

Human Cathepsin D ELISA Kit | CTSD elisa kit

Human Cathepsin D Quick ELISA Kit

CATALOG #
AAA125869

REACTIVITY
Human

PRODUCT SYNONYMS

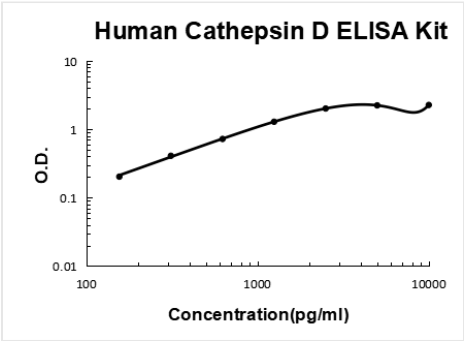
Cathepsin D; Human Cathepsin D Quick ELISA Kit; Cathepsin D|cathepsin D (lysosomal aspartyl protease); CPSD; CTSD; EC 3. 4. 23; EC 3. 4. 23. 5; lysosomal aspartyl peptidase; lysosomal aspartyl protease; MGC2311; neuronal 10; cathepsin D; CTSD elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human CTSD
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA)
Detection Range	156pg/ml-10,000pg/ml
Sensitivity	<10pg/ml
Capture/Detection Antibodies	Capture antibody- polyclonal antibody from goat Detection antibody- polyclonal antibody from goat
Sample Data	Concentration(pg/ml) 0 156 312 625 1250 2500 5000 10000 O.D. 0.052 0.255 0.462 0.775 1.343 2.069 2.294 2.324
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 191 1701 5274 Standard deviation 13.56 100.36 358.63 CV(%) 7.1% 5.9% 6.8%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 179 1699 5098 Standard deviation 13.43 108.74 433.33 CV(%) 7.5% 6.4% 8.5%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 191 201 226 217 209 11.48 5.5% Sample 2: 1701 1814 1695 1596 1702 76.57 4.5% Sample 3: 5274 5267 4806 4977 5081 157.51 3.1% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: NS0; Immunogen sequence: L21-L412
Anticoagulant	heparin or EDTA
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human Cathepsin D with <10pg/ml sensitivity. Format: 96-well plate with removable strips. This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.

Principle	Human CTSD Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human CTSD in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA). It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human CTSD with immunogen: Expression system for standard: NS0; Immunogen sequence: L21-L412. To measure Human CTSD, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human CTSD in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human CTSD in the sample.
Assay Procedure Step 1	10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312.5pg/ml, 156.25pg/ml
TMB Incubation Time	15
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for CTSD elisa kit	Cathepsin D is a protein that in humans is encoded by the CTSD gene. This proteinase is a member of the peptidase C1 family, having a specificity similar to but narrower than that of pepsin A. It is mapped to 11p15. 5. The cDNA encodes a 412-amino acid protein with 20 and 44 amino acids in a pre- and prosegment, respectively. Cathepsin D is one of the lysosomal proteinases. It is ubiquitously expressed and is involved in proteolytic degradation, cell invasion, and apoptosis. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease and it has been considered as a breast cancer tumor marker.
Product Categories/Family for CTSD elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503143
NCBI GeneID	1509
NCBI Accession #	NP_001900.1
NCBI GenBank Nucleotide #	NM_001909.4
UniProt Accession #	P07339; Q6IB57
Molecular Weight	44,552 Da

NCBI Official Full Name	cathepsin D preproprotein
NCBI Official Synonym Full Names	cathepsin D
NCBI Official Symbol	CTSD
NCBI Official Synonym Symbols	CPSD; CLN10
NCBI Protein Information	cathepsin D; lysosomal aspartyl protease; lysosomal aspartyl peptidase; ceroid-lipofuscinosis, neuronal 10
UniProt Protein Name	Cathepsin D
UniProt Gene Name	CTSD
UniProt Synonym Gene Names	CPSD
UniProt Entry Name	CATD_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/ctsd-human-elisa-kits/cathepsin-d/125869>