

# **Product Information**

# MemDX™ Membrane Protein Human TMPRSS2 (Transmembrane serine protease 2) for Antibody Discovery

Cat. No.: MP1433X

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

This product is a 79.86 kDa Human TMPRSS2 membrane protein expressed in *In vitro* wheat germ 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**

Full-length

# **Molecular Weight**

79.86 kDa

# **TMD**

1

#### Sequence

MALNSGSPPAIEPYYENHGYQPENPYPAQPTVVPTVYEVHPAQYYPSPVPQYAPRVLTQASDPVVCTQPKSPSGTVCTSKTKKAL

## **Product Description**

# **Application**

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

# **Expression Systems**

in vitro wheat germ expression system

# Tag

GST-tag at N-terminal

# **Protein Format**

Liposome

# Form

#### Liquid

#### **Purification**

Glutathione Sepharose 4 Fast Flow

#### **Buffer**

50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0

#### **Storage**

Store at +4°C for up to one week or several months at -80°C

### **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**

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

#### Gene ID

7113

#### **UniProt ID**

O15393