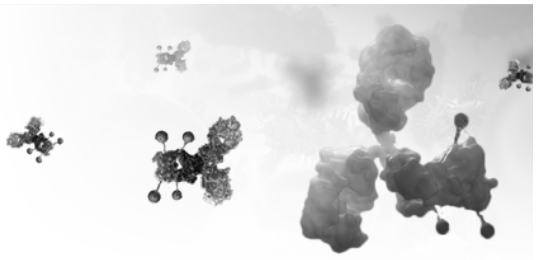

Mouse Anti-TMPRSS2 monoclonal antibody, clone Q6I0-B4 (CABT-RM145)

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

PRODUCT INFORMATION

Specificity	Specifically detects human Transmembrane protease serine 2. It targets an epitope with in the extracellular serine protease domain.
Target	TMPRSS2
Immunogen	KLH-conjugated linear peptide corresponding to 16 amino acids from the extracellular domain of human transmembrane protease serine 2.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	Q6I0-B4
Purification	Protein G purified
Conjugate	unconjugated
Applications	ELISA, IHC, WB
Molecular Weight	53.86 kDa calculated.
Format	Liquid
Size	100 µg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
Preservative	0.05% sodium azide

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Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	Transmembrane protease serine 2 is encoded by the TMPRSS2 gene in human. TMPRSS2 is a single-pass type II membrane protein of the peptidase S1 family that is shown to proteolytically cleave and activate the viral spike glycoproteins, which facilitate virus-cell membrane fusions. It is shown to facilitate human SARS coronavirus (SARS-CoV) infection via two independent mechanisms, proteolytic cleavage of ACE2 that promotes viral uptake and cleavage of coronavirus spike glycoprotein, which activates the glycoprotein for cathepsin L-independent host cell entry. TMPRSS2 is highly expressed in the prostate tissue and lower expression levels are observed in the epithelia of the colon, stomach, epididymis and breast tissue. Some expression has also been reported in pancreatic acini, hepatic bile ducts, testicular Leydig cells and the kidney. Its expression levels are significantly elevated in both neoplastic prostate and in the epithelium of prostatic hyperplasia. TMPRSS2 has a cytoplasmic domain (aa 1-84), a transmembrane domain (aa 85-105), and an extracellular domain (aa 106-492). Its peptidase S1 domain is localized to amino acids 256-489. It is reported to be proteolytically processed by an autocatalytic mechanism generating the transmembrane protease serine 2 non-catalytic chain (1-255) and the transmembrane protease serine 2 catalytic chain (256-492). Two isoforms of TMPRSS2 have been described that are produced by alternative splicing.
Keywords	TMPRSS2; PRO115; PRSS10

GENE INFORMATION

Entrez Gene ID	7113
UniProt ID	O15393

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