

# Cathepsin B Recombinant monoclonal antibody

Catalog Number: **85841-5-RR**

## Basic Information

Catalog Number:	85841-5-RR	GenBank Accession Number:	NM_007798.3	Purification Method:	Protein A purification
Source:	Rabbit	GenID (NCBI):	13030	CloneNo.:	243020A5
Isotype:	IgG	UNIPROT ID:	P10605	Recommended Dilutions:	WB: 1:2000-1:10000 IHC: 1:500-1:2000 IF/ICC: 1:500-1:2000 FC (Intra): 0.25 ug per 10 <sup>6</sup> cells in a 100 µl suspension
Immunogen Catalog Number:	EG3028	Full Name:	cathepsin B		
		Calculated MW:	37 kDa		
		Observed MW:	31 kDa, 39 kDa		

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Species Specificity:

mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** J774A.1 cells, mouse brain tissue, RAW 264.7 cells, mouse liver tissue

**IHC:** mouse brain tissue,

**IF/ICC:** RAW 264.7 cells,

**FC (Intra):** RAW 264.7 cells,

## Background Information

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 procathepsin B is 44.5-46kDa (unglycosylated=39kDa)(PMID:2097084). It can be detected the 39 kDa form of pro-CTS<sub>B</sub>, 31 kDa mature forms in mouse brain by western blot.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

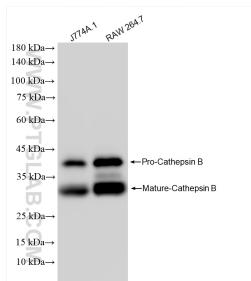
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

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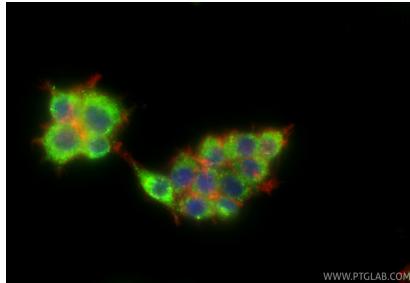
## Selected Validation Data



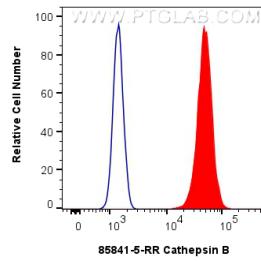
Various lysates were subjected to SDS PAGE followed by western blot with 85841-5-RR (Cathepsin B antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 85841-5-RR (Cathepsin B antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 85841-5-RR (Cathepsin B antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed RAW 264.7 cells using Cathepsin B antibody (85841-5-RR, Clone: 243020A5) at dilution of 1:1000 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10<sup>6</sup> RAW 264.7 cells were intracellularly stained with 0.25 ug Cathepsin B Recombinant antibody (85841-5-RR, Clone:243020A5) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.