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Product Datasheet

Human Cathepsin V protein, His tag, Unconjugated GTX00171-PRO

Article Name	Human Cathepsin V protein, His tag, Unconjugated
Biozol Catalog Number	GTX00171-PRO
Supplier Catalog Number	GTX00171-pro
Alternative Catalog Number	GTX00171-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	1515
UniProt	O60911
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Gly64~Val334 (NP_001188504.1)

Application Notes

Cathepsin V (CTSV) is a lysosomal cysteine proteinase which belongs to peptidase C1 family. It is expressed in normal human thymus, testis and corneal epithelium. Cathepsin V plays an important role in corneal physiology and mediates degradation of invariant chain in human thymus. Besides, Retinoblastoma Protein 1 (RB1) has been identified as an interactor of CTSV, thus a binding ELISA assay was conducted to detect the interaction of recombinant human CTSV and recombinant human RB1. Briefly, CTSV were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to RB1-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-CTSV pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of CTSV and RB1 was in a dose dependent manner.