

Active Native Human Cathepsin H

Cat. No. CTSH-1650H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Native Human CTSH Protein purified from human liver. Extinction Coefficient (E) = 1.22 (0.1% at 280 nm, 1 cm pathway)
Species	Human
Source	Liver
Description	Cathepsin H (CatH) is a lysosomal cysteine protease distinguished by its unique dual aminopeptidase and endopeptidase activities. Unlike other cathepsins, it includes a disulfide-linked mini-chain that anchors substrate N-termini via electrostatic interactions, enabling sequential cleavage of N-terminal basic residues (Arg/Lys). This exopeptidase function, optimal at neutral pH, facilitates its role in extracellular spaces, while its endopeptidase activity at acidic pH (4.5–5.5) supports lysosomal protein degradation.
Form	Frozen in 20 mM sodium acetate, pH 4.5, with 1 mM EDTA and 100 mM NaCl
Bio-activity	> 1 unit/mg protein. One unit is defined as the amount of enzyme that hydrolyzes 1 μ mol of L-arginine-beta-naphthylamide per minute at 40 centigrade using 75 mM potassium phosphate, pH 6.8, with 1 mM EDTA and 3 mM cysteine as the activation buffer.
Molecular Mass	28 kDa
Purity	$\geq$ 90% (SDS-PAGE)

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Storage ≤ -70 centigrade

GENE INFORMATION

Gene Name CTSH cathepsin H [Homo sapiens (human)]

Official Symbol CTSH

Synonyms CTSH; cathepsin H; ACC4; ACC5; CPSB; ACC-4; ACC-5; pro-cathepsin H; N-benzoylarginine-beta-naphthylamide hydrolase; aleurain; cathepsin B3; cathepsin BA; EC 3.4.22.16

Gene ID 1512

mRNA Refseq NP_004381

Protein Refseq NM_004390

MIM 116820

UniProt ID P09668

SDS-PAGE 1. Blank 2. Cathepsin H 4 µg (Heated/Reduced) 3. Cathepsin H 7 µg (Heated/Reduced) 4. Standard 5. Blank 6. Cathepsin H 4 µg (Not Heated/Non-Reduced) 7. Cathepsin H 7 µg (Not Heated/Non-Reduced)

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