



Recombinant Protein Technical Manual
Recombinant Human Cathepsin D/CTSD Protein (His
Tag)(Active)
RPES2594

Product Data:

Product SKU: RPES2594

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P07339

Protein Information:

Molecular Mass: 44 kDa

AP Molecular Mass: 4010 kDa

Tag: C-His

Bio-activity: Measured by its ability to bind biotinylated human CTSS-His in a functional ELISA.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 25mM MES, 150mM NaCl, pH 6.5

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Cathepsin D; CTSD;CLN10;CPSD;HEL-S30P

Immunogen Information:

Sequence: Met 1-Leu 412

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.