



20150120ML

Anti-Human Cathepsin A (#14H2)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	101-M244
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with human recombinant protein of Cathepsin-A.

Target Background

Synonyms (Target):	CTSA; GSL; GLB2; NGBE; PPCA; PPGB
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Cathepsin A/lysosomal carboxypeptidase A is a member of the serine carboxypeptidase family. Cathepsin A is a multifunctional enzyme that expresses deaminidase and esterase activities at neutral pH and carboxypeptidase activity at acidic pH. Also known as protective protein, its association with βgalactosidase (βgal) and neuraminidase is essential for βgal stability and neuraminidase activation in the lysosomes. Inherited deficiency of Cathepsin A causes the lysosomal storage disorder galactosialidosis, characterized by a combined secondary deficiency of βgal and neuraminidase. Cathepsin A is capable of hydrolyzing a variety of bioactive peptide hormones including tachykinins, indicating that extralysosomal Cathepsin A plays a role in regulation of functions of these molecules. Cathepsin A is synthesized as a singlechain precursor and processed into heavy (32 kDa) and light (20 kDa) chains, which are linked by disulfide bonds.

Database References Target

Protein RefSeq:	NP_000299
Uniprot ID:	P10619
mRNA RefSeq:	NM_000308

Product Specifications

Host	Mouse
Reactivity against	Human
Clonality	Monoclonal Antibody
Clone	(#14H2)
Isotype	IgG2
Purification	Protein G chromatography
Antigen	recombinant human Cathepsin-A
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody was selected for its ability to detect Cathepsin-A protein.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB

Recommended usage:

Western Blot: 1:500 - 1:1000

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!