

**Procathepsin B, Human recombinant protein**  
**CTSB, CPSB**  
**Catalog # PBV11188r****Specification**

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**Procathepsin B, Human recombinant protein - Product info**

Primary Accession	<a href="#">P07858</a>
Calculated MW	<b>38.2 kDa (18-339 aa + N-terminal poly-his tag) KDa</b>

**Procathepsin B, Human recombinant protein - Additional Info**

Gene ID	<b>1508</b>
Gene Symbol	<b>CTSB</b>
<b>Other Names</b>	
CTSB, CPSB	
Gene Source	<b>Human</b>
Source	<b>E. coli</b>
Assay&Purity	<b>SDS-PAGE; ≥95%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
Results	<b>&gt; 5000 mU/mg (1 U = 1 μmole/min, after complete activation)</b>

**Target/Specificity**

Procathepsin B

**Application Notes**

Reconstitute in de-ionized water to 1 mg/ml and store at -20°C. Avoid repeated freezing and thawing cycles.

**Format**

Lyophilized

**Storage**

-20°C; Lyophilized from a proprietary buffer.

**Procathepsin B, Human recombinant protein - 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](#)

## **Procathepsin B, Human recombinant protein - Images**

## **Procathepsin B, Human recombinant protein - Background**

Cathepsin B is a lysosomal cysteine protease. It is implicated in playing a role in protein degradation, arthritis, apoptosis, and cancer. Biovision's Procathepsin B can be auto-catalytically activated to mature Cathepsin B (~28 kDa) by adding an equal volume of 0.2 M NaOAc, 5 mM EDTA pH 4.0 containing fresh 5 mM DTT at room temperature (RT). The enzyme is fully activated within 3-4 h of incubation at RT. After activation mature Cathepsin B is highly auto-proteolytic at pH 4.0, and care must be taken to avoid self-proteolysis. If the activated enzyme is not used immediately, methylmethanthiosulfonate (1 mM final concentration; MeS-SO<sub>2</sub>Me; MMTS) could be added and sample should be frozen at -80°C. The activity can be then restored by adding L-cysteine (3 M excess over MMTS) to the enzyme solution.

## **Procathepsin B, Human recombinant protein - References**

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Cao L.,et al.Gene 139:163-169(1994).  
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Otsuki T.,et al.DNA Res. 12:117-126(2005).  
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