

DESCRIPTION

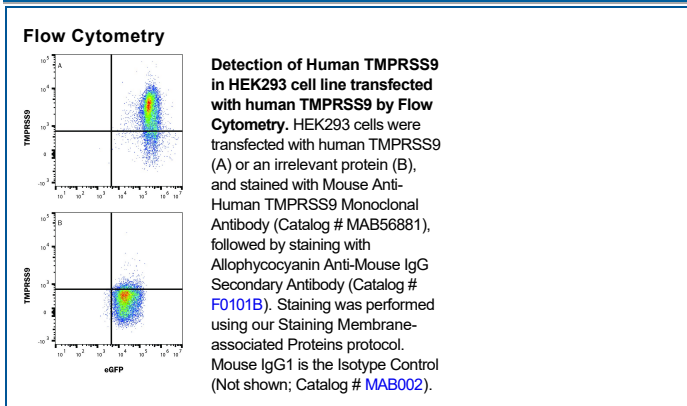
Species Reactivity	Human
Specificity	Detects TMPRSS9 in direct Elisa
Source	Monoclonal Mouse IgG ₁ Clone # 1042526
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TMPRSS9 Glu190-Gln490 Accession # Q7Z410
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Flow Cytometry	25 µg/mL	HEK293 human embryonic kidney cell line

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.