

Datasheet for ABIN3136438 AQR Protein (AA 1-1481) (Strep Tag)



Overview

| Quantity: | 250 μg |
|-------------------------------|--|
| Target: | AQR |
| Protein Characteristics: | AA 1-1481 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This AQR protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), ELISA, SDS-PAGE (SDS) |

| Product Details | |
|-----------------|---|
| Brand: | AliCE® |
| Sequence: | MAAPAQPKKI VAPTVSQINA EFVTQLACKY WAPHIKKKSP FDIKVIEEIY EKEIVKSRFA |
| | IRKIMLLEFS QYLENYLWMN YSPEVSSKAY LMSICCMVNE KFRENVPAWE TFKKKPDHFP |
| | FFFKCILKAA LAETDGEFSL HEQTLLLLFL DHCFNSLEVD LIRSQVQQLI SLPMWMGLQP |
| | ARLELELKKT PKLRKFWNLI KKNDEKMDPE AREQAYQERR FLSRLIQKFI SVLKSIPLSE |
| | PVTMDKVHYC ERFIELMIDL EALLPTRRWF NTILDDSHLL VHCYLSSLVH REEDGHLFSQ |
| | LLDMLKFYTG FEINDQTGNA LTENEMTTIH YDRITSLQRA AFAHFPELYD FALSNVAEVD |
| | ARDSLVKFFG PLSSNTLHQV ASYLCLLPTL PKNEDTTFDK EFLLELLVSR HERRISQIQQ |
| | LNQMPLYPTE KIIWDENIVP TEYYSGEGCL ALPKLNLQFL TLHDYLLRNF NLFRLESTYE |
| | IRQDIEDSVS RMKPWQSEYG GVVFGGWARM AQPIVAFTVV EVAKPNIGEN WPTRVRADVT |
| | INLNVRDHIK DEWEGLRKHD VCFLITVRPT KPYGTKFDRR RPFIEQVGLV YVRGCEIQGM |
| | LDDKGRVIED GPEPRPNLRG ESRTFRVFLD PNQYQQDMTN TIQNGAEDVY DTFNVIMRRK |

PKENNFKAVL ETIRNLMNTD CVVPDWLHDI ILGYGDPSSA HYSKMPNQIA TLDFNDTFLS
IEHLKASFPG HNVKVTVSDP ALQIPPFRIT FPVRSGKGKK RKDADGEEDD TEEAKTLIVE
PHVIPNRGPY PYNQPKRNTI QFTHTQIEAI RAGMQPGLTM VVGPPGTGKT DVAVQIISNI
YHNFPEQRTL IVTHSNQALN QLFEKIMALD IDERHLLRLG HGEEELETEK DFSRYGRVNY
VLARRIELLE EVKRLQKSLG VPGDASYTCE TAGYFFLYQV MSRWEEYMSR VKNSGTACPD
AAPDAAQVAT FFPFHEYFAN APQPIFKGRS YEEDMEIAEG CFRHIKKIFT QLEEFRASEL
LRSGLDRSKY LLVKEAKIIA MTCTHAALKR HDLVKLGFKY DNILMEEAAQ ILEIETFIPL
LLQNPQDGFS RLKRWIMIGD HHQLPPVIKN MAFQKYSNME QSLFTRFVRV GVPTVDLDAQ
GRARASLCNL YNWRYKNLGN LPHVQLLPEF STANAGLLYD FQLINVEDFQ GVGESEPNPY
FYQNLGEAEY VVALFMYMCL LGYPADKISI LTTYNGQKHL IRDIINRRCG NNPLIGRPNK
VTTVDRFQGQ QNDYILLSLV RTRAVGHLRD VRRLVVAMSR ARLGLYIFAR VSLFQNCFEL
TPAFSQLTAR PLHLHIIPTE PFPTSRKNGE RPPHEVQVIK NMPQMANFVY NMYMHLIQTT
HHYHQTFLQL PPAMVEEGEE GQSQETEMEA EEETVSAQGN LTPSPADASL SQETPAAQPD
CSSQTEDTSA PCDIATAAEP VSAAAEAATP ODAESVPTET E

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 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: | AQR |
|-------------------|---|
| Alternative Name: | Aqr (AQR Products) |
| Background: | RNA helicase aquarius (EC 3.6.4.13) (Intron-binding protein of 160 kDa), FUNCTION: Involved in pre-mRNA splicing as component of the spliceosome. Intron-binding spliceosomal protein required to link pre-mRNA splicing and snoRNP (small nucleolar ribonucleoprotein) biogenesis. Plays a key role in position-dependent assembly of intron-encoded box C/D small snoRNP, splicing being required for snoRNP assembly. May act by helping the folding of the snoRNA sequence. Binds to intron of pre-mRNAs in a sequence-independent manner, contacting the region between snoRNA and the branchpoint of introns (40 nucleotides upstream of the branchpoint) during the late stages of splicing. Has ATP-dependent RNA helicase activity and can unwind double-stranded RNA molecules with a 3' overhang (in vitro). {ECO:0000250 UniProtKB:060306}. |
| Molecular Weight: | 170.3 kDa |
| UniProt: | Q8CFQ3 |

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 |