

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse Cathepsin L in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Cathepsin L Thr18-Asn334 Accession # P06797
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Cathepsin L is a lysosomal cysteine protease expressed in most eukaryotic cells. Cathepsin L is known to hydrolyze a number of proteins, including the proform of urokinase-type plasminogen activator, which is activated by Cathepsin L cleavage (1). Cathepsin L has also been shown to proteolytically inactivate α_1 -antitrypsin and secretory leucoprotease inhibitor, two major protease inhibitors of the respiratory tract (2). These observations, combined with the demonstration of increased Cathepsin L activity in the epithelial lining fluid of the lungs of emphysema patients, have led to the suggestion that the enzyme may be involved in the progression of this disease. Cathepsin L has also been identified as a major excreted protein of transformed fibroblasts, indicating the enzyme could be involved in malignant tumor growth (3). In Cathepsin L-deficient mice, it appears to play a critical role in cardiac morphology and function, epidermal homeostasis, regulation of the hair cycle, and MHC class II-mediated antigen presentation in cortical epithelial cells of the thymus (4, 5). Mouse Cathepsin L is synthesized as a 334 amino acid precursor with a signal peptide (residues 1-17), a pro region (residues 18-113), and a mature chain (residues 114-334).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.