

**TMPRSS2 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7377a****Specification**

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**TMPRSS2 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O15393</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

**TMPRSS2 Antibody (N-term) - Additional Information****Gene ID** 7113**Other Names**

Transmembrane protease serine 2, 3421-, Serine protease 10, Transmembrane protease serine 2 non-catalytic chain, Transmembrane protease serine 2 catalytic chain, TMPRSS2, PRSS10

**Target/Specificity**

This TMPRSS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human TMPRSS2.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TMPRSS2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**TMPRSS2 Antibody (N-term) - Protein Information****Name** TMPRSS2 ([HGNC:11876](#))**Synonyms** PRSS10

**Function** Plasma membrane-anchored serine protease that cleaves at arginine residues (PubMed:[32703818](#), PubMed:[35676539](#), PubMed:[37990007](#), PubMed:[38964328](#)). Participates in proteolytic cascades of relevance for the normal physiologic function of the prostate (PubMed:[25122198](#)). Androgen-induced TMPRSS2 activates several substrates that include pro-hepatocyte growth factor/HGF, the protease activated receptor-2/F2RL1 or matriptase/ST14 leading to extracellular matrix disruption and metastasis of prostate cancer cells (PubMed:[15537383](#), PubMed:[25122198](#), PubMed:[26018085](#)). In addition, activates trigeminal neurons and contribute to both spontaneous pain and mechanical allodynia (By similarity).

#### Cellular Location

Cell membrane; Single-pass type II membrane protein

#### Tissue Location

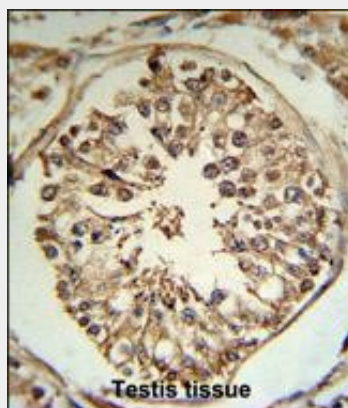
Expressed in several tissues that comprise large populations of epithelial cells with the highest level of transcripts measured in the prostate gland. Expressed in type II pneumocytes in the lung (at protein level). Expressed strongly in small intestine. Also expressed in colon, stomach and salivary gland. Coexpressed with ACE2 within lung type II pneumocytes, ileal absorptive enterocytes, intestinal epithelial cells, cornea, gallbladder and nasal goblet secretory cells (Ref.21). {ECO:0000269|PubMed:11169526, ECO:0000269|PubMed:20382709, ECO:0000269|PubMed:21325420, ECO:0000269|PubMed:32404436, ECO:0000269|Ref.21}

#### TMPRSS2 Antibody (N-term) - Protocols

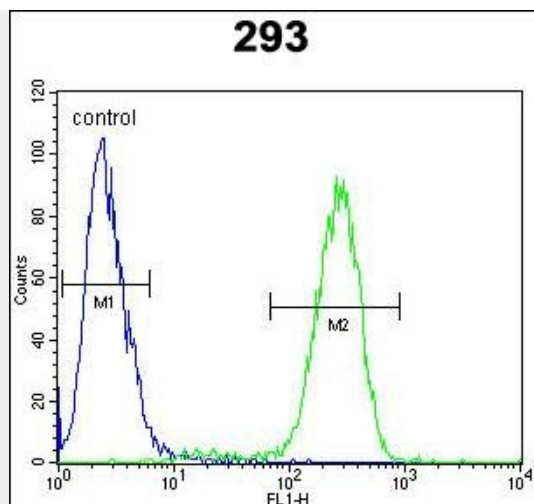
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

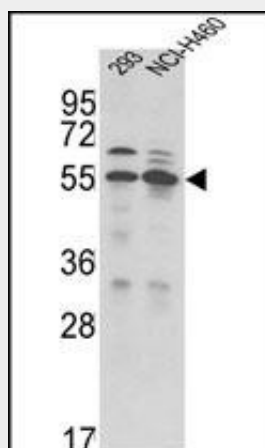
#### TMPRSS2 Antibody (N-term) - Images



TMPRSS2 Antibody (N-term) (RB18784) IHC analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TMPRSS2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



TPRSS2 Antibody (N-term) (Cat. #AP7377a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Western blot analysis of TPRS2 Antibody (N-term) (Cat. #AP7377a) in 293, NCI-H460 cell line lysates (35ug/lane). TPRS2 (arrow) was detected using the purified Pab.

### TPRSS2 Antibody (N-term) - Background

TPRSS2 is a protein that belongs to the serine protease family. The protein contains a type II transmembrane domain, a receptor class A domain, a scavenger receptor cysteine-rich domain and a protease domain. Serine proteases are known to be involved in many physiological and pathological processes. Its gene was demonstrated to be up-regulated by androgenic hormones in prostate cancer cells and down-regulated in androgen-independent prostate cancer tissue. The protease domain of this protein is thought to be cleaved and secreted into cell media after autocleavage.

### TPRSS2 Antibody (N-term) - References

Gopalan,A., Cancer Res. 69 (4), 1400-1406 (2009)  
Hofer,M.D., Cancer Res. 69 (2), 640-646 (2009)