

DATASHEET
Version 20181206**Cathepsin X/Z/P, Human****Cat. No.:** Z03330-10**Size:** 10.0 ug**Synonyms:** Cathepsin P; Cathepsin Z; CTSZ**Description:**

Cathepsin X, also known as Cathepsin Z and P, is a lysosomal cysteine proteinase and member of the peptidase C1 family. It exhibits both carboxy-monopeptidase and carboxy-dipeptidase activities. While some cathepsins are expressed in various tissue, cathepsin X is restricted to immune cells, predominantly monocytes, macrophages and dendritic cells. The gene for cathepsin X is expressed in several cancer cell lines and primary tumors. Recombinant Human Cathepsin X/Z/P produced in CHO cells is a polypeptide chain containing 293 amino acids. A fully biologically active molecule, rhCathepsin X/Z/P has a molecular mass of 33 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 AQGGLYFRRG QTCYRPLRGD GLAPLGRSTY PRPHEYLSPA
00041 DLPKSWDWRN VDGVNYASIT RNQHIPPQYCG SCWAHASTSA
00081 MADRINIKRK GAWPSTLLSV QNVIDCGNAG SCEGGNDLSV
00121 WDYAHQHGIP DETCNQYQAK DQECDFNQC GTONEFKECH
00161 AIRNYTLWRV GDYGSLSGRE KMAEIIYANG PISCGIMATE
00201 RLANYTGGIY AEYQDTTYIN HVVSVAGWGI SDGTEYWIVR
00241 NSWGEPWGER GWLRIVTSTY KDGGKARYNL AIEEHCTFGD
00281 PIVHHHHHHH HHH
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Source: CHO

Biological Activity: The specific activity is > 1500 pmol/min/μg, measured by Cathepsin X/Z/P's ability to cleave the fluorogenic peptide substrate Mca-RPPGFSAFK(Dnp)(R&D, Catalog: ES005).
Activation Buffer: 25 mM Sodium Acetate, pH 3.5.
Assay Buffer: 25 mM Sodium Acetate, 5 mM Dithiothreitol (DTT), pH 3.5

Molecular Weight: 33 kDa, observed by reducing SDS-PAGE.

Formulation: Liquid after a 0.2 μm filtered solution in 50 mM NaOAc, 50 mM NaCl, 10% Glycerol, pH 6.0.

Purity: > 97% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Recombinant Human Cathepsin X/Z/P remains stable up to 6 months at lower than -70°C from date of receipt under sterile conditions. Up to 3 months at lower than -70°C under sterile conditions after opening. Avoid repeated freeze-thaw cycles.