

Rabbit TMPRSS3 Polyclonal Antibody | anti-TMPRSS3 antibody

Anti-TMPRSS3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19289	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

TMPRSS3; Polyclonal Antibody; Anti-TMPRSS3 Antibody; Tmprss3; Transmembrane protease serine 3; transmembrane serine protease 3; anti-TMPRSS3 antibody

PRODUCT SPECIFICATIONS

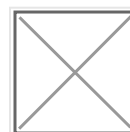
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for TMPRSS3 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-TMPRSS3 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.25-0.5ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat FC/FACS/FCM: 1-3ug/1x106 cells Human Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	E Coli-derived human TMPRSS3 recombinant protein (Position: E3-T454).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of A431 cells using anti-TMPRSS3 antibody (AAA19289). Overlay histogram showing A431 cells stained with AAA19289 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TMPRSS3 Antibody (AAA19289, 1µg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



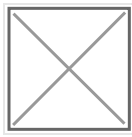
IHC (Immunohistochemistry)

Figure 5. IHC analysis of TMPRSS3 using anti-TMPRSS3 antibody (AAA19289). TMPRSS3 was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-TMPRSS3 Antibody (AAA19289) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



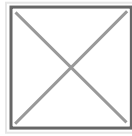
IHC (Immunohistochemistry)

Figure 4. IHC analysis of TMPRSS3 using anti-TMPRSS3 antibody (AAA19289).TMPRSS3 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-TMPRSS3 Antibody (AAA19289) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of TMPRSS3 using anti-TMPRSS3 antibody (AAA19289).TMPRSS3 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-TMPRSS3 Antibody (AAA19289) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 2. IHC analysis of TMPRSS3 using anti-TMPRSS3 antibody (AAA19289).TMPRSS3 was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-TMPRSS3 Antibody (AAA19289) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



WB (Western Blot)

Figure 1. Western blot analysis of TMPRSS3 using anti-TMPRSS3 antibody (AAA19289).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: human MCF-7 whole cell lysatesLane 2: human HepG2 whole cell lysatesLane 3: rat pancreas tissue lysatesLane 4: rat stomach tissue lysatesLane 5: rat PC-12 whole cell lysatesLane 6: mouse lung tissue lysatesLane 7: mouse RAW264. 7 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-TMPRSS3 antigen affinity purified polyclonal antibody (Catalog # AAA19289) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system. A specific band was detected for TMPRSS3 at approximately 48KD. The expected band size for TMPRSS3 is at 48KD.

ADDITIONAL INFORMATION

Related Product Information for anti-TMPRSS3 antibody	Transmembrane protease, serine 3 is an enzyme that in humans is encoded by the TMPRSS3 gene. This gene encodes a protein that belongs to the serine protease family. The encoded protein contains a serine protease domain, a transmembrane domain, an LDL receptor-like domain, and a scavenger receptor cysteine-rich domain. Serine proteases are known to be involved in a variety of biological processes, whose malfunction often leads to human diseases and disorders. This gene was identified by its association with both congenital and childhood onset autosomal recessive deafness. This gene is expressed in fetal cochlea and many other tissues, and is thought to be involved in the development and maintenance of the inner ear or the contents of the perilymph and endolymph. This gene was also identified as a tumor-associated gene that is overexpressed in ovarian tumors. Alternatively spliced transcript variants have been described.
References	1. Ben-Yosef, T., Wattenhofer, M., Riazuddin, S., Ahmed, Z. M., Scott, H. S., Kudoh, J., Shibuya, K., Antonarakis, S. E., Bonne-Tamir, B., Radhakrishna, U., Naz, S., Ahmed, Z., Riazuddin, S., Pandya, A., Nance, W. E., Wilcox, E. R., Friedman, T. B., Morell, R. J. Novel mutations of TMPRSS3 in four DFNB8/B10 families segregating congenital autosomal recessive deafness. (Letter) J. Med. Genet. 38: 396-400, 2001. 2. Fasquelle, L., Scott, H. S., Lenoir, M., Wang, J., Rebillard, G., Goboyard, S., Venteo, S., Francois, F., Mausset-Bonnefont, A. -L., Antonarakis, S. E., Neidhart, E., Chabbert, C., Puel, J. -L., Guipponi, M., Delprat, B. Tmprss3, a transmembrane serine protease deficient in human DFNB8/10 deafness, is critical for cochlear hair cell survival at the onset of hearing. J. Biol. Chem. 286: 17383-17397, 2011. 3. Guipponi, M., Vuagniaux, G., Wattenhofer, M., Shibuya, K., Vazquez, M., Dougherty, L., Scamuffa, N., Guida, E., Okui, M., Rossier, C., Hancock, M., Buchet, K., Reymond, A., Hummler, E., Marzella, P. L., Kudoh, J., Shimizu, N., Scott, H. S., Antonarakis, S. E., Rossier, B. C. The transmembrane serine protease (TMPRSS3) mutated in deafness DFNB8/10 activates the epithelial sodium channel (ENaC) in vitro. Hum. Molec. Genet. 11: 2829-2836, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	373251166
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NCBI GeneID	64699
NCBI Accession #	NP_001243246.1
NCBI GenBank Nucleotide #	NM_001256317.1
UniProt Accession #	P57727; Q6ZMC3; D3DSJ6
Molecular Weight	49,405 Da
NCBI Official Full Name	transmembrane protease serine 3 isoform 4
NCBI Official Synonym Full Names	transmembrane protease, serine 3
NCBI Official Symbol	TMPRSS3
NCBI Official Synonym Symbols	DFNB8; DFNB10; ECHOS1; TADG12
NCBI Protein Information	transmembrane protease serine 3; serine protease TADG-12; tumor-associated differentially-expressed gene 12 protein
UniProt Protein Name	Transmembrane protease serine 3
UniProt Gene Name	TMPRSS3
UniProt Synonym Gene Names	ECHOS1; TADG12
UniProt Entry Name	TMPS3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/tmprrs3-antibody-western-blot-immunohistochemistry-flow-cytometry-direct-elisa-elisa/19289>