

# Datasheet for ABIN7564671 MTA1 Protein (AA 1-715) (His tag)



# Overview

Quantity:	1 mg
Target:	MTA1
Protein Characteristics:	AA 1-715
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MTA1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat Mta1 Protein expressed in mammalien cells.
Sequence:	MAANMYRVGD YVYFENSSSN PYLIRRIEEL NKTANGNVEA KVVCFYRRRD ISSSLIALAD
	KHATLSVCYR AGPGADTGEE GEVEEEVENP EMVDLPEKLK HQLRHRELFL SRQLESLPAT
	HIRGKCSVTL LNETESLKSY LEREDFFFYS LVYDPQQKTL LADKGEIRVG NRYQADITDL
	LKEGEEDGRD QSKLETKVWE AHNPLVDKQI DQFLVVARSV GTFARALDCS SSVRQPSLHM
	SAAAASRDIT LFHAMDTLHK NIYDISKAIS ALVPQGGPVL CRDEMEEWSA SEANLFEEAL
	EKYGKDFTDI QQDFLPWKSL TSIIEYYYMW KTTDRYVQQK RLKAAEAESK LKQVYIPNYN
	KPNPNQISAS SVKATVVNGT GTPGQSPGAG RACESCYTTQ SYQWYSWGPP NMQCRLCASC
	WTYWKKYGGL KMPTRLDGER PGPNRNNMSP HGIPARSSGS PKFAMKTRQA FYLHTTKLTR
	IARRLCREIL RPWHAARHPY MPINSAAIKA ECTARLPEAS QSPLVLKQVV RKPLEAVLRY
	LETHPRPPKP DPVKSSSSVL SSLTPAKSAP VINNGSPTIL GKRSYEQHNG VDGNMKKRLL
	MPSRGLANHG QTRHMGPSRN LLLNGKSYPT KVRLIRGGSL PPVKRRRMNW IDAPDDVFYM

ATEETRKIRK LLSSSETKRA ARRPYKPIAL RQSQALPLRP PPPAPVNDEP IVIED **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:	MTA1
Alternative Name:	Mta1 (MTA1 Products)
Background:	Metastasis-associated protein MTA1,FUNCTION: Transcriptional coregulator which can act as
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Metastasis-associated protein MTA1,FUNCTION: Transcriptional coregulator which can act as both a transcriptional corepressor and coactivator (PubMed:20682799, PubMed:20071335). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (By similarity). In the NuRD complex, regulates transcription of its targets by modifying the acetylation status of the target chromatin and cofactor accessibility to the target DNA (PubMed:17671180). In conjunction with other components of NuRD, acts as a transcriptional corepressor of BRCA1, ESR1, TFF1 and CDKN1A (PubMed:20071335, PubMed:21965678). Acts as a transcriptional coactivator of BCAS3, PAX5 and SUMO2, independent of the NuRD complex (PubMed:17671180, PubMed:21965678). Stimulates the

expression of WNT1 by inhibiting the expression of its transcriptional corepressor SIX3 (PubMed:20682799). Regulates p53-dependent and -independent DNA repair processes following genotoxic stress (PubMed:20071335, PubMed:19805145). Regulates the stability and function of p53/TP53 by inhibiting its ubiquitination by COP1 and MDM2 thereby regulating the p53-dependent DNA repair (PubMed:19837670, PubMed:19805145). Plays a role in the regulation of the circadian clock and is essential for the generation and maintenance of circadian rhythms under constant light and for normal entrainment of behavior to light-dark (LD) cycles (PubMed:24089055). Positively regulates the CLOCK-BMAL1 heterodimer mediated transcriptional activation of its own transcription and the transcription of CRY1 (PubMed:24089055). Regulates deacetylation of BMAL1 by regulating SIRT1 expression, resulting in derepressing CRY1-mediated transcription repression (PubMed:24089055). With Tfcp2l1, promotes establishment and maintenance of pluripotency in embryonic stem cells (ESCs) and inhibits endoderm differentiation (PubMed:28982712). {ECO:0000250|UniProtKB:Q13330, ECO:0000269|PubMed:17671180, ECO:0000269|PubMed:19805145, ECO:0000269|PubMed:19837670, ECO:0000269|PubMed:20071335, ECO:0000269|PubMed:20682799, ECO:0000269|PubMed:21965678, ECO:0000269|PubMed:24089055, ECO:0000269|PubMed:28982712}.

Molecular Weight: 80.8 kDa
UniProt: Q8K4B0

Pathways: Chromatin Binding

### **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:

Buffer:

The buffer composition is at the discretion of the manufacturer.

Handling Advice:

Avoid repeated freeze-thaw cycles.

# Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months