

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cystatin B in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) Cystatin B is observed and no cross-reactivity with rhCystatin A, C, D, E/M, F, S, SA, rhFetuin A, rhFetuin B, rhHPRG, or rhKininogen is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 227807
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Cystatin B Met2-Phe98 Accession # Q62426
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
Immunohistochemistry	8-25 µg/mL	Perfusion fixed frozen sections of mouse spinal cord

PREPARATION AND STORAGE

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. *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. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 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.