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Datasheet for ABIN2859339

TIMP4 ELISA Kit

1 Image

Overview

Quantity: 96 tests

Target: TIMP4

Binding Specificity: AA 30-224

Reactivity: Mouse

Method Type: Sandwich ELISA

Detection Range: 78-5.000 pg/mL

Minimum Detection Limit: 78 pg/mL

Application: ELISA

Product Details

Purpose: Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse TIMP-4

Brand: PicoKine™

Sample Type: Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)

Analytical Method: Quantitative

Detection Method: Colorimetric

Immunogen: Expression system for standard: NSO

Immunogen sequence: C30-P224

Specificity: Expression system for standard: NSO

Immunogen sequence: C30-P224

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: TIMP4

Alternative Name: TIMP4 ([TIMP4 Products](#))

Background: Protein Function: Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor.

Background: Metalloproteinase inhibitor 4 is an enzyme that in humans is encoded by the TIMP4 gene. This gene belongs to the tissue inhibitor of metalloproteinases gene family. The proteins encoded by this gene family are inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. TIMP4 gene is mapped to chromosome 3p25. TIMP4 gene contains 5 exons that span 6 kb of genomic DNA. The gene is expressed as a 1.4-kb transcript abundant in heart and present at low levels in several other tissues. Expressed TIMP4 inhibits MMPs in vitro. What's more, TIMP-4 binds both progelatinase A and the C domain in a similar manner to that of TIMP-2.

Synonyms: Metalloproteinase inhibitor 4, Tissue inhibitor of metalloproteinases 4, TIMP-4, Timp4,
Full Gene Name: Metalloproteinase inhibitor 4
Cellular Localisation: Secreted.

Gene ID: 110595

UniProt: [Q9JHB3](#)

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.

Comment: Sequence similarities: Belongs to the protease inhibitor I35 (TIMP) family.
Tissue Specificity: Expressed in brain, heart, ovary and skeletal muscle.

Plate: Pre-coated

Protocol: mouse TIMP-4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent

Application Details

assay technology. A monoclonal antibody from rat specific for TIMP-4 has been precoated onto 96-well plates. Standards(NSO, C30-P224) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TIMP-4 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 mouse TIMP-4 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 5,000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL, 78pg/mL mouse TIMP-4 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 mouse cell culture supernatants, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each mouse TIMP-4 standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 272, Standard deviation: 12.24, CV(%): 4.5
- Sample 2: n=16, Mean(pg/ml): 830, Standard deviation: 473.1, CV(%): 5.7
- Sample 3: n=16, Mean(pg/ml): 1934, Standard deviation: 98.6, CV(%): 5.1,
- Sample 1: n=24, Mean(pg/ml): 296, Standard deviation: 22.5, CV(%): 7.6
- Sample 2: n=24, Mean(pg/ml): 793, Standard deviation: 53.92, CV(%): 6.8
- Sample 3: n=24, Mean(pg/ml): 1615, Standard deviation: 116.3, CV(%): 7.2

Restrictions: For Research Use only

Handling

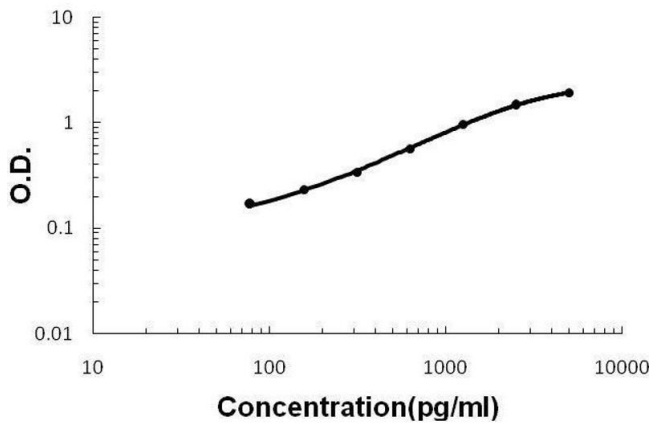
Handling Advice: Avoid multiple freeze-thaw cycles.

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

Mouse TIMP-4 ELISA Kit



ELISA

Image 1. Mouse TIMP-4 PicoKine ELISA Kit standard curve