

Human Cathepsin V protein, His tag

Cat. No. GTX00171-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

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 37°C. 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 37°C. 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.

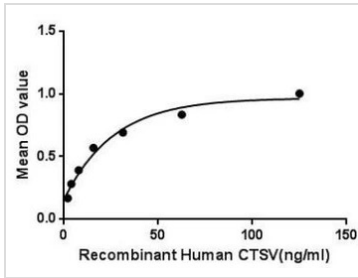
Observed MW (kDa) 32 kDa.

Properties

Form Lyophilized powder**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.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Gly64~Val334 (NP_001188504.1)**Expression System** E. coli**Purity** > 95%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

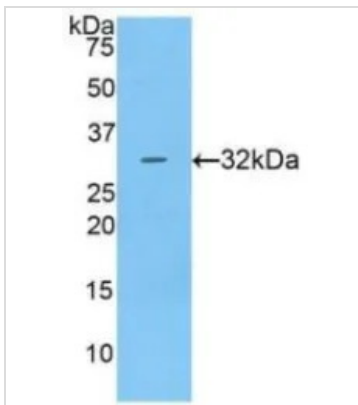
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DATA IMAGES



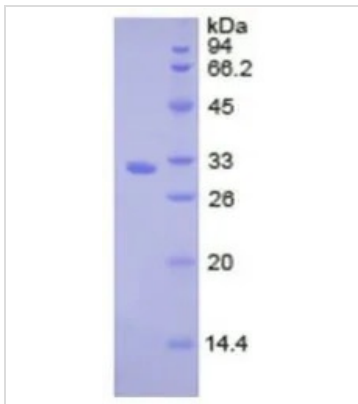
GTX00171-pro Functional Assay Image

Functional ELISA analysis of GTX00171-pro Human Cathepsin V protein which can bind immobilized RB1 protein.



GTX00171-pro Image

WB analysis of GTX00171-pro Human Cathepsin V protein.



GTX00171-pro Image

SDS-PAGE analysis of GTX00171-pro Human Cathepsin V protein.



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