

▶ **TMPRSS4 (T-14): sc-66603**

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. TMPRSS4 (transmembrane protease, serine 4) also known as MT-SP2 (membrane-type serine protease 2) and initially referred to as TMPRSS3, is a single-pass type II membrane protein with one SRCR domain, one LDL-receptor class A domain and one peptidase S1 domain. Localizing to the cell surface, TMPRSS4 is a member of the peptidase S1 family and is weakly expressed in normal tissues but is highly expressed in gastric, pancreatic, ampullary and colorectal cancer. TMPRSS4 plays a role in metastasis formation and tumor invasion.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Tmprss4* (mouse) mapping to 9 A5.2.

SOURCE

TMPRSS4 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMPRSS4 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66603 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMPRSS4 (T-14) is recommended for detection of TMPRSS4 of mouse and rat 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).

TMPRSS4 (T-14) is also recommended for detection of TMPRSS4 in additional species, including canine and porcine.

Suitable for use as control antibody for TMPRSS4 siRNA (m): sc-63138, TMPRSS4 shRNA Plasmid (m): sc-63138-SH and TMPRSS4 shRNA (m) Lentiviral Particles: sc-63138-V.

Molecular Weight of TMPRSS4: 48 kDa.

Molecular Weight of glycosylated TMPRSS4: 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) Immunofluorescence: 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.



MONOS
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Try **TMPRSS4 (A-3): sc-376415**, our highly recommended monoclonal alternative to TMPRSS4 (T-14).