OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for BA112

Cathepsin B Human Protein

Product data:

Product Type:	Native Proteins
Description:	Cathepsin B human protein, 25 µg
Species:	Human
Protein Source:	Liver
Concentration:	lot specific
Purity:	>95% pure by SDS-PAGE
Buffer:	Presentation State: Purified State: Purified liquid protein Buffer System: 50 mM Sodium Acetate, pH 5.0, with 1 mM EDTA as buffer, containing no preservatives.
Bioactivity:	Specific: 385 Units/mg protein using Z-Arg-Arg-beta-NA as a substrate. One unit is defined as the amount of enzyme that hydrolyzes one µmole of 2-Naphtylamine per minute at 40°C, pH 6.0, in the presence of DTT.
Preparation:	Purified liquid protein
Protein Description:	Human Cathepsin B. Prepared from liver tissue that was shown to be nonreactive for HBsAg, anti-HCV, anti HBc, and negative for anti-HIV 1 & 2 by FDA required tests.
Storage:	Store the antigen at -80°C
Stability:	Shelf life: six month from despatch.
RefSeq:	NP_001304166
Locus ID:	1508
Cytogenetics:	8p23.1
Synonyms:	Cathepsin B1, APP secretase, APPS, CTSB, CPSB

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Summary: This gene encodes a member of the C1 family of peptidases. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the cathepsin B light and heavy chains, which can dimerize to form the double chain form of the enzyme. This enzyme is a lysosomal cysteine protease with both endopeptidase and exopeptidase activity that may play a role in protein turnover. It is also known as amyloid precursor protein secretase and is involved in the proteolytic processing of amyloid precursor protein (APP). Incomplete proteolytic processing of APP has been suggested to be a causative factor in Alzheimer's disease, the most common cause of dementia. Overexpression of the encoded protein has been associated with esophageal adenocarcinoma and other tumors. Both Cathepsin B and Cathepsin L are involved in the cleavage of the spike protein from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) upon its entry to the human host cell. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Sep 2020]

Protein Families: Druggable Genome, Protease

Protein Pathways: Antigen processing and presentation, Lysosome