

# TMPRSS2 (H-50): sc-33533

## BACKGROUND

Extracellular proteases mediate the digestion of neighboring extracellular matrix components in initial tumor growth, allow desquamation of tumor cells into the surrounding environment, provide the basis for invasion of basement membranes in targeted metastatic organs and are required for release and activation of many growth and angiogenic factors. The TMPRSS2 gene encodes a 492 amino acid multimeric serine protease, which is mainly expressed in the mouse prostate and kidney, and is also expressed in the human small intestine, prostate, colon, stomach and salivary gland. TMPRSS2 contains several domains, including a serine protease domain of the S1 family, a scavenger receptor cysteine-rich domain of group A, an LDL receptor class A domain and a transmembrane domain. TMPRSS2 is expressed as a full length form and a cleaved protease domain and its expression is increased by androgenic hormones. TMPRSS2 is also expressed in prostate carcinoma, suggesting that it may play a role in prostate carcinogenesis.

## CHROMOSOMAL LOCATION

Genetic locus: TMPRSS2 (human) mapping to 21q22.3; Tmprss2 (mouse) mapping to 16 C4.

## SOURCE

TMPRSS2 (H-50) is a rabbit polyclonal antibody raised against amino acids 296-345 mapping within an internal region of TMPRSS2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

TMPRSS2 (H-50) is recommended for detection of TMPRSS2 catalytic chain of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TMPRSS2 (H-50) is also recommended for detection of TMPRSS2 catalytic chain in additional species, including porcine.

Suitable for use as control antibody for TMPRSS2 siRNA (h): sc-41658, TMPRSS2 siRNA (m): sc-154527, TMPRSS2 shRNA Plasmid (h): sc-41658-SH, TMPRSS2 shRNA Plasmid (m): sc-154527-SH, TMPRSS2 shRNA (h) Lentiviral Particles: sc-41658-V and TMPRSS2 shRNA (m) Lentiviral Particles: sc-154527-V.

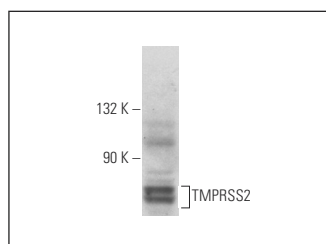
Molecular Weight of TMPRSS2: 70 kDa.

Positive Controls: mouse prostate extract: sc-364249 or HeLa whole cell lysate: sc-2200.

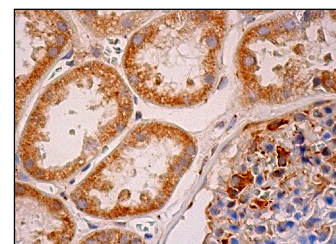
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



TMPRSS2 (H-50): sc-33533. Western blot analysis of TMPRSS2 expression in HeLa whole cell lysate.



TMPRSS2 (H-50): sc-33533. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomerulus and tubules.

## RESEARCH USE

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

## PROTOCOLS

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

**MONOS**  
Satisfaction  
Guaranteed

Try **TMPRSS2 (P5H9-A3): sc-101847**, our highly recommended monoclonal alternative to TMPRSS2 (H-50).