

Datasheet for ABIN7549358

## MBTD1 Protein (AA 1-628) (His tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	MBTD1
Protein Characteristics:	AA 1-628
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MBTD1 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant MBTD1 Protein expressed in mammalian cells.
Sequence:	<p> MFDGYDSCSE DTSSSSSSEE SEEEVAPLPS NLPIKNNGQ VYTYPDGKSG MATCEMCGMV  GVRDAFYSKT KRFCVSCSR SYSSNSKKAS ILARLQGKPP TTKAKVLQKQ PLVAKLAAYA  QYQATLQNQA KTKAAVSMEG FSWGNYINSN SFIAAPVTCT KHAPMGTCWG DISENVRVEV  PNTDCSLPTK VFWIAGIVKL AGYNALLRYE GFENDSGLDF WCNICGSDIH PVGWCAASGK  PLVPPRTIQH KYTNWKAFLV KRLTGAKTLP PDFSQKVSES MQYPFKPCMR VEVVDKRHLG  RTRVAVVESV IGGRLRLVYE ESEDRTDDFW CHMHSPLIHH IGWSRSIGHR FKRSITKKQ  DGHFDTPPHL FAKVKEVDQS GEWFKEGMKL EADPLNLST ICVATIRKVL ADGFLMIGID  GSEAADGSDW FCYHATSPSI FPGVFCINM IELTPPRGYT KLPFKWFDYL RETGSIAAPV  KLFNKDVPNH GFRVGMKLEA VDLMEPRIC VATVTRIIHR LLRIHFDGWE EEDQWVDCE  SPDLYPVGWC QLTGYQLQPP ASQSSRENQS ASSKQKKKAK SQQYKGHKM TTLQLKEELL  DGEDYNFLQG ASDQESNGSA NFYIKQEP </p> <p><b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the</b></p>

## Product Details

**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:	<p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made to order protein - from design to production - by highly experienced protein experts.</li><li>• Protein expressed in mammalian cells and purified in one-step affinity chromatography</li><li>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul> <p>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.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>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.</p>
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

## Target Details

Target:	MBTD1
Alternative Name:	MBTD1 ( <a href="#">MBTD1 Products</a> )
Background:	<p>MBT domain-containing protein 1,FUNCTION: Chromatin reader component of the NuA4 histone acetyltransferase complex, a multiprotein complex involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed:27153538, PubMed:32209463). The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (PubMed:27153538). MBTD1 specifically recognizes and binds monomethylated and dimethylated 'Lys-20' on histone H4 (H4K20me1 and H4K20me2, respectively) (PubMed:19841675, PubMed:27153538, PubMed:32209463). In the NuA4 complex, MBTD1 promotes recruitment of the complex to H4K20me marks by competing with TP53BP1 for</p>

## Target Details

binding to H4K20me (PubMed:27153538). Following recruitment to H4K20me at DNA breaks, the NuA4 complex catalyzes acetylation of 'Lys-15' on histone H2A (H2AK15), blocking the ubiquitination mark required for TP53BP1 localization at DNA breaks, thereby promoting homologous recombination (HR) (PubMed:27153538). {ECO:0000269|PubMed:19841675, ECO:0000269|PubMed:27153538, ECO:0000269|PubMed:32209463}.

Molecular Weight: 70.5 kDa

UniProt: [Q05BQ5](#)

## Application Details

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

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