

Datasheet for ABIN3094724

PRDM6 Protein (AA 1-595) (Strep Tag)



Overview

| Quantity: | 250 μg |
|-------------------------------|--|
| Target: | PRDM6 |
| Protein Characteristics: | AA 1-595 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This PRDM6 protein is labelled with Strep Tag. |
| Application: | ELISA, SDS-PAGE (SDS), Western Blotting (WB) |

| Product Details | |
|-----------------|---|
| Brand: | AliCE® |
| Sequence: | MLKPGDPGGS AFLKVDPAYL QHWQQLFPHG GAGPLKGSGA AGLLSAPQPL QPPPPPPPE |
| | RAEPPPDSLR PRPASLSSAS STPASSSTSA SSASSCAAAA AAAALAGLSA LPVSQLPVFA |
| | PLAAAAVAAE PLPPKELCLG ATSGPGPVKC GGGGGGGGG RGAPRFRCSA EELDYYLYGQ |
| | QRMEIIPLNQ HTSDPNNRCD MCADNRNGEC PMHGPLHSLR RLVGTSSAAA AAPPPELPEW |
| | LRDLPREVCL CTSTVPGLAY GICAAQRIQQ GTWIGPFQGV LLPPEKVQAG AVRNTQHLWE |
| | IYDQDGTLQH FIDGGEPSKS SWMRYIRCAR HCGEQNLTVV QYRSNIFYRA CIDIPRGTEL |
| | LVWYNDSYTS FFGIPLQCIA QDENLNVPST VMEAMCRQDA LQPFNKSSKL APTTQQRSVV |
| | FPQTPCSRNF SLLDKSGPIE SGFNQINVKN QRVLASPTST SQLHSEFSDW HLWKCGQCFK |
| | TFTQRILLQM HVCTQNPDRP YQCGHCSQSF SQPSELRNHV VTHSSDRPFK CGYCGRAFAG |
| | ATTLNNHIRT HTGEKPFKCE RCERSFTQAT QLSRHQRMPN ECKPITESPE SIEVD |
| | Sequence without tag. The proposed Strep-Tag is based on experience s with the expres |

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 posttranslational 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). |
| Grade: | custom-made |

Target Details

| Target: | PRDM6 |
|---------------------|---|
| Alternative Name: | PRDM6 (PRDM6 Products) |
| Background: | Putative histone-lysine N-methyltransferase PRDM6 (EC 2.1.1.361) (PR domain zinc finger protein 6) (PR domain-containing protein 6),FUNCTION: Putative histone methyltransferase that acts as a transcriptional repressor of smooth muscle gene expression. Promotes the transition from differentiated to proliferative smooth muscle by suppressing differentiation and maintaining the proliferative potential of vascular smooth muscle cells. Also plays a role in endothelial cells by inhibiting endothelial cell proliferation, survival and differentiation. It is unclear whether it has histone methyltransferase activity in vivo. According to some authors, it does not act as a histone methyltransferase by itself and represses transcription by recruiting EHMT2/G9a. According to others, it possesses histone methyltransferase activity when associated with other proteins and specifically methylates 'Lys-20' of histone H4 in vitro. 'Lys-20' methylation represents a specific tag for epigenetic transcriptional repression. {ECO:0000250 UniProtKB:Q3UZD5}. |
| Molecular Weight: | 64.5 kDa |
| UniProt: | Q9NQX0 |
| Pathways: | Regulation of Muscle Cell Differentiation |
| 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! |

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 |