

**Goat Anti-TMPRSS3 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2096a****Specification**

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**Goat Anti-TMPRSS3 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P57727</a>
Other Accession	<a href="#">NP_115781</a> , <a href="#">64699</a> , <a href="#">140765 (mouse)</a>
Reactivity	Human
Predicted	Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	49405

**Goat Anti-TMPRSS3 Antibody - Additional Information****Gene ID** 64699**Other Names**

Transmembrane protease serine 3, 3.4.21.-, Serine protease TADG-12, Tumor-associated differentially-expressed gene 12 protein, TMPRSS3, ECHOS1, TADG12

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/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-TMPRSS3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-TMPRSS3 Antibody - Protein Information****Name** TMPRSS3**Synonyms** ECHOS1, TADG12

**Function**

Probable serine protease that plays a role in hearing. Acts as a permissive factor for cochlear hair cell survival and activation at the onset of hearing and is required for saccular hair cell survival (By similarity). Activates ENaC (in vitro).

**Cellular Location**

Endoplasmic reticulum membrane; Single-pass type II membrane protein

**Tissue Location**

Expressed in many tissues including fetal cochlea. Isoform T is found at increased levels in some carcinomas

**Goat Anti-TMPRSS3 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-TMPRSS3 Antibody - Images**

AF2096a (0.1 µg/ml) staining of A431 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-TMPRSS3 Antibody - Background**

This gene encodes a protein that belongs to the serine protease family. The encoded protein contains a serine protease domain, a transmembrane domain, a 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.

## **Goat Anti-TMPRSS3 Antibody - References**

TMPRSS3, a type II transmembrane serine protease mutated in non-syndromic autosomal recessive deafness. Guipponi M, et al. Front Biosci, 2008 Jan 1. PMID 17981648.

Autosomal recessive postlingual hearing loss (DFNB8): compound heterozygosity for two novel TMPRSS3 mutations in German siblings. Elbracht M, et al. J Med Genet, 2007 Jun. PMID 17551081.

Cell array-based intracellular localization screening reveals novel functional features of human chromosome 21 proteins. Hu YH, et al. BMC Genomics, 2006 Jun 16. PMID 16780588.

Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.

A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.