



# Monoclonal Anti-human Pro-Cathepsin B Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB2176

**Clone:** 155714

**Lot Number:** HJQ01

**Size:** 500 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human Pro-Cathepsin B

**Immunogen:** NS0-derived rhPro-Cathepsin B

**Ig class:** mouse IgG<sub>1</sub>

## Recommended Applications:

Immunoprecipitation  
ELISA capture

## Background

Cathepsin B is a cysteine protease that is known to process a number of proteins. It is up-regulated or redistributed in human and animal tumors.

## Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Pro-Cathepsin B (rhPro-Cathepsin B; aa 18 - 339; Accession # P07858). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

## Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

## Reconstitution

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 500 µg/mL.

## Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

## Specificity

This antibody was selected for its ability to immunoprecipitate human Cathepsin B. In this format, no cross-reactivity or interference was observed with rhCathepsin A, C, D, E, L, S, V, X/Z/P, SA, or rmCathepsin B.

## Applications

**Immunoprecipitation** - This antibody was used at a concentration of 25 µg/mL to immunoprecipitate rhCathepsin B from conditioned cell culture medium. The recovered rhCathepsin B can be detected in Western blots by using a polyclonal antibody (R&D Systems, Catalog # AF953 or BAF953).

**ELISA capture** - This product can be used as a capture reagent in a human Cathepsin B sandwich immunoassay in combination with biotinylated human Cathepsin B detection antibody (Cat. # BAM21761) and recombinant human Cathepsin B (Cat. # 953-CY) as the standard. The suggested coating concentration range is 2 - 8 µg/mL and should be titrated to determine the optimal concentration. A general protocol is provided at [www.RnDSystems.com/go/MAPELISA](http://www.RnDSystems.com/go/MAPELISA).

**Optimal dilutions should be determined by each laboratory for each application.**