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Cathepsin B

Catalog # PVGS1491

Product Information

Primary Accession	P07858
Species	Human
Sequence	Arg18-Ile339
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Expression System	CHO
Formulation	Supplied as a 0.2 □m filtered solution in 25 mM Tris, 150 mM NaCl, 20% Glycerol, pH 8.0.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -20°C or below and 1-2 weeks at 4°C. For long term storage, aliquot and store at -70°C or below. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	1508
Other Names	Cathepsin B, 3.4.22.1, APP secretase, APPS, Cathepsin B1, Cathepsin B light chain, Cathepsin B heavy chain, CTSB, CPSB
Target Background	Cathepsin B is an enzymatic protein that is a member of the peptidase (or protease) family. Elevated lev- els of cathepsin B occur in a wide variety of disease,causing numerous pathologies including cell death, inflammation, and the production of toxic peptides. For example, neuroscience research suggests that cathepsin B plays a role in inducing epilepsy resulting in a significant amount of cell death. Seizure-induced rats treated with a cathepsin B inhibitor exhibited improved neurological scores and learning ability with reduced neuronal cell death.

Protein Information

Name	CTSB
Synonyms	CPSB
Function	Thiol protease which is believed to participate in intracellular degradation and turnover of proteins (PubMed:12220505). Cleaves matrix extracellular phosphoglycoprotein MEPE (PubMed:12220505). Involved in the solubilization of cross-linked TG/thyroglobulin in the thyroid follicle lumen (By similarity).

	Has also been implicated in tumor invasion and metastasis (PubMed:3972105).
Cellular Location	Lysosome. Melanosome. Secreted, extracellular space {ECO:0000250|UniProtKB:A1E295}. Apical cell membrane {ECO:0000250|UniProtKB:P10605}; Peripheral membrane protein {ECO:0000250|UniProtKB:P10605}; Extracellular side {ECO:0000250|UniProtKB:P10605}. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Localizes to the lumen of thyroid follicles and to the apical membrane of thyroid epithelial cells (By similarity) {ECO:0000250|UniProtKB:P10605, ECO:0000269|PubMed:17081065}
Tissue Location	Expressed in the stratum spinosum of the epidermis. Weak expression is detected in the stratum granulosum

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.