# TMEM43 (S-18): sc-99680



The Power to Question

## **BACKGROUND**

TMEM43 (transmembrane protein 43), also known as LUMA, ARVC5 or ARVD5, is a 400 amino acid multi-pass membrane protein that localizes to the inner nuclear membrane, as well as to the endoplasmic reticulum. Highly expressed in placenta and present at lower levels in ovary, heart, thymus, spleen, prostate, testis and small intestine, TMEM43 is required for retaining emerin at the nuclear membrane and may also play an important role in the maintenance of nuclear envelope structure. Defects in the gene encoding TMEM43 are the cause of familial arrhythmogenic right ventricular dysplasia type 5 (ARVD5), an inherited disorder that is characterized by heart failure, ventricular tachycardia, fibrofatty replacement of cardiomyocytes and sudden cardiac death.

## **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: TMEM43 (human) mapping to 3p25.1; Tmem43 (mouse) mapping to 6 D1.

# SOURCE

TMEM43 (S-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMEM43 of human origin.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99680 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

TMEM43 (S-18) is recommended for detection of TMEM43 of mouse, rat and 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); non cross-reactive with other TMEM family members.

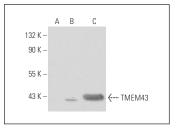
TMEM43 (S-18) is also recommended for detection of TMEM43 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TMEM43 siRNA (h): sc-78426, TMEM43 siRNA (m): sc-77360, TMEM43 shRNA Plasmid (h): sc-78426-SH, TMEM43 shRNA Plasmid (m): sc-77360-SH, TMEM43 shRNA (h) Lentiviral Particles: sc-78426-V and TMEM43 shRNA (m) Lentiviral Particles: sc-77360-V.

Molecular Weight of TMEM43: 45 kDa.

Positive Controls: TMEM43 (m): 293T Lysate: sc-124169 or EOC 20 whole cell lysate: sc-364781.

## **DATA**



TMEM43 (S-18): sc-99680. Western blot analysis of TMEM43 expression in non-transfected 293T: sc-117752 (**A**), mouse TMEM43 transfected 293T: sc-124169 (**B**) and EOC 20 (**C**) whole cell lysates.

# **RESEARCH USE**

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

MONOS Satisfation Guaranteed

Try **TMEM43 (E-1):** sc-365298 or **TMEM43 (F-3):** sc-271887, our highly recommended monoclonal alternatives to TMEM43 (S-18).

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