

# KD-Validated Anti-Cathepsin D Rabbit Monoclonal Antibody Rabbit monoclonal antibody

Catalog # AGI1171

# Specification

# KD-Validated Anti-Cathepsin D Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB <u>P07339</u> Human, Mouse Monoclonal Rabbit IgG Predicted, 45 kDa , observed, 28, 46 kDa
	KDa
Gene Name Aliases	CTSD CTSD; Cathepsin D; CLN10; CPSD; Ceroid-Lipofuscinosis, Neuronal 10; EC 3.4.23.5; Epididymis Secretory Sperm Binding Protein Li 130P; Cathepsin D (Lysosomal Aspartyl Protease); Lysosomal
Immunogen	Aspartyl Peptidase; Lysosomal Aspartyl Protease; HEL-S-130P; EC 3.4.23 A synthesized peptide derived from human Cathepsin D

# **KD-Validated Anti-Cathepsin D Rabbit Monoclonal Antibody - Additional Information**

Gene ID 1509 Other Names Cathepsin D, 3.4.23.5, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

#### **KD-Validated Anti-Cathepsin D Rabbit Monoclonal Antibody - 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).

### **KD-Validated Anti-Cathepsin D Rabbit Monoclonal 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>

**KD-Validated Anti-Cathepsin D Rabbit Monoclonal Antibody - Images** 



Western blotting analysis using anti-Cathepsin D antibody (Cat#AGI1171). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Cathepsin D antibody (Cat#AGI1171, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

kDa 250 - 150 - 100 - 75 -	-N <sup>4</sup> sH <sup>QUA</sup> ← Hsp90 α	kDa 250 - 150 - 100 - 75 -	of speak	← Pro Cathepsin D ← Mature Cathepsin D
37 -		37 -		
25 -		25-	-	Mature Cathepsin D
20 -		20 -		it ©202
15 —		15 -		Sopyrigh
10 —		10 —		

Western blotting analysis using anti-Cathepsin D antibody (Cat#AGI1171). Cathepsin D expression in wild type (WT) and Cathepsin D shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-Cathepsin D antibody (Cat#AGI1171, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.