

ARG41157 anti-Cathepsin D antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes Cathepsin D
Tested Reactivity	Hu, Ms, Rat, Dog, Mk
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Cathepsin D
Species	Human
Immunogen	Purified recombinant peptide within aa. 275 to the C-terminus of Human Cathepsin D.
Conjugation	Un-conjugated
Alternate Names	CPSD; EC 3.4.23.5; HEL-S-130P; CLN10; Cathepsin D

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-Fr	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:250 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human (Jurkat, HT1080, HUH, MDA-MB-231, ARPE19, SH-SY5Y), Dog (MDCK) and Monkey (COS-7) whole cell lysates.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide and 20% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	20% Glycerol
Concentration	3 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

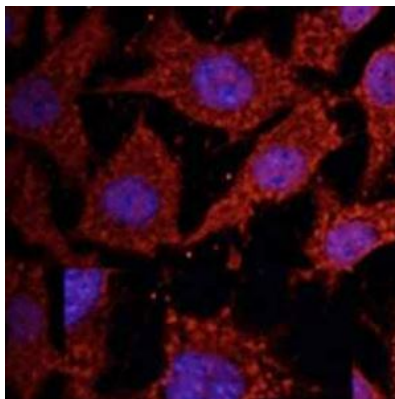
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

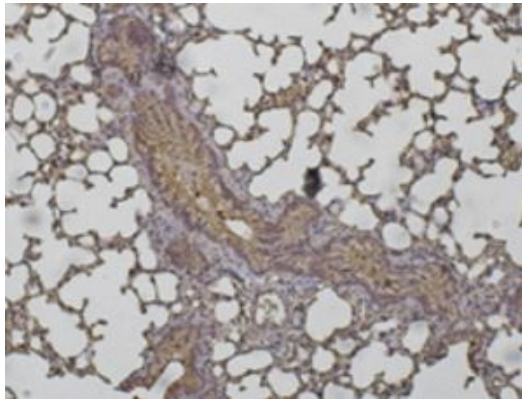
Gene Symbol	CTSD
Gene Full Name	cathepsin D
Background	This gene encodes a lysosomal aspartyl protease composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This proteinase, which is a member of the peptidase C1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of this gene is initiated from several sites, including one which is a start site for an estrogen-regulated transcript. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease. [provided by RefSeq, Jul 2008]
Function	Acid protease active in intracellular protein breakdown. Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease. [UniProt]
Calculated Mw	45 kDa
PTM	N- and O-glycosylated. Undergoes proteolytic cleavage and activation by ADAM30. As well as the major heavy chain which starts at Leu-169, 2 minor forms starting at Gly-170 and Gly-171 have been identified (PubMed:1426530). An additional form starting at Ala-168 has also been identified (PubMed:27333034). [UniProt]
Cellular Localization	Lysosome. Melanosome. Secreted, extracellular space. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380). [UniProt]

Images



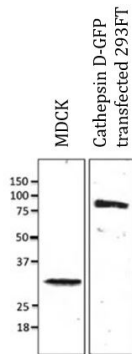
ARG41157 anti-Cathepsin D antibody ICC/IF image

Immunofluorescence: NIH/3T3 cells were fixed with methanol and permeabilized with 0.1% saponin. Cells were stained with ARG41157 anti-Cathepsin D antibody at 1:100 dilution.



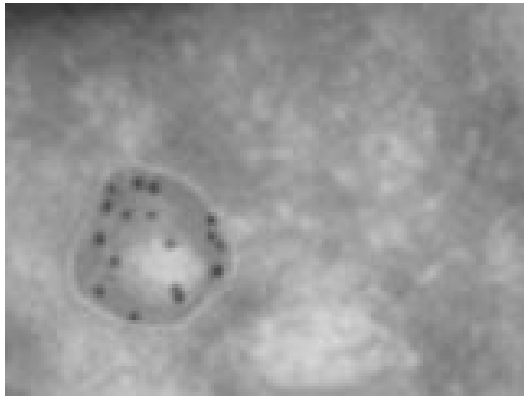
ARG41157 anti-Cathepsin D antibody IHC-P image

Immunohistochemistry: Paraformaldehyde-fixed and paraffin-embedded Mouse lung tissue stained with ARG41157 anti-Cathepsin D antibody at 1:200 dilution.



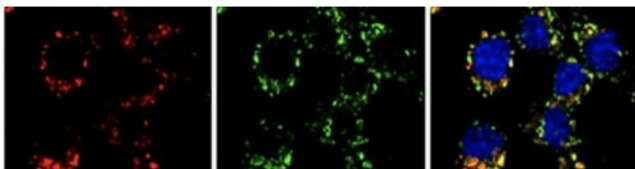
ARG41157 anti-Cathepsin D antibody WB image

Western blot: 100 ug of MDCK cell lysate and 30 ug of transfected 293FT cell lysate stained with ARG41157 anti-Cathepsin D antibody at 1:500 dilution.



ARG41157 anti-Cathepsin D antibody EM image

Electron microscopy: Immunogold labeling using melanocytes and ARG41157 anti-Cathepsin D antibody.



ARG41157 anti-Cathepsin D antibody ICC/IF image

Immunofluorescence: Raw264.7 cells were fixed with PFA and permeabilized with 0.05% saponin. Cells were stained with ARG41157 anti-Cathepsin D antibody (red) at 1:100 dilution. LAMP2 staining (green). nuclear staining (blue).