Datasheet for ABIN3094492

# PARN Protein (AA 1-639) (Strep Tag)

1 Image

Go to Product page

## Overview

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| Quantity: | 1 mg |
| Target: | PARN |
| Protein Characteristics: | AA 1-639 |
| Origin: | Human |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This PARN protein is labelled with Strep Tag. |
| Application: | SDS-PAGE (SDS), Western Blotting (WB), ELISA |

## Product Details

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| Sequence: | MEIIRSNFKS NLHKVYQAIE EADFFAIDGE FSGISDGPSV SALTNGFDTP EERYQKLKKH SMDFLLFQFG LCTFKYDYTD SKYITKSFNF YVFPKPFNRS SPDVKFVCQS SSIDFLASQG FDFNKVFRNG IPYLNQEEER QLREQYDEKR SQANGAGALS YVSPNTSKCP VTIPEDQKKF IDQVVEKIED LLQSEENKNL DLEPCTGFQR KLIYQTLSWK YPKGIHVETL ETEKKERYIV ISKVDEEERK RREQQKHAKE QEELNDAVGF SRVIHAIANS GKLVIGHNML LDVMHTVHQF YCPLPADLSE FKEMTTCVFP RLLDTKLMAS TQPFKDIINN TSLAELEKRL KETPFNPPKV ESAEGFPSYD TASEQLHEAG YDAYITGLCF ISMANYLGSF LSPPKIHVSA RSKLIEPFFN KLFLMRVMDI PYLNLEGPDL QPKRDHVLHV TFPKEWKTSD LYQLFSAFGN IQISWIDDTS AFVSLSQPEQ VKIAVNTSKY AESYRIQTYA EYMGRKQEEK QIKRKWTEDS WKEADSKRLN PQCIPYTLQN HYYRNNSFTA PSTVGKRNLS PSQEEAGLED GVSGEISDTE LEQTDSCAEP LSEGRKKAKK LKRMKKELSP AGSISKNSPA TLFEVPDTW<br>**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression** |

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| | **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:<br>• Made in Germany - from design to production - by highly experienced protein experts.<br>• Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.<br>• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.<br>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.<br><br>Expression System:<br>• 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.<br>• 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!<br><br>Concentration:<br>• The concentration of our recombinant proteins is measured using the absorbance at 280nm.<br>• The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.<br>• We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein. |
| Purification: | Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):<br>1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag |

## Product Details

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| | capture material. Eluate fractions are analyzed by SDS-PAGE.<br>2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot. |
| Purity: | >80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. |
| Endotoxin Level: | Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg) |
| Grade: | Crystallography grade |

## Target Details

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| Target: | PARN |
| Alternative Name: | PARN (PARN Products) |
| Background: | Poly(A)-specific ribonuclease PARN (EC 3.1.13.4) (Deadenylating nuclease) (Deadenylation nuclease) (Polyadenylate-specific ribonuclease),FUNCTION: 3'-exoribonuclease that has a preference for poly(A) tails of mRNAs, thereby efficiently degrading poly(A) tails. Exonucleolytic degradation of the poly(A) tail is often the first step in the decay of eukaryotic mRNAs and is also used to silence certain maternal mRNAs translationally during oocyte maturation and early embryonic development. Interacts with both the 3'-end poly(A) tail and the 5'-end cap structure during degradation, the interaction with the cap structure being required for an efficient degradation of poly(A) tails. Involved in nonsense-mediated mRNA decay, a critical process of selective degradation of mRNAs that contain premature stop codons. Also involved in degradation of inherently unstable mRNAs that contain AU-rich elements (AREs) in their 3'-UTR, possibly via its interaction with KHSRP. Probably mediates the removal of poly(A) tails of AREs mRNAs, which constitutes the first step of destabilization (PubMed:10882133, PubMed:11359775, PubMed:12748283, PubMed:15175153, PubMed:9736620). Also able to recognize and trim poly(A) tails of microRNAs such as MIR21 and H/ACA box snoRNAs (small nucleolar RNAs) leading to microRNAs degradation or snoRNA increased stability (PubMed:25049417, PubMed:22442037). {ECO:0000269\|PubMed:10882133, ECO:0000269\|PubMed:11359775, ECO:0000269\|PubMed:12748283, ECO:0000269\|PubMed:15175153, ECO:0000269\|PubMed:22442037, ECO:0000269\|PubMed:25049417, ECO:0000269\|PubMed:9736620}. |
| Molecular Weight: | 73.5 kDa |
| UniProt: | O95453 |

## Application Details

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| 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.<br>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

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | Unlimited (if stored properly) |


**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process

 