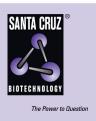
## SANTA CRUZ BIOTECHNOLOGY, INC.

# TMEM245 (C-20): sc-246019



## BACKGROUND

TMEM245 (transmembrane protein 245), also known as CG2 or C9orf5, is a 911 amino acid multi-pass membrane protein that is widely expressed and belongs to the UPF0118 (TMEM245) family. TMEM245 exists as four alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 9q31.3. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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- Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
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#### CHROMOSOMAL LOCATION

Genetic locus: TMEM245 (human) mapping to 9q31.3; D730040F13Rik (mouse) mapping to 4 B3.

#### SOURCE

TMEM245 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TMEM245 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-246019 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMEM245 (C-20) is recommended for detection of TMEM245 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).

TMEM245 (C-20) is also recommended for detection of TMEM245 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TMEM245 siRNA (h): sc-92711, TMEM245 siRNA (m): sc-142850, TMEM245 shRNA Plasmid (h): sc-92711-SH, TMEM245 shRNA Plasmid (m): sc-142850-SH, TMEM245 shRNA (h) Lentiviral Particles: sc-92711-V and TMEM245 shRNA (m) Lentiviral Particles: sc-142850-V.

Molecular Weight of TMEM245 isoforms: 101/97/48/55 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) Immunofluo-rescence: 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.