

Datasheet for ABIN3136883

## PRMT7 Protein (AA 1-692) (Strep Tag)



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### Overview

|                               |                                                |
|-------------------------------|------------------------------------------------|
| Quantity:                     | 250 µg                                         |
| Target:                       | PRMT7                                          |
| Protein Characteristics:      | AA 1-692                                       |
| Origin:                       | Mouse                                          |
| Source:                       | Cell-free protein synthesis (CFPS)             |
| Protein Type:                 | Recombinant                                    |
| Purification tag / Conjugate: | This PRMT7 protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)   |

### Product Details

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brand:    | AliCE®                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Sequence: | <p>MKVFCGRANP TTGSLEWLEE DEHYDYHQEI ARSSYADMLH DKDRNIKYYQ GIRAAVSRVK</p> <p>DRGQKALVLD IGTGTGLLSM MAVTAGADFC YAIEVFKPMA EAAVKIVERN GFSDKIKVIN</p> <p>KHSTEVTVGP DGDLP CRANI LITELFDTTEL IGEALPSYE HAHKHLVQED CEAVPHRATV</p> <p>YAQLVESRRM WSWNKLFPVR VRTSLGEQVI VPPSELERCP GAPSVCDIQL NQVSPADFTV</p> <p>LSDVLP MFSV DFSKQVSSA ACHSRQFVPL ASGQAQVLS WWDIEMDPEG KIKCTMAPFW</p> <p>AQTDPQELQW RDHWMQCVYF LPQEEPVVQG SPRCLVAHHD DYCVMWYSLQR TSPDENDSAY</p> <p>QVRPVCDCQA HLLWNRPRFG EINDQDRTDH YAQALRTVLL PGSVCLCVSD GSLLSMLAHH</p> <p>LGAEQVFTVE SSVASYRLMK RIFKVNHLKD KISVINKRPE LLTAADLEGK KVSLLLGEFP</p> <p>FTTSLLPWHN LYFWYVRTSV DQHLAPGAVV MPQAASLHAV IVEFRDLWRI RSPCGDCEGF</p> <p>DVHIMDDMIK HSLDFRESRE AEPHPLWEYP CRSLSKPQEI LTFDFQQPIP QQPMQSKGTM</p> <p>ELTRPGKSHG AVLWMEYQLT PDSTISTGLI NPAEDKGDCC WNPCHKQAVY FLSTTLDLRV</p> |

PLNGPRSVSY VVEFHPLTGD ITMEFRLADT LS

**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.**

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### 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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## Product Details

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

Grade: custom-made

## Target Details

Target: PRMT7

Alternative Name: Prmt7 ([PRMT7 Products](#))

Background: Protein arginine N-methyltransferase 7 (EC 2.1.1.321) (Histone-arginine N-methyltransferase PRMT7) ([Myelin basic protein]-arginine N-methyltransferase PRMT7),FUNCTION: Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA. Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3), such methylation being required for the assembly and biogenesis of snRNP core particles. Specifically mediates the symmetric dimethylation of histone H4 'Arg-3' to form H4R3me2s. Plays a role in gene imprinting by being recruited by CTCFL at the H19 imprinted control region (ICR) and methylating histone H4 to form H4R3me2s, possibly leading to recruit DNA methyltransferases at these sites. May also play a role in embryonic stem cell (ESC) pluripotency. Also able to mediate the arginine methylation of histone H2A and myelin basic protein (MBP) in vitro, the relevance of such results is however unclear in vivo (By similarity). {ECO:0000250, ECO:0000269|PubMed:17048991}.

Molecular Weight: 78.3 kDa

UniProt: [Q922X9](#)

Pathways: [Ribonucleoprotein Complex Subunit Organization](#)

## 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.<br>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b> |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                                                                                                                               |
| Storage:         | -80 °C                                                                                                                                                           |
| Storage Comment: | Store at -80°C.                                                                                                                                                  |
| Expiry Date:     | 12 months                                                                                                                                                        |