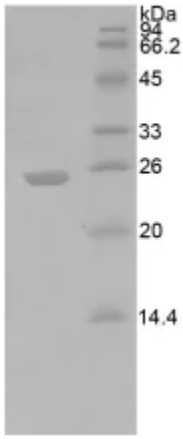
Active Puromycin Sensitive Aminopeptidase (PSA)

Catalog#:PEH12931

概述（Summary）

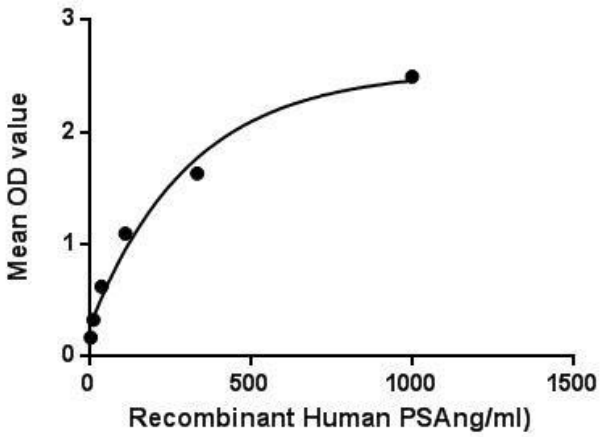
别称（Alternative Names）	NPEPPS; AAP-S; Metalloproteinase MP100; Cytosol alanyl aminopeptidase
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gly584-Gln793】
Accession #	P55786
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	24.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Aminopeptidase with broad substrate specificity for several peptides. Involved in proteolytic events essential for cell growth and viability. May act as regulator of neuropeptide activity. Plays a role in the antigen-processing pathway for MHC class I molecules. Involved in the N-terminal trimming of cytotoxic T-cell epitope precursors. Digests the poly-Q peptides found in many cellular proteins. Digests tau from normal brain more efficiently than tau from Alzheimer disease brain.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



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 neuropeptidase, 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℃. 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℃. 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.

Figure. The binding activity of PSA with PDIA3

注意事项（Note）

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