Active Recombinant Human CTSD, His-tagged

Cat. No. CTSD-1649H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CTSD (Leu21-Leu412), fused with a C-terminal 10-His tag, was expressed in Mouse NSO Cells.
Species	Human
Source	Mammalian Cells
ProteinLength	21-412 a.a.
Description	This gene encodes a lysosomal aspartyl protease composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This proteinase, which is a member of the peptidase C1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of this gene is initiated from several sites, including one which is a start site for an estrogen-regulated transcript. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease.
Predicted N Terminal	Leu21
Form	Supplied as a 0.2 μm filtered solution in MES and NaCl.
Bio-activity	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-PLGL-Dpa-AR-NH2.
Molecular Mass	Predicted Molecular Mass: 44 kDaSDS-PAGE: 50 kDa, reducing conditions

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Endotoxin	< 1.0 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Avoid repeated freeze-thaw cycles.6 months from date of receipt, -20 to -70 °C as supplied.3 months, -20 to -70 °C under sterile conditions after opening.
Reconstitution	Reconstitute at 100 g/mL in sterile, deionized water.

GENE INFORMATION

Gene Name	CTSD cathepsin D [Homo sapiens (human)]
Official Symbol	CTSD
Synonyms	CTSD; cathepsin D; CPSD; CLN10; MGC2311; cathepsin D; lysosomal aspartyl protease; lysosomal aspartyl peptidase; ceroid-lipofuscinosis, neuronal 10; Cathepsin D; EC 3.4.23.5; OTTHUMP00000042282; OTTHUMP00000196039; OTTHUMP00000198692
Gene ID	1509
mRNA Refseq	NM_001909
Protein Refseq	NP_001900
MIM	116840
UniProt ID	P07339
Chromosome	11p15.5

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Location	
Pathway	Ceramide signaling pathway; Direct p53 effectors; LKB1 signaling events; Lysosome; Tuberculosis; thyroid hormone biosynthesis
Function	aspartic-type endopeptidase activity; peptidase activity

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