

Datasheet for ABIN7555456
SETMAR Protein (AA 1-684) (His tag)



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Overview

Quantity:	1 mg
Target:	SETMAR
Protein Characteristics:	AA 1-684
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SETMAR protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat SETMAR Protein expressed in mammalien cells.
Sequence:	MFAEAAKTTR PCGMAEFKEK PEAPTEQLDV ACGQENLPVG AWPPGAAPAP FQYTPDHVVG PGADIDPTQI TFPGCICVKT PCLPGTCSCL RHGENYDDNS CLRDIGSGGK YAEPVFECNV LCRCSDHCRN RVVQKGLQFH FQVFKTHKKG WGLRTLFIK 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 GKVKKLDKVV PHELTENQKN RRFEVSSSLI LRNHNEPFLD RIVTCDEKWI LYDNRRRSAQ WLDQEEAPKH FPKPILHPKK VMVTIWWWSAA GLIHYSFLNP GETITSEKYA QEIDEMNQKL QRLQLALVNR KGPILLHDNA RPHVAQPTLQ KLNELGYEVL PHPPYSPDLL PTNYHVFKHL NNFLQGKRFH NQQDAENAFQ EFVESQSTDF

Product Details

YATGINQLIS RWQKVCDCNG SYFD **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.
- Protein expressed in mammalian 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:

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

Target Details

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.

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