

# CTSD / Cathepsin D Antibody (clone 4G2)

Mouse Monoclonal Antibody Catalog # ALS12547

# **Specification**

### CTSD / Cathepsin D Antibody (clone 4G2) - Product Information

Application IHC, WB
Primary Accession P07339
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 45kDa KDa

#### CTSD / Cathepsin D Antibody (clone 4G2) - Additional Information

**Gene ID** 1509

#### **Other Names**

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

### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

#### **Precautions**

CTSD / Cathepsin D Antibody (clone 4G2) is for research use only and not for use in diagnostic or therapeutic procedures.

# CTSD / Cathepsin D Antibody (clone 4G2) - 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).

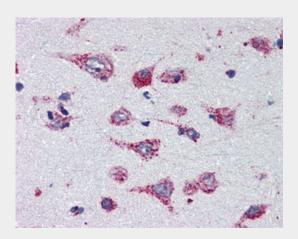


# CTSD / Cathepsin D Antibody (clone 4G2) - Protocols

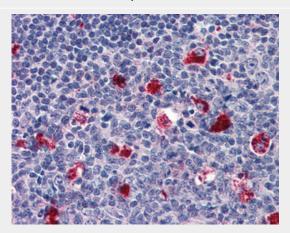
Provided below are standard protocols that you may find useful for product applications.

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

# CTSD / Cathepsin D Antibody (clone 4G2) - Images

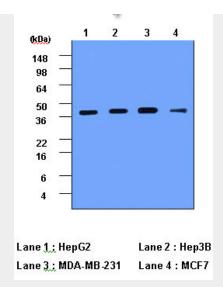


Anti-Cathepsin D antibody IHC of human brain, cortex.



Anti-Cathepsin D antibody IHC of human tonsil.





Cell lysates of HepG2, Hep3B, MDA-MB-231 and MCF7 (each 20 ug) were resolved by SDS-PAGE,...

# CTSD / Cathepsin D Antibody (clone 4G2) - 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 4G2) - 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.