection of TMC8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

TMC8 (Y-12) is also recommended for detection of TMC8 in additional species, including equine and bovine.

Suitable for use as control antibody for TMC8 siRNA (h): sc-94147, TMC8 siRNA (m): sc-154320, TMC8 shRNA Plasmid (h): sc-94147-SH, TMC8 shRNA Plasmid (m): sc-154320-SH, TMC8 shRNA (h) Lentiviral Particles: sc-94147-V and TMC8 shRNA (m) Lentiviral Particles: sc-154320-V.

Molecular Weight of (predicted) TMC8: 82 kDa.

Molecular Weight of (observed) TMC8: 119 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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