# TMEM71 (B-9): sc-376631



The Power to Question

#### **BACKGROUND**

TMEM71 is a 191 amino acid protein encoded by a gene mapping to human chromosome 8. Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

#### **REFERENCES**

- Wildenauer, D.B., et al. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
- 2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
- Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.

#### **CHROMOSOMAL LOCATION**

Genetic locus: TMEM71 (human) mapping to 8q24.22; Tmem71 (mouse) mapping to 15 D2.

## **SOURCE**

TMEM71 (B-9) is a mouse monoclonal antibody raised against a peptide mapping within an internal region of TMEM71 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g \ lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TMEM71 (B-9) is available conjugated to agarose (sc-376631 AC), 500  $\mu$ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376631 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376631 PE), fluorescein (sc-376631 FITC), Alexa Fluor\* 488 (sc-376631 AF488), Alexa Fluor\* 546 (sc-376631 AF546), Alexa Fluor\* 594 (sc-376631 AF594) or Alexa Fluor\* 647 (sc-376631 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor\* 680 (sc-376631 AF680) or Alexa Fluor\* 790 (sc-376631 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376631 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

#### **APPLICATIONS**

TMEM71 (B-9) is recommended for detection of TMEM71 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 TMEM71 siRNA (h): sc-77752, TMEM71 siRNA (m): sc-154496, TMEM71 shRNA Plasmid (h): sc-77752-SH, TMEM71 shRNA Plasmid (m): sc-154496-SH, TMEM71 shRNA (h) Lentiviral Particles: sc-77752-V and TMEM71 shRNA (m) Lentiviral Particles: sc-154496-V.

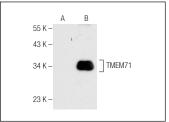
Molecular Weight of TMEM71: 33 kDa.

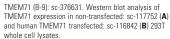
Positive Controls: TMEM71 (h): 293T Lysate: sc-116842.

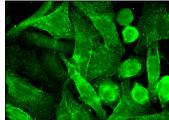
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

#### DATA







TMEM71 (B-9): sc-376631. Immunofluorescence staining of formalin-fixed SW480 cells showing membrane localization.

#### **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.

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