

## Human Cathepsin C ELISA Kit | CTSC elisa kit

Human Cathepsin C ELISA Kit PicoKine

|                               |                            |                              |
|-------------------------------|----------------------------|------------------------------|
| CATALOG #<br><b>AAA126723</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA</b> |
|-------------------------------|----------------------------|------------------------------|

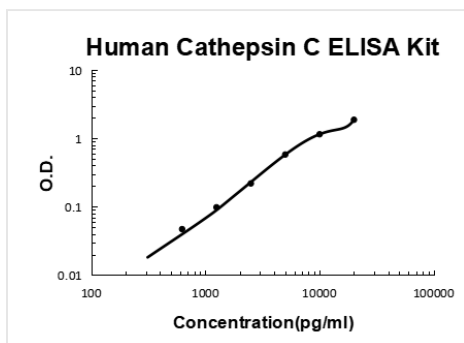
### PRODUCT SYNONYMS

Cathepsin C; Human Cathepsin C ELISA Kit PicoKine; CTSC elisa kit

### PRODUCT SPECIFICATIONS

|                                            |                                                                                                                                                                                                 |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                 | Human                                                                                                                                                                                           |
| Specificity                                | Natural and recombinant Human CTSC                                                                                                                                                              |
| Samples                                    | Cell culture supernatants, serum and plasma (heparin, EDTA)                                                                                                                                     |
| Detection Range                            | 312 pg/ml - 20,000 pg/ml                                                                                                                                                                        |
| Sensitivity                                | <108 pg/ml                                                                                                                                                                                      |
| Applicable Applications for CTSC elisa kit | ELISA                                                                                                                                                                                           |
| Intra-assay Precision                      | Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.                                               |
| Inter-assay Precision                      | Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.                                           |
| Preparation and Storage                    | Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Ships with gel ice, can store for up to 3 days in room temperature. Freeze upon receiving.) |

### IMAGES



Standard Curve (Sample)

Human Cathepsin C PicoKine ELISA Kit standard curve

## ADDITIONAL INFORMATION

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| Related Product Information for CTSC elisa kit | <p>Background: Cathepsin C (CTSC) also known as dipeptidyl peptidase I (DPP-I) is a lysosomal exo-cysteine protease belonging to the peptidase C1 protein family, a subgroup of the cysteine cathepsins. In humans, it is encoded by the CTSC gene. This gene encodes a member of the peptidase C1 family and lysosomal cysteine proteinase that appears to be a central coordinator for activation of many serine proteinases in cells of the immune system. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate heavy and light chains that form a disulfide-linked dimer. A portion of the propeptide acts as an intramolecular chaperone for the folding and stabilization of the mature enzyme. This enzyme requires chloride ions for activity and can degrade glucagon. Defects in the encoded protein have been shown to be a cause of Papillon-Lefevre syndrome, an autosomal recessive disorder characterized by palmoplantar keratosis and periodontitis.</p> <p>Principle of the Assay: The Picokine™ Human CTSC Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human CTSC with a 96-well strip plate that is pre-coated with antibody specific for CTSC. The detection antibody is a biotinylated antibody specific for CTSC. The capture antibody is a polyclonal antibody from goat and the detection antibody is a biotinylated polyclonal antibody from goat. The kit includes Human CTSC protein as standards. To measure Human CTSC, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human CTSC in the sample. Read the absorbance 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 CTSC in the sample.</p> |
| Product Categories/Family for CTSC elisa kit   | PicoKine ELISA Kits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 167000671                                                                                                   |
| NCBI GeneID                      | 1075                                                                                                        |
| NCBI Accession #                 | NP_001107645.1                                                                                              |
| NCBI GenBank Nucleotide #        | NM_001114173.1                                                                                              |
| UniProt Accession #              | P53634; Q2HIY8; Q53G93; Q71E75; Q71E76; Q7M4N9; Q7Z3G7; Q7Z5U7; Q8WY99; Q8WYA7; A8K7V2; B5MDD5              |
| Molecular Weight                 | 51,854 Da                                                                                                   |
| NCBI Official Full Name          | dipeptidyl peptidase 1 isoform c                                                                            |
| NCBI Official Synonym Full Names | cathepsin C                                                                                                 |
| NCBI Official Symbol             | CTSC                                                                                                        |
| NCBI Official Synonym Symbols    | JP; HMS; JPD; PLS; CPPI; DPP1; DPPI; PALS; DPP-I; PDON1                                                     |
| NCBI Protein Information         | dipeptidyl peptidase 1; cathepsin J; dipeptidyl peptidase I; dipeptidyl transferase; dipeptidyl-peptidase I |
| UniProt Protein Name             | Dipeptidyl peptidase 1                                                                                      |
| UniProt Gene Name                | CTSC                                                                                                        |
| UniProt Synonym Gene Names       | CPPI; DPP-I; DPPI                                                                                           |
| UniProt Entry Name               | CATC_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.