

Product datasheet for **AP26341PU-N**

Cathepsin D (CTSD) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IP, WB
Recommended Dilution:	Western blot (0.5-4 µg/ml). Immunoprecipitation.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide surrounding amino acid 140 of Mouse Cathepsins D
Specificity:	This antibody detects both the 52 kDa proform and the 34 kDa cleaved fragment of Cathepsin D.
Formulation:	PBS, pH 7.2 State: Aff - Purified State: Liquid purified IgG fraction Stabilizer: 30% Glycerol, 0.5% BSA Preservative: 0.01% Thimerosal
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	cathepsin D
Database Link:	Entrez Gene 13033 Mouse Entrez Gene 171293 Rat Entrez Gene 1509 Human P07339



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Background:

Cathepsin D is a normal lysosomal protease that is expressed in all cells. It is an aspartyl protease with a pH optimum in the range of 3-5, and contains two N-linked oligosaccharides. Cathepsin D is synthesized as an inactive 52 kDa pro-enzyme. Activation involves the proteolytic removal of the 43 amino acid profragment and an internal cleavage to generate the two-chain form made up of 34 and 14 kDa subunits. Cathepsin D contains the mannose-6-phosphate lysosomal localization signal that targets the enzyme to the lysosomal compartment where it functions in the normal degradation of proteins. In certain tumor cells, Cathepsin D is abnormally processed and is secreted in its 52 kDa precursor form. Numerous clinical studies as well as in vitro evidence suggest that cathepsin D plays an important role in malignant transformation and may be a useful prognostic indicator for breast cancer.

Synonyms:

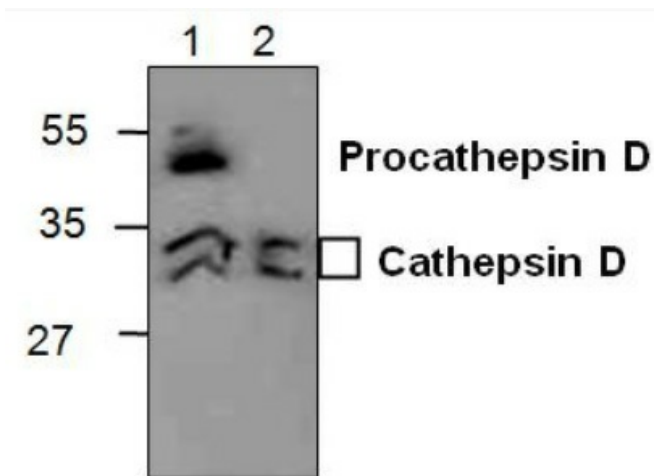
CTSD, CPSD

Protein Families:

Druggable Genome, Protease

Protein Pathways:

Lysosome

Product images:

Western blot analysis of Cathepsin D in 3T3 cell lysate (Lane 1) and in Rat kidney tissue lysate (Lane 2).