Datasheet for ABIN3095375

SETMAR Protein (AA 1-684) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SETMAR
Protein Characteristics:	AA 1-684
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SETMAR protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MFAEAAKTTR PCGMAEFKEK PEAPTEQLDV ACGQENLPVG AWPPGAAPAP FQYTPDHVVG PGADIDPTQI TFPGCICVKT PCLPGTCSCL RHGENYDDNS CLRDIGSGGK YAEPVFECNV LCRCSDHCRN RVVQKGLQFH FQVFKTHKKG WGLRTLEFIP KGRFVCEYAG EVLGFSEVQR RIHLQTKSDS NYIIAIREHV YNGQVMETFV DPTYIGNIGR FLNHSCEPNL LMIPVRIDSM VPKLALFAAK DIVPEEELSY DYSGRYLNLT VSEDKERLDH GKLRKPCYCG AKSCTAFLPF DSSLYCPVEK SNISCGNEKE PSMCGSAPSV FPSCKRLTLE TMKMMLDKKQ IRAIFLFEFK MGRKAAETTR NINNAFGPGT ANERTVQWWF KKFCKGDESL EDEERSGRPS EVDNDQLRAI IEADPLTTTR EVAEELNVNH STVVRHLKQI GKVKKLDKWV PHELTENQKN RRFEVSSSLI LRNHNEPFLD RIVTCDEKWI LYDNRRRSAQ WLDQEEAPKH FPKPILHPKK VMVTIWWSAA GLIHYSFLNP GETITSEKYA QEIDEMNQKL QRLQLALVNR KGPILLHDNA RPHVAQPTLQ KLNELGYEVL PHPPYSPDLL PTNYHVFKHL NNFLQGKRFH NQQDAENAFQ EFVESQSTDF

	YATGINQLIS RWQKCVDCNG SYFD **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®).

Product Details

Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	SETMAR
Alternative Name:	SETMAR (SETMAR Products)
Background:	Histone-lysine N-methyltransferase SETMAR (SET domain and mariner transposase fusion protein) (Metnase) [Includes: Histone-lysine N-methyltransferase (EC 2.1.1.357), Transposon Hsmar1 transposase (EC 3.1.-.-)],FUNCTION: Protein derived from the fusion of a methylase with the transposase of an Hsmar1 transposon that plays a role in DNA double-strand break repair, stalled replication fork restart and DNA integration. DNA-binding protein, it is indirectly recruited to sites of DNA damage through protein-protein interactions. Has also kept a sequence-specific DNA-binding activity recognizing the 19-mer core of the 5'-terminal inverted repeats (TIRs) of the Hsmar1 element and displays a DNA nicking and end joining activity (PubMed:16332963, PubMed:16672366, PubMed:17877369, PubMed:17403897, PubMed:18263876, PubMed:22231448, PubMed:24573677, PubMed:20521842). In parallel, has a histone methyltransferase activity and methylates 'Lys-4' and 'Lys-36' of histone H3. Specifically mediates dimethylation of H3 'Lys-36' at sites of DNA double-strand break and may recruit proteins required for efficient DSB repair through non-homologous end-joining (PubMed:16332963, PubMed:21187428, PubMed:22231448). Also regulates replication fork processing, promoting replication fork restart and regulating DNA decatenation through stimulation of the topoisomerase activity of TOP2A (PubMed:18790802, PubMed:20457750). {ECO:0000269|PubMed:16332963, ECO:0000269|PubMed:16672366, ECO:0000269|PubMed:17403897, ECO:0000269|PubMed:17877369, ECO:0000269|PubMed:18790802, ECO:0000269|PubMed:20457750, ECO:0000269|PubMed:20521842, ECO:0000269|PubMed:21187428, ECO:0000269|PubMed:22231448, ECO:0000269|PubMed:24573677, ECO:0000303|PubMed:18263876}.
Molecular Weight:	78.0 kDa
UniProt:	Q53H47
Pathways:	Positive Regulation of Response to DNA Damage Stimulus

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