

APA884Hu01 100µg

Active Active Dipeptidyl Peptidase IV (DPP4)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

## [PROPERTIES]

Source: Prokaryotic expression.

Host: E. coli

Residues: Ser484~Val728 Tags: N-terminal His-tag

**Purity: >95%** 

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl

and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 6.4

Predicted Molecular Mass: 29.0kDa

Accurate Molecular Mass: 29.0kDa as determined by SDS-PAGE reducing

conditions.

#### [USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## [STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## [SEQUENCE]

SSVNDKG LRVLEDNSAL

DKMLQNVQMP SKKLDFIILN ETKFWYQMIL PPHFDKSKKY PLLLDVYAGP
CSQKADTVFR LNWATYLAST ENIIVASFDG RGSGYQGDKI MHAINRRLGT
FEVEDQIEAA RQFSKMGFVD NKRIAIWGWS YGGYVTSMVL GSGSGVFKCG
IAVAPVSRWE YYDSVYTERY MGLPTPEDNL DHYRNSTVMS RAENFKQVEY
LLIHGTADDN VHFOOSAOIS KALVDVGV

#### [ACTIVITY]

Dipeptidyl peptidase-4 (DPP4), also known as adenosine deaminase complexing protein 2 or cluster of differentiation 26 (CD26), is a protein in humans. DPP4 is an antigenic enzyme expressed on the surface of most cell types and is associated with immune regulation, signal transduction and apoptosis. It is an intrinsic membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. Besides, Eosinophil Chemotactic Factor (ECF) has been identified as an interactor of DPP4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human DPP4 and recombinant human ECF. Briefly, DPP4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ECF-coated microtiter wells and incubated for 2h at 37 °C. Wells were washed with PBST and incubated for 1h with anti-DPP4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated

15-25 minutes at 37  $^{\circ}$ C . Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of DPP4 and ECF was shown in Figure 1, and this effect was in a dose dependent manner.

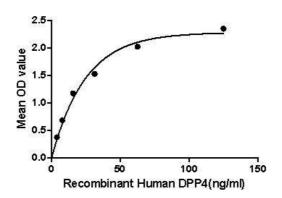


Figure 1. The binding activity of DPP4 with ECF.

# [IDENTIFICATION]

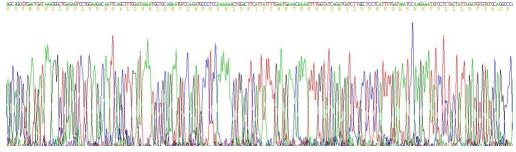


Figure 2. Gene Sequencing (extract)

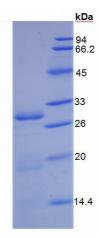


Figure 3. SDS-PAGE

Sample: Active recombinant DPP4, Human

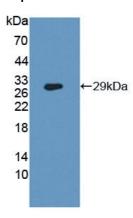


Figure 4. Western Blot

Sample: Recombinant DPP4, Human;

Antibody: Rabbit Anti-Human DPP4 Ab (PAA884Hu01)

## [ IMPORTANT NOTE ]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.