

TMEM164 (C-14): sc-138815

BACKGROUND

TMEM164 (transmembrane protein 164) is a 297 amino acid protein encoded by a gene mapping to the human X and Y chromosomes. 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 combinations 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

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4. Muntoni, F., Torelli, S. and Ferlini, A. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. *Lancet Neurol.* 2: 731-740.
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CHROMOSOMAL LOCATION

Genetic locus: TMEM164 (human) mapping to Xq23; Tmem164 (mouse) mapping to X F2.

SOURCE

TMEM164 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TMEM164 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138815 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM164 (C-14) is recommended for detection of TMEM164 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TMEM family members.

TMEM164 (C-14) is also recommended for detection of TMEM164 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMEM164 siRNA (h): sc-91198, TMEM164 siRNA (m): sc-154393, TMEM164 shRNA Plasmid (h): sc-91198-SH, TMEM164 shRNA Plasmid (m): sc-154393-SH, TMEM164 shRNA (h) Lentiviral Particles: sc-91198-V and TMEM164 shRNA (m) Lentiviral Particles: sc-154393-V.

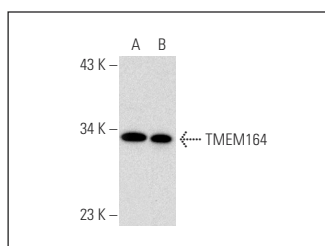
Molecular Weight of TMEM164: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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



TMEM164 (C-14): sc-138815. Western blot analysis of TMEM164 expression in HeLa (A) and Jurkat (B) 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.