

Human CellExp™ Cathepsin D, human recombinant

CATALOG #: 7409-10 10 µg

ALTERNATE NAMES: CTSD, Cathepsin D, CPSD, CLN10

SOURCE: HEK 293 cells (Ser 19 – Leu 412)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: This protein is fused with polyhistidine tag at the C-terminus, has a calculated MW of 43.6 kDa. The predicted N-terminus is Ser 19. DTT-reduced Protein migrates as 45-55 kDa due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

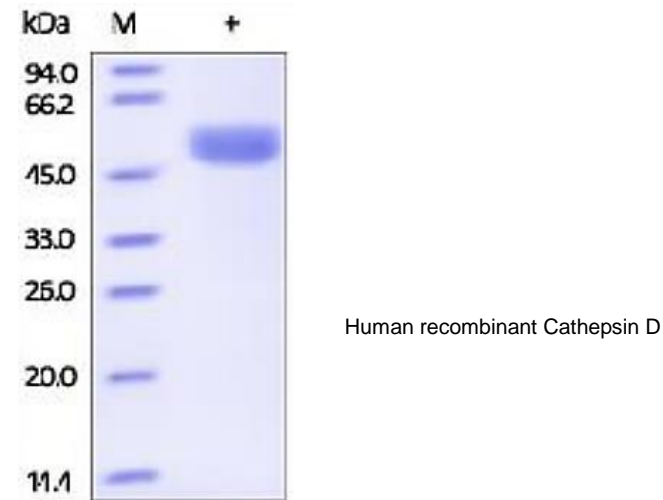
FORMULATION: Lyophilized from 0.22 µm filtered solution in 50 mM MES, pH 6.5 with 100 mM NaCl. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Cathepsin D is also known as CTSD, CPSD, which belongs to the peptidase A1 family. Cathepsin D can be cleaved into the following 2 chains: cathepsin D light chain and cathepsin D heavy chain, which is expressed in the aorta extracellular space (at protein level). The catalytic activity of Cathepsin D is specificity similar to, but narrower than, that of pepsin A. Cathepsin D does not cleave the 4-Gln-|-His-5 bond in B chain of insulin. Cathepsin D involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

BIOLOGICAL ACTIVITY: Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH₂. The specific activity is >450 pmol/min/µg.



RELATED PRODUCTS:

- Human CellExp™ Cathepsin B, human recombinant (**Cat. No. 7408-10**)
- Human CellExp™ Cathepsin L1, human recombinant (**Cat. No. 7410-10**)
- Human CellExp™ Cathepsin S, human recombinant (**Cat. No. 7277-10, -50, -1000**)
- Cathepsin K, Active, human recombinant (**Cat. No. 7600-5, -50**)
- Cathepsin K, Active, mouse recombinant (**Cat. No. 7597-5, -50**)
- Cathepsin K, Active, rat recombinant (**Cat. No. 7598-5, -50**)
- Cathepsin B (active, human) (**Cat. No. 1021-5**)
- Cathepsin D (active, human) (**Cat. No. 1022-5**)
- Cathepsin H (active, human) (**Cat. No. 1023-5**)
- Cathepsin L, human recombinant (**Cat. No. 1135-5, 100, 1000**)
- Procathepsin K, human recombinant (**Cat. No. 1026-10, -50, -1000**)
- Procathepsin K, mouse recombinant (**Cat. No. 1027-10, -50, -1000**)
- Procathepsin K, rat recombinant (**Cat. No. 1029-10, -50, -1000**)

FOR RESEARCH USE ONLY! Not to be used in humans.