Datasheet for ABIN7548650

JMJD7 Protein (AA 1-316) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	JMJD7
Protein Characteristics:	AA 1-316
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This JMJD7 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat JMJD7 Protein expressed in mammalien cells.
Sequence:	MAEAALEAVR SELREFPAAA RELCVPLAVP YLDKPPTPLH FYRDWVCPNR PCIIRNALQH WPALQKWSLP YFRATVGSTE VSVAVTPDGY ADAVRGDRFM MPAERRLPLS FVLDVLEGRA QHPGVLYVQK QCSNLPSELP QLLPDLESHV PWASEALGKM PDAVNFWLGE AAAVTSLHKD HYENLYCVVS GEKHFLFHPP SDRPFIPYEL YTPATYQLTE EGTFKVVDEE AMEKVPWIPL DPLAPDLARY PSYSQAQALR CTVRAGEMLY LPALWFHHVQ QSQGCIAVNF WYDMEYDLKY SYFQLLDSLT KASGLD **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.

Product Details

	• 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:	JMJD7
Alternative Name:	JMJD7 (JMJD7 Products)
Background:	Bifunctional peptidase and (3S)-lysyl hydroxylase JMJD7 (EC 1.14.11.63) (EC 3.4.-.-) (JmjC domain-containing protein 7) (Jumonji domain-containing protein 7) (L-lysine (3S)-hydroxylase JMJD7),FUNCTION: Bifunctional enzyme that acts both as an endopeptidase and 2-oxoglutarate-dependent monooxygenase (PubMed:28847961, PubMed:29915238). Endopeptidase that cleaves histones N-terminal tails at the carboxyl side of methylated arginine or lysine residues, to generate 'tailless nucleosomes', which may trigger transcription elongation (PubMed:28847961). Preferentially recognizes and cleaves monomethylated and dimethylated arginine residues of histones H2, H3 and H4 (PubMed:28847961). After initial cleavage, continues to digest histones tails via its aminopeptidase activity (PubMed:28847961). Additionally, may play a role in protein biosynthesis by modifying the translation machinery (PubMed:29915238). Acts as a Fe(2+) and 2-oxoglutarate-dependent monooxygenase, catalyzing (S)-stereospecific hydroxylation at C-3 of 'Lys-22' of DRG1 and 'Lys-21' of DRG2 translation factors (TRAFAC), promoting their interaction with ribonucleic acids (RNA) (PubMed:29915238). {ECO:0000269|PubMed:28847961, ECO:0000269|PubMed:29915238}.
Molecular Weight:	35.9 kDa

Target Details

UniProt:	P0C870

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