

Recombinant Protein Technical Manual

Recombinant Mouse Cathepsin H/CTSH Protein (aa 22-333, His Tag) RPES5112

## Product Data:

Product SKU: RPES5112

Species: Mouse

**Size:** 10µg

Expression host: Human Cells

Uniprot: AAA82966.1

Protein Information:	
Molecular Mass:	36.1 kDa
AP Molecular Mass:	36-40 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 $\mu m$ filtered solution of 20mM PB, 150mM NaCl, pH7.4.
Reconstitution:	Please refer to it for detailed information.
Application:	
Synonyms:	Pro-cathepsin H; CTSH; ACC-4; ACC-5; aleurain; cathepsin B3; cathepsin BA; cathepsin H; CPSB; minichain; N-benzoylarginine-beta-naphthylamide hydrolase

## Sequence: Glu22-Val333

## Background:

Cathepsin H (CTSH), which can act both as an aminopeptidase and as an endopeptidase, is a lysosomal cysteine protease of the papain family. CTSH is composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. CTSH is associated with various pathological conditions like human fibrous meningioma, colorectal cancer, arthritis, human prostate tumor and lung cancer. CTSH is associated with cancer progression because of their ability to degrade extracellular matrices facilitating invasion, angiogenesis and metastasis as is evident from numerous clinical reports and experimental models. The expression of CTSH is significantly increased in disease states such as in prostate tumors, sera of asthmatic patients, and mucosa of colorectal cancer patients.