Datasheet for ABIN3137633

MBD1 Protein (AA 1-636) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	MBD1
Protein Characteristics:	AA 1-636
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MBD1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MAESWQDCPA LGPGWKRRES FRKSGASFGR SDIYYQSPTG EKIRSKVELT RYLGPACDLT LFDFRQGTLC HPIPKTHPLA VPSKKKKKPS KPAKTKKQQV GLQRSEVRIE TPQGEYKAPT ATALASLSVS ASASSSASAS ASASSHAPVC CENCGIHFSW DGVKRQRLKT LCKDCRAQRI AFNREQRMFK RVGCGDCAAC LVKEDCGVCS TCRLQLPSDV ASGLYCKCER RRCLRIMEKS RGCGVCRGCQ TQEDCGHCCI CLRSPRPGLK RQWRCLQRRC FWGKRDSSKR GSKVASQRHS QAPPLPPHPA SQYTEPTELH ISDIAPTSPA EFIYYCVDED EDELQPYTNQ RQNRKCGACA ACLRRMDCGR CDFCCDKPKF GGGNQKRQKC RWRQCLQFAM KRLLPSAGSG SGEGAGLRPY QTHQTHQKRP ASARQLQLSS PLKAPWAVVT APPGPVRDSR KQQAGRGSVL PQPDTDFVFL QEGTSSAMQM PGTAAASTEV PVQAAQCSAP SWVVALPQVK QETADAPEEW TAVTTFLTSS TLQSGFPSKA ADPDLSPVKQ EPPGPEEDGE EKKDDVSETT PAEEIGGVGT PVITEIFSLG GTRLRDAEAW LPRLHKLLAV NEKEYFTELQ LKEEVL

Product Details

	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.
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).

Product Details

Grade:	custom-made

Target Details

Target:	MBD1
Alternative Name:	Mbd1 (MBD1 Products)
Background:	Methyl-CpG-binding domain protein 1 (Methyl-CpG-binding protein MBD1),FUNCTION: Transcriptional repressor that binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. Binding is abolished by the presence of 7-mG that is produced by DNA damage by methylmethanesulfonate (MMS). Acts as transcriptional repressor and plays a role in gene silencing by recruiting ATF7IP, which in turn recruits factors such as the histone methyltransferase SETDB1. Probably forms a complex with SETDB1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Isoform 1 can also repress transcription from unmethylated promoters. {ECO:0000269|PubMed:15060159, ECO:0000269|PubMed:9774669}.
Molecular Weight:	70.0 kDa
UniProt:	Q9Z2E2

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. 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