

**KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2398****Specification****KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">P07858</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 38 kDa , observed, 38 kDa
Gene Name	CTSB
Aliases	CTSB; Cathepsin B; APP Secretase; Cathepsin B1; EC 3.4.22.1; APPS; CPSB; Keratolytic Winter Erythema (Oudtshoorn Skin Disease); Epididymis Secretory Sperm Binding Protein; Amyloid Precursor Protein Secretase; Cysteine Protease; EC 3.4.22; RECEUP; KWE
Immunogen	A synthesized peptide derived from human Cathepsin B

**KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody - Additional Information**

Gene ID	1508
<b>Other Names</b>	
Cathepsin B, 3.4.22.1, APP secretase, APPS, Cathepsin B1, Cathepsin B light chain, Cathepsin B heavy chain, CTSB, CPSB	

**KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody - Protein Information****Name** CTSB**Synonyms** CPSB**Function**

Thiol protease which is believed to participate in intracellular degradation and turnover of proteins (PubMed:<a href="http://www.uniprot.org/citations/12220505" target="\_blank">12220505</a>). Cleaves matrix extracellular phosphoglycoprotein MEPE (PubMed:<a href="http://www.uniprot.org/citations/12220505" target="\_blank">12220505</a>). Involved in the solubilization of cross-linked TG/thyroglobulin in the thyroid follicle lumen (By similarity). Has also been implicated in tumor invasion and metastasis (PubMed:<a href="http://www.uniprot.org/citations/3972105" target="\_blank">3972105</a>).

**Cellular Location**

Lysosome. Melanosome. Secreted, extracellular space {ECO:0000250|UniProtKB:A1E295}. Apical cell membrane {ECO:0000250|UniProtKB:P10605}; Peripheral membrane protein

{ECO:0000250|UniProtKB:P10605}; Extracellular side {ECO:0000250|UniProtKB:P10605}.  
Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV  
(PubMed:17081065) Localizes to the lumen of thyroid follicles and to the apical membrane of  
thyroid epithelial cells (By similarity) {ECO:0000250|UniProtKB:P10605,  
ECO:0000269|PubMed:17081065}

#### Tissue Location

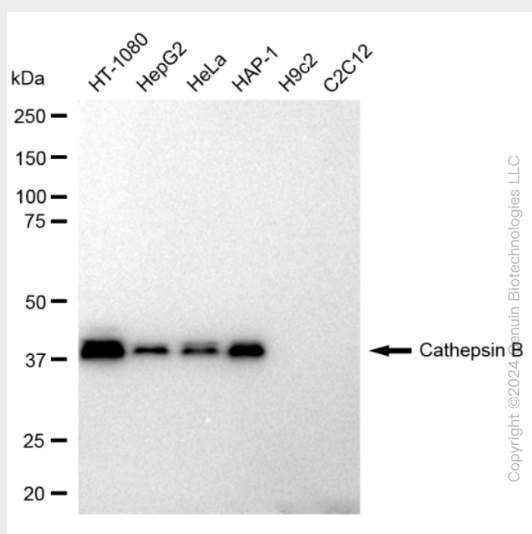
Expressed in the stratum spinosum of the epidermis. Weak expression is detected in the stratum  
granulosum

### KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody - Protocols

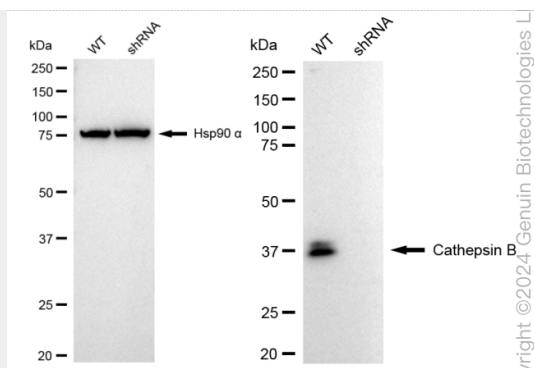
Provided below are standard protocols that you may find useful for product applications.

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

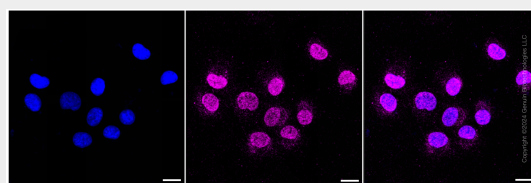
### KD-Validated Anti-Cathepsin B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Cathepsin B antibody (Cat#AGI2398). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Cathepsin B antibody (Cat#AGI2398, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Cathepsin B antibody (Cat#AGI2398). Cathepsin B expression in wild type (WT) and Cathepsin B 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 B antibody (Cat#AGI2398, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with Cathepsin B antibody (Cat#AGI2398, 1:1,000). Nuclei were stained blue with DAPI; Cathepsin B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20  $\mu$ m.