Recombinant CTSZ/CTSX/Cathepsin Z Monoclonal Antibody

catalog number: AN300474P

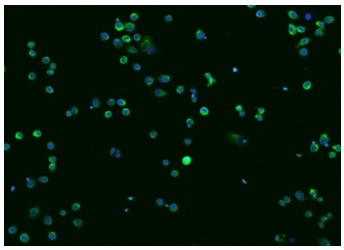
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Mouse
Immunogen	Recombinant Mouse CTSZ/CTSX/Cathepsin Z protein
Host	Rabbit
Isotype	IgG
Clone	B404
Purification	Protein A
Buffer	0.2 μm filtered solution in PBS

Applications	Recommended Dilution
ICC/IF	1:20-1:100

Data



Immunofluorescence analysis of mCTSZ in RAW264.7 cells. Cells were fixed with 4% PFA,blocked with 10% serum, and incubated with rabbit anti-Mouse mCTSZ monoclonal antibody (dilution ratio 1:60) at 4°C overnight. Then cells were stained with the Alexa Fluor®488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to Cytoplasm.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

Toll-free: 1-888-852-8623
Web: www.elabscience.com
Tel: 1-832-243-6086
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Cathepsin Z (CTSZ), also known as Cathepsin X or CATX, belongs to the C1 family of lysosomal cysteine proteases. Its gene structure and activity properties show several unique features that distinguish it clearly from other human cysteine proteases. It has a very short pro-region that shows no similarity to those of other cathepsins and a three-residue insertion motif that forms a characteristic 'mini loop'. Cathepsin Z exhibits mono- and di-peptidase activity at its C-terminus, and in contrast to cathepsin B, it does not act as an endopeptidase. It is restricted to the cells of theimmune system, predominantly monocytes, macrophages and dendritic cells. Cathepsin Z is widely expressed in human tissues, suggesting that this enzyme could be involved in the normal intracellular protein degradation taking place in all cell types. It is capable to cleave regulatory motifs at C-terminus affecting the function of targeted molecules. Cathepsin X may regulate also the maturation of dendritic cells, a process, which is crucial in the initiation of adaptive immunity. Furthermore, higher levels of Cathepsin Z are also found in tumour and immune cells of prostate and gastric carcinomas and inmacrophages of gastric mucosa, especially after infection by Helicobacter pylori. Cathepsin Z is also ubiquitously distributed in cancer cell lines and in primary tumors from different sources, suggesting that this enzyme may participate in tumor progression.

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