

Datasheet for ABIN7554611  
**MPHOSPH8 Protein (AA 1-860) (His tag)**



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## Overview

Quantity:	1 mg
Target:	MPHOSPH8
Protein Characteristics:	AA 1-860
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MPHOSPH8 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant MPHOSPH8 Protein expressed in mammalian cells.
Sequence:	MEQVAEGARV TAVPVSAAADS TEELAEVEEG VGVVGEDNDA AARGAEAFGD SEEDGEDVFE VEKILDMKTE GGVVLYKVRW KGYTSDDDTW EPEIHLEDCK EVLLEFRKKI AENKAKAVRK DIQRSLNND IFEANSDSQ QSETKEDTSP KKKKKKLRQR EEKSPDDLK KAKAGKLD KSKPDLESSL ESLVFDLRTK KRISEAKEEL KESKKPKKDE VKETKELKKV KKGEIRDLKT KTREDPKENR KTKKEKFVES QVESESVLN DSPFPEDDSE GLHSDSREEK QNTKSARERA GQDMGLEHGF EKPLDSAMSA EEDTDVRGRR KKKTPRKAED TRENKLENK NAFLEKKTVP KKQRNQDRSK SAAELEKMP VSAQTPKGRR LSGEERGLWS TDSAEEDKET KRNESKEYQ KRHSDKEEK GRKEPKGLKT LKEIRNAFDL FKLTPPEKND VSENNRKREE IPLDFKTIDD HKTKENKQSL KERRNTRDET DTWAYIAAEG DQEVLDVVCQ ADENS DGRQQ ILSLGM DLQL EWMKLEDFQK HLDGKDENFA ATDAIPSNVL RDAVKNGDYI TVKVALNSNE EYNLDQEDSS GMTLVMLAAA GGQDDLRLLL ITKGAKVNGR QKNGTTALIH AAEKNFLT TV AILLEAGAFV NVQQSNGETA LMKACKRGNS DIVRLVIECG ADCNILSKHQ NSALHFAKQS NNVLVYDLLK

## Product Details

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NHLETLSRVA EETIKDYFEA RLALLEPVFP IACHRLCEGP DFSTDFNYKP PQNIPEGSGI  
LLFIFHANFL GKEVIARLCG PCSVQAVVLN DKFQLPVFLD SHFVYSFSPV AGPNKLFIRL  
TEAPSAKVKL LIGAYRVQLQ **Sequence without tag. The proposed Purification-Tag is based on experiences 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.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

## Target Details

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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

## Target Details

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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}.

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Molecular Weight: 97.2 kDa

UniProt: [Q99549](#)

## Application Details

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Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months