

Product Information

MemDX™ Membrane Protein Human TMPRSS2 (Transmembrane serine protease 2)

Expressed *in vitro* *E.coli* expression system for Antibody Discovery, Partial (106-492aa)

Cat. No.: **MPX0843K**

This product is for research use only and is not intended for diagnostic use.

This product is a 46.9 kDa Human TMPRSS2 membrane protein expressed *in vitro* *E.coli* expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

TMPRSS2

Protein Length

Partial (106-492aa)

Protein Class

Protease

Molecular Weight

46.9 kDa

TMD

1

Sequence

WKFMGSKCSNSGIECDSSGTCINPSNWCDGVSHCPGGEDENRCVRLYGPNFILQVYSSQRKSWHPVCQDDWNENYGRAACRDI

Product Description

Expression Systems

in vitro *E.coli* expression system

Tag

6xHis tag at the N-terminus

Protein Format

Soluble

Form

LYOPH

Reconstitution

Reconstitute protein in deionized sterile water

Purity

>85% as determined by SDS-PAGE.

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

TMPRSS2

Full Name

Transmembrane serine protease 2

Introduction

This gene encodes a protein that belongs to the serine protease family. The encoded 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. This 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. This protein also facilitates entry of viruses into host cells by proteolytically cleaving and activating viral envelope glycoproteins. Viruses found to use this protein for cell entry include Influenza virus and the human coronaviruses HCoV-229E, MERS-CoV, SARS-CoV and SARS-CoV-2 (COVID-19 virus). Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Alternative Names

TMPRSS2; PRSS10; epitheliasin; serine protease 10; transmembrane protease, serine 2; Transmembrane serine protease 2

Gene ID

[7113](#)

UniProt ID

[Q15393](#)