

# TMEM45A (C-13): sc-100196

## BACKGROUND

TMEM45A (transmembrane protein 45A), also known as DERP7 or DNAPTP4, is a 275 amino acid multi-pass membrane protein that is encoded by a gene which maps to human chromosome 3. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth Disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TMEM45A (human) mapping to 3q12.2.

## SOURCE

TMEM45A (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TMEM45A of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100196 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

TMEM45A (C-13) is recommended for detection of TMEM45A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with other THEM family members.

Suitable for use as control antibody for TMEM45A siRNA (h): sc-78532, TMEM45A shRNA Plasmid (h): sc-78532-SH and TMEM45A shRNA (h) Lentiviral Particles: sc-78532-V.

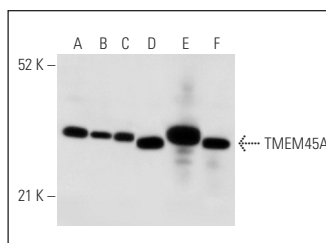
Molecular Weight of TMEM45A: 32 kDa.

Positive Controls: human skeletal muscle extract: sc-363776, A-673 cell lysate: sc-2414 or IMR-32 cell lysate: sc-2409.

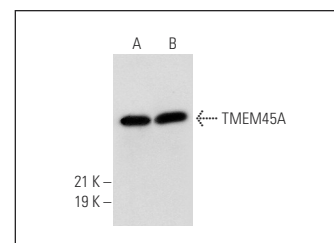
## RECOMMENDED SECONDARY REAGENTS

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



TMEM45A (C-13): sc-100196. Western blot analysis of TMEM45A expression in K-562 (A), HeLa (B), Jurkat (C) and A-673 (D) whole cell lysates and human skeletal muscle (E) and human tonsil (F) tissue extracts.



TMEM45A (C-13): sc-100196. Western blot analysis of TMEM45A expression in BxPC-3 (A) and IMR-32 (B) whole cell lysates.

## 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.