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Datasheet for ABIN1672774

## DPP4 ELISA Kit

### 1 Image

#### Overview

Quantity:	96 tests
Target:	DPP4
Binding Specificity:	AA 29-760
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

#### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CD26/DPP4
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: S29-H760
Specificity:	Expression system for standard: NSO Immunogen sequence: S29-H760
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

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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

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Target: DPP4

Alternative Name: DPP4 ([DPP4 Products](#))

Background: Protein Function: Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF- kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline. .

Background: Dipeptidyl peptidase-4(DPP4), also known as adenosine deaminase complexing protein 2 or CD26(cluster of differentiation 26) is a protein that, in humans, is encoded by the DPP4 gene. By fluorescence in situ hybridization, the CD26 gene was mapped to 2q24.3. DPP4 plays a major role in glucose metabolism. It is responsible for the degradation of incretins such as GLP-1. Furthermore, it appears to work as a suppressor in the development of cancer and tumours. CD26/ DPP4 plays an important role in tumor biology, and is useful as a marker for various cancers, with its levels either on the cell surface or in the serum increased in some neoplasms and decreased in others.

Synonyms: Dipeptidyl peptidase 4,3.4.14.5 ,Dipeptidyl peptidase IV,DPP IV,T-cell activation antigen CD26,Thymocyte-activating molecule,THAM,CD26,Dipeptidyl peptidase 4 membrane form,Dipeptidyl peptidase IV membrane form,Dipeptidyl peptidase 4 soluble form,Dipeptidyl peptidase IV soluble form,Dpp4,Cd26,

## Target Details

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Full Gene Name: Dipeptidyl peptidase 4

Cellular Localisation: Dipeptidyl peptidase 4 soluble form: Secreted. Detected in the serum and the seminal fluid..

Gene ID: 13482

UniProt: [P28843](#)

Pathways: [Peptide Hormone Metabolism, Regulation of Leukocyte Mediated Immunity](#)

## Application Details

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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.

Plate: Pre-coated

Protocol: mouse CD26 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CD26 has been precoated onto 96-well plates. Standards(NSO, S29-H760) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD26 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 CD26 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 mouse CD26 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 supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CD26 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 773, Standard deviation: 39.4, CV(%): 5.1
- Sample 2: n=16, Mean(pg/ml): 1540, Standard deviation: 104.72, CV(%): 6.8
- Sample 3: n=16, Mean(pg/ml): 2892, Standard deviation: 216.9, CV(%): 7.5,
- Sample 1: n=24, Mean(pg/ml): 846, Standard deviation: 54.99, CV(%): 6.5
- Sample 2: n=24, Mean(pg/ml): 1685, Standard deviation: 124.69, CV(%): 7.4
- Sample 3: n=24, Mean(pg/ml): 3195, Standard deviation: 274.77, CV(%): 8.6

Restrictions: For Research Use only

## Handling

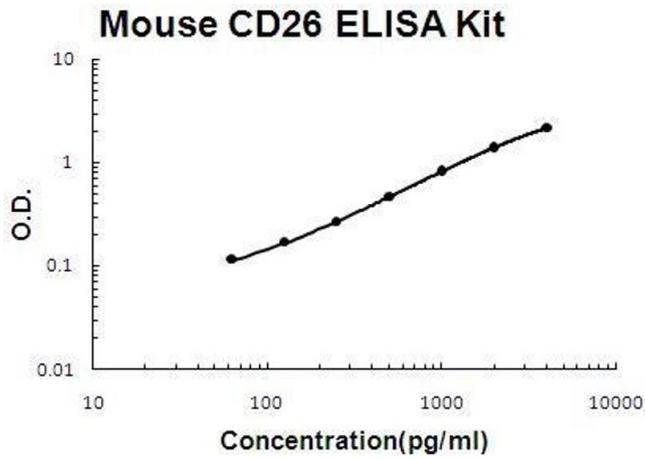
Handling Advice: Avoid multiple freeze-thaw cycles.

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

## Images



### ELISA

**Image 1.** Mouse CD26/DPP4 PicoKine ELISA Kit standard curve