Datasheet for ABIN3093283

JHDM1D Protein (AA 1-941) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	JHDM1D
Protein Characteristics:	AA 1-941
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This JHDM1D protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAGAAAAVAA GAAAGAAAAA VSVAAPGRAS APPPPPPVYC VCRQPYDVNR FMIECDICKD WFHGSCVGVE EHHAVDIDLY HCPNCAVLHG SSLMKKRRNW HRHDYTEIDD GSKPVQAGTR TFIKELRSRV FPSADEIIIK MHGSQLTQRY LEKHGFDVPI MVPKLDDLGL RLPSPTFSVM DVERYVGGDK VIDVIDVARQ ADSKMTLHNY VKYFMNPNRP KVLNVISLEF SDTKMSELVE VPDIAKKLSW VENYWPDDSV FPKPFVQKYC LMGVQDSYTD FHIDFGGTSV WYHVLWGEKI FYLIKPTDEN LARYESWSSS VTQSEVFFGD KVDKCYKCVV KQGHTLFVPT GWIHAVLTSQ DCMAFGGNFL HNLNIGMQLR CYEMEKRLKT PDLFKFPFFE AICWFVAKNL LETLKELRED GFQPQTYLVQ GVKALHTALK LWMKKELVSE HAFEIPDNVR PGHLIKELSK VIRAIEEENG KPVKSQGIPI VCPVSRSSNE ATSPYHSRRK MRKLRDHNVR TPSNLDILEL HTREVLKRLE MCPWEEDILS SKLNGKFNKH LQPSSTVPEW RAKDNDLRLL LTNGRIIKDE RQPFADQSLY TADSENEEDK RRTKKAKMKI EESSGVEGVE HEESQKPLNG FFTRVKSELR SRSSGYSDIS

ESEDSGPECT ALKSIFTTEE SESSGDEKKQ EITSNFKEES NVMRNFLQKS QKPSRSEIPI KRECPTSTST EEEAIQGMLS MAGLHYSTCL QRQIQSTDCS GERNSLQDPS SCHGSNHEVR QLYRYDKPVE CGYHVKTEDP DLRTSSWIKQ FDTSRFHPQD LSRSQKCIRK EGSSEISQRV QSRNYVDSSG SSLQNGKYMQ NSNLTSGACQ ISNGSLSPER PVGETSFSVP LHPTKRPASN PPPISNQATK GKRPKKGMAT AKQRLGKILK LNRNGHARFF V

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	JHDM1D
Alternative Name:	KDM7A (JHDM1D Products)
Background:	Lysine-specific demethylase 7A (JmjC domain-containing histone demethylation protein 1D) (Lysine-specific demethylase 7) ([histone H3]-dimethyl-L-lysine9 demethylase 7A) (EC 1.14.11.65),FUNCTION: Histone demethylase required for brain development. Specifically demethylates dimethylated 'Lys-9', 'Lys-27' and 'Lys-36' (H3K9me2, H3K27me2, H3K36me2, respectively) of histone H3 and monomethylated histone H4 'Lys-20' residue (H4K20Me1), thereby playing a central role in histone code (PubMed:20023638, PubMed:20622853). Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: in presence of H3K4me3, it has no demethylase activity toward H3K9me2, while it has high activity toward H3K27me2. Demethylates H3K9me2 in absence of H3K4me3 (PubMed:20023638). Has activity toward H4K20Me1 only when nucleosome is used as a substrate and when not histone octamer is used as substrate (PubMed:20622853). {ECO:0000269|PubMed:20023638, ECO:0000269|PubMed:20622853}.
Molecular Weight:	106.6 kDa
UniProt:	Q6ZMT4

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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

Application Details

	During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months