

Datasheet for ABIN3088595

AHRR Protein (AA 1-701) (Strep Tag)



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Overview

| | |
|-------------------------------|---|
| Quantity: | 250 µg |
| Target: | AHRR |
| Protein Characteristics: | AA 1-701 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This AHRR protein is labelled with Strep Tag. |
| Application: | SDS-PAGE (SDS), Western Blotting (WB), ELISA |

Product Details

| | |
|-----------|---|
| Brand: | AliCE® |
| Sequence: | <p>MPRTMIPPGE CTYAGRKRRL PLQKQRPVAVG AEKSNPSKRH RDRLNAELDH LASLLPFPPD</p> <p>IISKLDKLSV LRLSVSYLRV KSFFQVVQEQ SSRQPAAGAP SPGDSCPLAG SAVLEGRLLL</p> <p>ESLNGFALVV SAEGTIFYAS ATIVDYLGFH QTDVMHQNIY DYIHVDDRQD FCRQLHWAMD</p> <p>PPQVVFQPPP PLETGDDAIL GRLLRAQEWG TGTPTEYSAF LTRCFICRVR CLLDSTSGFL</p> <p>TMQFQGKLFK LFGQKKKAPS GAMLPRLSL FCIAAPVLLP SAAEMKM RSA LLRAKPRADT</p> <p>AATADAKVKA TTSLCESELH GKP NY SAGRS SRESGVLVLR EQTDAGRWAQ VPARAPCLCL</p> <p>RGGPDLVLDP KGGSGDREEE QHRMLSRASG VTGRRETPGP TKPLPWTAGK HSEDGARPR</p> <p>L QPSKNDPPSL RPMPRGSCLP CPCVQGTFRN SPISHPPSPS PSAYSSRTSR PMRDVGEDQV</p> <p>HPPLCHFPQR SLQHQLPQPG AQR FATRGYP MEDMKLQGV P MPPGDL CGPT LLLDVS IKME</p> <p>KDSGCEGAAD GCVPSQVWL G ASDRSH PATF PTRMHLKTEP DSRQQVYISH LGHGVRGAQP</p> <p>HGRATAGRSR ELTPFH PAHC ACLEPTDGLP QSEPPHQLCA RGRGEQSCTC RAAEAAPVVK</p> |

REPLDSPQWA THSQGMVPGM LPKSALATLV PPQASGCTFL P

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 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.

Purification:

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

Product Details

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

Grade: custom-made

Target Details

Target: AHRR

Alternative Name: AHRR ([AHRR Products](#))

Background: Aryl hydrocarbon receptor repressor (AhR repressor) (AhRR) (Class E basic helix-loop-helix protein 77) (bHLHe77),FUNCTION: Mediates dioxin toxicity and is involved in regulation of cell growth and differentiation. Represses the transcription activity of AHR by competing with this transcription factor for heterodimer formation with the ARNT and subsequently binding to the xenobiotic response element (XRE) sequence present in the promoter regulatory region of variety of genes. Represses CYP1A1 by binding the XRE sequence and recruiting ANKRA2, HDAC4 and/or HDAC5. Autoregulates its expression by associating with its own XRE site. {ECO:0000269|PubMed:17890447, ECO:0000269|PubMed:18172554}.

Molecular Weight: 76.3 kDa

UniProt: [A9YTQ3](#)

Pathways: [Steroid Hormone Biosynthesis, Regulation of Lipid Metabolism by PPARalpha](#)

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.

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Application Details

Restrictions: For Research Use only

Handling

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|------------------|--|
| 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 |