

Datasheet for ABIN3077904

CMPK2 Protein (AA 99-449) (His tag)[Go to Product page](#)**2** Images

Overview

Quantity:	1 mg
Target:	CMPK2
Protein Characteristics:	AA 99-449
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CMPK2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MLHQLRRGPF QRCQLLRLLC YCPGGQAGGA QQGFLLRDPL DDPDTRQALL ELLGACQEAP RPHLGFEAD PRGQLWQRLW EVQDGRRLQV GCAQVVPVPE PPLHPVVPDL PSSWVFPDRE AARAVLEECT SFIPEARAVL DLVDQCPKQI QKGKFQVVAI EGLDATGKTT VTQSVADSLK AVLLKSPSPSC IGQWRKIFDD EPTIIRRAFY SLGNYIVASE IAKESAKSPV IVDRYWHSTA TYAIADEVSG GLQHLPPAHH PVYQWPEDLL KPDLLLLTV SPEERLQRLQ GRGMEKTREE AELEANSVFR QKVEMSYQRM ENPGCHVVDA SPSREKVLQT VLSLIQNSFS EPGSSGHHHH HH
Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Human CMPK2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make</p>

Product Details

you a customized quote in case we can provide this protein in a smaller amount.

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	CMPK2
Alternative Name:	CMPK2 (CMPK2 Products)
Background:	May participate in dUTP and dCTP synthesis in mitochondria. Is able to phosphorylate dUMP, dCMP, CMP, UMP and monophosphates of the pyrimidine nucleoside analogs ddC, dFdC, araC, BVDU and FdUrd with ATP as phosphate donor. Efficacy is highest for dUMP followed by dCMP, CMP and UMP are poor substrates. May be involved in mtDNA depletion caused by long term treatment with ddC or other pyrimidine analogs. Also displays broad nucleoside diphosphate kinase activity. {ECO:0000269 PubMed:17999954, ECO:0000269 PubMed:23416111}.
Molecular Weight:	40.1 kDa Including tag.
UniProt:	Q5EBM0

Target Details

Pathways: [Nucleotide Phosphorylation](#), [Cellular Response to Molecule of Bacterial Origin](#)

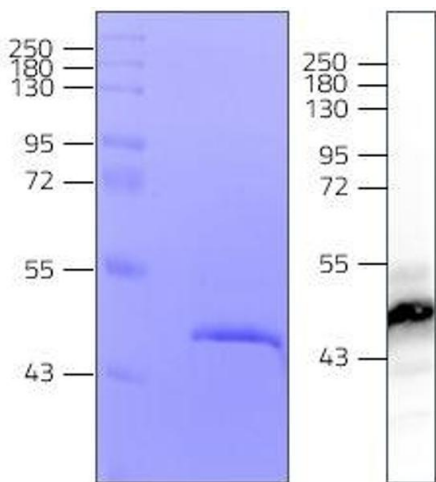
Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	20 mM Hepes, pH 8.0, 150 mM NaCl, 2 mM DTT, 2mM EDTA
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Western Blotting

Image 1.



Image 2. „Crystallography Grade“ protein due to multi-step, protein-specific purification process