SANTA CRUZ BIOTECHNOLOGY, INC.

TMEM132A (K-14): sc-169614

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TMEM132A is a 560 amino acid protein encoded by a gene mapping to human chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TMEM132A (human) mapping to 11q12.2; Tmem132a (mouse) mapping to 19 A.

SOURCE

TMEM132A (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMEM132A 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-169614 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM132A (K-14) is recommended for detection of TMEM132A 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); non cross-reactive with other TMEM132 family members.

TMEM132A (K-14) is also recommended for detection of TMEM132A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TMEM132A siRNA (h): sc-96680, TMEM132A siRNA (m): sc-154364, TMEM132A shRNA Plasmid (h): sc-96680-SH, TMEM132A shRNA Plasmid (m): sc-154364-SH, TMEM132A shRNA (h) Lentiviral Particles: sc-96680-V and TMEM132A shRNA (m) Lentiviral Particles: sc-154364-V.

Molecular Weight of TMEM132A: 110 kDa.

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.