

# TMEM33 (A-17): sc-244421

## BACKGROUND

TMEM33 (transmembrane protein 33), also known as protein DB83, is a 247 amino acid protein encoded by a gene mapping to human chromosome 4. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease. Chromosome 4 reportedly contains the largest gene deserts (regions of the genome with no protein encoding genes) and has one of the two lowest recombination frequencies of the human chromosomes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TMEM33 (human) mapping to 4p13; Tmem33 (mouse) mapping to 5 C3.1.

## SOURCE

TMEM33 (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMEM33 of human origin.

## RESEARCH USE

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

## 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-244421 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMEM33 (A-17) is recommended for detection of TMEM33 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 TMEM family members.

TMEM33 (A-17) is also recommended for detection of TMEM33 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMEM33 siRNA (h): sc-89064, TMEM33 siRNA (m): sc-154457, TMEM33 shRNA Plasmid (h): sc-89064-SH, TMEM33 shRNA Plasmid (m): sc-154457-SH, TMEM33 shRNA (h) Lentiviral Particles: sc-89064-V and TMEM33 shRNA (m) Lentiviral Particles: sc-154457-V.

Molecular Weight of TMEM33: 28 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.