

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TMPRSS9 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 1042528
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TMPRSS9 Glu190-Gln490 Accession # Q7Z410
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TMPRSS9 (Transmembrane protease, Serine 9; also Polyserine protease 1) is a 116-120 kDa (predicted) member of the TTSP family of membrane-bound serine proteases. It is expressed in fetal tissue, and converts pro-uPA into its active form. Human TMPRSS9 is a 1059 type II transmembrane (TM) protein. It has a 29 aa N-terminal cytoplasmic region and a 1008 aa extracellular domain (ECD) (aa 51-1059). The ECD contains one LDLR region (aa 153-190), followed by three Peptidase S1 domains (aa 203-436, 504-736, and 827-1058), the first two of which are catalytically active. Proteolytic cleavage can generate a soluble 34 kDa Serase 1 (aa 203-503), a 35 kDa Serase 2 (aa 504-826) and an inactive 25 kDa Serase 3 (aa 827-1059). Alternatively, truncated, TM forms of TMPRSS9 such as a 56 kDa TM isotype containing only the Serase 1 domain, or a 91 kDa (predicted) form containing the Serase 1, 2 and 3 domains may exist. Two potential splice forms are reported. One shows an insertion of 34 aa after Lys90 accompanied by a seven aa substitution for aa 491-1059. A second isoform shows a 34 aa substitution for aa 822-1059. Over aa 190-490, human TMPRSS9 shares 79% aa identity with mouse TMPRSS9.

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