



# Recombinant Protein Technical Manual

## Recombinant Human Cathepsin D/CTSD Protein (His Tag)

RPE54634

### Product Data:

**Product SKU:** RPE54634

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P07339

### Protein Information:

**Molecular Mass:** 43.8 kDa

**AP Molecular Mass:** 50 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

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

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, pH 5.5.

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

**Application:**

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

## Immunogen Information:

**Sequence:** Leu21-Leu412

## Background:

The protein acid protease active in intracellular protein breakdown and involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease. It is specificity similar to, but narrower than, that of pepsin A and it does not cleave the 4-Gln-|-His-5 bond in B chain of insulin. It consists of a light chain and a heavy chain and expressed in the aorta extracellular space. The Val-58 allele is significantly overrepresented in demented patients (11.8%) compared with non-demented controls (4.9%). Carriers of the Val-58 allele have a 3.1-fold increased risk for developing AD than non-carriers. It belongs to the peptidase A1 family