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Datasheet for ABIN1889374

CSTB ELISA Kit

1 Image

Overview

| | |
|--------------------------|-----------------|
| Quantity: | 96 tests |
| Target: | CSTB |
| Binding Specificity: | AA 2-98 |
| Reactivity: | Human |
| Method Type: | Sandwich ELISA |
| Detection Range: | 62.5-4000 pg/mL |
| Minimum Detection Limit: | 62.5 pg/mL |
| Application: | ELISA |

Product Details

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|-----------------------------|---|
| Purpose: | Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Cystatin B |
| Brand: | PicoKine™ |
| Sample Type: | Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Saliva, Urine, Milk |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Immunogen: | Expression system for standard: E.coli Immunogen sequence: M2-F98 |
| Specificity: | Expression system for standard: E.coli Immunogen sequence: M2-F98 |
| Cross-Reactivity (Details): | There is no detectable cross-reactivity with other relevant proteins. |

Product Details

Sensitivity: <10pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target: CSTB

Alternative Name: [CSTB \(CSTB Products\)](#)

Background: Protein Function: This is an intracellular thiol proteinase inhibitor. Tightly binding reversible inhibitor of cathepsins L, H and B.

Background: Cystatin B(CSTB), also called STFB, is a small protein that is a member of the superfamily of cysteine protease inhibitors. It has been isolated from human spleen and liver and its amino acid sequence has been fully determined. The cystatin B gene is located on 21q22.3. It is widely distributed and is localized mostly intracellularly, but has been found extracellularly. The protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins l, h and b. Its role is thought to be as a protector against the proteinases leaking from lysosomes. A cystatin B multiprotein complex might have a specific cerebellar function, and that the loss of this function might contribute to the etiopathogenesis of EPM1. Upon differentiation to myotubes, CSTB becomes excluded from the nucleus and lysosomes, suggesting that the subcellular distribution of CSTB is dependent on the differentiation status of the cell.

Synonyms: Cystatin-B,CPI-B,Liver thiol proteinase inhibitor,Stefin-B,CSTB,CST6, STFB,
Full Gene Name: Cystatin-B
Cellular Localisation: Cytoplasm . Nucleus.

Gene ID: 1476

UniProt: [P04080](#)

Pathways: [Response to Water Deprivation](#)

Application Details

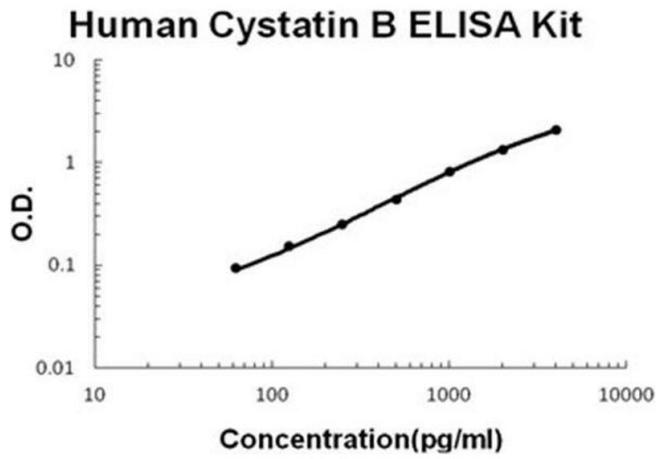
Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Application Details

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| Comment: | Sequence similarities: Belongs to the cystatin family. |
| Plate: | Pre-coated |
| Protocol: | human Cystatin B ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Cystatin B has been precoated onto 96-well plates. Standards(E.coli, M2-F98) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Cystatin B is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Cystatin B amount of sample captured in plate. |
| Assay Procedure: | Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human Cystatin B standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA), saliva, urine or human milk to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human Cystatin B standard solution and each sample is measured in duplicate. |
| Assay Precision: | <ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 421, Standard deviation: 26.1, CV(%): 6.2• Sample 2: n=16, Mean(pg/ml): 1169, Standard deviation: 67.8, CV(%): 5.8• Sample 3: n=16, Mean(pg/ml): 2311, Standard deviation: 140.97, CV(%): 6.1,• Sample 1: n=24, Mean(pg/ml): 428, Standard deviation: 30.82, CV(%): 7.2• Sample 2: n=24, Mean(pg/ml): 1207, Standard deviation: 82.08, CV(%): 6.8• Sample 3: n=24, Mean(pg/ml): 2365, Standard deviation: 165.6, CV(%): 7 |
| Restrictions: | For Research Use only |

Handling

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| Handling Advice: | Avoid multiple freeze-thaw cycles. |
| Storage: | -20 °C,4 °C |
| Storage Comment: | Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles |
| Expiry Date: | 12 months |



ELISA

Image 1. Human Cystatin B PicoKine ELISA Kit standard curve