Recombinant Human Cathepsin D/CTSD Protein (His Tag)

Catalog Number: PKSH030822

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

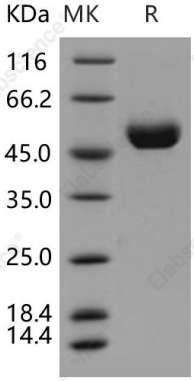
Description

Species	Human
Source	HEK293 Cells-derived Human Cathepsin D/CTSD protein Met 1-Leu 412, with an C-terminal His
Calculated MW	44 kDa
Observed MW	40-110 kDa
Accession	P07339
Bio-activity	Measured by its ability to bind biotinylated human CTSS-His in a functional ELISA.

Properties

Purity	> 97% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 25 mM MES, 150 mM NaCl, pH 6.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Cathepsin D (CTSD); a well known lysosomal aspartyl protease and belongs to the peptidase C1 family; which is a normal and major component of lysosomes; and is found in almost all cells and tissues of mammals. Its mostly described function is intracellular catabolism in lysosomal compartments; other physiological effect include hormone and antigen processing. Cathepsin D has a specificity similar to but narrower than that of pepsin A. Cathepsin D plays an important role in the degradation of proteins; the generation of bioactive proteins; antigen processing; etc. Among different role in cell physiology; a new function of this enzyme is examined. Cathepsin D is an important regulator of apoptotic pathways in cells. It acts at different stage of intrinsic and extrinsic pathway of apoptosis. In addition; CTSD secreted from human prostate carcinoma cells are responsible for the generation of angiostatin; a potent endogenous inhibitor of angiogenesis; suggesting its contribution to the prevention of tumor growth and angiogenesis-dependent growth of metastases.

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