

### CTSD / Cathepsin D Antibody (clone 3F12-1B9) Mouse Monoclonal Antibody Catalog # ALS14362

## Specification

## CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IP, IHC <u>P07339</u> Human Mouse Monoclonal 45kDa KDa

### CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Additional Information

Gene ID 1509

Other Names Cathepsin D, 3.4.23.5, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

Target/Specificity Human Cathepsin D

**Reconstitution & Storage** Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

**Precautions** CTSD / Cathepsin D Antibody (clone 3F12-1B9) is for research use only and not for use in diagnostic or therapeutic procedures.

### CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Protein Information

Name CTSD

Synonyms CPSD

#### Function

Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation (PubMed:<a href="http://www.uniprot.org/citations/27333034" target="\_blank">27333034</a>). Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

#### **Cellular Location**

Lysosome. Melanosome. Secreted, extracellular space. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380)

**Tissue Location** 



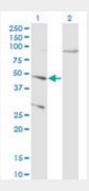
Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

# CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Protocols

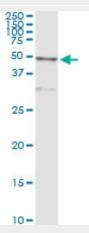
Provided below are standard protocols that you may find useful for product applications.

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

### CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Images

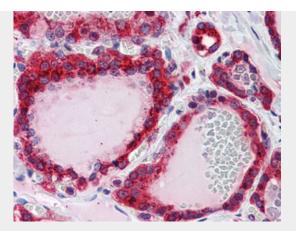


Western blot of CTSD expression in transfected 293T cell line by CTSD antibody.



Immunoprecipitation of CTSD transfected lysate using anti-CTSD monoclonal antibody and Protein A...





Anti-Cathepsin D antibody IHC of human thyroid.

# CTSD / Cathepsin D Antibody (clone 3F12-1B9) - Background

Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

# CTSD / Cathepsin D Antibody (clone 3F12-1B9) - References

Faust P.L., et al. Proc. Natl. Acad. Sci. U.S.A. 82:4910-4914(1985). Westley B.R., et al. Nucleic Acids Res. 15:3773-3786(1987). Redecker B., et al. DNA Cell Biol. 10:423-431(1991). Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.