SANTA CRUZ BIOTECHNOLOGY, INC.

TMEM35 (K-14): sc-244426

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TMEM35 (transmembrane protein 35) is a 167 amino acid protein encoded by a gene mapping to human chromosomes X and Y. The X and Y chromosomes are the human sex chromosomes. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. The combination of an X and Y chromosome lead to normal male development while two copies of X lead to normal female development. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited. More than one copy of the X chromosome with a Y chromosome causes Klinefelter's syndrome. A single copy of X alone leads to Turner's syndrome. More than two copies of the X chromosome, in the absence of a Y chromosome, is known as Triple X syndrome. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

REFERENCES

1. Givens, J.R., et al. 1975. Features of Turner's syndrome in women with polycystic ovaries. Obstet. Gynecol. 45: 619-624.
2. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. Cytogenet. Genome Res. 99: 85-91.
3. Ozçelik, T. 2002. Uncovering the complex mysteries of mosaicism. Nature 417: 588.
4. Muntoni, F., et al. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. Lancet Neurol. 2: 731-740.
5. Deeb, S.S. 2005. The molecular basis of variation in human color vision. Clin. Genet. 67: 369-377.
6. Bojesen, A., et al. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. Diabetes Care 29: 1591-1598.

CHROMOSOMAL LOCATION

Genetic locus: TMEM35 (human) mapping to Xq22.1; Tmem35 (mouse) mapping to X E3.

SOURCE

TMEM35 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMEM35 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-244426 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TMEM35 (K-14) is recommended for detection of TMEM35 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).

TMEM35 (K-14) is also recommended for detection of TMEM35 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TMEM35 siRNA (h): sc-90939, TMEM35 siRNA (m): sc-154459, TMEM35 shRNA Plasmid (h): sc-90939-SH, TMEM35 shRNA Plasmid (m): sc-154459-SH, TMEM35 shRNA (h) Lentiviral Particles: sc-90939-V and TMEM35 shRNA (m) Lentiviral Particles: sc-154459-V.

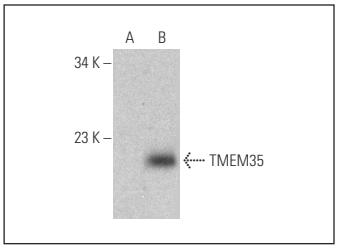
Molecular Weight of TMEM35: 18 kDa.

Positive Controls: TMEM35 (m): 293T Lysate: sc-124162.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TMEM35 (K-14): sc-244426. Western blot analysis of TMEM35 expression in non-transfected: sc-117752 (**A**) and mouse TMEM35 transfected: sc-124162 (**B**) 293T whole cell lysates.

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.