Mouse Cathepsin H Antibody

Monoclonal Rat IgG_{2B} Clone # 175909

Catalog Number: MAB1013

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cathepsin H in direct ELISAs and Western blots. It recognizes both the pro and active forms of recombinant mouse (rm) Cathepsin H. In Western blots, no cross-reactivity with rmCathepsin A, D, E, X, and Z or recombinant human Cathepsin B, C, L, or S is observed.
Source	Monoclonal Rat IgG_{2B} Clone # 175909
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Cathepsin H Glu22-Val333 Accession # Q3UCD6
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
Western Blot	1 µg/mL	Recombinant Mouse Cathepsin H (Catalog # 1013-CY)

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

Cathepsin H is a lysosomal cysteine protease of the papain family (1). It is synthesized as a precursor protein, consisting of a signal peptide (residues 1-20), a propeptide (residues 21-95), a mini chain (residues 96-103), a heavy chain (residues 114-290) and a light chain (residues 291-333) (2, 3). A truncated form with a 12 amino acid deletion in the signal peptide region is secreted (4). Cathepsin H is the only known mono-aminopeptidase in the papain family (5). Cathepsin H expression is significantly increased in prostate tumors, sera of asthmatic patients, and mucosa of colorectal cancer patients (4, 6, 7).

References:

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6. Cimerman, N. *et al.* (2001) Clin. Chim. Acta **310**:113.
7. del Re, E.C. *et al.* (2000) Br. J. Cancer. **82**:1317.

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