# Mouse Cystatin B Antibody

Monoclonal Rat $IgG_{2A}$ Clone # 227818

Catalog Number: MAB1409

## DESCRIPTION

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| **Species Reactivity** | Mouse |
| **Specificity** | Detects mouse Cystatin B in direct ELISAs and Western blots. In Western blots, 20-25% cross-reactivity with recombinant human (rh) Cystatin B is observed and no cross-reactivity with rhCystatin D, S, SA, SN, recombinant mouse (rm) Cystatin A, E/M, rmFetuin A, rhFetuin B, rhHPRG, or rhKininogen is observed. |
| **Source** | Monoclonal Rat $IgG_{2A}$ Clone # 227818 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | *E. coli*-derived recombinant mouse Cystatin B<br>Met2-Phe98<br>Accession # Q62426 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS. |

## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

| | Recommended Concentration | Sample |
|---|---|---|
| **Western Blot** | 1 µg/mL | Recombinant Mouse Cystatin B (Catalog # 1409-PI) |
| **Immunoprecipitation** | 25 µg/mL | Conditioned cell culture medium spiked with Recombinant Mouse Cystatin B (Catalog # 1409-PI), see our available Western blot detection antibodies |

## PREPARATION AND STORAGE

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| **Reconstitution** | Reconstitute at 0.5 mg/mL in sterile PBS. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

Cystatin B, also called stefin B or liver thiol proteinase inhibitor, is a member of family 1 of the cystatin superfamily (1). Like Cystatin A, it is an intracellular inhibitor regulating the activities of cysteine proteases of the papain family such as cathepsins B, H and L (2). Cystatin B-deficient mice have increased expression of proteolysis, apoptosis and glial activation genes, which is consistent with the pathology found in the mouse model of human progressive myoclonus epilepsy (EPM1) (3). The mouse Cystatin B consists of 98 amino acid residues (4).

**References:**


1. Abrahamson, M. (1994) Methods Enzymol. **244**:685.
2. Pol, E. and I. Bjork (1999) Biochemistry **38**:10519.
3. Lieuallen, K. *et al.* (2001) Hum. Mol. Genet. **10**:1867.
4. Pennacchio, L.A. and R.M. Myers (1996) Genome Res. **6**:1103.