Datasheet for ABIN3083666

MEPCE Protein (AA 1-689) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	MEPCE
Protein Characteristics:	AA 1-689
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEPCE protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MIEMAAEKEP FLVPAPPPPL KDESGGGGGP TVPPHQEAAS GELRGGTERG PGRCAPSAGS PAAAVGRESP GAAATSSSGP QAQQHRGGGP QAQSHGEARL SDPPGRAAPP DVGEERRGGG GTELGPPAPP RPRNGYQPHR PPGGGGGKRR NSCNVGGGGG GFKHPAFKRR RRVNSDCDSV LPSNFLLGGN IFDPLNLNSL LDEEVSRTLN AETPKSSPLP AKGRDPVEIL IPKDITDPLS LNTCTDEGHV VLASPLKTGR KRHRHRGQHH QQQQAAGGSE SHPVPPTAPL TPLLHGEGAS QQPRHRGQNR DAPQPYELNT AINCRDEVVS PLPSALQGPS GSLSAPPAAS VISAPPSSSS RHRKRRRTSS KSEAGARGGG QGSKEKGRGS WGGRHHHHHP LPAAGFKKQQ RKFQYGNYCK YYGYRNPSCE DGRLRVLKPE WFRGRDVLDL GCNVGHLTLS IACKWGPSRM VGLDIDSRLI HSARQNIRHY LSEELRLPPQ TLEGDPGAEG EEGTTTVRKR SCFPASLTAS RGPIAAPQVP LDGADTSVFP NNVVFVTGNY VLDRDDLVEA QTPEYDVVLC LSLTKWVHLN WGDEGLKRMF RRIYRHLRPG GILVLEPQPW SSYGKRKTLT ETIYKNYYRI QLKPEQFSSY LTSPDVGFSS

	YELVATPHNT SKGFQRPVYL FHKARSPSH **Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	MEPCE
Alternative Name:	MEPCE (MEPCE Products)
Background:	7SK snRNA methylphosphate capping enzyme (MePCE) (EC 2.1.1.-) (Bicoid-interacting protein 3 homolog) (Bin3 homolog),FUNCTION: S-adenosyl-L-methionine-dependent methyltransferase that adds a methylphosphate cap at the 5'-end of 7SK snRNA (7SK RNA), leading to stabilize it (PubMed:17643375, PubMed:19906723, PubMed:30559425). Also has a non-enzymatic function as part of the 7SK RNP complex: the 7SK RNP complex sequesters the positive transcription elongation factor b (P-TEFb) in a large inactive 7SK RNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation (PubMed:17643375). The 7SK RNP complex also promotes snRNA gene transcription by RNA polymerase II via interaction with the little elongation complex (LEC) (PubMed:28254838). In the 7SK RNP complex, MEPCE is required to stabilize 7SK RNA and facilitate the assembly of 7SK RNP complex (PubMed:19906723). MEPCE has a non-enzymatic function in the 7SK RNP complex, interaction with LARP7 within the 7SK RNP complex occluding its catalytic center (PubMed:19906723). {ECO:0000269|PubMed:17643375, ECO:0000269|PubMed:19906723, ECO:0000269|PubMed:28254838, ECO:0000269|PubMed:30559425}.
Molecular Weight:	74.4 kDa
UniProt:	Q7L2J0
Pathways:	Chromatin Binding, SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational

Application Details

	modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months