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CTSD

Native Bovine Cathepsin D, Spleen

Catalog No. CNC005A Quantity: 1000 Units

Alternate Names: Cathepsin D

Description: Cathepsin D is an endosomal-lysosomal aspartic protease produced as an inactive

enzyme, called a preproenzyme, with extra protein segments attached. These segments must be removed, followed by additional processing steps, for the enzyme to become active. The mature, active cathepsin D enzyme is made up of two parts, one light chain and one heavy chain. This enzyme exhibits pepsin-like activity and plays a role in protein turnover and in the proteolytic activation of hormones and growth factors. Mutations in this gene play a causal role in neuronal ceroid lipofuscinosis-10 and may be involved in the pathogenesis of several other diseases, including breast cancer and possibly

Alzheimer's disease.

UniProt ID P80209

Source: Bovine spleen

Formulation: Lyophilized from 2 mM Sodium phosphate, pH 6.5

Purity: \geq 95% by SDS-PAGE

Biological Activity: > 400 Units/mg

One unit is defined as the amount of enzyme which digests hemoglobin. The reaction is measured by an increase of an A280 of 1.0 per 60 minutes at 37°C. Measured as TCA-soluble product using acid-denatured hemoglobin (0.2% in reaction mixture) as the

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substrate in 0.1 M formate, pH 3.3.

Reconstitution: Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

-1.0 mg/mL and gently pipette the solution up and down the sides of the vial.

DO NOT VORTEX. Allow several minutes for complete reconstitution.

Country of Origin: Prepared from tissue collected in the contiguous United States from animals under 30

months of age at a USDA inspected facility. Animals were inspected ante and

postmortem and found free of infections diseases.

Storage & Stability: Store -20 to -80°C for 1 year. After reconstitution, prepare aliquots and store at -20°C to

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-80°C. Avoid repeated freeze-thaw cycles.

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