For Research Use Only

TMPRSS2 Monoclonal antibody

Catalog Number:68264-1-Ig

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Basic Information

Catalog Number:
68264-1-Ig

Size:
1000 μg/ml

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG5824

GenBank Accession Number:
BC051839

GeneID (NCBI):
7113

UNIPROT ID:
O15393

Full Name:
transmembrane protease, serine 2

Calculated MW:
54 kDa

Observed MW:
50 kDa

Purification Method:
Protein G purification

CloneNo.:
1H7E9

Recommended Dilutions:
WB 1:1000-1:8000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
Human, Pig

Positive Controls:

WB : PC-3 cells, pig kidney tissue, LNCaP cells, Caco-2 cells, COLO 320 cells, HT-29 cells, human testis tissue

Background Information

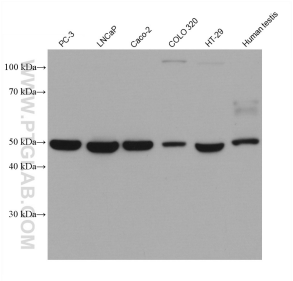
TMPRSS2, also named as PRSS10, is a type II transmembrane serine protease which is highly expressed by the epithelium of the human prostate gland. TMPRSS2 may contribute to prostate tumour metastasis via the activation of PAR-2. TMPRSS2 is a Serine protease that proteolytically cleaves and activates the viral spike glycoproteins which facilitate virus-cell membrane fusions. TMPRSS2 is a host cell factor that is critical for the spread of several clinically relevant viruses, including influenza A viruses and coronaviruses (PMID: 23468491, 30626688). SARS-CoV-2 uses the SARS-CoV receptor ACE2 for entry and the serine protease TMPRSS2 for S protein priming. The initial spike protein priming by TMPRSS2 is essential for the entry and viral spread of SARS-CoV-2 through interaction with the ACE2 receptor (PMID: 32142651, 30626688). Camostat mesylate, an inhibitor of TMPRSS2, can block SARS-CoV-2 infection of lung cells (PMID: 32142651). The MW of TMPRSS2 is about 65-70 kDa. It can be cleaved into some chains with MW 54 kDa, 31 kDa and 26 kDa (PMID: 25734995, 20382709, 26018085).

Storage

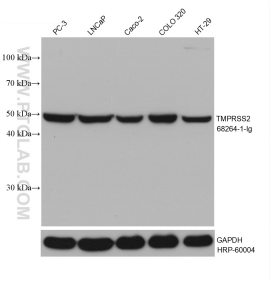
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

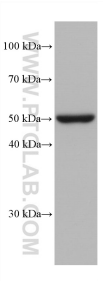
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68264-1-Ig (TMPRSS2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 68264-1-Ig (TMPRSS2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



pig kidney tissue were subjected to SDS PAGE followed by western blot with 68264-1-Ig (TMPRSS2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.