

TMPRSS2 Monoclonal antibody

Catalog Number: 68264-1-Ig

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:

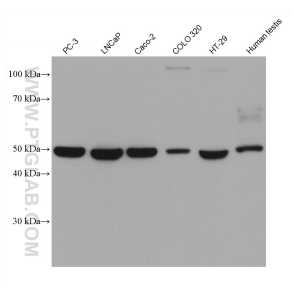
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

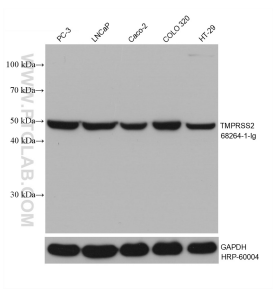
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

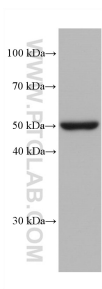
Selected Validation Data



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.