

# TMEM211 (C-15): sc-86534

## BACKGROUND

TMEM211 (transmembrane protein 211) is a 200 amino acid multipass membrane protein that is encoded by a gene localized to human chromosome 22. Chromosome 22 houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

## REFERENCES

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
- Schwab, S.G., et al. 1999. Chromosome 22 workshop report. *Am. J. Med. Genet.* 88: 276-278.
- Matsuda, A., et al. 2003. Large-scale identification and characterization of human genes that activate NF $\kappa$ B and MAPK signaling pathways. *Oncogene* 22: 3307-3318.
- Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.
- Paylor, R., et al. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. *Proc. Natl. Acad. Sci. USA* 103: 7729-7734.
- Zheng, X., et al. 2006. BCR and its mutants, the reciprocal t(9;22)-associated Abl/Bcr fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 6: 262.
- Ahronowitz, I., et al. 2007. Mutational spectrum of the NF2 gene: a meta-analysis of 12 years of research and diagnostic laboratory findings. *Hum. Mutat.* 28: 1-12.

## CHROMOSOMAL LOCATION

Genetic locus: TMEM211 (human) mapping to 22q11.23.

## SOURCE

TMEM211 (C-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TMEM211 of human origin.

## 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.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86534 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMEM211 (C-15) is recommended for detection of TMEM211 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000, immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for TMEM211 siRNA (h): sc-75449, TMEM211 shRNA Plasmid (h): sc-75449-SH and TMEM211 shRNA (h) Lentiviral Particles: sc-75449-V.

Molecular Weight (predicted) of TMEM211: 22 kDa.

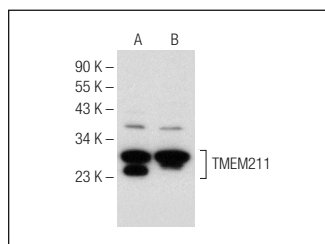
Molecular Weight (observed) of TMEM211: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or SK-BR-3 cell lysate: sc-2218.

## 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



TMEM211 (C-15): sc-86534. Western blot analysis of TMEM211 expression in HeLa (A) and SK-BR-3 (B) whole cell lysates.

## RESEARCH USE

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