Datasheet for ABIN7505194

ACPP Protein (AA 33-386) (His tag)

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Overview

Quantity:	100 µg
Target:	ACPP
Protein Characteristics:	AA 33-386
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACPP protein is labelled with His tag.

Product Details

Sequence:	Lys 33-Asp 386
Characteristics:	A DNA sequence encoding the Human Prostatic Acid Phosphatase/ACPP protein (P15309) (Lys 33-Asp 386) was expressed with N-His.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	ACPP
Alternative Name:	Prostatic Acid Phosphatase (ACPP Products)
Background:	Abbreviation: ACPP Target Synonym: Prostatic Acid Phosphatase,PAP,5'-Nucleotidase,5'-NT,Ecto-5'-Nucleotidase,Thiamine Monophosphatase,TMPase,ACPP,ACP-3,ACP3 Background: Prostatic acid phosphatase (PAP, or ACPP), also known as prostatic specific acid

Target Details

	phosphatase (PSAP), is an enzyme produced by the prostate. As a non-specific phosphomonoesterase, Prostatic acid phosphatase synthetized and secreted into seminal plasma under androgenic control. The enzyme is a dimer of molecular weight around 100 kDa. Prostatic acid phosphatase is a clinically important protein for its relevance as a biomarker of prostate carcinoma. Furthermore, it has a potential role in fertilization. The major action of PAP is to dephosphorylate macromolecules with the help of catalytic residues (His(12) and Asp(258)) that are located in the cleft between two domains. Cellular prostatic acid phosphatase (cPAcP), an authentic tyrosine phosphatase, is proposed to function as a negative growth regulator of prostate cancer (PCa) cells in part through its dephosphorylation of ErbB-2. cPAcP functions as a neutral protein tyrosine phosphatase (PTP) in prostate cancer cells and dephosphorylates HER-2/ErbB-2/Neu (HER-2: human epidermal growth factor receptor-2) at the phosphotyrosine (p-Tyr) residues. Injection of the secretory isoform of PAP has potent antinociceptive effects in mouse models of chronic pain. This enzyme exhibits ecto-5'-nucleotidase activity, is widely distributed, and implicated in the formation of chronic pain. Additionally, PAP could be a target molecule in specific immunotherapy for patients with nonprostate adenocarcinomas including colon and gastric cancers.
Molecular Weight:	Calculated MW: 38.83 kDa Observed MW: 43 kDa
UniProt:	P15309
Pathways:	Synaptic Membrane, Ribonucleoside Biosynthetic Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Handling

Expiry Date:	12 months