

Active Human Cathepsin D

CATALOG #: 1022-5

AMOUNT: 5 µg

LOT #: 30522

BACKGROUND: Cathepsin D is an estrogen-regulated protein associated with tissue breakdown. Levels of cathepsin D have been positively correlated with recurring breast cancers of both node negative and node positive types. Additionally cathepsin D has been associated with amyloid formation in Alzheimer's plaques. As cathepsin D activity is increased by cigarette smoke, the enzyme may contribute to lung tissue damage in smokers.

SOURCE: Purified from human liver

FORM: Frozen liquid (5 µl) in 2 mM sodium phosphate, pH 6.5

PURITY: ≥95% by SDS-PAGE

STORAGE: Store at -80°C, stable for at least 6 months as supplied. Avoid freeze/thaw cycles.

APPLICATIONS: Human Cathepsin D is useful in inhibitor screening, kinetic studies, and cleavage of substrates and other *in vitro* studies.

ACTIVITY: >300 units/mg protein. One unit is defined as the amount of enzyme that digests hemoglobin releasing peptides which are soluble in 10% TCA. The reaction is measured by an increase of an A280 of 1.0 per 60 minutes at 37°C. Substrate: acid denatured hemoglobin (0.2% in reaction mixture). Buffer: 100 mM formate. pH 3.3.

SPECIFIC ACTIVITY: 365 units/mg

Prepared from tissue shown to be non reactive for HbsAG, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

For Research Use Only! Not to be used in human subjects.

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- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

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- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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