Datasheet for ABIN3093912

MPHOSPH8 Protein (AA 1-860) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	MPHOSPH8
Protein Characteristics:	AA 1-860
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MPHOSPH8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MEQVAEGARV TAVPVSAADS TEELAEVEEG VGVVGEDNDA AARGAEAFGD SEEDGEDVFE VEKILDMKTE GGKVLYKVRW KGYTSDDDTW EPEIHLEDCK EVLLEFRKKI AENKAKAVRK DIQRLSLNND IFEANSDSDQ QSETKEDTSP KKKKKKLRQR EEKSPDDLKK KKAKAGKLKD KSKPDLESSL ESLVFDLRTK KRISEAKEEL KESKKPKKDE VKETKELKKV KKGEIRDLKT KTREDPKENR KTKKEKFVES QVESESSVLN DSPFPEDDSE GLHSDSREEK QNTKSARERA GQDMGLEHGF EKPLDSAMSA EEDTDVRGRR KKKTPRKAED TRENRKLENK NAFLEKKTVP KKQRNQDRSK SAAELEKLMP VSAQTPKGRR LSGEERGLWS TDSAEEDKET KRNESKEKYQ KRHDSDKEEK GRKEPKGLKT LKEIRNAFDL FKLTPEEKND VSENNRKREE IPLDFKTIDD HKTKENKQSL KERRNTRDET DTWAYIAAEG DQEVLDSVCQ ADENSDGRQQ ILSLGMDLQL EWMKLEDFQK HLDGKDENFA ATDAIPSNVL RDAVKNGDYI TVKVALNSNE EYNLDQEDSS GMTLVMLAAA GGQDDLLRLL ITKGAKVNGR QKNGTTALIH AAEKNFLTTV AILLEAGAFV NVQQSNGETA LMKACKRGNS DIVRLVIECG ADCNILSKHQ NSALHFAKQS NNVLVYDLLK

NHLETLSRVA EETIKDYFEA RLALLEPVFP IACHRLCEGP DFSTDFNYKP PQNIPEGSGI LLFIFHANFL GKEVIARLCG PCSVQAVVLN DKFQLPVFLD SHFVYSFSPV AGPNKLFIRL TEAPSAKVKL LIGAYRVQLQ

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	MPHOSPH8
Alternative Name:	MPHOSPH8 (MPHOSPH8 Products)
Background:	M-phase phosphoprotein 8 (Two hybrid-associated protein 3 with RanBPM) (Twa3),FUNCTION: Heterochromatin component that specifically recognizes and binds methylated 'Lys-9' of histone H3 (H3K9me) and promotes recruitment of proteins that mediate epigenetic repression (PubMed:20871592, PubMed:26022416). Mediates recruitment of the HUSH complex to H3K9me3 sites: the HUSH complex is recruited to genomic loci rich in H3K9me3 and is required to maintain transcriptional silencing by promoting recruitment of SETDB1, a histone methyltransferase that mediates further deposition of H3K9me3, as well as MORC2 (PubMed:26022416, PubMed:28581500). Binds H3K9me and promotes DNA methylation by recruiting DNMT3A to target CpG sites, these can be situated within the coding region of the gene (PubMed:20871592). Mediates down-regulation of CDH1 expression (PubMed:20871592). Also represses L1 retrotransposons in collaboration with MORC2 and, probably, SETDB1, the silencing is dependent of repressive epigenetic modifications, such as H3K9me3 mark. Silencing events often occur within introns of transcriptionally active genes, and lead to the down-regulation of host gene expression (PubMed:29211708). The HUSH complex is also involved in the silencing of unintegrated retroviral DNA by being recruited by ZNF638: some part of the retroviral DNA formed immediately after infection remains unintegrated in the host genome and is transcriptionally repressed (PubMed:30487602). {ECO:0000269|PubMed:20871592, ECO:0000269|PubMed:26022416, ECO:0000269|PubMed:28581500, ECO:0000269|PubMed:29211708, ECO:0000269|PubMed:30487602}.

Target Details

Molecular Weight:	97.2 kDa
UniProt:	Q99549

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 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process