Cathepsin X Protein, Human (HEK293, His)

Cat. No.:	HY-P7758
Synonyms:	rHuCathepsin X, His; Cathepsin Z; Cathepsin P; Cathepsin X; CTSZ
Species:	Human
Source:	HEK 293
Accession:	Q9UBR2 (G24-V303)
Gene ID:	1522
Molecular Weight:	Approximately 37 kDa

PROPERTIES

AA Sequence	G L Y F R R G Q T C Y R P L R G D G L A P L G R S T Y P R P H E Y L S P A D L P K S W D W R N V D G V N Y A S I T R N Q H I P Q Y C G S C W A H A S T S A M A D R I N I K R K G A W P S T L L S V Q N V I D C G N A G S C E G G N D L S V W D Y A H Q H G I P D E T C N N Y Q A K D Q E C D K F N Q C G T C N E F K E C H A I R N Y T L W R V G D Y G S L S G R E K M M A E I Y A N G P I S C G I M A T E R L A N Y T G G I Y A E Y Q D T T Y I N H V V S V A G W G I S D G T E Y W I V R N S W G E P W G E R G W L R I V T S T Y K D G K G A R Y N L A I E E H C T F G D P I V H H H H H H
Biological Activity	Data is not available.
Appearance	Solution
Formulation	Supplied as a 0.2 μm filter solution of 20 mM HAc-NaAc, 150 mM NaCl, pH 4.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	Cathepsin X acts as a monocarboxypepidase and has a strict positional and narrower substrate specificity relative to the other human cathepsins. The via activation of β2 integrin receptor Mac-1 (CD11b/CD18) active cathepsin X enhances adhesion of monocytes/macrophages to fibrinogen and regulates the phagocytosis. By activation of Mac-1 receptor

cathepsin X may regulate also the maturation of dendritic cells, a process, which is crucial in the initiation of adaptive immunity. Cathepsin X activates also the other β2 integrin receptor, LFA-1 (CD11a/CD18) which is involved in the proliferation of T lymphocytes. The cleavage of C-terminal amino acids of alpha and gamma enolase by cathepsin X abolishes their neurotrophic activity affecting neuronal cell survival and neuritogenesis. Cathepsin X is a cysteine carboxypeptidase, localized predominantly in immune cells, regulating their proliferation, maturation, migration and adhesion[1][2].

REFERENCES

[1]. Janko Kos, et al. The role of cathepsin X in cell signaling. Cell Adh Migr. Apr-Jun 2009;3(2):164-6.

[2]. Janko Kos, et al. Intracellular signaling by cathepsin X: molecular mechanisms and diagnostic and therapeutic opportunities in cancer. Semin Cancer Biol. 2015 Apr;31:76-83.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA