

# Datasheet for ABIN7554937

## PHF12 Protein (AA 1-1004) (His tag)



#### Go to Product page

()	ve	rvi	6	W
$\sim$	v C	1 V I	$\sim$	v v

Quantity:	1 mg
Target:	PHF12
Protein Characteristics:	AA 1-1004
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHF12 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Purpose:	Custom-made recombinat PHF12 Protein expressed in mammalien cells.
Sequence:	MWEKMETKTI VYDLDTSGGL MEQIQALLAP PKTDEAEKRS RKPEKEPRRS GRATNHDSCD
	SCKEGGDLLC CDHCPAAFHL QCCNPPLSEE MLPPGEWMCH RCTVRRKKRE QKKELGHVNG
	LVDKSGKRTT SPSSDTDLLD RSASKTELKA IAHARILERR ASRPGTPTSS ASTETPTSEQ
	NDVDEDIIDV DEEPVAAEPD YVQPQLRRPF ELLIAAAMER NPTQFQLPNE LTCTTALPGS
	SKRRRKEETT GKNVKKTQHE LDHNGLVPLP VKVCFTCNRS CRVAPLIQCD YCPLLFHMDC
	LEPPLTAMPL GRWMCPNHIE HVVLNQKNMT LSNRCQVFDR FQDTVSQHVV KVDFLNRIHK
	KHPPNRRVLQ SVKRRSLKVP DAIKSQYQFP PPLIAPAAIR DGELICNGIP EESQMHLLNS
	EHLATQAEQQ EWLCSVVALQ CSILKHLSAK QMPSHWDSEQ TEKADIKPVI VTDSSVTTSL
	QTADKTPTPS HYPLSCPSGI STQNSLSCSP PHQSPALEDI GCSSCAEKSK KTPCGTANGP
	VNTEVKANGP HLYSSPTDST DPRRLPGANT PLPGLSHRQG WPRPLTPPAA GGLQNHTVGI
	IVKTENATGP SSCPQRSLVP VPSLPPSIPS SCASIENTST LQRKTVQSQI GPPLTDSRPL

GSPPNATRVL TPPQAAGDGI LATTANQRFS SPAPSSDGKV SPGTLSIGSA LTVPSFPANS
TAMVDLTNSL RAFMDVNGEI EINMLDEKLI KFLALQRIHQ LFPSRVQPSP GSVGTHQLAS
GGHHIEVQRK EVQARAVFYP LLGLGGAVNM CYRTLYIGTG ADMDVCLTNY GHCNYVSGKH
ACIFYDENTK HYELLNYSEH GTTVDNVLYS CDFSEKTPPT PPSSIVAKVQ SVIRRRRHQK
QDEEPSEEAA MMSSQAQGPQ RRPCNCKASS SSLIGGSGAG WEGTALLHHG SYIKLGCLQF
VFSITEFATK QPKGDASLLQ DGVLAEKLSL KPHQGPVLRS NSVP 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.

#### Characteristics:

Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien 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, Western Blot

#### Grade:

custom-made

### **Target Details**

Target:	PHF12	
Alternative Name:	PHF12 (PHF12 Products)	
Background:	PHD finger protein 12 (PHD factor 1) (Pf1),FUNCTION: Transcriptional repressor acting as ke	
	scaffolding subunit of SIN3 complexes which contributes to complex assembly by contacting	
	each core subunit domain, stabilizes the complex and constitutes the substrate receptor by	
	recruiting the H3 histone tail (PubMed:37137925). SIN3 complexes are composed of a SIN3	

scaffold subunit, one catalytic core (HDAC1 or HDAC2) and 2 chromatin targeting modules (PubMed:11390640, PubMed:37137925). SIN3B complex represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed:37137925). SIN3B complex is recruited downstream of the constitutively active genes transcriptional start sites through interaction with histones and mitigates histone acetylation and RNA polymerase II progression within transcribed regions contributing to the regulation of transcription (PubMed:21041482). May also repress transcription in a SIN3A-independent manner through recruitment of functional TLE5 complexes to DNA (PubMed:11390640). May also play a role in ribosomal biogenesis (By similarity). {ECO:0000250|UniProtKB:Q5SPL2, ECO:0000269|PubMed:11390640, ECO:0000269|PubMed:37137925}.

Molecular Weight:

109.7 kDa

UniProt:

Q96QT6

## **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.

Restrictions:

For Research Use only

## Handling

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