

# Goat Anti-TMPRSS4 Antibody

Peptide-affinity purified goat antibody Catalog # AF2097a

### Specification

# **Goat Anti-TMPRSS4 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>O9NRS4</u> <u>NP\_001077416</u>, 56649, 214523 (mouse) Human Mouse Goat Polyclonal 100ug/200ul IgG 48246

# Goat Anti-TMPRSS4 Antibody - Additional Information

Gene ID 56649

**Other Names** Transmembrane protease serine 4, 3.4.21.-, Channel-activating protease 2, CAPH2, Membrane-type serine protease 2, MT-SP2, TMPRSS4, TMPRSS3

Dilution WB~~1:1000 E~~N/A

**Format** 0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat Anti-TMPRSS4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-TMPRSS4 Antibody - Protein Information

Name TMPRSS4 (<u>HGNC:11878</u>)

Function

Plasma membrane-anchored serine protease that directly induces processing of pro-uPA/PLAU into



the active form through proteolytic activity (PubMed: <a

href="http://www.uniprot.org/citations/24434139" target="\_blank">24434139</a>). Seems to be capable of activating ENaC (By similarity).

**Cellular Location** 

Cell membrane; Single-pass type II membrane protein

Tissue Location

High levels in pancreatic, gastric, colorectal and ampullary cancer. Very weak expression in normal gastrointestinal and urogenital tract (PubMed:10825129). Coexpressed with ACE2 within mature enterocytes (PubMed:32404436).

# Goat Anti-TMPRSS4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Goat Anti-TMPRSS4 Antibody - Images



AF2097a (1  $\mu$ g/ml) staining of Human Bone Marrow lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-TMPRSS4 Antibody - Background

This gene encodes a member of the serine protease family. 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 as a gene overexpressed in pancreatic carcinoma. The encoded protein is membrane bound with a N-terminal anchor sequence and a glycosylated extracellular region containing the serine protease domain. Multiple transcript variants encoding different isoforms have been found for this gene.

### Goat Anti-TMPRSS4 Antibody - References



TMPRSS4 induces invasion and epithelial-mesenchymal transition through upregulation of integrin alpha5 and its signaling pathways. Kim S, et al. Carcinogenesis, 2010 Apr. PMID 20118200. Proteolytic activation of the 1918 influenza virus hemagglutinin. Chaipan C, et al. J Virol, 2009 Apr. PMID 19158246.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

TMPRSS4 promotes invasion, migration and metastasis of human tumor cells by facilitating an epithelial-mesenchymal transition. Jung H, et al. Oncogene, 2008 Apr 17. PMID 17968309. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.