

Active Puromycin Sensitive Aminopeptidase (PSA) Instruction Manual

SBPE299Hu02

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 97%

Isoelectric Point

6.3

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

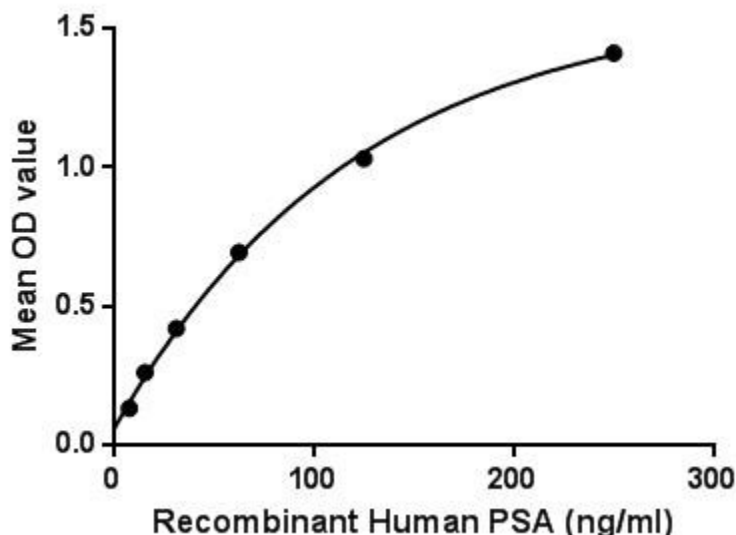


Figure. The binding activity of PSA with PDIA3.

Puromycin Sensitive Aminopeptidase (PSA) also known as cytosol alanyl aminopeptidase or alanine aminopeptidase (AAP) is used as a biomarker to detect damage to the kidneys, and that may be used to help diagnose certain kidney disorders. It is found at high levels in the urine when there are kidney problems. PSA has been proposed to function in a variety of processes, including metabolism of neuropeptide, regulation of the cell cycle, and hydrolysis of proteasomal products to amino acids. Besides, Protein Disulfide Isomerase A3 (PDIA3) has been identified as an interactor of

PSA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PSA and recombinant human PDIA3. Briefly, PSA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to PDIA3-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PSA 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°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of PSA and PDIA3 was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

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

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.

Image



Figure. SDS-PAGE

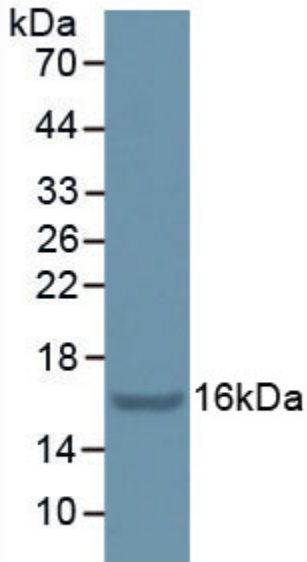


Figure. Western Blot

[IMPORTANT NOTE]

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

