

## Cathepsin B Polyclonal Antibody

Catalog number: 12216-1-AP

Size: 49 µg/150 µl

Source: Rabbit

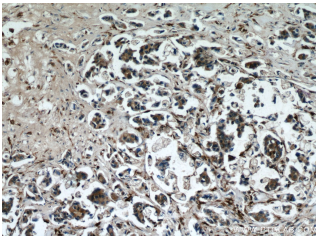
Isotype: IgG

Synonyms:

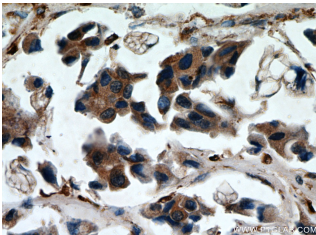
CTS<sub>B</sub>; APP secretase, APPS,

cathepsin B, Cathepsin B1,

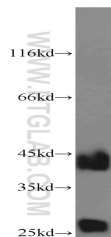
CPSB, CTSB



Immunohistochemical of paraffin-embedded human breast cancer using 12216-1-AP (CTS<sub>B</sub> antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical of paraffin-embedded human breast cancer using 12216-1-AP (CTS<sub>B</sub> antibody) at dilution of 1:50 (under 40x lens)



A375 cells were subjected to SDS PAGE followed by western blot with 12216-1-AP (CTS<sub>B</sub> antibody) at dilution of 1:800

### Background

CTS<sub>B</sub> (Cathepsin B) is also named as CPSB and belongs to the peptidase C1 family. It participates in intracellular degradation and turnover of proteins. Cathepsin B precursors found in human malignant ascites fluid do not possess mannose-rich carbohydrates suggesting that a defect in the post translational processing of carbohydrate moieties on tumor. Cathepsin B exists as both glycosylated and unglycosylated forms (PMID:1637335). In rat macrophages and hepatocytes pro-cathepsin B is 39 kDa (unglycosylated =35 kDa), whereas in human fibroblasts pro-cathepsin B is 44.5-46kDa (unglycosylated=39kDa) (PMID:2097084). It can be detected the 43 kDa form of pro-CTS<sub>B</sub>, 31 kDa and 25 kDa mature forms in mouse brain by western blot (PMID:20616152).

### Applications

Tested applications:	ELISA, WB, IHC, IF, FC
Cited applications:	IHC, WB
Species specificity:	Human, Mouse; other species not tested.
Cited species:	Frog, human
Calculated Cathepsin B MW:	229aa, 38 kDa
Observed Cathepsin B MW:	38 kDa, 44 kDa
Positive WB detected in	A375 cells, HT-1080 cells, human brain tissue, human liver tissue, mouse brain tissue, NIH/3T3 cells, RAW264.7 cells
Positive IHC detected in	Human breast cancer tissue, human colon cancer tissue, human ovary tumor tissue
Positive IF detected in	A375 cells
Positive FC detected in	MCF-7 cells
Recommended dilution:	WB: 1:200-1:2000 IHC: 1:20-1:200 IF: 1:10-1:100 FC: N/A

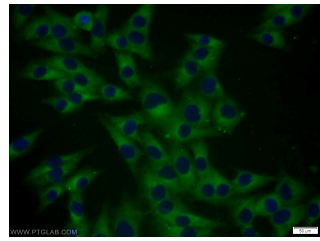
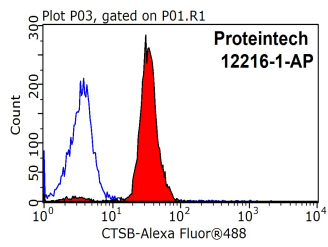
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:	Ag2898
GenBank accession number:	BC010240
Gene ID (NCBI):	1508
Full name:	Cathepsin B

### Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



**1X10<sup>6</sup> MCF-7 cells were stained with 0.2ug Cathepsin B antibody (12216-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.**

**Immunofluorescent analysis of A375 cells using 12216-1-AP( Cathepsin B Antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)**