

TMPRSS2 Antibody Rabbit mAb

Catalog # AP92338

## Specification

# TMPRSS2 Antibody - Product Information

Application Primary Accession Reactivity Clonality <b>Other Names</b> Epitheliasin; PRSS10; TMPRSS2;	WB, IHC, FC, ICC <u>015393</u> Rat Monoclonal
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	53859 Da

## **TMPRSS2 Antibody - Additional Information**

Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human TMPRSS2
Description	Serine protease that proteolytically cleaves and activates the viral spike glycoproteins which facilitate virus-cell membrane fusions; spike proteins are synthesized and maintained in precursor intermediate folding states and proteolysis permits the refolding and energy release required to create stable virus-cell linkages and membrane coalescence.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## **TMPRSS2 Antibody - Protein Information**

Name TMPRSS2 (<u>HGNC:11876</u>)

## Synonyms PRSS10

#### Function

Plasma membrane-anchored serine protease that cleaves at arginine residues (PubMed:<a href="http://www.uniprot.org/citations/32703818" target="\_blank">32703818</a>, PubMed:<a href="http://www.uniprot.org/citations/35676539" target="\_blank">35676539</a>, PubMed:<a href="http://www.uniprot.org/citations/37990007" target="\_blank">37990007</a>, PubMed:<a href="http://www.uniprot.org/citations/37990007" target="\_blank">37990007</a>, PubMed:<a href="http://www.uniprot.org/citations/37990007" target="\_blank">37990007</a>, PubMed:<a href="http://www.uniprot.org/citations/37990007" target="\_blank">37990007</a>, PubMed:<a href="http://www.uniprot.org/citations/38964328" target="\_blank">38964328</a>, PubMed:<a href="http://www.uniprot.org/citations/38964328" target="\_blank">38964328</a>, PubMed:<a href="http://www.uniprot.org/citations/38964328" target="\_blank">38964328</a>). Participates



in proteolytic cascades of relevance for the normal physiologic function of the prostate (PubMed:<a href="http://www.uniprot.org/citations/25122198" target="\_blank">25122198</a>). 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:<a

href="http://www.uniprot.org/citations/15537383" target="\_blank">15537383</a>, PubMed:<a href="http://www.uniprot.org/citations/25122198" target="\_blank">25122198</a>, PubMed:<a href="http://www.uniprot.org/citations/26018085" target="\_blank">26018085</a>). 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** 

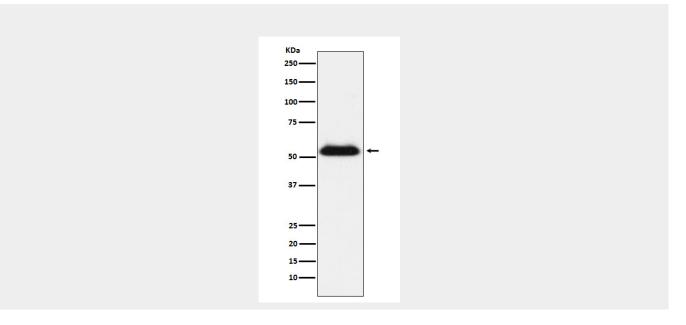
Expressed in several tissues that comprise large populations of epithelial cells with the highest level of transcripts measured in the prostate gland. Expressed in type II pneumocytes in the lung (at protein level). Expressed strongly in small intestine. Also expressed in colon, stomach and salivary 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 - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**TMPRSS2 Antibody - Images** 





Western blot analysis of TMPRSS2 expression in LNCaP cell lysate.